



Taranaki is home to forests, wetlands and lakes, along with hundreds of streams and rivers winding their way from the mountain to the sea. Standing proud, Taranaki Maunga and Te Papakura o Taranaki are cloaked in native bush, home to birds, lizards and insects. To the north and east of the region, indigenous forest and wetlands can be found throughout the steep hills and valleys stretching inland to Whanganui and the King Country.

Prior to human settlement, much of the region would have been covered in native vegetation. Today, around 40% of Taranaki native forest and bush habitat remains. Taranaki Maunga and Te Papakura o Taranaki contain the region's only true alpine and subalpine habitats. Large tracts of forest can still be found in the hill country to the east, with smaller fragmented habitats scattered around the volcanic ring plain. The Sugar Loaf Islands and surrounding Marine Park provide habitat for nesting seabirds such as white-fronted tern, northern diving petrel and grey-faced petrel/oi, and a refuge for the largest New Zealand fur seal breeding colony/rookery on the west coast of the North Island.

Threats to native ecosystems and productive land include the destruction of habitat by invasive pest animals such as stoats, weasels and ferrets (collectively known as mustelids), possums and rats, along with the invasion of pest plants. These pests present challenges to the preservation and restoration of habitat on land and in lakes, streams and the coastal environment. To understand and respond to these challenges, the Council monitors various aspects of biodiversity and ecosystem health, such as the extent and condition of native habitat, presence of weeds and pest animals, abundance of native species and pressures from surrounding land use.

For the past 30 years, the Council has undertaken a range of work to tackle some of our biggest biodiversity and biosecurity challenges and has a range of strategies, plans and processes in place to address current and future issues.



What we know

Extent of indigenous habitats

Before human settlement much of Taranaki was covered in dense forests and wetlands, fringed with coastal dune and cliff habitats, supporting a unique assemblage of life. Since that time forest clearance, wetland drainage and realignment of streams, coupled with the introduction of predators, browsers and a variety of weed species have continued to affect its indigenous biodiversity.

Today, native forest and bush habitats make up around 40% of the region's land area, although many are isolated and modified to some degree. Around 55% of the steeper hill country to the north and east still has some native vegetation cover. By contrast, the flatter, more fertile ring plain has retained less than 5% of its native vegetation (outside of Te Papakura o Taranaki). The remaining habitat includes 36 types of native forest and shrubland ecosystems, and at least 12 threatened or naturally uncommon coastal and wetland ecosystems.

At least seven forest types now cover less than 5% of their former extent and a further five, less than 30%. From 2001 to 2018, the overall extent of the region's indigenous vegetation cover further declined by around 5,120ha. Around 3,765ha of this was lost from habitats already greatly reduced. The majority of the loss happened between 2001 and 2012. Between 2012 and 2018, this trend reversed with a 650ha gain in indigenous cover, compared to the previous five years. In part, this turnaround has been the result of extensive revegetation of riparian areas on the ring plain and regeneration of previously farmed and forested steep hill country. The success of the Council's wetland and riparian programmes has seen more than 7.2 million native plants distributed, and thousands of kilometres of streambanks replanted.

	Indigenous vegetation (ha)	Exotic vegetation, transport routes and urban areas
2001	294,003	425,329
2008	291,746	427,579
2012	288,228	431,100
2018	288,881	430,448
2001-2018	-5,122 (loss)	+5,119 (gain)

Change in indigenous vegetation compared to exotic vegetation in Taranaki, 2001 to 2018.

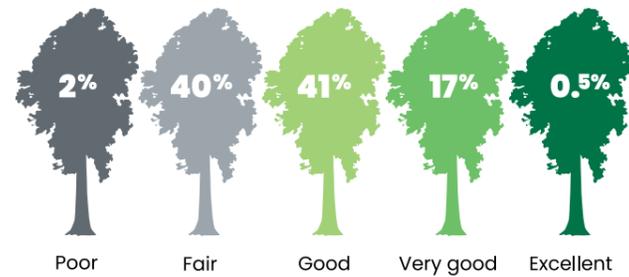
Native habitats in urban areas are also important for biodiversity. New Plymouth city is top of the table in New Zealand when it comes to native vegetation cover, with around 8% remaining. NPDC plans to increase this to 10% by 2030 through local revegetation programmes.

