



# Conservation Status of Birds in Tāmaki Makaurau / Auckland

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Technical Report 2024/5







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Cover image credit: Saddleback / tīeke (*Philesturnus rufusater*). Photograph by Martin Sanders.

Inside image credit: Australasian Gannet (*Morus serrator*) colony at Muriwai Regional Park. Photograph by Jacinda Woolly.

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# Executive summary

The regional conservation status of all known bird taxa in Tāmaki Makaurau / Auckland was assessed for the first time, using the New Zealand Threat Classification System (NZTCS) (Townsend et al., 2008; Michel, 2021; Rolfe et al., 2021). We used the draft methodology for regional conservation status assessments developed collaboratively by the Department of Conservation, regional councils and a local authority (Department of Conservation, 2014).

We identified a total of 230 bird taxa as present or occasionally present in Tāmaki Makaurau / Auckland. One was assessed as Regionally Data Deficient, 34 taxa were assessed as Regionally Threatened, 20 taxa as Regionally At-Risk, 24 taxa as Regionally Not Threatened, 123 taxa as Non-Resident Native, and 28 taxa as Introduced and Naturalised to the region. Thirty-two species were recognised as to have become extinct or may have formerly occurred in the region.

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# 1 Introduction

The Department of Conservation regularly assesses the national conservation status of many taxa using the New Zealand Threat Classification System (NZTCS) (Townsend et al., 2008; Michel, 2021; Rolfe et al., 2021). National conservation status assessments of New Zealand birds are published at regular intervals as part of the Department of Conservation New Zealand Threat Classification Series (Hitchmough, 2002; Hitchmough et al., 2007; Miskelly et al., 2008; Robertson et al., 2013; Robertson et al., 2017; Robertson et al., 2021). While the national assessments are helpful for prioritising conservation management, research, monitoring and natural resource management decisions at a national scale, there are limitations in their use for informing these at a regional scale in relation to the statutory and land management responsibilities of local government agencies.

The regional conservation status of a species is particularly important in the context of consent processes under the Resource Management Act 1991 (RMA) because regional and district councils have an obligation to recognise and provide for the protection of significant habitats of indigenous fauna. A key requirement of managing significant habitats of threatened species and achieving the recovery of threatened species in Tāmaki Makaurau / Auckland is to have a good understanding of regional population sizes and to know if and where declines are occurring. In addition to regulatory requirements, regional conservation assessments help inform other local government functions concerning the protection of indigenous fauna. These include land management of parkland with high biodiversity and advice and support to other landowners and community groups involved with conservation activities. Furthermore, regional conservation status assessments will provide information to support national species assessments, as they use regional expert knowledge and data that may not otherwise be readily available.

Completing regional conservation status assessments for birds in Tāmaki Makaurau / Auckland is a component of Auckland Council's Biodiversity Focus Area (BFA) programme. Under this programme, several projects are delivering on the council's obligations for regional biodiversity management under Te Tahua Pūtea Tau 2021-2031 Long-term Plan (Auckland Council, 2021), Auckland Council's Indigenous Biodiversity Strategy (Auckland Council, 2012), Te Mana o te Taiao – Aotearoa New Zealand Biodiversity Strategy 2020 (Department of Conservation, 2020), Mahere ā-Rohe Whakahaere Kaupapa Kōiora Orotā mō Tāmaki Makaurau Auckland Regional Pest Management Plan 2020-2030 (Auckland Council, 2020) and the National Policy Statements for Freshwater Management and Indigenous Biodiversity (Ministry for the Environment, 2023a; 2023b).

Methodologies for a consistent regional threat classification system (RTCS) were drafted in collaboration with councils and Landcare Research by the Department of Conservation (2014; Appendix 1). While based on the national NZTCS system (Townsend et al., 2008; Michel, 2021; Rolfe et al., 2021), scaling thresholds were introduced to adjust for variations in regional land area relative to national land extent. National strongholds and additional regional qualifiers, including natural or historic range limits, were also considered (Appendix 2). Greater Wellington Regional Council was the

first to publish regional conservation status assessments for several taxa groups in the Wellington region (Crisp, 2020a; 2020b; 2020c; Crisp et al., 2022; Crisp et al., 2023a; 2023b). Auckland Council has recently completed regional conservation status assessments for reptiles, amphibians, vascular plants and bats using this draft methodology (Melzer et al., 2022a; 2022b; Simpkins et al., 2022; Woolly et al., 2023). This report for Tāmaki Makaurau / Auckland is the first regional conservation status assessment for birds using this system.



## 2 Methodology

A panel of external experts (Dr Tim Lovegrove and Dr Hugh Robertson) and Auckland Council ecologists (Dr Gaia Dell’ArICCia, Jacinda Woolly and Dr Sabine Melzer) assessed the status of the bird species in Tāmaki Makaurau / Auckland during virtual workshops held during September 2023. The external panel members were invited to participate in the assessment based on their knowledge of, and experience working with, birds in the region and/or nationally, and familiarity with the assessment process.

This report covers all known native and naturalised birds in the region and follows the draft Department of Conservation process for assessing regional conservation status (Department of Conservation, 2014; Pascale Michel, pers. comm.). Taxa that have become naturalised in New Zealand after being deliberately or accidentally introduced by human agency are classified as Introduced and Naturalised. To be considered naturalised, a taxon must have established a self-sustaining population in the wild persisting for over at least three generations and it must have spread beyond the site of initial establishment.

The assessment used bird observation records from Auckland Council’s own regional surveys and monitoring data, along with external datasets, to inform decisions on the distribution of each bird species. External datasets included the eBird database (eBird 2023), iNaturalist database (iNaturalist 2023), the Wilderlab public environmental DNA (eDNA) portal (Wilderlab 2023) and published and unpublished results of regional bird counts from Birds New Zealand. While species distribution records were used to support decision-making, these data do contain caveats that need to be considered, including differences in survey methodologies, possible misidentification of some species, location inaccuracies and bias of observations that are often clustered around public land or where development and associated surveys have occurred. The panel critically assessed the available data and also drew on their own experience and expert knowledge to consider current and likely future threats to determine the ultimate conservation status of each species.

A decision support tool was developed in Auckland Council’s conservation information system, Ruru, including an ESRI Survey123 form to facilitate assessing each species following the process outlined in Appendix 1. The Survey123 form contains a series of predefined questions and selections. Spatial data were viewed in ESRI ArcGIS Pro version 2.6.4.

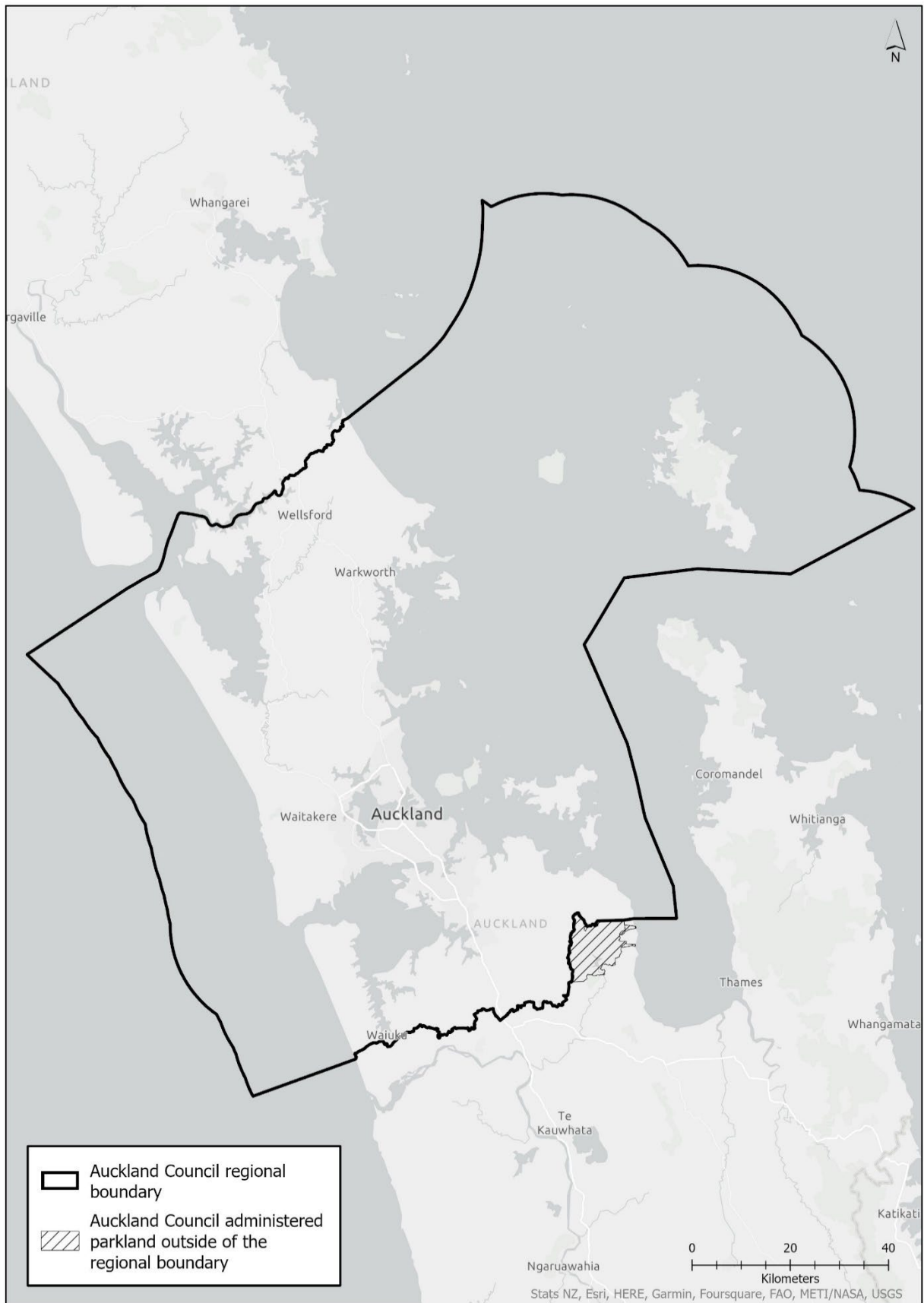
Current taxonomic, common English and Māori names follow the Checklist of the Birds of New Zealand (fifth edition) (Checklist Committee Ornithological Society of New Zealand, 2022) and type localities for birds were also obtained from the same checklist.

All bird species from the national NZTCS list (Robertson et al., 2021) not known to be present in the region were removed from consideration in the assessment. Nationally Threatened species that breed or are resident for more than half their life cycle in the region were assessed following the process outlined in the flowchart shown in Appendix 1.

To maintain the highest protection of threatened species and for consistency between regional and national assessments, the regional status must not be a lower threat category than the most recently published national status. For example, a Nationally Endangered taxon cannot be assessed as Regionally Vulnerable or lower, but it could be assessed as Regionally Critical. Population trend criteria were applied based on current knowledge, projecting from recent past into the future (over the longer of either 10 years or three generations, or up to a maximum of 100 years, for shorter and longer generation species respectively). Population trend is assessed as increasing (INC), STABLE or decreasing (DEC) alongside the forecast percentage range.

The process for determining the regional threat status of a species is shown in Appendix 1 and the full list of qualifiers applied are in Appendix 2. If more than 20% of the national population is breeding or resident for more than half of its life cycle in Tāmaki Makaurau / Auckland, the species was assigned National Stronghold status and the NZTCS criteria applied. Population size was estimated using either total number of mature individuals (MATIND), area of occupancy of the total population (AREA) or the total number of sub-populations (SUBPOP) and number of mature individuals (MATIND) in the largest sub-population. Regional thresholds for the number of mature individuals and habitat occupancy area, allowing for differences in land area, were applied as drafted in Department of Conservation (2014). The thresholds were designed to be used universally across a wide range of taxa and allow for using either an area or population size estimate based on the information available for a species. For Tāmaki Makaurau / Auckland, the threshold was set at 500 mature individuals present or a habitat occupancy area of 250ha. If a species was below the threshold, it was assigned a regional conservation status by applying the NZTCS criteria. If it was over the threshold and the population was  $\pm 10\%$  stable or increasing, it was assigned the status regionally Not Threatened. The NZTCS process does allow for the expert panel to assign a taxon to what they consider to be the most appropriate status without full application of the criteria. These taxa were given the 'Designated' qualifier. For example, a commercial fish stock that is being fished down to Biomass Maximum Sustainable yield (BMSy) may meet criteria for 'Declining'; however, it could be designated as 'Not Threatened' if the Expert Panel believes that this better describes the taxon's risk of extinction.

For the purposes of this assessment, the area of the entire Hūnua Ranges Regional Park was included as part of the Auckland 'region', in agreement with Waikato Regional Council staff (Figure 1). Although a large part of Te Ngāherehere o Kohukohunui and the Hūnua Ranges are within the Waikato region, most of the area is managed by Auckland Council as within the Hūnua Ranges Regional Park. This extensive tract of forest provides one of the most important opportunities to conserve and protect ecologically functional ecosystems and the diversity of native species that they support on the mainland of Tāmaki Makaurau / Auckland. The Auckland administrative area includes both land and sea. Many non-resident seabird species included in this report use or pass through the region's waters as part of their migration routes or as vagrants. These species are often only observed live at sea, or are identified as beach wrecks, and they do not use terrestrial areas within the region.



