[2] Tour stories: ***this section covers the cruise ship tours drive first (which does not go to Otari Wilton's Bush). The stories from Karori onwards apply to both tours (noting also that the cruise ship tour does not go to Otari Wilton's Bush). The final part of this section includes the FIT tours Otari-Wilton's Bush visit.***

Waterloo Quay to Thorndon (to Karori)

Welcoming to Wellington

Welcome to Wellington! Let's kick things off with some fascinating facts about this vibrant city. Wellington, the capital of New Zealand since 1865, has a population of 220,000 in the city itself and about 450,000 in the region. In all of New Zealand, there are 5.2 million people, with 4 million living in the North Island and 1.2 million in the South Island. Despite being 56% of the land mass, the South Island is sparsely populated.

Wellington is known for its windy weather and holds the title of the world's windiest city. To put that into perspective, Chicago, the "Windy City," has average winds of 12 mph, while Wellington boasts an average of 18 mph. On around 170 days each year, the wind exceeds 60 kph, reaching gale force. The unique geography, with mountains in both the North and South Islands funneling the Cook Strait, naturally makes Wellington a breezy place.

As we pass the **Sky Stadium**, it's a 35,000-seat venue hosting concerts and rugby games featuring our national team, the All Blacks. It has hosted many large concerts including David Bowie, AC-DC, Ed Sheeran, Elton John and even the Edinburgh Tattoo!

Wellington is also known as an earthquake-prone city. In November 2016, a large 7.8 magnitude earthquake, the second largest in recorded history occurred off the coast of Kaikoura, which is 200kms from Wellington. Soberingly for Wellington 70 buildings were damaged and 12 had to be demolished, including the relatively new BNZ (Bank of New Zealand). The new BNZ building now sits on base isolators, specially designed to absorb the impact of earthquakes.

Lambton Quay used to be the waterfront, but the land was raised by an 8.2 magnitude earthquake in 1855 (the largest in our recorded history), allowing the development of the downtown area through further land reclamation, which now covers 88 hectares. We're always on alert for the next big one.

We'll drive by Parliament, with the iconic Beehive building, built in 1979, and then continue up Molesworth Street to see more government buildings, the National Library, the Court of Appeal, and Rugby House, New Zealand's most important building. We'll also pass the US Embassy.

Thorndon

[If doing a cruise ship tour turn left up Glenmore Street]

Exploring Wellington's Natural Beauty and Unique History

Next up, the Wellington Botanic Gardens. These 60-acre gardens are the oldest in New Zealand, established in 1868. This area was once the site of Māori gardens and a pā (fortified

village). The Māori name for Wellington is Te Whanganui-a-Tara, meaning "the great harbour of Tara." This botanic garden is the birthplace of New Zealand's large forestry industry, as it was a testing site for exotic species to work out what could grow commercially. It was here that we discovered that pine (initially Monterey Pines from California) grows at up to four times faster than in the United States due to our nutrient rich volcanic soils. So, some of the oldest exotic pine trees in New Zealand are right here at over 150 years old.

New Zealand is the last large land mass discovered on the planet, aside from Antarctica. Before the Māori arrived around 750-800 years ago, the only animals here were birds, as we had no native mammals except for seals, dolphins, whales, and three species of bats.

This absence of predators allowed many birds to evolve to be flightless, like the giant moa bird, which was hunted to extinction by the Māori. The Haast's eagle, the largest eagle ever, also became extinct when the moa disappeared.

Karori

Karori Tunnel is the oldest road tunnel of the 12 tunnels through the hills of Wellington. Constructed at the turn of the 20th century when Karori was a separate Borough from Wellington city with its own Mayor.

The name *Karori* used to be *Kaharore* and is from the Māori language. It comes from the Māori phrase 'te kaha o ngā rore' meaning 'the place of many bird snares'. Originally forested, Māori used the Karori area for hunting. It also had tracks crossing it that led to Māori pa on the west coast.

Karori is one of the oldest, largest, most self-contained suburbs in New Zealand with a population of 16,000. The median house price is $900,000NZD. Housing in New Zealand is expensive, with income tax rates ranging from 10.5% to 39% based on income, and corporate tax at 28%. Petrol costs around $2.77 per litre, equivalent to $6.30 per US gallon. The average salary here is NZ$65,000, with a minimum wage of $23.15 per hour. Many companies pay a living wage of $27.80. Average incomes and educational attainment are higher here than the national average.

Many prominent New Zealanders have come from Karori, including Katherine Mansfield, an important novelist in the 'modernist' movement (her stories translated into 25 languages worldwide). She left New Zealand at 19 for London where she became a friend of members of the Bloomsbury Set, including D. H. Lawrence and Virginia Woolf.