Protection of native habitats is increasing. More than 54% of our remnant native habitats, covering about 22% of the total land area of the region, are now formally protected (up from 51% in 2014). Public land is protected as reserves and parks by the Department of Conservation (DOC) and

district councils and private land is covered by conservation covenants or QEII open space covenants. Further protection is in place for designated Significant Natural Areas (SNA) and other forest, wetland and coastal areas through national policy and regional and district plans.

Condition of indigenous habitats

Between 2015 and 2020, the Council assessed the general health or condition of 223 patches of native bush. Results show forest remnants in Taranaki are generally in 'Good' or 'Very good' condition and continue to improve under management.



Forest condition assessment, 2015-2020.

The ring plain is scattered with numerous small (<50ha) remnant areas of native habitat. These are increasingly connected by riparian planting and are likely to be benefiting from the improving condition of Te Papakura o Taranaki. Most remnants are fenced and stock-proof and all come under the long running Self-Help Possum Control Programme, meaning there is limited pressure from pest species. These areas show increased abundance of palatable plant species, such as king fern, kanono and kohurangi.

Remnants in the hill country score slightly lower, with high numbers of possums and goats having a significant impact on regeneration of understorey and canopy species. Although degraded, larger remnant tracts of forest provide habitat for iconic threatened species such as western North Island brown kiwi and native bats. North Island kākā and a very small population of yellow crowned kākāriki still live in remote areas, although their future is uncertain.

Weeds are a constant threat and have the biggest impact on coastal areas, wetlands and regenerating bush margins. Fast growing, climbing and sprawling species such as blackberry, tradescantia, climbing asparagus and old man's beard are particularly bad for regenerating bush areas in the region. Since 2018, Council Environment Officers have identified more than 160 exotic plant species naturalising or beginning to spread into local native ecosystems.

Each spring, the Council uses standard counts to monitor forest birds in urban reserves and rural bush areas around the ring plain. These counts have shown increases in both abundance and variety of species over the last five to 10 years. Although there are more native than exotic bird species found in areas dominated by native vegetation, introduced species such as rosellas, blackbirds and chaffinches are commonly found throughout all bush areas.

Annual garden bird surveys have also shown increases in the number of tūī, kererū and tauhou/silvereyes in urban areas.

	Native bird species	Exotic bird species
Urban reserves and parks	19	18
Small rural bush remnants <50ha	20	16
Large bush areas >300ha	17	10

Number of native and exotic bird species recorded in urban reserve and parks, small and large bush areas, 2015-2020.

Coastal habitat

Small coastal turfs and herbfields are scattered along the coast in areas where the beach meets the land, with coastal sand dunes and beaches covering 15,700ha of the region. Some of the region's best remnant habitats can be found along the coastal cliffs of South Taranaki. Tiny endemic herbs are found in these areas, including *Crassula manaia*, which is found nowhere else in the world. These areas are under constant threat from coastal erosion and pressure from competition with exotic pasture grasses.

Most coastal turf communities and herbfields can be found along a 120km strip of South Taranaki coastline. Often sandwiched between eroding coastal cliff edges and intensively farmed land, these fragile habitats are considered nationally threatened. Sand blowouts and erosion, along with the impacts of weeds and pest animals, continue to reduce these threatened habitats. Less than 2,000ha (12%) is considered indigenous or partially modified.

Threatened shorebirds, such as the New Zealand dotterel and the variable oystercatcher, nest along the coast. Good numbers of the world's smallest penguin, the native kororā/little blue penguin, roost and nest along most of the shoreline, even in coastal areas of urban New Plymouth. Dogs and habitat disturbance remain a constant threat for all of these species.

Weedy exotic plants often overrun coastal dune systems, which are heavily impacted by vehicles and foot traffic. Surrounding land use pressures are also affecting these areas and sand blowouts and erosion are common. Coastal dune systems in the region are highly degraded with 66% of those monitored between 2016 and 2020 in either 'Fair' or 'Poor' condition, 33% in 'Good' condition and 0% in 'Very Good' or 'Excellent Condition'.



Coastal dune condition assessments, 2016-2020.

Biodiversity and beef? No tension, say farming couple



Mat and Vanessa Vujcich.

Vanessa and Mat Vujcich have given over a good third of their 100ha beef unit to biodiversity – and they say there doesn't have to be tension between environmental priorities and business imperatives. If anything, it's proved quite the opposite.