**Figure 1. Geographic extent of the Auckland region used to assess the conservation status of species, including Auckland Council administered parkland in the Hūnua Ranges.**

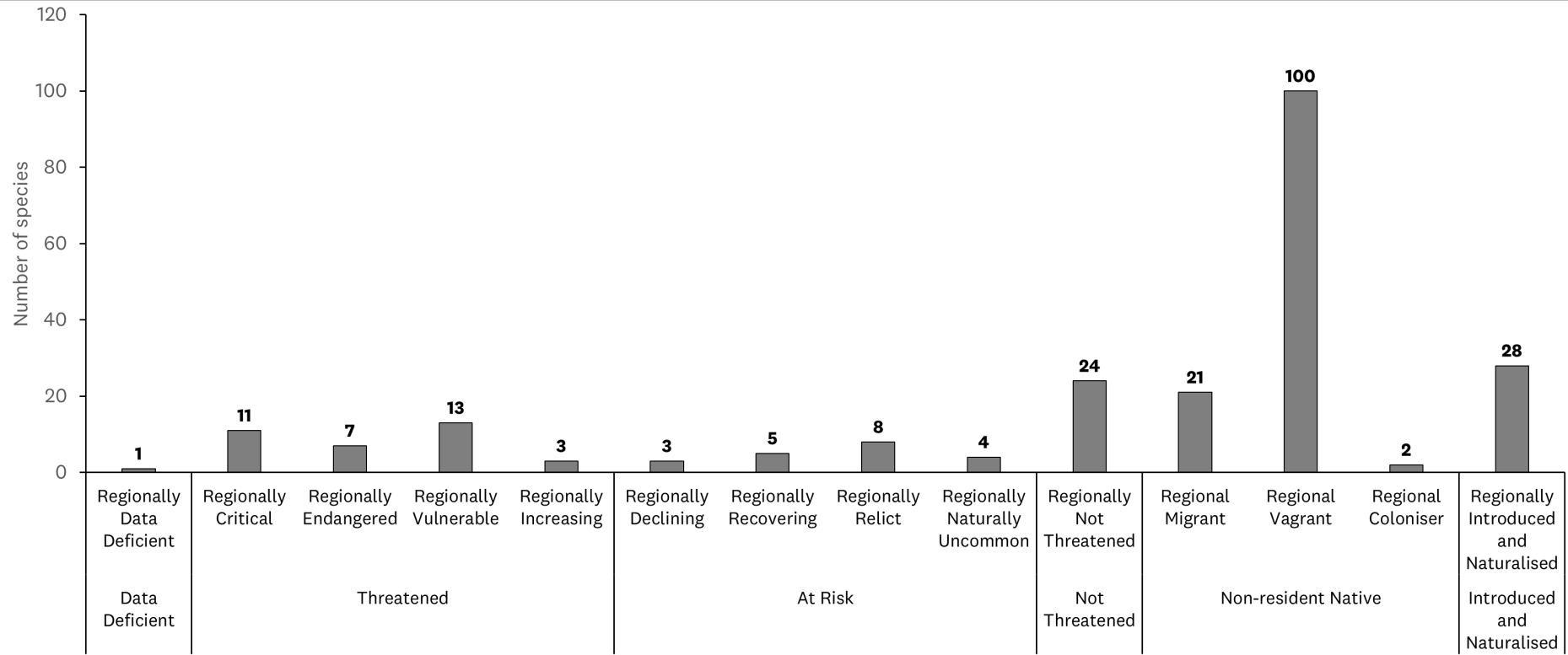
## 3 Results

We identified 230 bird taxa as present or occasionally present in Tāmaki Makaurau / Auckland including introduced and naturalised species (Figure 2, Table 2-14).

Two species and one subspecies were identified as regionally endemic, (i.e. known to breed only in Tāmaki Makaurau / Auckland). These were black petrel (*Procellaria parkinsoni*), New Zealand storm petrel (*Fregetta maoriana*) and Northern Cook's petrel (*Pterodroma cookii cookii*). Two others – Buller's shearwater (*Ardenna bulleri*) and Pycroft's petrel (*Pterodroma pycrofti*), are considered endemic to the wider Hauraki Gulf, with breeding sites beyond the Auckland administrative area. New Zealand fairy tern (*Sternula nereis davisae*), New Zealand's rarest bird species, is considered endemic to the wider region with breeding also occurring in southeastern Northland very close to the Auckland regional boundary.

The region was identified as a national stronghold (>20% of the national population present) for 24 taxa. For some species of migratory shorebirds, Tāmaki Makaurau / Auckland is a national stronghold providing their over-wintering grounds, although they do not breed within the region or breed in only very small numbers. This includes domestic migrants such as banded dotterel (*Charadrius bicinctus bicinctus*), South Island pied oystercatcher (*Haematopus finschi*) and wrybill (*Anarhynchus frontalis*), which migrate within New Zealand, along with international migrants including Eastern bar-tailed godwit (*Limosa lapponica baueri*) and red knot (*Calidris canutus rogersi*).

Of the taxa assessed, one – marsh crake (*Zapornia pusilla affinis*), was identified as Regionally Data Deficient. Of the 34 taxa identified as Threatened, 11 were assessed as Regionally Critical, seven as Regionally Endangered, 13 as Regionally Vulnerable and three as Regionally Increasing. Of the 19 At Risk taxa identified, three were assessed as Regionally Declining, five as Regionally Recovering, eight as Regionally Relict and three as Regionally Naturally Uncommon. Twenty-five taxa were assessed as Regionally Not Threatened and 123 Non-Resident Native taxa (comprising 21 Regional Migrants, 100 Regional Vagrants and two Regional Colonisers) Twenty-eight taxa were assessed as Introduced and Naturalised in the region. Thirty-two species were recognised as to have become extinct or may have formerly occurred in the region (Appendix 3).



**Figure 2. Regional conservation status of birds in Tāmaki Makaurau / Auckland.**

### Species inclusions and exclusions

Three species of particular conservation note are kākāpō (*Strigops habroptila*), shore plover (*Thinornis novaeseelandiae*) and South Island takahē (*Porphyrio hochstetteri*). Although present in Tāmaki Makaurau / Auckland, they are part of highly managed national conservation programmes. Their populations have been introduced or reintroduced but are not considered established or self-sustaining within the region. They are noted here but not assessed in the listings below. Based on the number of mature individuals in the region, if assessed, they would all be considered Regionally Critical.

**Table 1. Highly managed species of note in Tāmaki Makaurau / Auckland.**

Common Name	Māori Name	Name and Authority	Regional Conservation Status (2023)	National Conservation Status (2021)	Regional Qualifiers	Regional Threat Assessment Notes
Kākāpō	Kākāpō	<i>Strigops habroptila</i> (G.R. Gray, 1845)	N/A	Threatened – Nationally Critical	CD, RN	Historically regionally extirpated. Small numbers have been translocated to Te Hauturu-o-Toi / Little Barrier Island as part of a national conservation programme. Not an established/self-sustaining regional population.
Shore plover	Tuturuatu	<i>Thinornis novaeseelandiae</i> (Gmelin, 1789)	N/A	Threatened – Nationally Critical	CD, RN	Captive bred individuals have been translocated to Rangitoto/Motutapu Islands as part of a national conservation programme. Not an established/self-sustaining regional population. Historically regionally extirpated and confined to the Chatham Islands until recent conservation translocations.
South Island takahē	Takahē	<i>Porphyrio hochstetteri</i> (A.B. Meyer, 1883)	N/A	Threatened – Nationally Vulnerable	CD	A small number of individuals have been translocated to the region as part of a national conservation programme (Tiritiri Matangi, Motutapu and Rotoroa Islands, Tāwharanui Open Sanctuary and Auckland Zoo). Not an established/self-sustaining regional population.

Vagrant species were included in the assessment where there were records within the region accepted by the Birds New Zealand Records Appraisal Committee and the species were listed in the Checklist of the Birds of New Zealand (fifth edition) (Checklist Committee OSNZ, 2022).

Efforts were made to ensure the list of regional migrant and vagrant species listed below was as complete as possible, but we acknowledge there may be taxa that were overlooked. We encourage feedback on any additions or inaccuracies for correction in the next iteration of this assessment.

Of note were the first New Zealand records for black-naped tern (*Sterna sumatrana sumatrana*) in February 2022 observed live at the Muriwai gannet colony (Miskelly et al., 2023), and of Matsudaira's

storm petrel (*Hydrobates matsudairae*) with a single specimen found dead in May 2022 at Maukatia Bay, Muriwai (Miskelly et al., 2023). Although both were accepted by the Birds New Zealand Records Appraisal Committee, this was after the latest (2022) edition of the Checklist of New Zealand Birds was published. Both species are acknowledged here as regional vagrants.

Observations of rare and vagrant species in the region that have not been submitted to the Birds New Zealand Records Appraisal Committee and therefore were unverified for the purposes of inclusion in this assessment included American whimbrel (*Numenius hudsonicus*), black-faced cuckoo-shrike (*Coracina novaehollandiae*), plumed whistling duck (*Dendrocygna eytoni*) and straw-necked ibis (*Threskiornis spinicollis*). Although not included in this assessment, the panel notes that records have been accepted outside the region for these species and some of them could have visited the region. We encourage the submission of reportable bird sightings to the Birds New Zealand Records Appraisal Committee for assessment.

Two subspecies of red knot (*Calidrius canutus*) are known to migrate to New Zealand. *C. c. rogersi* which breeds in eastern Russia is the commonest form in New Zealand and for the purposes of this assessment, was the subspecies assessed, noting that the population of red knots that migrates to the region likely includes some of the subspecies *C. c. piersmai*, which breeds on the New Siberian Islands.

The panel felt there was insufficient evidence that Cape Barren goose (*Cereopsis novaehollandiae*), and helmeted guinea fowl (*Numida meleagris*) had established naturalised self-sustaining populations in the region to consider them as Regionally Introduced and Naturalised. Observations of Cape Barren goose and helmeted guineafowl appear to be mostly from escaped and/or liberated birds that do not persist in the wild. Similarly, feral chicken (*Gallus gallus gallus*) was not assessed in the latest national assessment (Robertson et al., 2021) and was therefore not assessed here. While known to breed in the wild, groups tend to be supplemented by ongoing liberations or supplementary feeding (Heather and Robertson 2015).

There have been a couple of accepted records of ciril bunting (*Emberiza cirilus*) in the region, however the panel was not aware of any evidence of breeding and so this introduced species is not considered to be naturalised in the region.

Several parrot species are known to be present outside of captivity, as a result of releases (accidental and likely also sometimes deliberate) of pet birds (Stanley et al 2023). The extent to which breeding is occurring for any of these species in the region is not well understood and it is assumed that only Eastern rosellas, sulphur-crested cockatoos and galahs have met the criteria for population establishment. Nonetheless, internationally the propagule pressure arising from pet trade is a significant and growing contributor to novel vertebrate invasions (Lockwood et al. 2019); indeed, contemporary bird invasions globally are driven largely by trade in caged birds (Cassey et al. 2016). Therefore, Auckland Council's management approach focuses on preventing future naturalisations through pet trade regulation, responsible pet ownership education, and incursion response. Sightings of parrots outside of captivity (other than the three established species named above) should be reported to Te Kaunihera o Tāmaki Makaurau / Auckland Council (09) 301 0101 or [pestfree@aucklandcouncil.govt.nz](mailto:pestfree@aucklandcouncil.govt.nz)

### 3.1 Data Deficient (1)

Taxa that are suspected to be threatened or, in some instances, possibly extinct in Tāmaki Makaurau / Auckland but are not definitely known to belong to any particular category due to a lack of current information about their distribution and abundance. It is hoped that listing such taxa will stimulate research to find out the true category (Townsend et al., 2008; Michel, 2021; Rolfe et al., 2021).

**Table 2. Regionally Data Deficient bird species of Tāmaki Makaurau / Auckland.**

Common Name	Māori Name	Name and Authority	Regional Cons. Status (2023)	National Cons. Status (2021)	National Strong-hold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
Marsh crake	Kotoreke	<i>Zapornia pusilla affinis</i> (J. E. Gray, 1845)	Regionally Data Deficient	At Risk - Declining	No	MATIND <250?	Very low	Unknown	Very low	DPS, DPT	Very few observations in the region and one of New Zealand’s most secretive birds. Targeted survey efforts needed to assess status in the region.



## 3.2 Threatened (34)

Taxa that meet the criteria for the categories Regionally Critical, Regionally Endangered, Regionally Vulnerable and Regionally Increasing (Townsend et al., 2008; Michel, 2021; Rolfe et al., 2021).