Makara to Terawhiti Station

As we continue down into the Makara Valley, you'll see Monterey Pines from California, known as Pinus radiata, growing here. These trees grow to harvest size in about 22-25 years, compared to up to four times this timeframe in the U.S. and Canada. However, they can cause environmental issues when debris washes into streams and rivers during storms.

Passing under a toxic Tutu tree, there is a story from the 1920s when it killed a circus elephant. And in 2008 22 tourists fell ill from honey made with Tutu, leading to government intervention and fines for the beekeeper.

New Zealand's medical care for accidental injuries is covered by the Accident Compensation Corporation (ACC). As a self-employed tour guide, I pay a levy for ACC coverage. For employers, the levy is 1.6%, similar to national health insurance.

As we head towards Terawhiti Station, consider buying some unique Kiwi gifts. Manuka honey is a high-quality honey graded by UMF (Unique Manuka Factor). Buy it from supermarkets, not souvenir shops. New Zealand greenstone (pounamu) is a treasured Māori gift, and paua (rainbow abalone) makes beautiful jewellery and carvings.

Terawhiti Station

Our first stop is Terawhiti Station, one of New Zealand's largest and oldest multi-generational farms. Spanning around 13,000 hectares, it was established in the 1840s and has a rich history. The land was initially granted to Charles Clifford and Henry Weld, two pioneering settlers. The station has remained in the same family for generations, currently owned by the third and fourth generations of the Riddiford family, who have maintained and modernized the farm while preserving its historical legacy. The station continues to be a working farm, balancing traditional farming methods with innovative approaches to sustainable agriculture. The breathtaking views of the coastline and the surrounding hills make it a unique and picturesque place. They raise Wiltshire sheep, known for their meat, not wool, and earn around $1 million a year leasing land for wind turbines to Meridian Energy. You'll also see Angus cattle and wild goats here.

New Zealand became the first nuclear-free country in 1987, which means no American warships have visited since 1984.

Meridian Wind Farm

Next, we'll encounter the impressive Meridian 'West Wind' farm, a symbol of New Zealand's commitment to renewable energy. The wind farm consists of 62 turbines, each standing about 111 meters tall, harnessing the powerful winds that sweep across this region. Together, these turbines generate up to 143 megawatts of electricity, enough to power approximately 62,000 homes. The wind farm was commissioned in 2009 and represents a significant step towards reducing the country's reliance on fossil fuels.

There are a total of 88 wind turbines in Wellington, generating nearly all of Wellington's domestic electricity. New Zealand gets 87% of its electricity from sustainable sources: 65% hydro, 15% geothermal, 6-8% wind, and now solar since November 2023.

As you admire these towering structures, consider the engineering marvels they represent and the positive impact they have on the environment by providing clean, renewable energy.

Enjoying the Scenic Views and Wildlife

We'll stop here for a view of Mana Island and Kapiti Island, both predator-free sanctuaries. These islands are crucial for protecting our native species, including the Kiwi. Before humans arrived, it was estimated that Aotearoa New Zealand was home to about 12 million Kiwi. Today, only around 70,000 remain. The rarest is the Rowi, with just 450 left. Despite challenges, the Capital Kiwi project has been successful in reintroducing kiwis to the Wellington area, with the first wild-born chicks in 150 years hatching recently.

From here, you can also see the Kaikoura Mountain range on the South Island. Though Wellington is further south than the northern tip of the South Island, it's actually west of Wellington. The highest peak visible is Mount Tapi-o-Uenuku at *2,885 metres (9,465 ft*) it is the highest mountain in New Zealand outside the main ranges of the Southern Alps. The narrowest point between Wellington and the South Island is just 22 km (14 miles).

The Sinking of the SS Penguin

As we continue, I'd like to share the story of the SS Penguin, a passenger ferry that met a tragic fate near this coastline.

On February 12, 1909, the SS Penguin was en route from Picton to Wellington when it encountered a severe storm. With visibility reduced to almost zero, the ship struck submerged rocks near Tongue Point. The impact caused significant damage, and the vessel began to sink rapidly. Despite the crew's efforts to launch lifeboats, the harsh conditions made rescue attempts perilous. Of the 105 passengers and crew on board, only 30 survived, making it one of New Zealand's deadliest maritime disasters. The event left an indelible mark on the region's history, and the remains of the SS Penguin still rest on the seabed as a solemn reminder of the dangers faced by those who traverse these waters.