"Our animal performance has been improving because we focus on looking after the land holistically," says Mat. "It's all one package really – looking after the bush, restoring wetlands, controlling pests, and keeping pasture soils and waterways healthy as well."

They've got QEII covenants on 28ha of bushland on their farm near Inglewood. The protected bush is also part of the Council's Key Native Ecosystem programme. This opens opportunities for assistance with fencing and pest control, which they have gladly taken up.

There is also extensive wetland and riparian fencing and planting along waterways outside the protected areas. The farm borders Te Papakura o Taranaki and Mat and Vanessa recognise the importance of their planted riparian

strips as corridors for native species. They also control pests so native species can thrive.

They enjoy seeing the property's growing abundance of native birds and native plant species as they work day-to-day on the farm. For Vanessa, it's the birds that are special, particularly those classified as threatened or at risk. She's delighted every time she sees kārearea, or New Zealand native falcon, wheeling above her, and proud that whio/blue duck, are taking advantage of the corridors to expand their range from the national park.

Another notable feature of the property is the number of miromiro, or tomtits – they've even been seen cavorting around the homestead. While not classified as threatened, they're not usually encountered up close in a working farm environment. Kererū, tūī, korimako/bellbirds, pihoihoi/pipits and riroriro/grey warblers are among the other native bird species on the property.

Mat has a keen eye for the native bush on the property, and the changing display as different species come into

flower at different times. Kamahi is abundant and their bush is also home to threatened swamp maire, as well as rimu, miro, tawa, rewarewa and kahikatea.

The covenanted Piakau Stream and other waterways on the property also provide good habitat for native fish species, with shortjaw kōkopu, kōaro and tuna, or longfin eel, recorded there.

Mat and Vanessa see the native biodiversity as something to be treasured. It's also spurred their interest and adoption of regenerative farming practices. They view biodiversity in the soils and pasture every bit as important as biodiversity of bush, wetlands and riparian habitats. Their involvement in a local network of like-minded people has led to visits from Inglewood High School students and teachers to study the stream life and even help to plant a riparian corridor on the property.

Vanessa and Mat say land ownership is not just about the money that can be made from it. It's about the future.



Kererū.

Threatened species

According to the latest national threat classifications, at least 40 of Taranaki land and shorebird species are now considered threatened or at risk, along with two species of native bat, 10 reptiles and around 90 native plants.

Since 2015, the number of species considered to be in trouble has increased in Taranaki. This is due in part to the reintroduction of three rare bird species previously lost to the region. Joint projects between community groups, iwi, DOC and the Council have seen five rare and threatened native bird species (whio/blue duck, stichbird/hihi, saddleback/tīeke, brown teal/pāteke and kōkako) reintroduced to the region since 2000. Several others, such as North Island brown kiwi, whitehead/pōpokotea, tītipounamu/rifleman and North Island robin/toutouwai, have been relocated to restore local populations following intensive predator control efforts by communities and local agencies.

Other additions to the threatened list are for more sombre reasons. In the last five years, three of the region’s 11 native lizard species have become more threatened. This includes the copper skink, which has gone from ‘Not Threatened’ to ‘At Risk’, and the Kupe skink, which has become so rare it is listed as ‘Nationally Critical’; one step from ‘Extinct’.

The number of native plants on the list has also increased. Several plants and trees were added to the national lists in

2018 after the discovery of myrtle rust, due to the increased risk this fungus has on their survival and reproduction. Certain natives, such as swamp maire/waiwaka and ramarama, are particularly susceptible.

At least three plant species are likely to have become regionally extinct in the past 30 years, and some are just hanging on. The nationally threatened dactylanthus/pua o te reinga is still present in Taranaki, although greatly reduced in abundance. Historically, large scale clearing of indigenous vegetation has meant loss of habitat for this parasitic plant, while possums directly damage the plants when they flower. Regular possum control in key areas is helping to maintain the species in the region.

Taranaki also has at least seven species of threatened or at-risk terrestrial invertebrates, including the nationally threatened Notoreas moth (*Notoreas perornata*). This moth is only known to be found in a handful of small coastal herbfield sites, including in South Taranaki. Recently, the newly described Jacinda wētā was discovered in the bush at Pukeiti and on Taranaki Maunga. Increased predator control may be making these species more detectable and show that there is still lots more to discover, as the condition of our ecosystems improve under management.