### 3.2.1 Threatened – Regionally Critical (11)

**Table 3. Regionally Critical bird species of Tāmaki Makaurau / Auckland.**

Common Name	Māori Name	Name and Authority	Regional Cons. Status (2023)	National Cons. Status (2021)	National Strong-hold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
Australasian bittern	Matuku-hūrepo	<i>Botaurus poiciloptilus</i> (Wagler, 1827)	Regionally Critical	Threatened – Nationally Critical	No	MATIND <250	High	DEC 10-30%	Low	CI, CR, DPS, DPT, Sp, TO	Suffering from a slow ongoing decline associated with declining water quality, limited food availability (starvation), historic and ongoing habitat loss, disturbance pressures, road kill and predation by mammalian carnivores. Increasing drought frequency and associated impacts are of concern. Conservation research needed to assess reasons for decline and solutions for recovery.
Black shag	Māpunga	<i>Phalacrocorax carbo novaehollandiae</i> (Stephens, 1826)	Regionally Critical	At Risk – Relict	No	MATIND <250	Low	STABLE +/-10%	Low	CI, DPS, DPT, SO, Sp	Observed widely but uncertainty around number and size of breeding colonies in the region. Survey of breeding colonies required.
Caspian tern	Taranui	<i>Hydroprogne caspia</i> (Pallas, 1770)	Regionally Critical	Threatened – Nationally Vulnerable	No	MATIND <250	Low	STABLE +/-10%	Low	CI, DPS, DPT, SO, Sp	Main breeding colonies within the region include Clarks Beach and Tuhimata/Rat Island, with scattered breeding pairs elsewhere. Population estimate based on main colonies (Jeremy Painting, pers. comm.; Tony Habraken, pers. comm.) An example of climate impact through loss of historic Whangateau Harbour breeding site to storm erosion (Gaskin, 2021).

Common Name	Māori Name	Name and Authority	Regional Cons. Status (2023)	National Cons. Status (2021)	National Strong-hold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
Flesh-footed shearwater	Toanui	<i>Ardenna carneipes</i> (Gould, 1844)	Regionally Critical	At Risk - Relict	No	MATIND <250	High	STABLE +/-10%	High	CD, CI, RR, S?O	One very small breeding population (~25 pairs) in region on Kauwahaia Island. Long-term monitoring shows stable trend. Conservation depends on management of mammalian predators. Climate impacts of changes in food availability at sea due to marine heat-waves and warming oceans (Pearce et al. 2020).
Grey duck	Pāpera	<i>Anas superciliosa</i> (Gmelin, 1789)	Regionally Critical	Threatened - Nationally Vulnerable	No	MATIND <250	Low	DEC 10-30%	Low	CR, DPR, DPS, DPT, SO	Slow decline associated with hybridisation with mallards. Genetic study is required to understand impact and extent of hybridisation. Targeted survey efforts needed to assess population size and trend in region.
Little spotted kiwi	Kiwi pukupuku	<i>Apteryx owenii</i> (Gould, 1847)	Regionally Critical	Threatened - Nationally Increasing	No	MATIND <250	High	INC > 10%	Medium	CD, CI, EF, INC, RN	Within the region there have been conservation translocations to Tiritiri Matangi, Motuihe and Shakespear Open Sanctuary. Populations depend on mammalian predator-free status of these locations. Shakespear has the greatest potential for population increase because it is the largest site (c. 500 ha) and it is also the site of the most recent release (2017). Tiritiri Matangi (196.5 ha) is probably fully occupied (releases in 1993 and 1995), and Motuihe (195 ha), possibly has an increasing population (released 2009-10), but is a much smaller site than Shakespear. Ensure ongoing monitoring of populations.
New Zealand dabchick	Weweia	<i>Poliiocephalus rufopectus</i> (G.R. Gray, 1843)	Regionally Critical	Threatened - Nationally Increasing	No	MATIND <250	Medium	STABLE +/-10%	Low	DPS, DPT, Sp	Sparsely distributed across region in suitable habitat, but in low numbers. Colonises artificial habitats (e.g. farm and storm water ponds), which may have offset some historical habitat loss.

Common Name	Māori Name	Name and Authority	Regional Cons. Status (2023)	National Cons. Status (2021)	National Strong-hold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
New Zealand fairy tern	Tara iti	<i>Sternula nereis davisae</i> (Mathews & Iredale, 1913)	Regionally Critical	Threatened – Nationally Critical	Yes	MATIND <250	High	STABLE +/-10%	High	CD, CI, CR, NStr, RF, RR	The rarest New Zealand native bird species. Other subspecies occur in Australia and New Caledonia. A very small, but relatively stable current population. Survival depends on ongoing conservation management to minimise mammalian predation and human disturbance. Research and management needed to improve breeding outcomes, including captive-rearing at Auckland Zoo for release to the wild. Vulnerable to storm events.
North Island little shearwater	Totorore	<i>Puffinus assimilis haurakiensis</i> (Fleming & Serventy, 1943)	Regionally Critical	At Risk – Recovering	No	MATIND <250	Medium	STABLE +/-10%	Low	CD, CI, DPS, DPT, RR	Within the region known to breed only on Burgess Island. Last surveyed in 2013. Needs resurveying to provide better estimate of size of breeding population and trend. Conservation dependent on mammalian predator-free island.
Reef heron	Matuku moana	<i>Egretta sacra sacra</i> (Gmelin, 1789)	Regionally Critical	Threatened – Nationally Endangered	Yes	MATIND <250	Medium	DEC 10-30%	Low	CI, DPS, DPT, NStr, Sp, SO	Sparsely distributed along coastlines of the region. Small population, likely in decline. Needs targeted surveys to assess population size and trend in region.
Sooty Shearwater	Titi	<i>Ardenna grisea</i> (Gmelin, 1789)	Regionally Critical	At Risk – Declining	No	MATIND <250	High	DEC 30-50%	High	CD, CI, CR, SO	Very small breeding population in region at Kawahaia Island where long-term monitoring shows significant decline. Formerly bred on Mokohinau Islands but survey required to confirm if still present. Conservation dependent on mammalian predator management. Conservation research needed on cause of decline in the region. Sooty shearwaters that breed outside the region also visit Auckland waters.

### 3.2.2 Threatened – Regionally Endangered (7)

**Table 4. Regionally Endangered bird species of Tāmaki Makaurau / Auckland.**

Common Name	Māori Name	Name and Authority	Regional Cons. Status (2023)	National Cons. Status (2021)	National Stronghold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
Banded dotterel	Pohowera	<i>Charadrius bicinctus bicinctus</i> (Jardine & Selby, 1827)	Regionally Endangered	At Risk – Declining	Yes	MATIND = 250-1000	Medium	DEC 10-30%	Medium	CD, CI, NStr	Very small, sparse regional breeding population. Primarily a seasonal domestic migrant to the region. The region is a national stronghold for the proportion of the population that overwinters in NZ. Population size and trend depends on what happens at the southern breeding grounds.
Black-billed gull	Tarāpuka	<i>Chroicocephalus bulleri</i> (Hutton, 1871)	Regionally Endangered	At Risk – Declining	No	MATIND = 250-1000	Medium	STABLE +/-10%	Low	CI, CR, DPT	Some shifts in colony location over time but regional population overall considered relatively stable. Monitoring and research needed, especially for some colonies, e.g. Mangere in 2022/23 season, where there was high juvenile mortality caused by parasitic trematodes.
Brown teal / pāteke	Pāteke	<i>Anas chlorotis</i> (G.R. Gray, 1845)	Regionally Endangered	Threatened – Nationally Increasing	Yes	MATIND = 250-1000	High	DEC 10-30%	Low	CD, CI, CR, NStr, DPT	Ongoing decline observed on Aotea / Great Barrier Island, which has been a national stronghold. Research needed to understand reasons for this decline. Decline partly offset by the expansion of the mainland population particularly out from Tāwharanui Open Sanctuary into surrounding areas, and releases elsewhere including Motutapu Island and Te Henga wetland. Conservation dependent on management of predatory mammals.
Little shag	Kawaupaka	<i>Microcarbo melanoleucos brevirostris</i> (Gould, 1837)	Regionally Endangered	At Risk – Relict	No	MATIND = 250-1000	Low	STABLE +/-10%	Low	CI, DPR, DPS, DPT	Widespread, scattered small colonies. Assessment based on small population size and incomplete colony surveys. More information needed to assess the trend in the region.

Common Name	Māori Name	Name and Authority	Regional Cons. Status (2023)	National Cons. Status (2021)	National Strong-hold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
Long-tailed cuckoo	Koekoeā	<i>Eudynamys taitensis</i> (Sparrman, 1787)	Regionally Endangered	Threatened – Nationally Vulnerable	No	MATIND = 250-1000	Medium	STABLE +/-10%	Medium	CD, DPS, DPT	Within region most of population breeds on Te Hauturu-o-Toi / Little Barrier Island (with a few recent breeding records at Tāwharanui Open Sanctuary). Breeding depends on presence of host species (which in the North Island is whitehead – <i>Mohoua albicilla</i> ). Whiteheads declined on Hauturu following kiore ( <i>Rattus exulans</i> ) removal, then stabilised. Whiteheads have been recently translocated to multiple locations in the region. These new populations may benefit long-tailed cuckoo in future.
Spotted shag	Kawau tikitiki, Pūrekareka	<i>Phalacrocorax punctatus</i> (Sparrman, 1786)	Regionally Endangered	Threatened – Nationally Vulnerable	No	MATIND = 250-1000	Medium	DEC 10-30%	Medium	CI, CR, DPT, RR	c. 600 breeding adults. A major decline occurred in the region from 1970s-2000 when Auckland west coast and some Hauraki Gulf colonies disappeared. Three remaining Hauraki Gulf colonies are in slow decline with monitoring data showing c. 20% decline between 2015 and 2023. Hauraki Gulf population is genetically distinct, but it is considered as one species nationally.
Yellow-crowned kākārīki	Kākārīki	<i>Cyanoramphus auriceps</i> (Kuhl, 1820)	Regionally Endangered	At Risk – Declining	No	MATIND = 250-1000	Low	STABLE +/-10%	Low	CD, CI, DPR, DPS, DPT	Apparently stable population on Te Hauturu-o-Toi / Little Barrier Island with occasional records elsewhere (likely birds from Hauturu). Quite cryptic and also difficult to survey accurately as sympatric with red-crowned kākārīki on Te Hauturu-o-Toi. Conservation dependent on mammalian pest-free status of the island.

### 3.2.3 Threatened – Regionally Vulnerable (13)

**Table 5. Regionally Vulnerable bird species of Tāmaki Makaurau / Auckland.**

Common Name	Māori Name	Name and Authority	Regional Cons. Status (2023)	National Cons. Status (2021)	National Stronghold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
Banded rail	Moho pererū	<i>Gallirallus philippensis assimilis</i>	Regionally Vulnerable	At Risk – Declining	Yes	MATIND = 1000 – 5000	Medium	STABLE +/-10%	Medium	CI, CR, DPS, DPT, NStr	Aotea / Great Barrier Island a regional stronghold. Expansion of mangroves in the region has probably benefitted banded rail despite other habitat being lost. Mangrove clearance is a threat. Conservation research needed on effective pest management in mangrove/estuarine edge habitat.
Black petrel	Tākoketai / Tāiko	<i>Procellaria parkinsoni</i> (Gray, 1862)	Regionally Vulnerable	Threatened – Nationally Vulnerable	Yes	MATIND = 5000 – 20000	High	DEC 10-30%	High	CD, CI, CR, DPS*, DPT*, NStr, RE, RF, Rel	Now known to breed only on Aotea / Great Barrier Island and in smaller numbers on Te Hauturu-o-Toi / Little Barrier Island. Lack of recruitment is a major issue. Long-term monitoring of Aotea population shows an ageing population indicating recruitment failure has been happening for some time. One of the most susceptible species to fisheries bycatch. *DPS, DPT applicable to Hauturu population only. Research needed to determine size and trend and on the impacts of the lack of recruitment into the overall population.
Hihi / stitchbird	Hihi	<i>Notiomystis cincta</i> (Du Bus de Gisignies, 1839)	Regionally Vulnerable	Threatened – Nationally Vulnerable	Yes	MATIND = 1000 – 5000	High	STABLE +/-10%	Medium	CD, NStr	Te Hauturu-o-Toi / Little Barrier Island was the only place that hihi survived following extinction elsewhere in the North Island in the 19 <sup>th</sup> century. It is still the largest population. There is a smaller, managed, translocated population on Tiritiri Matangi Island. Two other translocations within the region to Ark in the Park in the Waitākere Ranges and Shakespear Open Sanctuary have failed.

Common Name	Māori Name	Name and Authority	Regional Cons. Status (2023)	National Cons. Status (2021)	National Strong-hold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
New Zealand pipit	Pihoihoi	<i>Anthus novaeseelandiae novaeseelandiae</i> (Gmelin, 1789)	Regionally Vulnerable	At Risk - Declining	No	MATIND = 250 - 1000	Low	STABLE +/-10%	Low	DE, DPS, DPT, RR, Sp	Widely and sparsely distributed but little information on population size and trend in the region. Status designated as the panel felt this best represented the situation, with the need for targeted monitoring to improve confidence in status. Declines have been noted elsewhere. If population declines can be confirmed here, research will be needed on the causes.
New Zealand storm petrel	Takahikar-eraro	<i>Fregatta maoriana</i> (Mathews, 1932)	Regionally Vulnerable	Threatened - Nationally Vulnerable	Yes	MATIND = 1000 - 5000	Medium	INC >10%	Medium	CD, DPS, IE, NStr, OL, RE	Te Hauturu-o-Toi / Little Barrier Island is currently the only known breeding location for this species. Research is being done to determine if there are other breeding sites. Population estimates are from land-based and sea-based mark-recapture models. Thought to be recovering from a population of c.300 birds pre-kiore and feral cat ( <i>Felis catus</i> ) eradications on Hauturu.
North Island fernbird	Koroātito	<i>Poodytes punctatus vealeae</i> (Kemp, 1912)	Regionally Vulnerable	At Risk - Declining	No	MATIND = 1000 - 5000	Low	DEC 10-30%	Low	CI, DPS, DPT, PF	Suffered large historic decline, with saltmarsh and wetland habitat loss and effects of predatory mammals significant factors, but regional population possibly now relatively stable, but with slow decline where unmanaged. Localised increases associated with translocation (Tiritiri Matangi) or pest management (Shakespear Open Sanctuary).
North Island rifleman	Tititipou-namu	<i>Acanthisitta chloris granti</i> (Sparrman, 1913)	Regionally Vulnerable	At Risk - Declining	No	MATIND = 1000 - 5000	Low	DEC 10-30%	Low	CD, DPS, DPT, PD, PF	Observed decline on Hauturu-o-Toi / Little Barrier Island following kiore removal, but more recent trend data is lacking to determine if this has continued. Thriving translocated population on Tiritiri Matangi Island. No dispersal between populations. Conservation dependent on these island locations remaining mammalian predator-free.