An intriguing part of this story involves Pelorus Jack, a famous Risso's dolphin (very rare in New Zealand, similar in appearance to a pilot whale), known for guiding ships through the treacherous waters of the Cook Strait and into the Marlborough Sounds. Pelorus Jack was well-known and beloved by sailors for over 20 years, often seen escorting vessels safely past dangerous rocks. Pelorus Jack was shot at from the SS Penguin in 1904 and then a law was passed to protect the dolphin - believed to be the first sea creature in the world protected by law. Despite the incident Pelorus Jack continued to come out of the Sounds and guide ships, all except one. On the night the SS Penguin sank, Pelorus Jack was notably absent, adding a layer of mystery and poignancy to the tragedy. So, for those who believe in Karma - some believe that Jack's absence contributed to the ship's unfortunate fate, highlighting the unique bond between humans and marine life.

Pelorus Jack is also referred to in Maori mythology. A kaumatua (tribal elder) Kipa Hemi Whiro, of Ngāti Kuia believed that Pelorus Jack was "the self-same fish of ancient days", Kaikai-a-waro, a sea-god or taniwha who had guided his ancestor Matua-hautere across Cook Strait from the North Island to settle in the South Island many generations earlier.

This story reminds us that the Cook Strait is one of the most dangerous bodies of the water in the world. In total there are over 70 shipwrecks dotting the coastlines on both sides of the Strait.

Karori Rock/Lighthouse

Ahead, you'll see the Karori Rock Lighthouse, a vital beacon that has been guiding ships safely through these treacherous waters since 1915. The lighthouse was built following the SS Penguin disaster to prevent similar tragedies. It stands on Karori Rock, a small, isolated outcrop that juts out into the Cook Strait. Originally, the lighthouse was manned by keepers who maintained the light and kept watch over the strait. They faced challenging conditions, with powerful winds and waves constantly battering the rock. In the 1960s, the lighthouse was automated, eliminating the need for permanent keepers. Today, it continues to serve as a

crucial navigational aid, helping vessels safely navigate the often-turbulent waters of the Cook Strait.

The South Coast of Wellington

As we travel along the South Coast, take in the dramatic and rugged landscape that defines this part of Wellington. The South Coast is known for its steep cliffs, rocky shores, and windswept beaches. This area is a favorite among locals for outdoor activities such as hiking, fishing, and diving. The unique geological formations and the raw beauty of the coast make it a captivating place to explore. The South Coast is also home to a variety of native plants and animals, adding to its ecological significance. The interplay between the land and sea creates a dynamic environment that is constantly changing, offering new vistas and experiences with every visit.

The geology of the South Coast is ancient and fascinating. The cliffs and rocks you see here were formed during the Triassic period, over 200 million years ago (this is when the continent of Zealandia was still connected to the supercontinent Gondwana), shaped by volcanic activity and tectonic movements. The coastline is a geological treasure trove, with layers of sedimentary rock that tell the story of the region's geological past. These formations provide insights into the natural history of New Zealand, revealing evidence of ancient marine environments and the forces that have shaped the landscape.

Cook Strait and the Meeting of the Waters

As we look out over the water, we see the Cook Strait, the narrow body of water that separates New Zealand’s North and South Islands. Named after Captain James Cook, the first European to navigate the strait in 1770, it is one of the most challenging and treacherous stretches of water in the world. The strait is approximately 22 kilometers wide at its narrowest point and is known for its strong currents and unpredictable weather. Despite these challenges, it is a vital maritime route, with numerous ferries and cargo ships passing through daily. The Cook Strait is also a significant ecological region, home to a variety of marine life, including dolphins, whales, and numerous fish species. Its dynamic nature and crucial role in connecting the two islands make it a fascinating and essential part of New Zealand’s geography.

The South Coast of Wellington is where the waters of the Pacific Ocean and the Tasman Sea meet in the Cook Strait. This convergence creates a unique marine environment with a mix of water temperatures and currents, supporting a diverse range of marine life. The meeting of these bodies of water also contributes to the strait’s notoriously unpredictable weather and strong currents, making it a challenging but essential route for maritime navigation.

NZ Fur Seals at Tongue Point

Our next highlight is the NZ fur seals at the haulout at Tongue Point. These seals are a common sight along the Wellington coast, particularly at Tongue Point, where they come ashore to rest and bask in the sun. The NZ fur seal, or kekeno, is known for its playful and curious nature. They spend much of their time in the water, hunting for fish and squid, but come ashore to rest and socialize. The fur seal population here has rebounded significantly thanks to conservation efforts, as they were once hunted extensively for their pelts. Today, they are protected by law, and their numbers are steadily increasing. Watching these seals interact in their natural habitat is a delightful experience, offering a glimpse into the life of one of New Zealand's most charismatic marine mammals.

Let me tell you about New Zealand for seals the Maori name is Kekeno and these are the same as the Australian Fur Seal found in South Australia and Tasmania. The male grows to about 150 kilograms and the females are third of that at 50 kilograms. From about the age of five they start breeding and have a very interesting breeding cycle. They have the pups between November and February and about one week after giving birth they mate again and set aside
that fertile egg for three months and then drop the egg into the embryonic wall and have a nine-month gestation so they are pregnant for 51 weeks a year. They nurse the pup for about 300 days.