	Threatened	At risk
Birds	11	29
Bats	1	1
Lizards	1	9
Invertebrates	1	6
Plants	41	49
Total	55	94

Number of threatened or at risk native species that use terrestrial habitats in Taranaki as at 2020.

Pest animals

A key focus for pest control in the region is Taranaki Maunga and Te Papakura o Taranaki, covering approximately 34,170ha. The Department of Conservation, with support from the Taranaki Mouna Project, oversees day-to-day management of Te Papakura o Taranaki. Pest control operations primarily control possums, mustelids and to some extent rats. The national park is very nearly free of feral goats, and has no feral deer or pigs.

The Taranaki ring plain surrounds Te Papakura o Taranaki and is generally characterised by modest sized and highly developed dairy farms in private ownership. Possum control is a key focus however, mustelids, feral cats and rats are increasingly subject to co-ordinated management by landowners through Council programmes and by other agencies and organisations. Rabbits, hares and hedgehogs are also common in the agricultural landscape and while they can thrive in drier conditions, such as well-drained sandy soils on the coast, their populations are variable across the years owing to the region’s relatively high rainfall climate.

The Self-help Possum Control Programme has been running since 1992, keeping possum numbers low on the ring plain. Possum numbers are measured using the residual trap-catch (RTC) index, a simple method of determining relative possum abundance. The aim of the programme is for landowners to keep possum numbers below 10% RTC, or fewer than 10 possums caught for every 100 trap nights.

The number of landowners involved has increased over the past decade, from 3,753 properties covering 227,000ha in 2008 to 4,211 covering 240,000ha in 2020. The RTC has increased in recent years, from 6% in 2015/2016 to 6.8% in 2019/2020. It is of increasing concern that control by landowners is losing ground, with increasing impacts on indigenous flora and fauna in 24,016ha of riparian margins and threatened ecosystem areas on the ring plain.



Possum.



Stoat.

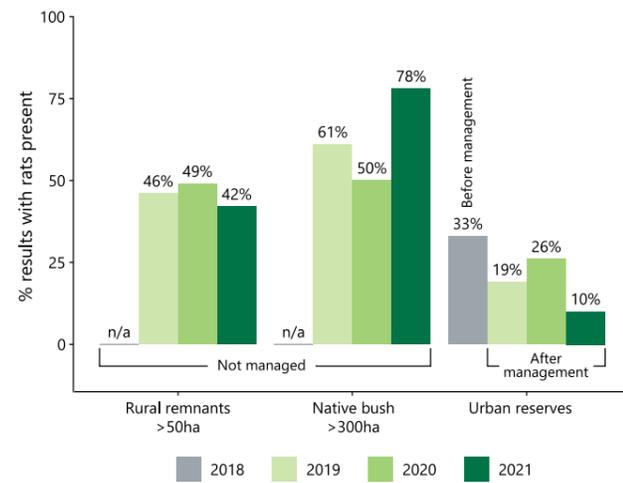
To the north and east of the region there are large areas of indigenous forest and wetlands among the steep hills and valleys. Less investment in biosecurity initiatives in the eastern hill country means that in large areas of forest species are in decline, reduced or displaced by browsing pests. Indigenous fauna is predated on leading to risk of population fragmentation and/or localised extinction.

On private land in the eastern hill country, possum numbers are generally very high, due to the challenging geography and prioritisation of labour towards agricultural production. Monitoring results show an average RTC of 49.8%. Control is generally only done by fur trappers, to protect new forestry and for a small number of conservation projects.

The control of feral goats, fallow and red deer and pigs on private land is sporadic, by recreational hunters or undertaken periodically during exotic and mānuka forest establishment. Mustelids, feral cats and rodents are also present in relatively high numbers. While these species are not usually controlled on private land, there are a large number of well-co-ordinated community restoration projects, many protecting the western North Island brown kiwi.

The urban predator control programme focuses on co-ordinated rat, mustelid and possum control in parks and in backyards. By June 2020, 12,000 traps and bait stations had been deployed across the New Plymouth, Waitara, Oākura, Ōkato and Ōpunake urban areas. The early concept was to appeal to 'hearts and minds' of the most densely populated part of the region, but very quickly calls came from other rural and urban communities to bring these programmes to their local districts and towns.