Common Name	Māori Name	Name and Authority	Regional Cons. Status (2023)	National Cons. Status (2021)	National Strong-hold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
North Island robin	Toutouwai	<i>Petroica longipes</i> (Sparman, 1913)	Regionally Vulnerable	At Risk - Declining	No	MATIND = 1000 - 5000	Medium	STABLE +/-10%	Medium	CD, DE	The Te Hauturu-o-Toi / Little Barrier Island population has thrived since the removal of cats and kiore. Translocations within the region have had mixed success. Population over regional threshold so designated to reflect they are conservation dependent on sites where predatory mammals have been controlled or removed.
Northern blue penguin	Kororā	<i>Eudyptula minor iredalei</i> (Mathews, 1911)	Regionally Vulnerable	At Risk - Declining	No	MATIND = 1000 - 5000	Low	DEC 10-30%	Low	CD, CI, CR, DPS, DPT, PD, RR	Survey efforts have focussed on one-off detection surveys rather than ongoing wider population monitoring, so little information available on regional population size or trend. High potential for population increases on pest-free islands, but uncertain how significant this will be in view of threats including declining food availability and climate impacts. Possible effects of sedimentation as they are visual hunters. Probably declining at unmanaged mainland sites and possibly more widely where threats include domestic dogs and introduced predatory mammals. Conservation research needed to understand impacts of various threats.
Red-billed gull	Tarāpunga	<i>Chroicocephalus novaehollandiae scopulinus</i> (J. R. Forster, 1844)	Regionally Vulnerable	At Risk - Declining	No	MATIND = 1000 - 5000	Medium	DEC 10-30%	Low	CI, CR, DPT	Trend unclear but likely ongoing slight decline. Significant decline of large colony at Mokohinau Islands, but there has been growth of some smaller inner Hauraki Gulf colonies (Frost and Taylor 2018). High variability in breeding population between years and large non-breeding population. Population estimate based on Frost (2021). Conservation research needed to identify cause of decline. Only few breeding colonies in the region, including urban site at the old Wynyard wharf.



Common Name	Māori Name	Name and Authority	Regional Cons. Status (2023)	National Cons. Status (2021)	National Strong-hold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
Spotless crane	Pūweto	<i>Zapornia tabuensis tabuensis</i> (Gmelin, 1789)	Regionally Vulnerable	At Risk - Declining	No	MATIND = 1000 - 5000	Low	DEC 10-30%	Low	DPS, DPT, PF, SO	Likely a large historic decline, but regional population may be relatively stable with slow decline where unmanaged. Population estimate likely to be at lower end of range. Localised increases at sites (e.g. Tāwharanui and Shakespear Open Sanctuaries) where mammalian predators have been controlled or removed.
Variable oyster-catcher	Tōrea pango	<i>Haematopus unicolor</i> (J.R. Forster, 1844)	Regionally Vulnerable	At Risk - Recovering	No	MATIND = 250 - 1000	Medium	INC >10%	Medium	CD, CI, DE, DPS	Has benefitted from conservation management for Northern New Zealand dotterel. Population estimate (~600) based broadly on wader count data, which doesn't include many coastal and island sites in region where variable oystercatchers roost and breed. Designated as the population estimate only slightly over the regional threshold and Auckland has a relatively low population where birds are conservation dependent at most mainland sites. Targeted regional survey including breeding sites would improve confidence in population estimate.
White-fronted tern	Tara	<i>Sterna striata</i> (Gmelin 1789)	Regionally Vulnerable	At Risk - Declining	No	MATIND = 1000 - 5000	High	DEC 10-30%	High	CD, CI, CR	Recent surveys indicate regional population has declined. Surveys can be challenging as there is often significant movement of colonies between years. Ongoing monitoring needed to confirm trend and status. Conservation research needed on causes of decline.

### 3.2.4 Threatened – Regionally Increasing (3)

**Table 6. Regionally Increasing bird species of Tāmaki Makaurau / Auckland.**

Common Name	Māori Name	Name and Authority	Regional Cons. Status (2023)	National Cons. Status (2021)	National Strong-hold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
North Island kōkako	Kōkako	<i>Callaeas wilsoni</i> (Bonaparte, 1851)	Regionally Increasing	Threatened – Nationally Increasing	Yes	MATIND = 1000 – 5000	High	INC >10%	High	CD, INC, NStr, PF	Large secure population on Te Hauturu-o-Toi / Little Barrier Island. Hūnua Ranges population has recovered through intensive conservation management including translocations and is now one of the largest mainland populations on the North Island. There are small, translocated populations on Tiritiri Matangi Island and at Ark in the Park, Waitākere Ranges. Conservation dependent on ongoing management of pest mammals.
Northern New Zealand dotterel	Tūturiwh- atu	<i>Charadrius obscurus aquilonius</i> (Dowding, 1994)	Regionally Increasing	Threatened – Nationally Increasing	Yes	MATIND = 1000 – 5000	High	INC >10%	High	CD, CI, INC, NStr	Ongoing recovery due to community-based conservation management. Recent expansion of nesting activity to non-beach areas anticipated to continue. Conservation dependent on management efforts continuing. Population estimate and trend is based on community dotterel nest monitoring data and annual post-breeding flock count data (Gwenda Pulham, pers. comm.). Population estimate at the low end of range.
Wrybill	Ngutu pare	<i>Anarhynchus frontalis</i> (Quoy & Gaimard, 1830)	Regionally Increasing	Threatened – Nationally Increasing	Yes	MATIND = 1000 – 5000	High	INC >10%	High	CD, NStr, RR, TL	Domestic migrant that breeds on South Island riverbeds. Approximately half the national population overwinters on the Manukau Harbour. Population increase over the last 20+ years, predicted to continue, with conservation management at nesting grounds (Riegen and Sagar, 2020).

### 3.3 At Risk (20)

Taxa that meet the criteria for Regionally Declining, Regionally Recovering, Regionally Relict or Regionally Naturally Uncommon (Townsend et al., 2008; Michel, 2021; Rolfe et al., 2021).

#### 3.3.1 At Risk – Regionally Declining (3)

**Table 7. Regionally Declining bird species of Tāmaki Makaurau / Auckland.**

Common Name	Māori Name	Name and Authority	Regional Cons. Status (2023)	National Cons. Status (2021)	National Stronghold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
Buller's shearwater	Rako	<i>Ardenna bulleri</i> (Salvin, 1888)	Regionally Declining	At Risk – Declining	Yes	MATIND > 100000	Medium	DEC 10-30%	Low	CI, CR, NStr	Main breeding colonies at Poor Knights Islands and observed at sea across the wider Hauraki Gulf (Friesen et al 2021). Although breeding site is outside region, abundance in the Hauraki Gulf indicates that it is a national stronghold. Conservation research needed on causes of decline, particularly food availability. The species is a regional endemic to the wider Hauraki Gulf.
Red knot / lesser knot	Huahou	<i>Calidris canutus rogersi</i> (Mathews, 1913)	Regionally Declining	At Risk – Declining	Yes	MATIND = 5000 – 20000	High	DEC 10-30%	Medium	CI, NStr, TO	Annual Arctic migrant that spends over 50% of its lifecycle in New Zealand. Significant decline observed since 1990s. Recently the Manukau Harbour population has been relatively stable, but with a noted decline in the Kaipara Harbour. Harbours in wider Auckland region are national strongholds during their time in New Zealand.
South Island pied oystercatcher	Tōrea	<i>Haematopus finschi</i> (Martens, 1897)	Regionally Declining	At Risk – Declining	Yes	MATIND = 20000 – 100000	High	DEC 10-30%	Medium	CI, NStr	Domestic migrant to region during non-breeding season. Population peaks at 30,000-40,000 in region when present. During non-breeding season, region is a national stronghold. Over past 40 years, trend for the Manukau Harbour has been relatively stable but since the mid-1990s there has been a decline, which is also reflected in a decline nationally.

### 3.3.2 At Risk – Regionally Recovering (5)

**Table 8. Regionally Recovering bird species of Tāmaki Makaurau / Auckland.**

Common Name	Māori Name	Name and Authority	Regional Cons. Status (2023)	National Cons. Status (2021)	National Stronghold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
Bellbird	Korimako	<i>Anthornis melanura melanura</i> (Sparrman, 1786)	Regionally Recovering	Not Threatened	No	MATIND = 5000 – 20000	Medium	INC >10%	Medium	CD, DE	Disappeared from mainland Northland and Auckland in 1860s. The population on Te Hauturu-o-Toi / Little Barrier Island is regional stronghold, and bellbirds increased following kiore eradication in 2004. In 2005 naturally recolonised Tāwharanui Open Sanctuary from Te Hauturu-o-Toi and some dispersal from there. Sparse elsewhere including Hūnua Ranges and Shakespear Open Sanctuary but slowly increasing at both sites. Abundant on some other pest-free islands e.g. Tiritiri Matangi. Designated Regionally Recovering as the panel considered this a more accurate reflection of what is happening in the region.
North Island kākā	Kākā	<i>Nestor meridionalis septentrionalis</i> (Lorenz, 1896)	Regionally Recovering	At Risk – Recovering	Yes	MATIND = 1000 – 5000	Medium	INC >10%	Medium	CD, NStr	Te Hauturu-o-Toi / Little Barrier Island and Aotea / Great Barrier Island are national strongholds for this species. They move freely between the islands and mainland. Increasing and breeding on Waiheke, at Tāwharanui Open Sanctuary and Hūnua Ranges where kaka are benefitting from removal or control of predatory mammals.

Common Name	Māori Name	Name and Authority	Regional Cons. Status (2023)	National Cons. Status (2021)	National Strong-hold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
North Island weka	Weka	<i>Gallirallus australis greyi</i> (Buller, 1888)	Regionally Recovering	At Risk - Relict	Yes	MATIND = 1000 - 5000	Low	INC >10%	Medium	CD, CI, EF, NStr, RN	Population trend estimated as recovery based on recent colonisation of Waiheke Island and recovery on Rakitu Island post-pest mammal eradication. Kawau Island is a national stronghold, although recently significant recovery outside region, especially in eastern Bay of Plenty. Size of regional population may temporarily reduce during predator control projects at specific sites, but measures to protect weka can be undertaken to alleviate this. Expected to recover post-pest eradication. Weka populations susceptible to extreme fluctuations caused by starvation during droughts, which threatens populations on drought-prone islands in the region.
Pied shag	Kāruhiruhi	<i>Phalacrocorax varius varius</i> (Gmelin, 1789)	Regionally Recovering	At Risk - Recovering	No	MATIND = 250 - 1000	Low	STABLE +/-10%	Medium	CR, DE, DPS, DPT	Population thought to be stable or slightly increasing. A 2013 national population review found Auckland's population to be increasing (Bell, 2013). As the region is not a national stronghold could be considered Regionally Not Threatened, however has been designated as Regionally Recovering as the panel considered this better reflected current situation. A regional survey of colonies is underway but not yet complete. Research needed on impacts of fisheries bycatch, which may be becoming a more significant threat.

Common Name	Māori Name	Name and Authority	Regional Cons. Status (2023)	National Cons. Status (2021)	National Strong-hold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
Pycroft's petrel		<i>Pterodroma pycrofti</i> (Falla, 1933)	Regionally Recovering	At Risk - Recovering	No	MATIND < 250	Low	INC >10%	Low	CD, DE, RN	Small translocated population establishing on Motuora Island. Conservation dependent on pest free islands. Based on number of individuals breeding in region (<250), could be listed as Regionally Critical, but since local population is establishing from translocations, and species also uses Auckland waters as part of foraging range from breeding sites outside region, the panel designated it as Regionally Recovering in line with national status. Species is a regional endemic to wider Hauraki Gulf.

### 3.3.3 At Risk – Regionally Relict (8)

**Table 9. Regionally Relict bird species of Tāmaki Makaurau / Auckland.**

Common Name	Māori Name	Name and Authority	Regional Cons. Status (2023)	National Cons. Status (2021)	National Strong-hold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
Fairy prion	Titi wainui	<i>Pachyptila turtur</i> (Kuhl, 1820)	Regionally Relict	At Risk – Relict	No	MATIND = 5000 – 20000, FRMHAB <10%	Low	STABLE +/-10%	Low	DE, SO	Not known to breed within Auckland region (breed locally on Poor Knights Islands; conservation dependent at breeding sites), but large numbers forage in wider Hauraki Gulf. Estimate of 40,000 breeding on Aorangi Island at the Poor Knights Islands (Harper, 1976). Given no recent estimates for regional population the panel has conservatively estimated 5000-20,000. Designated as over regional threshold but now occupies less than 10% of former range.