Where we are going is called a 'Haulout'. This is where the males mostly reside while the females with their pups and the eligible males are at another location in Wellington called Palliser Point, about two hours from Wellington at Cape Palliser. That's where the nursery is, so these are the males that are either too young to breed or too old to be fighting for the right to breed.

In winter we will see some females and their pups. Seals have one pup a year and live to about 17 years of age. Seals do have predators, a great white shark and the Orca. In New Zealand we have approximately 150 Orca and they are mostly named and identified by their markings. They live in separate pods and Wellington we have a regional pod of about 30 Orca. We occasionally do see Orca here. Typically, the seals fish at night when the squid rise to the surface, but New Zealand fur seals can dive as deep as 200 meters, and one is recorded as staying underwater for 11 minutes. They feed on other small fish and eels. Our company is the only company that conducts seal tours in Wellington.

We have the only permit licensed by the Department of Conservation to bring tours here. It's very important that we are safe, and the seals are not disturbed. We need to remain 20 meters back from the seals and I will guide you. If you're wearing a cap (and it is windy) we do not rush forward if our cap blows off. I will assess the safety of returning the cap.

The seals and are not dangerous, and they will not rush at us, but remember they are wild animals, so it is important we do not get between the seal, and the sea and just be mindful they can look like rocks.

The Capital Kiwi Project

A very exciting project that has been initiated in nearby Makara Terawhiti Station is the Capital Kiwi project—a remarkable attempt to bring our beloved kiwi back to Wellington's wild landscapes. Back in 2018, a group of passionate locals kicked off the Capital Kiwi project with a bold dream: to see kiwi roaming free in Wellington again. These iconic birds had disappeared from our region for over 100 years, but thanks to this project, they're making a comeback The big aim is to have 200 Kiwi living safely in the wild here in Wellington. To make this happen, the team has been working hard to reduce the number of predators like stoats, ferrets, and rats—these are the main threats to young kiwi. Today, there's a massive predator control area covering over 23,000 hectares with more than 4,500 traps in action. This is crucial because Kiwi chicks are especially vulnerable in their early months (only 5% of Kiwi chicks usually survive in the wild). The first big moment came in 2019 when the first Kiwi was released back into the wild. But the real highlight was in 2023 when the very first wild-born kiwi chick hatched right here in Wellington! It was a huge milestone that showed the project is on the right track.

Bringing Kiwi back isn't just about numbers. It's about restoring a vital part of our natural heritage. Kiwi are a keystone species, meaning their presence benefits the entire ecosystem. For Māori, the kiwi is a taonga, or treasure, with deep cultural significance. So, this project is helping to revive something truly special.

The journey is far from over. The team's goal is to see the kiwi population grow steadily until we have 200 of these amazing birds thriving here. They're also expanding predator control to cover more areas, ensuring a safe home for the kiwi.

But they can't do it alone—local communities, volunteers, and landowners are all crucial to the project's success. It's a real team effort, and everyone has a part to play in making sure the kiwi can call Wellington home once more.

Finally, let's delve into the local Māori history, focusing on the connections to Te Rauparaha, a prominent Māori chief of the Ngāti Toa tribe. Te Rauparaha was a brilliant strategist and warrior who played a crucial role in the early 19th century. He led his people through significant migrations and battles, establishing a strong presence in the region. Known for his cunning and resilience, Te Rauparaha was instrumental in securing land and resources for his tribe. One of his most famous legacies is the haka "Ka Mate," which he composed to celebrate a narrow escape from enemies. This haka is now performed by the New Zealand rugby team, the All Blacks, before their matches. Te Rauparaha's influence is still felt today, and his leadership is a testament to the rich cultural heritage of the Māori people in this region. His strategic settlements and alliances in the Wellington area helped shape the

region's history and demographics, with the Ngāti Toa tribe becoming a significant force in the area.

Karori

Karori, a suburb with a rich history, is known for its lush green spaces and historical landmarks. One of its most notable features is the **Karori Cemetery**, established in 1891. This cemetery is the final resting place for many prominent figures in New Zealand's history, including politicians, military leaders, and cultural icons. Some of the notable people buried here include:

- **Sir Michael Joseph Savage:** New Zealand's first Labour Prime Minister, known for his role in shaping the country's social welfare system.
- **William Ferguson Massey:** Prime Minister of New Zealand and a key figure in the development of the country's agricultural policies.
- **Sgt. Dan (Daniel) McKenzie:** A decorated soldier who fought in World War I and was a notable figure in New Zealand's military history.
- **Harry McNeish (carpenter on Ernest Shakelton's Endurance):** a Scottish carpenter, played a crucial role in Sir Ernest Shackleton's Imperial Trans-Antarctic Expedition. Despite his efforts to help the crew survive after their ship, the Endurance, was trapped and crushed by ice, McNeish was denied the Polar Medal—likely due to a clash with Shackleton over orders.