Monitoring of catch count data indicates significant decline of rodents and possums in urban areas where there is co-ordinated pest control. Monitored bush reserves in New Plymouth with regular rodent control recently achieved a monitoring rate of less than 10% (rodent tracking rate). Although there is still work to do, this is considerably lower than the 40-50% regularly recorded in small rural bush remnants (<50ha), or the over 75% recorded in large areas of contiguous bush (>300ha) without effective rat control.



Rat abundance in urban reserves, small rural bush remnants and large areas of native forest in Taranaki, 2018-2021.

Pest plants

Pest plants such as old man's beard, giant gunnera and wild ginger also manifest in natural areas, such as the coast, riversides, the margins of forest fragments and wetlands and in unmaintained parts of the urban environment. On lowland farms, if left unmanaged, some pest plant species can affect production, such as giant buttercup and ragwort.

Old man's beard is considered the most damaging of invasive climbing weeds in New Zealand. In Taranaki, landowners are required to control it on their property. There are exceptions, including three key areas with dense plant populations - Kaūpokonui Stream, Pātea River and Waingongoro River - where the Council has begun control operations. Once control has been completed landowners must maintain the gains made, the same as other landowners in the region.

The Council supports landowner control of the aggressive environmental weed species giant gunnera, kahili, wild ginger and giant reed. Giant buttercup, gorse, wild broom, yellow ragwort and the three key thistle species are primarily agricultural pests. Landowners must control these species and are motivated to do so largely in order to maintain land productivity. The Council will issue Notices of Direction to landowners when necessary, especially where a

neighbour is working hard to control the pest species.

Pest plant issues tend to be localised in the hill country, with species such as yellow bristle grass, tutsan, Japanese honeysuckle, Himalayan strawberry, Darwin's barberry and Chinese privet found along waterways, transport corridors and areas of disturbed land such as deforested and highly erodible land.

Eradication programmes are in place to rid the region of five highly damaging pest plants: climbing spindle berry, giant reed, madeira vine, moth plant and Senegal tea.

In 2019-2020 the Council actively monitored 189 sites with current or recent presence of eradication species, and undertook direct control at 106 of those sites.



Madiera vine.



Moth plant.



Climbing spindle berry.



Senegal tea.



Giant reed.

What we're doing

Regional Biodiversity Strategy

First adopted in 2008 and updated after a review in 2017, the Council's Regional Biodiversity Strategy outlines 180 actions to help maintain and improve biodiversity in the region. These actions contribute toward four key priorities: working with landowners through our Key Native Ecosystems (KNE) programme; enhancing biodiversity components of existing Council programmes; working with others to promote integrated management of indigenous biodiversity, and monitoring the extent and state of biodiversity on private land to enable sound management decisions and prioritisation.

One aim of the strategy is for more than 25,000ha of Taranaki remnant native ecosystems on private land to be under active management. The KNE programme presently covers almost 18,000ha and this figure continues to grow each year. Many of the Council's other programmes and initiatives also contribute toward this target.

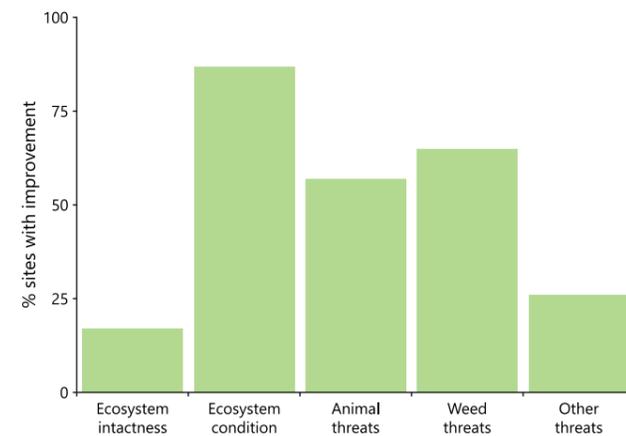
Another requires that 60% (170,000ha) of Taranaki remnant native ecosystems, including the public conservation estate, be formally protected. Presently, 54% (157,623ha) of the region's remnant native ecosystems are protected under DOC, QE II National Trust, or Conservation Covenant.

Others objectives include creating wildlife corridors from the maunga to the sea through retirement and vegetation of intensively farmed catchments, maintaining low levels of possums and predators to protect remnant ecosystems and indigenous wildlife and supporting and resourcing Wild for Taranaki and community groups to deliver biodiversity initiatives and outcomes.