Common Name	Māori Name	Name and Authority	Regional Cons. Status (2023)	National Cons. Status (2021)	National Strong-hold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
Fluttering shearwater	Pakahā	<i>Puffinus gavia</i> (J.R. Forster, 1844)	Regionally Relict	At Risk - Relict	No	MATIND = 250 - 1000	Medium	STABLE +/-10%	Low	CD, DE, DPS, DPT, RR	Breeds on several islands in wider Hauraki Gulf (eg. Mokohinau, Motuihe, Otata and Maria Islands). Auckland not a breeding stronghold, but large numbers forage across the inner Hauraki Gulf and a significant proportion of wider population is present locally during the non-breeding season (Gaskin and Rayner, 2013). Resident breeding population estimated at 250-1000 mature individuals, but flocks in the thousands commonly observed in Hauraki Gulf. Conservation dependent on mammalian predator-free breeding locations. Regional population monitoring needed. Designated as Regionally Relict based on small resident breeding population, while much larger population uses Auckland waters from nearby breeding colonies. Occupies <10% of former breeding habitat.
New Zealand white-faced storm petrel	Takahikar-emoana	<i>Pelagodroma marina maoriana</i> (Mathews, 1912)	Regionally Relict	At Risk - Relict	No	MATIND = 5000 - 20000, FRMHAB <10%	Medium	INC >10%	Low	CD, CI, DE, DPS, DPT, RR	Breeding colonies on Burgess and Maria Islands. High potential for increase on Burgess Island, but increase likely to slow on small Maria Island. Conservation dependent on mammalian predator-free breeding sites. Occupies less than 10% of former habitat. Designated based on not fully meeting criteria for Relict A (stable population) or B (>20,000 mature individuals).

Common Name	Māori Name	Name and Authority	Regional Cons. Status (2023)	National Cons. Status (2021)	National Strong-hold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
Northern Cook's petrel	Titi	<i>Pterodroma cookii cookii</i> (G.R. Gray, 1843)	Regionally Relict	At Risk - Relict	Yes	MATIND > 20000, FRMHAB <10%	High	INC >10%	Low	CD, DPS*,DPT, NStr, NR, RE	Subspecies a regional endemic known to breed mainly on Te Hauturu-o-Toi / Little Barrier Island with smaller numbers on Aotea / Great Barrier Island. Aotea population DPS. Population on Hauturu estimated to be still increasing following Hauturu feral cat and kiore eradications. Conservation dependent on mammalian predator-free breeding sites. Huge potential to increase on Aotea if predators managed adequately. May colonise other predator-free areas (e.g. at least one pair breeding at Tāwharanui Open Sanctuary). Pop >100,000 but occupies <10% of its former habitat.
Northern diving petrel	Kuaka	<i>Pelecanoides urinatrix urinatrix</i> (Gmelin, 1789)	Regionally Relict	At Risk - Relict	No	MATIND = 5000 - 20000, FRMHAB <10%	Low	INC >10%	Low	CD, CI, DE, DPS, DPT, RR, SO	Little information on current population size and trend but thought to be increasing on a number of pest-free islands in Hauraki Gulf (Gaskin, 2021). Conservation dependent on mammalian predator-free breeding sites. Designated based on not fully meeting criteria for Relict A (stable population) or B (>20,000 mature individuals).
North Island saddleback	Tieke	<i>Philesturnus rufusater</i> (Lesson, 1828)	Regionally Relict	At Risk - Relict	Yes	MATIND = 5000 - 20000, FRMHAB <10%	Medium	STABLE +/-10%	Medium	CD, NStr, RN	Formerly abundant on mainland but wiped out by predatory mammals by 1900, except for Hen Island (Taranga) in Northland. Thriving translocated populations include Te Hauturu-o-Toi / Little Barrier Island, Tiritiri Matangi, Motuihe, Rotoroa, Rangitoto/Motutapu Islands, with smaller populations at Tāwharanui and Shakespear Open Sanctuaries. Majority of regional population on Te Hauturu-o-Toi / Little Barrier Island. Mainland sanctuary populations fluctuate with stoat incursions. Conservation dependent on mammalian predator-free habitat. Occupies <10% of former range.



Common Name	Māori Name	Name and Authority	Regional Cons. Status (2023)	National Cons. Status (2021)	National Strong-hold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
Red-crowned parakeet	Kākāriki	<i>Cyanoramphus novaezelandiae novaezelandiae</i> (Sparrman, 1787)	Regionally Relict	At Risk - Relict	Yes	MATIND = 1000 - 5000	Medium	STABLE +/-10%	Medium	CD, DE, NStr, PF	Formerly widespread on mainland, now largely restricted to mammalian predator-free islands (<10% of former habitat). Large population on Te Hauturu-o-Toi / Little Barrier Island and some other pest-free islands in Hauraki Gulf. Naturally colonised Shakespear Open Sanctuary (low numbers) and translocated to Tāwharanui Open Sanctuary where numbers remain very low. Conservation dependent on mammalian predator-free habitat.
Whitehead	Pōpokotea	<i>Mohoua albicilla</i> (Lesson, 1830)	Regionally Relict	Not Threatened	Yes	MATIND = 5000 - 20000, FRMHAB <10%	Medium	STABLE +/-10%	Medium	CD, NStr	Formerly widespread on mainland. Large population on Te Hauturu-o-Toi / Little Barrier Island (where important role as host species supporting sizeable population of long-tailed cuckoo). Translocations from Te Hauturu-o-Toi / Little Barrier Island to Tiritiri Matangi, Motuora, Rangitoto/Motutapu Islands and from Tiritiri Matangi to Tāwharanui and Shakespear Open Sanctuaries, where they are thriving. However, translocations to the Waitākere and Hūnua Ranges have failed. Occupies <10% of former habitat.

### 3.3.4 At Risk - Regionally Naturally Uncommon (4)

**Table 10. Regionally Uncommon bird species of Tāmaki Makaurau / Auckland.**

Common Name	Māori Name	Name and Authority	Regional Cons. Status (2023)	National Cons. Status (2021)	National Stronghold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
Australasian shoveler	Kuruwhe- ngi	<i>Spatula rhynchotis</i> (Latham, 1801)	Regionally Naturally Uncommon	Not Threatened	No	MATIND = 250 - 1000	Low	STABLE +/-10%	Medium	DPS, SO	Population appears relatively stable, but more comprehensive surveys could provide greater confidence in population size and trend.
Australian coot		<i>Fulica atra australis</i> (Gould, 1845)	Regionally Naturally Uncommon	At Risk - Naturally Uncommon	No	MATIND = 250 - 1000	Low	STABLE +/-10%	Low	INC, SO	Panel thought it could still be considered a regional coloniser, establishing and expanding across the region.
Little black shag	Kawau tūi	<i>Phalacrocorax sulcirostris</i> (Brandt, 1837)	Regionally Naturally Uncommon	At Risk - Naturally Uncommon	No	MATIND 250 -1000	Low	STABLE +/-10%	Low	CI, DPR, DPS, DPT, SO	Very few breeding colonies known in region, but most of regional population migrates to region during autumn and winter from breeding sites elsewhere. Popn estimate slightly over 250, but only small resident population with a large seasonal migratory influx.
Royal spoonbill	Kōtuku ngutupapa	<i>Platalea regia</i> (Gould, 1838)	Regionally Naturally Uncommon	At Risk - Naturally Uncommon	Yes	MATIND = 1000 - 5000	Medium	INC >10%	Medium	INC, NStr, SO	Naturally occurring in the region and increasing, but no evidence yet of breeding in region. Population probably at lower end of estimated range. Seasonal influx of birds overwintering in region from breeding colonies elsewhere in NZ, and region is a national stronghold during this period.

### 3.4 Not Threatened (24)

Regionally resident native taxa that have large, stable populations (Townsend et al., 2008; Michel, 2021; Rolfe et al., 2021).

**Table 11. Regionally Not Threatened bird species of Tāmaki Makaurau / Auckland.**

Common Name	Māori Name	Name and Authority	Regional Conse. Status (2023)	National Conse. Status (2021)	National Strong-hold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
Australasian gannet	Tākapu	<i>Morus serrator</i> (G.R. Gray, 1843)	Regionally Not Threatened	Not Threatened	No	MATIND = 5000 - 20000	Medium	STABLE +/-10%	Medium	CI, SO	Muriwai colonies (Muriwai mainland, Motutara and Oaia Islands) had a combined 2138 occupied nests in 2017, inner Hauraki Gulf colony at Horuhoru Rock (Waiheke Island) has declined from 2647 in 1980 to 988 in 2017 but outer Gulf colony at Mahuki Island has increased from 2681 in 1980 to 6160 in 2017 (Wodzicki et al. 1984, Gaskin et al. 2019). Overall population appears to be stable.
Australasian harrier	Kāhu	<i>Circus approximans</i> (Peale, 1848)	Regionally Not Threatened	Not Threatened	No	MATIND = 1000 -5000	Low	STABLE +/-10%	Medium	SO	Widespread, conspicuous despite their low numbers.
Black swan	Kakīānau	<i>Cygnus atratus</i> (Latham, 1790)	Regionally Not Threatened	Not Threatened	No	MATIND = 1000 -5000	Low	STABLE +/-10%	Medium	SO	Numbers fluctuate seasonally, but overall population trend considered stable.
Eastern bar-tailed godwit	Kuaka	<i>Limosa lapponica baueri</i> (Linnaeus, 1758)	Regionally Not Threatened	At Risk - Declining	Yes	MATIND = 20000 - 100000	High	STABLE +/-10%	Medium	CI, NStr, TO	Annual Arctic migrant spending >50% of its lifecycle in New Zealand. Slow decline observed nationally over last 25 years (<10%) (Riegen & Sagar, 2020). Good regular count data available for assessing population state and trend. Harbours in wider Auckland region are national strongholds during their time in NZ.

Common Name	Māori Name	Name and Authority	Regional Conse. Status (2023)	National Conse. Status (2021)	National Strong-hold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
Grey-faced petrel	Ōi	<i>Pterodroma gouldi</i> (Hutton, 1869)	Regionally Not Threatened	Not Threatened	No	MATIND = 5000 - 20000	Medium	INC >10%	Medium	CD, CI, *DPS	Regional population increasing on a number of mammalian predator-free islands, also recolonising sites on mainland Auckland west coast and at Tāwharanui and Shakespear Open Sanctuaries. Long-term monitoring data exists for population on Kauwahaia and Ihumoana Islands. Conservation dependent on breeding sites free of mammalian predators, or sites where predators are controlled to low levels. *DPS on most colonies on Hauraki Gulf Islands.
Grey teal	Tētē-moroiti	<i>Anas gracilis</i> (Buller, 1869)	Regionally Not Threatened	Not Threatened	No	MATIND = 1000 -5000	Low	STABLE +/-10%	Low	DPT, SO	Monitoring needed to improve confidence in population size and trend estimate.
Grey warbler	Riroriro	<i>Gerygone igata</i> (Quoy & Gaimard, 1830)	Regionally Not Threatened	Not Threatened	No	MATIND = 20000 - 100000	Medium	STABLE +/-10%	Medium		Widespread and common across region. Declines seen at sites e.g. Tāwharanui Open Sanctuary, with intensive pest management, which has allowed deeper endemic species to be reintroduced or recover.
Kererū	Kererū	<i>Hemiphaga novaeseelandiae</i> (Gmelin, 1789)	Regionally Not Threatened	Not Threatened	No	MATIND = 1000 -5000	Low	INC >10%	Medium	CD, INC	Kererū have increased across the region as a result of various pest control initiatives including many Council and community-led projects, e.g. Hūnua and Waitākere Ranges, Tāwharanui and Shakespear Open Sanctuaries and across suburban Auckland.
New Zealand kingfisher	Kōtare	<i>Todiramphus sanctus vagans</i> (Lesson, 1828)	Regionally Not Threatened	Not Threatened	No	MATIND = 1000 -5000	Low	STABLE +/-10%	Low		Widespread and common. Apart from a few intensively monitored sites in Regional Parks, has not been surveyed systematically to provide population estimate across whole region.
New Zealand scaup	Pāpango	<i>Aythya novaeseelandiae</i> (Gmelin, 1789)	Regionally Not Threatened	Not Threatened	No	MATIND = 250 -1000	Medium	STABLE +/-10%	Low	INC	Patchily distributed and probably increasing across suitable freshwater habitats in region. Population estimate c. 500.