  After the expedition, McNeish immigrated to New Zealand, where he lived in poverty until his death in 1930. Though he died destitute, the New Zealand government honored him with a full naval burial. His grave at Karori Cemetery now features a headstone and a bronze statue of his beloved cat, Mrs. Chippy, thanks to the New Zealand Antarctic Society.

[If running an FIT tour after leaving the iSite and travelling down the Quays and up Whitmore/Bowen Streets turn right down Tinakori Road and head up into Wilton]

Travelling through **Thorndon** on the way to Wilton note that it is Wellington's oldest and most historic suburbs. It is known for its beautiful heritage buildings and proximity to New Zealand's government institutions, including the Beehive (the Executive Wing of Parliament). Thorndon's historic significance is highlighted by its early European settlement and its role in the development of Wellington as the capital city. The suburb boasts charming Victorian and Edwardian architecture, providing a glimpse into the city's past.

In the mid-19th century Kauri timber, roofing shingles and prefabricated houses were shipped to Sydney and then to San Francisco, the major port on the American west coast. Kauri helped build these cities, and after the devastating San Francisco earthquake and fire of 1906, it was used in rebuilding.

And here is Premier House, our equivalent of the White House. Our current Prime Minister prefers to live in his own city accommodation, as this house requires millions of dollars in upgrades to meet modern standards. Premier House includes part of the original house constructed in the early 1840s, so is Wellington's oldest surviving structure from the colonial period.

When the colonial settlers were building this early road, they asked local Māori to help build it. However, the Māori labourers had to work through their meal breaks. In Māori, tina is a transliteration of "dinner" and kahore means "none". Not a great way to start the relationship with the indigenous locals..

[Otari-Wilton's Bush - FIT tours]

Arrival: Otari-Wilton's Bush a Six-Star Garden of International Significance

Follow the suggested route below, stopping at the specific points of interest listed below:

On arrival and parking the vehicle introduce the group to Otari-Wilton's Bush: Aotearoa New Zealand's only entirely native botanical garden (so the plants are introduced but all are native). It is recognised as a Six-Star-Garden of International Significance, a prestigious accolade that underscores its importance as a conservation and educational resource. This rating is awarded by the New Zealand Gardens Trust, which assesses gardens based on their horticultural value, historical significance, and contribution to botanical knowledge. Being a six-star garden places Otari-Wilton's Bush among the top botanical gardens in the world, attracting visitors, researchers, and botanists from around the globe.

1. The Waharoa (gateway) and its meaning

As we enter the garden, we pass through the waharoa, or traditional Māori gateway. This beautifully carved structure serves as a symbolic entrance, representing the threshold between the everyday world and the natural sanctuary of Otari-Wilton's Bush. The carvings on the waharoa depict various aspects of Māori culture and mythology, acknowledging the deep connection between the indigenous people and the land. It reminds us of the respect and reverence we must have for this precious natural environment.

2. The Establishment and Significance of Otari-Wilton's Bush

Otari-Wilton's Bush was established in 1926 and stands as New Zealand’s only public botanic garden dedicated exclusively to native plants. Spanning over 100 hectares, it includes both native forest and specialized plant collections. The area was initially set aside by Job Wilton, a forward-thinking farmer who, in the 19th century, reserved 7 hectares of his land to

protect native bush. This act was met with dismay by his fellow farmers, who saw the untouched forest as wasted potential for pasture. However, Wilton's visionary decision laid the foundation for what would become a vital sanctuary for native flora. Thanks to the efforts of botanists like Leonard Cockayne, the area was transformed into a haven for New Zealand's indigenous plants, with the garden's mission focused on conservation, education, and scientific research.

3. The Alpine Garden

Our next stop is the Alpine Garden, a showcase of New Zealand's unique alpine flora. This area replicates the conditions found in the country's mountainous regions, featuring plants that have adapted to harsh, cold environments. Here, you'll find a variety of species, including the iconic Mt. Cook lily (Ranunculus lyallii) and several species of alpine daisies and cushion plants. The garden provides an excellent opportunity to see these hardy plants up close, many of which are not easily accessible in their natural alpine habitats.

[Image 2: Spiky plants] Stopping by these spiky plants explain that they have developed unique characteristics to protect themselves, including against the giant Moa bird, which a grass browsing bird, but these plants adapted so they couldn't be eaten hence (these spiky leaves).