Key Native Ecosystems (KNEs)

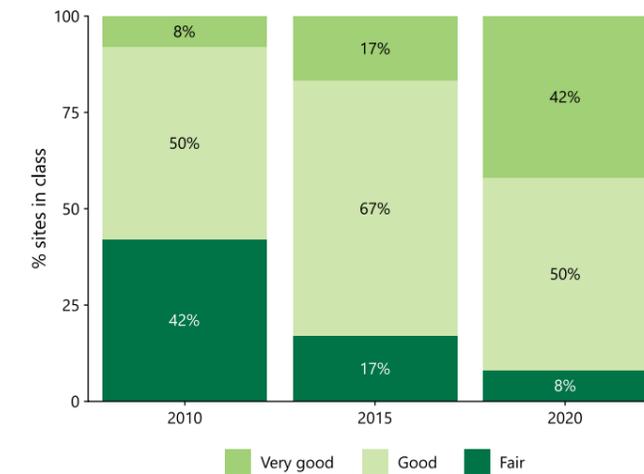
Since 2006, the Council has been identifying and surveying areas of important biodiversity value. As of 30 June 2021, it had identified more than 330 KNEs, covering a variety of habitats. For sites of high biodiversity value on private land, the Council provides free advice to landowners to help restore and protect those values. In some cases, sites may qualify for a Council-developed Biodiversity Plan.

Monitoring data from 46 forest remnant sites with a Biodiversity Plan shows strong gains from this programme. After five years of management, 26 sites (56%) showed reduced threats from animal pests, 34 sites (65%) showed reduced threats from weed pests, with 12 (26%) showing a reduction in other threats such as habitat loss or modification. Ecosystem intactness improved at 8 (17%) of sites and a total of 40 sites (86%) showed an improvement in ecosystem condition.



Ecosystem improvements at sites re-measured between 2015 and 2020, after five years with a Biodiversity Plan.

Ten-year repeat forest assessments have just got underway. Initial results from 12 sites show continued improvement. In 2010, initial surveys showed only one site (8%) was in 'Very Good' condition. After five years with a Biodiversity Plan, this climbed to two (17%) and after 10 years, five sites (42%) were in 'Very Good' condition. Eleven out of the 12 sites (92%) were in 'Good' or 'Very Good' condition.



Changes in overall ecological condition of forest remnants after 10 years with a Biodiversity Plan.

Pest management: a strategic approach

In 2018, the Council adopted a revised Regional Biosecurity Strategy (Strategy) and Regional Pest Management Plan (RPMP) to help address key biosecurity challenges for the region over the following 10 to 20 years. The RPMP is the Council's 'rule book', targeting specific pests for eradication or sustained control in the region. The Strategy outlines broader biosecurity goals and actions, covering all pests and harmful organisms, not just those in the RPMP.

The Strategy sets out five priorities that govern the activity of Council programmes and work. These broadly include excluding new pests, eradication of serious pests with limited distribution, sustained control of pervasive and widespread priority pest species, collaborating with others to achieve identified outcomes and regional leadership through strategy, planning and contributing to collaborative initiatives. The Strategy identifies 76 harmful organisms, including 35

pest animals and 41 pest plants. Twenty-one of the pest species targeted for eradication and sustained control are present in the region. Council responses to these priority species includes a combination of planning tools – such as advice, rules and monitoring aimed at co-ordinating on-going 'self-help' control by the community and Council-funded eradication programmes.

Sustained control of the 16 pervasive pest species is carried out either over the entire region, or in the case of the brushtail possum and mustelids, on about 240,000ha of private land surrounding Te Papakura o Taranaki. These species include:

- Pest animals - Brushtail possums, mustelids
- Pest plants – old man's beard, giant gunnera, kahili and wild ginger, giant buttercup, gorse, nodding, plumeless and variegated thistle, wild broom and yellow ragwort

The Council fields many inquiries regarding pest species and provides advice and information to the community on a daily basis. Species particularly harmful to the environment are further identified in the RPMP for advice, action and regulation. Some are not currently within the region but pose risk of entry, or are within the region but are very widespread. These species are therefore subject to monitoring, advice, information, and action where appropriate.

Our rangatahi making a difference

Environmental Educator Ash Muralidhar (left) and Rotokare Youth Ambassadors.