Common Name	Māori Name	Name and Authority	Regional Conse. Status (2023)	National Conse. Status (2021)	National Strong-hold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
North Island brown kiwi	Kiwi-nui	<i>Apteryx mantelli</i> (Bartlett, 1850)	Regionally Not Threatened	Not Threatened	No	MATIND = 1000 -5000	High	STABLE +/-10%	Medium	CD, CI, EF	Populations in region managed separately (geographically distinct sub-populations) but assessed collectively in this assessment. Mainly a restored native in region following local extinction during 20 <sup>th</sup> century. Small natural population believed to have survived on Hauturu but supplemented with birds from various North Island sources in early 20 <sup>th</sup> century (Lovegrove et al., 2019). Increases in numbers and range through recent reintroductions as kiwi disperse from reintroduction sites (e.g. Tāwharanui peninsula). Some evidence of extreme fluctuations caused by starvation during droughts.
North Island fantail	Piwakawa-ka	<i>Rhipidura fuliginosa placabilis</i>	Regionally Not Threatened	Not Threatened	No	MATIND = 20000 – 100000	Medium	STABLE +/-10%	Medium		Widespread and common.
North Island tomtit	Miromiro	<i>Petroica macrocephala toitoi</i> (Lesson, 1828)	Regionally Not Threatened	Not Threatened	No	MATIND = 5000 - 20000	Medium	STABLE +/-10%	Medium		Large population on Te Hauturu-o-Toi / Little Barrier Island. Other locations include Waitākere and Hūnua Ranges, central Rodney, Atuanui, Aotea / Great Barrier Island (a few). Has also naturally recolonised Rangitoto Island. Occasional records from other Hauraki Gulf islands and Tāwharanui Open Sanctuary, but no evidence of breeding there. A translocation to Tiritiri Matangi failed, possibly due to dispersal away from island (Parker et al., 2004).
Paradise shelduck	Pūtangitangi	<i>Tadorna variegata</i> (Gmelin, 1789)	Regionally Not Threatened	Not Threatened	No	MATIND = 1000 -5000	Medium	STABLE +/-10%	Medium		Widespread and common, including pastoral landscapes, following expansion of populations in Waikato and South Auckland and introductions to Northland in 1960s (Williams 1971).

Common Name	Māori Name	Name and Authority	Regional Conse. Status (2023)	National Conse. Status (2021)	National Strong-hold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
Pied stilt	Poaka	<i>Himantopus himantopus leucocephalus</i> (Gould, 1837)	Regionally Not Threatened	Not Threatened	Yes	MATIND = 5000 - 20000	Medium	STABLE +/-10%	High	DE, NStr, SO	Widespread and common. About a quarter of national population overwinters in region, so Auckland is considered a national stronghold. While national counts have declined over last 20+ years, there has been only a slight decline in Auckland counts (<10%).
Pūkeko	Pūkeko	<i>Porphyrio melanotus melanotus</i> (Temminck, 1820)	Regionally Not Threatened	Not Threatened	No	MATIND = 20000 - 100000	Low	STABLE +/-10%	Low	SO	Generally widespread and common, although distribution can be local and patchy.
Ruru / morepork	Ruru	<i>Ninox novaeseelandiae novaeseelandiae</i> (Gmelin, 1788)	Regionally Not Threatened	Not Threatened	No	MATIND = 5000 - 20000	Medium	STABLE +/-10%	Medium		Widespread across region.
Shining cuckoo	Pipīwharuroa	<i>Chrysococcyx lucidus lucidus</i> (Gmelin, 1788)	Regionally Not Threatened	Not Threatened	No	MATIND = 1000 -5000	Low	STABLE +/-10%	Low		Grey warbler a very abundant host species. Shining cuckoos are mobile and cryptic, making it challenging to estimate population size across region.
Silvereye	Tauhou	<i>Zosterops lateralis lateralis</i> (Latham, 1802)	Regionally Not Threatened	Not Threatened	No	MATIND > 100000	High	STABLE +/-10%	Medium	SO	Widespread and abundant. At sites where mammalian pests have been removed or controlled silvereye populations may decline as endemic species recover.
Southern black-backed gull	Karoro	<i>Larus dominicanus</i> (Lichtenstein, 1823)	Regionally Not Threatened	Not Threatened	No	MATIND = 5000 - 20000	Medium	STABLE +/-10%	Medium	DPS, DPT, SO	Widespread and common, expected to remain abundant. Updated regional population estimates required to inform size and trend.
Spur-winged plover		<i>Vanellus miles novaehollandiae</i> (Stephens, 1819)	Regionally Not Threatened	Not Threatened	No	MATIND = 1000 - 5000	Low	STABLE +/-10%	High	SO	20 <sup>th</sup> century coloniser to NZ that has become firmly established and is thriving. Appears to be still increasing in region (<10%).
Tūi	Tūi	<i>Prosthemadera novaeseelandiae novaeseelandiae</i> (Gmelin, 1788)	Regionally Not Threatened	Not Threatened	No	MATIND = 20000 - 100000	Medium	INC >10%	Medium	INC	Widespread and common. Has increased in Hūnua and Waitākere Ranges, and Tāwharanui Open Sanctuary in response to pest management. Also benefitting from many community-led pest control projects in region.

Common Name	Māori Name	Name and Authority	Regional Conse. Status (2023)	National Conse. Status (2021)	National Strong-hold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
Welcome swallow	Warou	<i>Hirundo neoxena neoxena</i> (Gould, 1842)	Regionally Not Threatened	Not Threatened	No	MATIND = 5000 - 20000	Low	STABLE +/-10%	High	SO	20 <sup>th</sup> century coloniser to NZ that has become firmly established and is thriving. Widespread and common.
White-faced heron	Matuku moana	<i>Egretta novaehollandiae novaehollandiae</i> (Latham, 1790)	Regionally Not Threatened	Not Threatened	No	MATIND = 1000 - 5000	Medium	STABLE +/-10%	Medium	SO	A 20 <sup>th</sup> century coloniser to NZ and now widespread and common across the region. Numbers have probably stabilised.

### 3.5 Non-resident Native (123)

Taxa whose natural presence in Tāmaki Makaurau / Auckland is either discontinuous (Migrant), sporadic or temporary (Vagrant) or which have succeeded in recently (since 1950) establishing a resident breeding population (Coloniser) (Townsend et al., 2008; Michel, 2021; Rolfe et al., 2021).

#### 3.5.1 Non-Resident Native – Migrant (21)

**Table 12. Regional Migrant bird species of Tāmaki Makaurau / Auckland.**

Common Name	Māori Name	Name and Authority	Regional Conservation Status (2023)	National Conservation Status (2021)	Regional Qualifiers	Regional Threat Assessment Notes
Arctic skua		<i>Stercorarius parasiticus</i> (Linnaeus, 1758)	Regional Migrant	Non-Resident Native – Migrant	SO	Annual Arctic migrant to NZ (Checklist Committee OSNZ, 2022). Often seen in Auckland waters during summer.
Black-browed mollymawk	Toroa	<i>Thalassarche melanophris</i> (Temminck, 1828)	Regional Migrant	Non-Resident Native – Coloniser	TO	Circumpolar breeding range on many islands in Southern Ocean including Snares, Campbell and Antipodes Island in NZ region (Checklist Committee OSNZ, 2022). Ranges northwards to subtropical waters visiting seas around Auckland.
Broad-billed prion	Pararā	<i>Pachyptila vittata</i> (G. Forster, 1777)	Regional Migrant	At Risk – Relict		In NZ region breeds on Chatham Islands and many southern islands (Checklist Committee OSNZ, 2022). Ranges through NZ waters and visits seas around Auckland where often found as a beach wreck.
Campbell Island mollymawk	Toroa	<i>Thalassarche impavida</i> (Mathews, 1912)	Regional Migrant	At Risk – Naturally Uncommon		Breeds only on Campbell Island. Ranges widely through NZ, southern Australian and SW Pacific seas (Checklist Committee OSNZ, 2022) and visits Auckland waters (Vaugh, 2013).
Eastern cattle egret		<i>Ardea ibis coromanda</i> (Boddaert, 1783)	Regional Migrant	Non-Resident Native – Migrant		Annual autumn and winter migrant to NZ from breeding colonies in Australia (Checklist Committee OSNZ, 2022).
Grey noddy		<i>Anous albivittus</i> (Bonaparte, 1856)	Regional Migrant	At Risk – Relict		Breeds on islands in South Pacific Ocean, also at Three Kings and some Bay of Plenty islands (Checklist Committee OSNZ, 2022). Annual visitor to outer Hauraki Gulf with post-breeding roost at Maori Rocks, Mokohinau Islands.



Common Name	Māori Name	Name and Authority	Regional Conservation Status (2023)	National Conservation Status (2021)	Regional Qualifiers	Regional Threat Assessment Notes
Hutton's shearwater	Kaikōura tītī	<i>Puffinus huttoni</i> (Mathews, 1912)	Regional Migrant	Threatened – Nationally Vulnerable		Breeds in Kaikoura mountains. A few remain in NZ waters but most migrate to seas off Australia (Gaze, 2013). Migrant through Auckland waters, occasionally found beach wrecked.
Mottled petrel	Kōrure	<i>Pterodroma inexpectata</i> (J.R. Forster, 1844)	Regional Migrant	At Risk – Relict		Breeds on islands around Fiordland, Stewart Island and on The Snares (Checklist Committee OSNZ, 2022). Migrates to North Pacific in winter, passing through Auckland waters.
New Zealand white-capped mollymawk	Toroa	<i>Thalassarche cauta steari</i> (Robertson & Nunn 1938)	Regional Migrant	At Risk – Declining		Breeds at Auckland Islands and ranges throughout NZ coastal waters (Sagar, 2013a), including seas around Auckland.
Northern Buller's mollymawk	Toroa	<i>Thalassarche bulleri platei</i> (Reichenow, 1898)	Regional Migrant	At Risk – Naturally Uncommon		Breeds at Three Kings and Chatham Islands. Ranges widely in southern Pacific Ocean, range including seas east of North Island (Sagar, 2013b).
Northern giant petrel	Pāngurunguru	<i>Macronectes halli</i> (Mathews, 1912)	Regional Migrant	At Risk – Recovering		Circumpolar breeding range on many islands in Southern Ocean. In NZ breeds at Auckland, Campbell, Antipodes and Chatham Islands, migrating to subtropical seas during winter (Szabo, 2013). A visitor to Hauraki Gulf during winter.
Pacific golden plover	Kuriri	<i>Pluvialis fulva</i> (Gmelin, 1789)	Regional Migrant	Non-Resident Native – Migrant		Annual Arctic-breeding migrant to harbours and coastal turfs in Auckland region.
Pomarine skua		<i>Stercorarius pomarinus</i> (Temminck, 1815)	Regional Migrant	Non-Resident Native – Migrant		Annual Arctic-breeding migrant to Auckland waters.
Red-necked stint		<i>Calidris ruficollis</i> (Pallas, 1776)	Regional Migrant	Non-Resident Native – Migrant		Annual Arctic-breeding migrant to harbours in Auckland region.
Ruddy turnstone		<i>Arenaria interpres interpres</i> (Linnaeus, 1758)	Regional Migrant	Non-Resident Native – Migrant	NStr	Annual Arctic-breeding migrant. Kaipara and Manukau Harbours are strongholds for them during their time in NZ (Riegen & Sagar 2020).
Salvin's mollymawk	Toroa	<i>Thalassarche salvini</i> (Rothschild, 1893)	Regional Migrant	Threatened – Nationally Critical		Breeds on Bounty and Snares Islands. Ranges across southern Pacific Ocean and throughout NZ coastal waters (Sagar, 2013c), including seas off Auckland.
Short-tailed shearwater		<i>Ardenna tenuirostris</i> (Temminck, 1836)	Regional Migrant	Non-Resident Native – Migrant		Breeds on islands around southern Australia and passes through NZ waters on migration to North Pacific (Checklist Committee OSNZ, 2022). Often found as beach wreck on Auckland's west coast beaches.
Snares Cape petrel		<i>Daption capense australe</i> (Mathews, 1913)	Regional Migrant	At Risk – Naturally Uncommon		Breeds at Chathams and on NZ subantarctic islands and ranges widely in NZ seas (Checklist Committee OSNZ, 2022), visiting Auckland waters especially during winter.

Common Name	Māori Name	Name and Authority	Regional Conservation Status (2023)	National Conservation Status (2021)	Regional Qualifiers	Regional Threat Assessment Notes
Subantarctic skua	Hākoakoa	<i>Stercorarius antarcticus lonnbergi</i> (Mathews, 1912)	Regional Migrant	Threatened – Nationally Vulnerable		In NZ this species breeds on Chatham Islands and many southern islands, dispersing north after breeding (Checklist Committee OSNZ, 2022).
White-headed petrel		<i>Pterodroma lessonii</i> (Garnot, 1826)	Regional Migrant	Not Threatened		Breeds on many islands in Southern Ocean, including Antipodes and Auckland Islands, ranges north during winter (Checklist Committee OSNZ, 2022) and occurs as a beach wreck on Auckland's west coast beaches.
Wilson's storm petrel		<i>Oceanites oceanicus exasperatus</i> (Mathews, 1912)	Regional Migrant	Non-Resident Native – Migrant		Circumpolar breeding distribution on islands around Antarctica (Checklist Committee OSNZ, 2022). Passes through Auckland waters on migration to Northern Hemisphere.

### 3.5.1 Non-Resident Native – Vagrant (100)

**Table 13. Regional Vagrant bird species of Tāmaki Makaurau / Auckland.**

Common Name	Māori Name	Name and Authority	Regional Conservation Status (2023)	National Conservation Status (2021)	Regional Qualifiers	Regional Threat Assessment Notes
Antarctic fulmar		<i>Fulmarus glacialisoides</i> (A. Smith, 1826)	Regional Vagrant	Non-Resident Native – Migrant		Breeds in Antarctic region and ranges north during winter (Checklist Committee OSNZ, 2022). Occurs as beach wreck on Auckland's west coast beaches.
Antarctic prion	Totorore	<i>Pachyptila desolata</i> (Gmelin, 1789)	Regional Vagrant	At Risk – Relict		Breeds in NZ region on Auckland Islands (Checklist Committee OSNZ, 2022), occurs as beach wreck on Auckland's west coast beaches.
Arctic tern		<i>Sterna paradisaea</i> (Pontoppidan, 1763)	Regional Vagrant	Non-Resident Native – Migrant		Uncommon annual Arctic-breeding migrant to NZ (Checklist Committee OSNZ, 2022).
Asiatic black-tailed godwit		<i>Limosa limosa melanuroides</i> (Gould, 1846)	Regional Vagrant	Non-Resident Native – Vagrant		Uncommon annual Arctic-breeding migrant to harbours in Auckland region (Checklist Committee OSNZ, 2022).
Asiatic whimbrel		<i>Numenius phaeopus variegatus</i> (Scopoli, 1786)	Regional Vagrant	Non-Resident Native – Migrant		Uncommon annual Arctic-breeding migrant to harbours in Auckland region (Checklist Committee OSNZ, 2022).