Pohutakawa

This here is the Pohutukawa. This tree is iconic in New Zealand and our coastal Christmas tree. It always has bright red flowers at Christmas time. Its scientific name is *Metrosideros Excelsa* and I only tell you this because we'll see some other Metrosideros.

[Image 3: Metrosideros Bartletti]

So, for example here we have a *Metrosideros Bartletti*. This tree is found naturally only in the Far North of the North Island and was almost browsed to extinction by goats, horses and possums. At one point there were only 13 trees remaining in the wild because they had been almost eaten to extinction by the possum. Now they have been propagated and replanted.

Every night an estimated 70 million Brushtail possums are eating our forest every night. chewing their way through 21 000 tonnes of choice greenshoots, fruits, berries and leaves in our native forests (the equivalent of eating almost 200 million standard hamburgers each night). Possums are omnivores, and, as well as a wide range of leaves, they eat birds' eggs, chicks and insects. Their voracious appetite threatens the survival of many of our native plants, birds and insects.

Kawakawa

This tree is our *Kawakawa*. Indigenous Māori most commonly used this plant for Rongoa (or Māori traditional medicine practices). Look at the most chewed up leaves. Māori would use the leaves that the Kawakawa Looper (caterpillar/moth) insects eat because if it was good for the insect, it is good for the people. It could be used on as a poultice for wounds and makes a very nice tea (you can buy Kawakawa tea locally).

[Image 5: Tara/Lemonwood]

This tree is our ***Lemonwood/Tarata*** and it has a very nice smell..

The Nature of the NZ Native Forest

As we move deeper into the bush, we enter the realm of the native New Zealand forest. This forest type is characterized by its lush, green canopy and diverse understory of ferns and shrubs. Unlike forests dominated by conifers or broadleaf trees found in other parts of the world, New Zealand's native forests have a unique composition, including many ancient species that have remained unchanged for millions of years. The dense foliage creates a cool,

shaded environment, perfect for a leisurely walk while learning about the intricate relationships between the plants and animals that live here.

[Explain the five layers of NZ forest]

Northern Rātā

Here is another very unique *Metrosideros: Metrosideros Robusta or Northern Rata.* This magnificent tree can grow up to 25 meters tall and is known for its vibrant red flowers that bloom in summer. This tree is parasitic epiphyte (vine) and starts its life at the top of another species of tree (the host). Blown in by the wind, or dropped by birds, the seed sprouts a vine, and the vines comes down the tree touches the ground. Over time, its roots grow down to the ground and encase the host tree, eventually killing it and becoming a free-standing tree. Curiously in the North Island the process starts from the top of the tree, and in the South Island from the base. This unusual process makes the Northern Rata a fascinating example of plant adaptation and survival.

Kaikomako

This tree was once known as the world's loneliest and rarest tree, Kaikomako. At the very top of the North Island is a group of islands called the Three King Islands and back in the day the sailors would come from Australia to Auckland and would shipwreck on the islands, so they left goats for the shipwrecked people and these goats ate all the Kaikomako except for one. Fortunately, it was a female plant. In the 1940s this tree was found on a cliff and cuttings were taken and it took about 40 years before it was induced to self-pollinate and now the species has been replanted. Seeing this rare tree thriving here is a powerful reminder of the importance of conservation.

Puriri tree

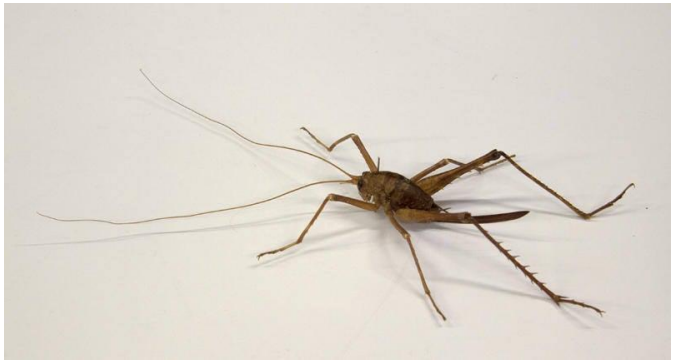
This is our Puriri tree. The equivalent of a mahogany tree with very hardwood. So hard the settlers didn't cut it down because it was too tough on their saws or axes However, there is a grub that lives inside the Puriri moth grub lives but there is a grub that lives inside the Puriri moth grub lives for seven years as a grub and then for two days as our largest moth… they don't have a mouth when they hatch and have only a couple of days to mate and lay eggs and that's their life cycle. Where they leave a hole in the tree that's where our Weta live. We have three species of Wētā living here (there are over 70 species in total in New Zealand):

Wellington Tree Weta: (Pu-tanga-tanga):

- all are nocturnal, are omnivorous and both play an important part in seed dispersal.
- When they are active at night, Pūtangatanga make a scratching noise to communicate by scratching the large spikes on their back legs against the ridges on their bellies.
- Ask your guests to take a closer look at the Wētā – is it male or female? Female Pūtangatanga can easily be told from their male counterparts by their long **ovipositor**, used in laying their eggs. This resembles a stinger and is found between their back legs.