Rotokare Scenic Reserve Trust has impressive biodiversity successes to its credit – most recently the release of Rotokare-bred kiwi into the Kaitake Range under its flourishing 'Taranaki Kōhanga Kiwi at Rotokare' partnership with Taranaki Kiwi Trust.

The accessible wildlife sanctuary with strong community roots can also be thanked for the return of tīeke (saddleback) to Taranaki after 150 years, and for successfully breeding hihi (stitchbird), one of New Zealand's rarest species. And the list goes on.

And the accomplishments don't stop there. The Rotokare Scenic Reserve Trust is nurturing and equipping young environmental and conservation champions, who are already putting their enthusiasm and skills to work not just at Rotokare, but right across the region.

"It's exciting to see our rangatahi spreading their wings with confidence and setting out to make a real difference across the region," says Rotokare's Environmental Educator, Ash Muralidhar, who runs the Youth

Ambassador Programme. "This is why the programme is such an important extension to the work we do with native species and landscapes."

Almost 50 young people have been through the programme in its first five years, taking a hands-on approach as they learn about predator control, monitoring native birdlife, creating habitats for invertebrates and monitoring and improving the health of wetlands.

The Trust takes a 'toolbox' approach to its education and training, calling in its own experts and others from around the region and the country to contribute to the skills and knowledge of the Ambassadors.

The Youth Ambassador Programme was initially set up for senior primary school students but graduates refused to leave at the end, so it has been extended to encompass junior and senior programmes.

While the graduates remain firmly connected to the sanctuary, they have also gone on to a variety of projects –

in some cases starting their own. These include predator-trapping programmes, fundraising and educational work with schools and at workshops they've organised themselves. They've volunteered with conservation programmes across Taranaki and as far afield as South Africa, won conservation awards and taken part in high-level environmental forums.

"It's so great to see our Ambassadors realising that they can make a difference, and seizing opportunities and creating their own opportunities to do so," says Ash. "We also see their enthusiasm taking root in their own homes, with their own whānau inspired to become involved in conservation efforts."



Tīeke (saddleback).



Taranaki Taku Tūranga - Towards Predator-Free Taranaki

The Council-led Towards Predator-Free Taranaki is a large-scale project aimed at restoring the region's unique wildlife and plants and protecting lifestyles and livelihoods by removing introduced predators. Launched in 2018, the project uses the latest trapping techniques, innovation and technology to help move New Zealand towards its Predator Free 2050 target.

Taranaki has unique advantages because of its relatively compact geography, its regional and national expertise in biodiversity and predator control, and strong community collaboration and enthusiasm at all levels. The region-wide programme builds on the community's successful biodiversity work, including the Self-help Possum Control Programme, Riparian Management Programme and protection of KNEs. Residents, businesses, schools, iwi, environmental and community groups are working alongside Council staff to remove possums, rats and mustelids from urban, rural and public land across the region.

By June 2020, the project's rural programme had deployed 4,091 mustelid traps across 44,473ha of the ring plain, centred around the rural Waiwhakaiho and Te Henui catchments, and within a buffer surrounding the whole of Te Papakura o Taranaki. Monitoring showed up to a 90% reduction in mustelid populations in areas under trapping control. The plan is to roll predator control out across 231,344ha of the ring plain over a 10-year period, expanding the scope of the Self-help Possum Control Programme.

A further initiative has been a partnership between Taranaki Mounga Project, the Council and the Kaitake community, attempting to eradicate possums from the Kaitake Range.

This includes pest control within Te Papakura o Taranaki along with around 2,000ha of surrounding private rural land. This work is ongoing, using a variety of methods, with preliminary results indicating eradication is possible and imminent, though further investment will be required.

Aquatic pests

Aquatic pest organisms, such as pest fish, macrophyte weeds, snails and algae, pose a significant and often irreversible threat to freshwater and marine ecosystems. There are small, localised populations of gambusia in New Plymouth and Waitara urban areas. Rudd and the sports fish perch, a voracious predator of native species, are present in our largest lake, Lake Rotorangi, and a number of other locations. The notable freshwater macrophyte weed hornwort is present at limited sites and is spreading to a small number of new locations, most likely via boats, boat trailers, eel fishing and/or duck shooting decoys and equipment. The coastal pest plant sea spurge was recently found in dunes near Oākura. At Port Taranaki the exotic seaweed undaria has been present for more than 10 years, despite control measures.