Common Name	Māori Name	Name and Authority	Regional Conservation Status (2023)	National Conservation Status (2021)	Regional Qualifiers	Regional Threat Assessment Notes
Australian barn owl		<i>Tyto alba delicatula</i> (Gould, 1837)	Regional Vagrant	Non-Resident Native – Coloniser		Breeding confirmed near Kaitaia in 2008 and becoming established in Northland (Checklist Committee OSNZ, 2022). Occasionally sighted in Auckland region but no evidence of breeding.
Australian pelican	Perikana	<i>Pelecanus conspicillatus</i> (Temminck, 1824)	Regional Vagrant	Non-Resident Native – Vagrant		Following arrival from Australia of 14 birds in Kaipara Harbour in Aug 2012, seven seen at Te Atatu in Mar 2013 (Miskelly et al., 2015).
Australian white-eyed duck	Karakahia	<i>Aythya australis</i> (Eyton, 1838)	Regional Vagrant	Non-Resident Native – Vagrant		One record from Auckland at Western Springs Lake in Apr 1980 (Jowett, 1980).
Baird's sandpiper		<i>Calidris bairdii</i> (Coues, 1861)	Regional Vagrant	Non-Resident Native – Vagrant		Rare Arctic-breeding migrant. Two records in Manukau Harbour, Mar 1970 (McKenzie et al., 1971) and Apr 1976 (Checklist Committee OSNZ, 2022).
Black-fronted dotterel		<i>Euseyornis melanops</i> (Vieillot, 1818)	Regional Vagrant	At Risk – Naturally Uncommon	SO	Breeds in NZ mainly in lower North Island and South Island (Checklist Committee OSNZ, 2022). Some breeding attempts on Mangere foreshore, but not established as a breeding species in region. The panel considered that regional vagrant best reflected the situation.
Black-fronted tern	Tarapirohe	<i>Chlidonias albobristatus</i> (Gray, 1845)	Regional Vagrant	Threatened – Nationally Endangered		Breeds on South Island riverbeds. A few migrate to North Island during non-breeding season (Checklist Committee OSNZ, 2022). Rare vagrant to harbours in Auckland region.
Black kite		<i>Milvus migrans</i> (Boddaert, 1783)	Regional Vagrant	Non-Resident Native – Vagrant		One record from Ihumatao and Mangere Wastewater Treatment ponds area, Manukau Harbour, in 2001 (Medway, 2002).
Black stilt	Kakī	<i>Himantopus novaezelandiae</i> (Gould, 1841)	Regional Vagrant	Threatened – Nationally Critical		Occasional visitor to region. Formerly widespread and breeding in lower North Island and South Island. Small managed population now restricted to Mackenzie Basin, South Island. Hybridises with pied stilt and a few hybrids migrate to northern NZ harbours during non-breeding season (Checklist Committee OSNZ, 2022).
Black-naped tern		<i>Sterna sumatrana</i> (Raffles, 1822)	Regional Vagrant	N/A		The first and only NZ record for this species was one at the Muriwai gannet colony, 2022 (Miskelly et al., 2023). Not included in 2021 national bird assessment (Robertson et al., 2021).
Blue petrel		<i>Halobaena caerulea</i> (Gmelin, 1789)	Regional Vagrant	Non-Resident Native – Migrant		Circumpolar breeding distribution on Southern Ocean islands ranging north in winter (Checklist Committee OSNZ, 2022). Often found as beach wreck on Auckland west coast beaches.

Common Name	Māori Name	Name and Authority	Regional Conservation Status (2023)	National Conservation Status (2021)	Regional Qualifiers	Regional Threat Assessment Notes
Brown booby		<i>Sula leucogaster plotus</i> (Forster, 1844)	Regional Vagrant	Non-Resident Native – Vagrant		Nearest breeding sites on islands in tropical Pacific. Occasional visitor to gannet colonies in region (Checklist Committee OSNZ, 2022).
Brown noddy / common noddy		<i>Anous stolidus pileatus</i> (Scopoli, 1786)	Regional Vagrant	Non-Resident Native – Coloniser		Breeds in tropics. In NZ region a few breed on Curtis Island, Kermadec Group. Rare vagrant to mainland NZ, one beach wrecked at Muriwai, Jun 1992 (Checklist Committee OSNZ, 2022), another at Muriwai, Jan 2022 (Miskelly et al. 2023).
Buff-breasted sandpiper		<i>Tryngites subruficollis</i> (Vieillot, 1819)	Regional Vagrant	Non-Resident Native – Vagrant		Rare vagrant to region. First NZ record was 2 at Papakanui Spit in Mar 2014 (Miskelly et al., 2015).
Bush falcon	Kārearea	<i>Falco novaeseelandiae ferox</i> (Gmelin, 1788)	Regional Vagrant	Threatened – Nationally Increasing	DE, FR, DPS, DPT	Occasionally seen in region. Recent sightings in Hūnua Ranges, including of pairs, but no evidence of breeding. Former resident which could recolonise. Research needed to determine if re-establishing in region.
Chestnut-breasted shelduck		<i>Tadorna tadornoides</i> (Jardine & Selby, 1828)	Regional Vagrant	Non-Resident Native – Vagrant		Rare Australian vagrant. One at Mangere, Dec 2014 (Miskelly et al., 2015).
Chestnut teal		<i>Anas castanea</i> (Eyton, 1838)	Regional Vagrant	Non-Resident Native – Vagrant		Rare Australian vagrant, with 2 Auckland records, Coatesville, Oct 2003 and Mangere, May 2010 (Checklist Committee OSNZ, 2022).
Common greenshank		<i>Tringa nebularia</i> (Gunnerus, 1767)	Regional Vagrant	Non-Resident Native – Vagrant		Rare Arctic visitor. One at Jordan's Farm, eastern shore of Kaipara Harbour, 2011 (Miskelly et al., 2013).
Common sandpiper		<i>Actitis hypoleucos</i> (Linnaeus, 1758)	Regional Vagrant	Non-Resident Native – Vagrant		Rare Arctic vagrant.
Crested tern		<i>Thalasseus bergii cristata</i> (Stephens, 1826)	Regional Vagrant	Non-Resident Native – Vagrant		Rare visitor from Australia and tropical Pacific. One beach wrecked at Whatipu, Jul 2011 (Miskelly et al., 2013).
Curlew sandpiper		<i>Calidris ferruginea</i> (Pontoppidan, 1763)	Regional Vagrant	Non-Resident Native – Vagrant		Uncommon Arctic migrant, with a few visiting Auckland harbours annually in summer.

Common Name	Māori Name	Name and Authority	Regional Conservation Status (2023)	National Conservation Status (2021)	Regional Qualifiers	Regional Threat Assessment Notes
Dollarbird		<i>Eurystomus orientalis pacificus</i> (Latham, 1802)	Regional Vagrant	Non-Resident Native – Vagrant		Rare visitor from Australia. Two at Upper Waiwera, Dec 2021 (Miskelly et al., 2023).
Dunlin		<i>Calidris alpina</i> (Pallas, 1764)	Regional Vagrant	Non-Resident Native – Vagrant		Rare Arctic vagrant. Records from the Kaipara Harbour, Feb 1974 and Manukau Harbour, Jun 1979 and Apr 2006 (Checklist Committee OSNZ, 2022).
Eastern broad-billed sandpiper		<i>Calidris falcinellus sibirica</i> (Dresser, 1876)	Regional Vagrant	Non-Resident Native – Vagrant		Rare Arctic vagrant.
Eastern common tern		<i>Sterna hirundo longipennis</i> (Nordmann, 1835)	Regional Vagrant	Non-Resident Native – Vagrant		Rare Northern Hemisphere migrant with several records from Auckland region (Checklist Committee OSNZ, 2022).
Eastern curlew		<i>Numenius madagascariensis</i> (Linnaeus, 1776)	Regional Vagrant	Non-Resident Native – Migrant		Rare Arctic migrant with annual records from Manukau Harbour (Checklist Committee OSNZ, 2022).
Eastern little tern	Tara teo	<i>Sternula albifrons sinensis</i> (Gmelin, 1789)	Regional Vagrant	Non-Resident Native – Vagrant		Regular non-breeding summer visitor (Checklist Committee OSNZ, 2022).
Eastern Pacific red-footed booby		<i>Sula sula websteri</i> (Rothschild, 1898)	Regional Vagrant	Non-Resident Native – Vagrant		Rare vagrant from tropical Pacific. One record at the Muriwai gannet colony Jan 2017 (Miskelly et al., 2019).
Fairy martin		<i>Petrochelidon ariel</i> (Gould, 1843)	Regional Vagrant	Non-Resident Native – Vagrant		Vagrant from Australia with several records from the region (Checklist Committee OSNZ, 2022).
Fork-tailed swift		<i>Apus pacificus pacificus</i> (Latham, 1802)	Regional Vagrant	Non-Resident Native – Vagrant		Rare vagrant from Northern Hemisphere. Two on Tirititi Matangi Island in 2023, (accepted record in Birds NZ Unusual Bird Report Database, record as yet unpublished).
Franklin's gull		<i>Leucophaeus pipixcan</i> (Wagler, 1831)	Regional Vagrant	Non-Resident Native – Vagrant		Rare vagrant from North America. One at Bruce Pulman Park, Papakura in 2009 (Miskelly et al., 2011).
Glossy ibis		<i>Plegadis falcinellus</i> (Linnaeus, 1766)	Regional Vagrant	Non-Resident Native – Coloniser		Australian vagrant, but since 2015 a few have bred in South Island (Checklist Committee OSNZ, 2022). Recorded at Mangere, Jul 2005 (Scofield, 2006).

Common Name	Māori Name	Name and Authority	Regional Conservation Status (2023)	National Conservation Status (2021)	Regional Qualifiers	Regional Threat Assessment Notes
Great knot		<i>Calidris tenuirostris</i> (Horsfield, 1821)	Regional Vagrant	Non-Resident Native – Vagrant		Rare Arctic vagrant. Occasionally visits the region, e.g. 3 at Mangere in 2004 (Checklist Committee OSNZ, 2022).
Greater sand plover		<i>Charadrius leschenaultii leschenaultii</i> (Lesson, 1826)	Regional Vagrant	Non-Resident Native – Vagrant		Rare Arctic migrant with records from Kaipara and Manukau Harbours (Checklist Committee OSNZ, 2022).
Grey-headed mollymawk	Toroa	<i>Thalassarche chrysostoma</i> (Forster, 1875)	Regional Vagrant	Threatened – Nationally Vulnerable		Circumpolar breeding distribution on islands in Southern Ocean including Campbell Island in NZ region. A vagrant to Auckland waters usually found as a beach wreck on Auckland west coast beaches.
Grey petrel	Kuia	<i>Procellaria cinerea</i> (Gmelin, 1789)	Regional Vagrant	At Risk – Relict		Circumpolar distribution breeding on many subantarctic islands (Checklist Committee OSNZ, 2022). Vagrant to Auckland waters.
Grey phalarope		<i>Phalaropus fulicarius</i> (Linnaeus, 1758)	Regional Vagrant	Non-Resident Native – Vagrant		Rare vagrant from Northern Hemisphere. A record from the Manukau Harbour, Jul 1992 (Medway, 2000).
Grey plover		<i>Pluvialis squatarola</i> (Linnaeus, 1758)	Regional Vagrant	Non-Resident Native – Vagrant		Rare Arctic vagrant. Occasional records from the northern harbours, including the Manukau (Saunders, 2013a).
Grey-backed storm petrel	Reoreo	<i>Garrodia nereis</i> (Gould, 1841)	Regional Vagrant	At Risk – Relict		Breeds on Chatham Islands, NZ subantarctic islands, some Fiordland islands and many islands in Southern Ocean (Checklist Committee OSNZ, 2022). Vagrant to seas around Auckland.
Grey-backed tern		<i>Onychoprion lunatus</i> (Peale, 1848)	Regional Vagrant	Non-Resident Native – Vagrant		Rare vagrant from tropical Pacific. Two records from Papakanui Spit, Feb 1999 (Scofield, 2006) and Dec 2022 (Miskelly et al., 2023).
Grey-tailed tattler		<i>Tringa brevipes</i> (Vieillot, 1816)	Regional Vagrant	Non-Resident Native – Vagrant		Uncommon Arctic migrant with occasional records from harbours in Auckland region.
Gull-billed tern		<i>Gelochelidon nilotica</i> (Gmelin, 1789)	Regional Vagrant	Non-Resident Native – Coloniser		Nomadic and migratory with cosmopolitan breeding range, which includes Australia. Breeding records from Southland in 2019 and 2021. Small flocks occasionally seen in Manukau and Kaipara Harbours (Checklist Committee OSNZ, 2022).
Hudsonian godwit		<i>Limosa haemastica</i> (Linnaeus, 1758)	Regional Vagrant	Non-Resident Native – Vagrant		Rare annual Arctic-breeding migrant to harbours in Auckland region.
Indian Ocean yellow-nosed mollymawk	Toroa	<i>Thalassarche carteri</i> (Rothschild, 1903)	Regional Vagrant	Non-Resident Native – Coloniser		Breeds on islands in Indian Ocean and formerly regular winter visitor to seas around Auckland (Checklist Committee OSNZ, 2022). Now an uncommon winter visitor.