- And males have a rather large and ferocious looking black head and large jaws which can give a painful bite – often fight all night with other males over a single female they fancy

Cave wētā, also known as jumping wētā (Toko-riro):



- Cave Wētā are nocturnal and live in tunnels, hollow tree trunks and under stones in the daytime. At night they leave their daytime shelter to feed.
- Due to their smaller mouths they tend to eat plants (not leaves), fungi and dead insects. Different to other Wētā, Cave Wētā have extra-long antennae and long slender legs for jumping.
- They can even leap up to 3 meters! Despite lacking hearing organs (tympana), this does not put them at a disadvantage to other wētā, instead cave wētā are very sensitive to ground vibrations detected through pads on their feet.

Giant Weta (Cook Strait Weta):

- Wētā Punga (the God of Ugly Things). The Giant Wētā acted like a mammal and occupied the space on the forest floor of the rat eating the dead birds and seeds. However, when the Māori arrived they brought the Pacific rat (Kiore) and this proceeded to eat most of the Giant Wētā, so these are only found on Islands or fenced sanctuaries.

[Show photos of the Puriri Moth and the Giant Weta from your phone]

Nikau Palm

Nikau Palm (Rhopalostylis sapida): The only palm native to New Zealand and the world's southernmost palm tree (so vey hardy - the only species to survive the last great cooling of the earth 20,000 years ago. The nikau is a striking tree with a tall, slender trunk and large, feathery fronds. It adds a tropical touch to the forest landscape and provides habitat for various birds and insects. In the Māori language, the name refers to "no nuts", as Polynesian people were used to coconut trees prior to arriving in Aotearoa, and this is close as they could find. Remarkably it takes up to thirty years for the fern to come out of the ground. Each of these rings represents about one year of growth. So, this a very old tree.

Ponga (Silver Fern, Cyathea dealbata)

The iconic silver fern is a symbol of New Zealand. Its fronds have a distinctive silvery underside, which is easily recognizable and often used as an emblem of New Zealand culture

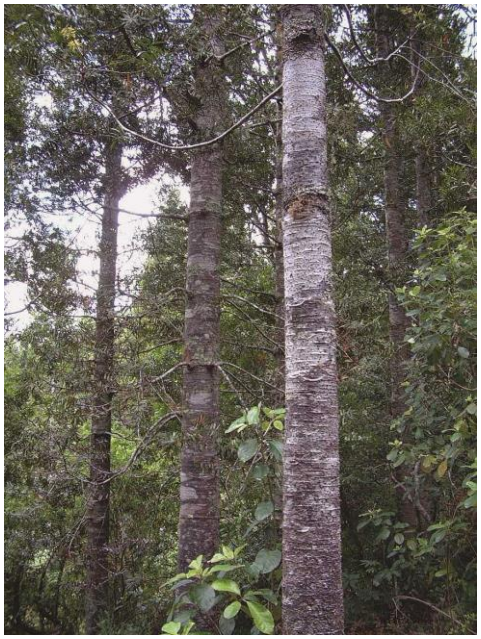
and sports teams. The silver fern has a deep historical and cultural significance. Māori used the fern's silvery underside to find their way at night, as it reflects the moonlight, making it a natural guide through the forest. Today, the silver fern is an emblem of national pride and identity, representing the spirit of New Zealand and its people. It is prominently featured in the logos of national sports teams, government agencies, and on military insignia.

The Fernery

This dedicated area showcases a wide variety of ferns, which are a significant component of New Zealand’s flora. For a marine temperate climate (that is a cool climate), New Zealand has an unusually high number of fern species at 200. Almost half are entirely native. We have some of the smallest to the tallest ferns in the world. From the delicate maidenhair ferns to the majestic tree ferns, this collection highlights the diversity and beauty of these ancient plants. We have the Mamaku the black tree fern, and the Wheki.

The New Zealand native forest is almost entirely evergreen, and we only have two trees that are deciduous (that is loose their leaves in winter): the Kotukutuku and the Kowhai.

Kauri (Agathis australis)



Kauri are one of the world’s mightiest trees, the Kauri is renowned for its size and longevity. These trees have a straight trunk and spreading canopy, and their wood has been highly valued for building and carving. Kauri didn't grow naturally this far south. Usually found only north of Auckland. However, they obviously can grow in Wellington's cooler climate. You will not grow in the South Island (as they cannot withstand frosts).