Check Clean Dry is a freshwater pest advocacy programme co-funded by MPI and delivered locally by the Council. The programme aims to educate boaties, anglers, paddlers, trampers and other freshwater users to follow the Check, Clean, Dry procedure when moving between waterways. This helps minimise the risk of transfer of exotic freshwater organisms, such as the algae didymo, macrophyte pest plants, pest fish and invertebrate pests such as snails and exotic leeches.



Where we're heading

National direction and policy changes

The Government has indicated changes to national policy and legislation are in progress, with a new National Policy Statement for Indigenous Biodiversity (NPS-IB) in development.

The aim of the proposed NPS-IB is to promote the maintenance and protection of indigenous biodiversity while providing for the social, cultural and economic wellbeing of communities. Councils will need to identify and map areas where there is significant vegetation and habitats of indigenous fauna, and manage the protection of these Significant Natural Areas (SNAs) through plans and consent processes under the RMA.

The proposed NPS-IB places importance on people and partnerships, and on the protection, restoration and enhancement of indigenous biodiversity. It recognises the need to incorporate mātauranga Māori and tikanga Māori, and the importance of recognising and protecting taonga species and ecosystems.

Public consultation on the proposed policy statement took place between November 2019 and January 2020. Following consideration of submissions, the Government is expected to release an exposure draft of the NPS-IB in 2022. It is likely to be accompanied by support measures to ensure iwi/ Māori, landowners, councils and other stakeholders are assisted to protect our indigenous biodiversity.

Preparing for new pest incursions

New incursions of pest organisms and expansion of small populations within the region present an ongoing challenge. Pathways analysis, planning, monitoring and management are essential at national, regional and even sub-regional scales going forward, if we are to hold the tide of pest species back.

In May 2017, myrtle rust was detected on mainland New Zealand for the first time and is now widespread across much of the country, including Taranaki. This fungal disease affects myrtle plants including natives such as pōhutukawa, mānuka, and kānuka, and productive species such as feijoa. Shortly after the discovery of myrtle rust *Mycoplasma bovis*, a bacterium that causes health issues in cattle, was detected in New Zealand. MPI's rapid and stringent response confirmed and cleared 270 properties nationally, including one in Taranaki. In April 2022, two properties in Canterbury remained under quarantine control.

There are a few other organisms occasionally observed in the region, such as Argentine ants, rooks and rainbow lorikeets and a few reptile species – plague skinks, eastern water dragons and red-eared slider turtles. No wallabies have yet been identified in Taranaki, nor certain species of feral deer including wapiti, sambar, rusa and white-tail. The illegal release of deer happens on occasion, and DOC has swiftly addressed isolated instances of sika deer release. The community must remain vigilant to minimise the potential for new pest incursions into the region. The Council will continue to monitor and respond accordingly.

Weed Wizard works magic



The Weed Wizard does his best David Bellamy impression among old man's beard.

Our region's very own Weed Wizard has been on a mission to help rid the region of pest plants, using a light-hearted approach to tackle a serious problem.

It all started on a noisy roadside outside Stratford, where Council Environment Officer Mike Beech recorded a spontaneous video about pampas. From there, it evolved into a Weed of the Week and the Weed Wizard – as he was quickly dubbed by his colleagues - was born.

The short videos are shared on the Council's social media platforms and have been viewed and shared by thousands of people. Behind the tongue-in-cheek style is a serious goal - to raise awareness of what different pest plants look like, why it's important to control them and how to remove and dispose of them.

The unscripted videos have seen the Weed Wizard waltzing with woolly nightshade, napping in tradescantia and hunting for pandas among bamboo. The Weed Wizard has also appeared at local markets and was even interviewed on breakfast radio!

The videos have featured plants listed in the Regional Pest Management Plan, such as ragwort, ginger and gunnera. But the Weed Wizard didn't stop at that. There are hundreds of invasive weeds in the National Pest Plant Accord that landowners have no obligation to control, but are nonetheless damaging native ecosystems.

The Council works closely with Weedbusters to educate, raise awareness and inspire people to take responsibility for weeds on their own land. The Weed Wizard has helped with that mission, engaging an audience who may otherwise have been tricky to reach.

Ridding Taranaki of pest plants will be an uphill battle, but every little bit will make a difference for our native biodiversity.

You can view the Weed Wizard videos on the Council's YouTube channel.