These Kauri are just infants, and you can see from the graphic that one day will be enormous. In Northland there is Tane Mahuta (the God of the Forest). Its age is unknown but is estimated to be between 1,250 and 2,500 years. It is the largest living Kauri tree known to stand today (girth: 15.44 meters (50.7 feet); height: 17.8 meters (58 feet)). However, there was a much more massive example that was one of the largest in recorded history at almost 30 meters in girth (almost 90 feet) and thought to be over 4000 years' old. By comparison General Sherman in America is 103 feet in girth. Tragically it was accidentally burned in a farm clearing fire in 1891. This incident is also symbolic of the more general destruction of New Zealand's original forests and ecosystem since human settlement. There are only about 40,000 mature or large Kauri trees remaining (5%) compared to the millions we had prior to the settlers arriving to cut them down for building houses and for building boats, the rebuild of San Fransisco and so on...

[Image 13: Karaka]

Now we don’t have poisonous snakes and spiders in New Zealand, however we do have poisonous trees, and this one. It is a Karaka Tree, the Māori word for orange. It has very abundant fruits that are quite large. The kernel of the fruit is the toxic part much like an apricot kernel is poisonous. The fruit falls to the ground and ferments and dogs will eat it and dogs will die. The Māori found a way to process this for eating. They would put it in running water for about a week then they would roast it in a fire and then feed it to their slaves to see if they got poisoned or sick. If they were okay, then it was good for the villagers to eat.

That leads us to the question, Māori had slaves? Yes, Māori are a tribal people, and there are 105 separate tribes across all of New Zealand. And at times they did have conflict between tribes. Te reo Māori is the indigenous language. While one universal and beautiful language is now spoken there are five or six dialects. It is likely there were multiple languages when Māori originally arrived here. They are thought to have come from Society Islands, Tahiti or Rarotonga and the DNA from 3000 years ago takes Māori back to Taiwan, then down through Micronesia, Melanesia into Polynesia. Around 25 percent of the New Zealand population can speak to Te Reo, and the language and culture is going from strength to strength (from almost disappearing in the late 19th century when the Māori population reduced to only 40,000 from around 200,000 when Captain Cook arrived in 1776). Around 19 percent of the current New Zealand population identify as Māori (nearly 900,000 people).

Canopy Walkway

Walking across this elevated walkway we get a great 'Bird's eye view of the forest canopy, and the spectacular artistry of nature. Look for example at the stunning symmetrical spread of a New Zealand fern. You can also catch a glimpse of the beautiful Kaiwharawhara stream and catchment, which weaves through these hillside suburbs and then drops down into the harbour near the Interislander Ferry terminal.

Leonard Cockayne lawn and Vulnerable Species Garden

Leonard Cockayne was one of New Zealand's most eminent botanists and a key figure in the establishment of Otari-Wilton's Bush. His pioneering work in ecology and plant science laid the foundation for much of our current understanding of New Zealand's native flora. Cockayne advocated for the conservation of native plants and the creation of botanical gardens dedicated to their study and preservation. The vulnerable species area within Otari is a testament to his legacy, where efforts are made to protect and cultivate rare and endangered plants, ensuring their survival for future generations.

As we reach the viewpoint overlooking the podocarp forest, we can appreciate the majestic 800-year-old Rimu, affectionately known as 'Moko'. It was a finalist in New Zealand tree of the year in 2024. This ancient tree is a living monument to the past, standing tall and strong as a symbol of resilience and natural heritage. The podocarp forest, with its mix of totara, matai, kahikatea, and Rimu trees, offers a glimpse into what much of New Zealand's lowland forests would have looked like before human settlement. Further up the hill you can see the regeneration that slowly taking part place. That land has been purchased by the Wellington Regional Council expanding the size of this reserve significantly. This reflects the wider conservation movement and philosophy here in Wellington, which is one of the few cities in the world that is actively increasing the biodiversity and green space around the city to make it a better place for wildlife and humans to lived together side by side.

Native Fauna at Otari-Wilton's Bush


Otari-Wilton's Bush is not only home to a wide variety of plants but also supports a rich diversity of native fauna. Birds are particularly abundant here, with species such as the tūī, kererū (New Zealand pigeon), Pīwakawaka (fantail), and the kākā often seen and heard throughout the forest. The garden also provides habitat for native insects, including the iconic wētā, and various lizards like the skink and gecko. Notably, a kiwi has recently taken up residence in the bush, a testament to the success of conservation efforts in providing a safe haven for these endangered birds. These animals play crucial roles in the ecosystem, from pollinating plants to controlling insect populations, and their presence highlights the garden's ecological significance.