Common Name	Māori Name	Name and Authority	Regional Conservation Status (2023)	National Conservation Status (2021)	Regional Qualifiers	Regional Threat Assessment Notes
Japanese snipe		<i>Gallinago hardwickii</i> (J.E Gray, 1831)	Regional Vagrant	Non-Resident Native – Vagrant		Rare Northern Hemisphere migrant. Record from Mangere Wastewater Treatment Ponds, Oct 1985 (Baker et al., 1986).
Kerguelen petrel		<i>Lugensa brevirostris</i> (Lesson, 1833)	Regional Vagrant	Non-Resident Native – Migrant		Breeds on subantarctic islands in Indian Ocean and occasionally found beach wrecked on Auckland west coast beaches.
Kermadec petrel	Pia koia	<i>Pterodroma neglecta neglecta</i> (Schlegel, 1863)	Regional Vagrant	Threatened – Nationally Endangered		Breeds mainly on islands across subtropical Pacific Ocean with nearest breeding site to NZ at Kermadec Islands. Rarely sighted off mainland New Zealand, and vagrant to Auckland waters. Occasionally beach wrecked on Auckland west coast beaches (Checklist Committee OSNZ, 2022).
Lesser frigatebird		<i>Fregata ariel ariel</i> (G.R. Gray, 1845)	Regional Vagrant	Non-Resident Native – Vagrant		Rare vagrant from Queensland and tropical Pacific. Recent records include one seen off Tiritiri Matangi, Jan 2018 (Miskelly et al., 2019).
Lesser yellowlegs		<i>Tringa flavipes</i> (Gmelin, 1789)	Regional Vagrant	Non-Resident Native – Vagrant		Rare Arctic vagrant. One at Mangere Wastewater Treatment Ponds 1987 (Imber, 1988).
Light-mantled sooty albatross	Toroa pango	<i>Phoebastria palpebrata</i> (Forster, 1785)	Regional Vagrant	Threatened – Nationally Vulnerable		Widespread circumpolar breeding distribution on Southern Ocean islands including NZ subantarctic islands (Checklist Committee OSNZ, 2022). A few range north to seas off Auckland where occasionally found as beach wreck on Auckland west coast beaches.
Little egret		<i>Egretta garzetta immaculata</i> (Gould, 1846)	Regional Vagrant	Non-Resident Native – Vagrant		Nearest breeding sites in Australia (Checklist Committee OSNZ, 2022). An uncommon annual vagrant to harbours in Auckland region.
Little stint		<i>Calidris minuta</i> (Leisler, 1812)	Regional Vagrant	Non-Resident Native – Vagrant		Rare Arctic vagrant. One record from the Manukau Harbour, Sep 2019 (Miskelly et al., 2021).
Little whimbrel		<i>Numenius minutus</i> (Gould, 1840)	Regional Vagrant	Non-Resident Native – Vagrant		Rare Arctic vagrant, e.g. one at Karaka, Manukau Harbour, Jan 2003 (Medway 2003).
Long-tailed skua		<i>Stercorarius longicaudus</i> (Vieillot, 1819)	Regional Vagrant	Non-Resident Native – Migrant		Rare Arctic visitor to NZ.
Marsh sandpiper		<i>Tringa stagnatilis</i> (Bechstein, 1803)	Regional Vagrant	Non-Resident Native – Vagrant		Rare Arctic visitor to NZ, occasionally recorded in harbours in Auckland region.
Matsudaira's storm petrel		<i>Hydrobates matsudairae</i> (Kuroda, 1922)	Regional Vagrant	N/A		Breeds on islands south of Japan. First and only mainland NZ record for this species was one found as beach wreck at Maukatia Bay, Muriwai, May 2022 (Miskelly et al., 2023). Not included in 2021 national bird assessment (Robertson et al., 2021).

Common Name	Māori Name	Name and Authority	Regional Conservation Status (2023)	National Conservation Status (2021)	Regional Qualifiers	Regional Threat Assessment Notes
Mongolian dotterel		<i>Charadrius mongolus</i> (Pallas, 1776)	Regional Vagrant	Non-Resident Native – Vagrant		Rare migrant from east Asia, occasionally seen in Manukau and Kaipara Harbours (Checklist Committee OSNZ, 2022).
Norfolk Island little shearwater		<i>Puffinus assimilis assimilis</i> (Gould)	Regional Vagrant	Non-Resident Native – Vagrant		Three records from Muriwai, one in 1937 and two in 1939 (Fleming & Serventy, 1943).
Northern royal albatross	Toroa	<i>Diomedea sanfordi</i> (Murphy, 1917)	Regional Vagrant	Threatened – Nationally Vulnerable		Breeds on Chatham Islands and at Tairaroa Head, Otago (Checklist Committee OSNZ, 2022), ranges north to seas off Auckland.
Oriental cuckoo		<i>Cuculus optatus</i> (Gould, 1845)	Regional Vagrant	Non-Resident Native – Vagrant		Rare migrant from Eurasia. One found dead on Te Oneone Rangatira/ Muriwai Beach, Dec 2002 (Medway, 2003).
Oriental dotterel		<i>Charadrius veredus</i> (Gould, 1848)	Regional Vagrant	Non-Resident Native – Vagrant		Rare Northern Hemisphere migrant, occasional records from Manukau Harbour (Checklist Committee OSNZ, 2022).
Pacific heron		<i>Ardea pacifica</i> (Latham, 1802)	Regional Vagrant	Non-Resident Native – Vagrant		One in Wayby Valley Road near Wellsford, Sep 2013 (Miskelly et al., 2015).
Pectoral sandpiper		<i>Calidris melanotos</i> (Vieillot, 1819)	Regional Vagrant	Non-Resident Native – Vagrant		Uncommon Arctic migrant to harbours in Auckland region.
Pink-eared duck		<i>Malacorhynchus membranaceus</i> (Latham, 1801)	Regional Vagrant	Non-Resident Native – Vagrant		A single record from Mangere Wastewater Treatment Ponds, Manukau Harbour, Jun-Jul 1990 (Eller et al., 1991).
Plumed egret		<i>Ardea intermedia plumifera</i> (Gould, 1848)	Regional Vagrant	Non-Resident Native – Vagrant		One at Waiatarua Reserve, Nov 2006 (Scofield, 2008).
Red-necked phalarope		<i>Phalaropus lobatus</i> (Linnaeus, 1758)	Regional Vagrant	Non-Resident Native – Vagrant		One at Mangere Wastewater Treatment Ponds, Manukau Harbour, Jun 1985 (Jenkins et al., 1986).
Red-tailed tropicbird	Amokura	<i>Phaethon rubricauda</i> (Boddaert, 1783)	Regional Vagrant	Threatened – Nationally Increasing		Breeds on islands in tropical and subtropical Indian and Pacific Oceans. In NZ region breeds at Kermadec Islands (Checklist Committee OSNZ, 2022). Rare vagrant to Auckland region.
Ruff		<i>Calidris pugnax</i> (Linnaeus, 1758)	Regional Vagrant	Non-Resident Native – Vagrant		Rare Arctic vagrant. Recorded at Mangere 2001, and in Manukau Harbour 2006-07 (Saunders, 2013b).
Salvin's prion		<i>Pachyptila salvini</i> (Mathews, 1912)	Regional Vagrant	Non-Resident Native – Migrant		Breeds on subantarctic islands in Indian Ocean. Common beach wreck on Auckland west coast beaches.
Sanderling		<i>Calidris alba</i> (Pallas, 1764)	Regional Vagrant	Non-Resident Native – Vagrant		Rare Arctic vagrant. Occasional records from harbours in region, e.g. one at Karaka, Apr-May 2002 (Medway 2003).
Semipalmated plover		<i>Charadrius semipalmatus</i> (Bonaparte, 1825)	Regional Vagrant	Non-Resident Native – Vagrant		One in Manukau Harbour, Dec 2009 (Miskelly et al., 2013).



Common Name	Māori Name	Name and Authority	Regional Conservation Status (2023)	National Conservation Status (2021)	Regional Qualifiers	Regional Threat Assessment Notes
Sharp-tailed sandpiper	Kohutapu	<i>Calidris acuminata</i> (Horsfield, 1821)	Regional Vagrant	Non-Resident Native – Migrant		Regular Arctic migrant to NZ but in declining numbers. Based on recent numbers, assessed here as a regional vagrant.
Sooty tern		<i>Onychoprion fuscatus serratus</i> (Linnaeus, 1766)	Regional Vagrant	At Risk – Recovering		In NZ region breeds at Kermadec Islands. Vagrant to region especially after storms, e.g. 13 alive at Pakiri beach, Jul 1986 Islands (Checklist Committee OSNZ, 2022).
Southern Buller's albatross / mollymawk	Toroa	<i>Thalassarche bulleri bulleri</i> (Rothschild, 1893)	Regional Vagrant	At Risk – Declining		Breeds on The Snares and Solander Islands (Sagar, 2013a). Occasional observations from Auckland waters.
Southern giant petrel	Pāngurunguru	<i>Macronectes giganteus</i> (Gmelin, 1789)	Regional Vagrant	Non-Resident Native – Migrant		Circumpolar breeding distribution around Antarctica. Ranges north to seas around Auckland where occasionally recovered as beach wreck.
Southern New Zealand dotterel	Tūturiwhatu	<i>Charadrius obscurus obscurus</i> (Gmelin, 1789)	Regional Vagrant	Threatened – Nationally Critical		A banded Southern New Zealand dotterel seen and photographed in Shoal Bay, Waitemata Harbour, Jul-Sep 1993 and Jun 1994 (Dowding, 2020a).
Southern royal albatross	Toroa	<i>Diomedea epomophora</i> (Lesson, 1825)	Regional Vagrant	Threatened – Nationally Vulnerable		Breeds on Auckland and Campbell Islands and ranges widely, visiting seas around Auckland.
South polar skua		<i>Stercorarius maccormicki</i> (Saunders, 1893)	Regional Vagrant	Non-Resident Native – Migrant		Breeds around coasts of Antarctica and ranges north during winter. Occasional records from Auckland region (Checklist Committee OSNZ, 2022).
Terek sandpiper		<i>Xenus cinerea</i> (Guldenstaedt, 1774)	Regional Vagrant	Non-Resident Native – Vagrant		Rare Arctic migrant. Recent Auckland records include observations at Big Sand Island, Kaipara Harbour, 2021 and 2022 (Miskelly et al., 2023). Scientific name from 2022 Checklist of the Birds of NZ used here. The 2021 national assessment (Robertson et al., 2021) lists this species as <i>Xenus cinerea</i> .
Thin-billed prion	Korotangi	<i>Pachyptila belcheri</i> (Mathews, 1912)	Regional Vagrant	Non-Resident Native – Migrant		Breeds on subantarctic islands in Atlantic and Indian Oceans. Ranges widely in subantarctic and NZ waters in winter. Occurs as beach wreck on Auckland west coast beaches.
Upland sandpiper		<i>Bartramia longicauda</i> (Bechstein, 1812)	Regional Vagrant	Non-Resident Native – Vagrant		Only NZ record is a single bird in the Manukau Harbour, 1967 (McKenzie, 1968).
Wandering albatross	Toroa	<i>Diomedea exulans</i> (Linnaeus, 1758)	Regional Vagrant	Non-Resident Native – Migrant	TO	Breeds mainly on islands in South Indian and Atlantic Oceans with a few breeding on Macquarie Island south of NZ. Ranges widely, occasionally visiting NZ seas (Checklist Committee OSNZ, 2022). Occasionally recovered as beach wreck.

Common Name	Māori Name	Name and Authority	Regional Conservation Status (2023)	National Conservation Status (2021)	Regional Qualifiers	Regional Threat Assessment Notes
Wandering tattler		<i>Tringa incana</i> (Gmelin, 1789)	Regional Vagrant	Non-Resident Native – Vagrant		Arctic migrant which mainly winters in the Pacific Islands, but occasional NZ records including at Karaka, Manukau Harbour, Jan-Mar 2003 (Medway, 2003).
Western sandpiper		<i>Calidris mauri</i> (Cabanis, 1857)	Regional Vagrant	At Risk – Naturally Uncommon		Rare Arctic vagrant. Auckland records include one at Omaha spit and possibly same bird at Clifton Beach, Whitford Estuary, Feb 2023 (Miskelly et al., 2023).
Westland petrel	Tāiko	<i>Procellaria westlandica</i> (Falla, 1946)	Regional Vagrant	Non-Resident Native – Vagrant		Breeds near Punakaiki, Westland. Ranges across Tasman Sea and southern Pacific Ocean. Occasionally recovered as beach wreck on Auckland west coast beaches.
Whiskered tern		<i>Chlidonias hybridus javanicus</i> (Horsfield, 1821)	Regional Vagrant	Non-Resident Native – Vagrant		Rare vagrant from Australia. One at Mangere, Oct 2017 (Miskelly et al., 2023).
White heron	Kōtuku	<i>Ardea alba modesta</i> (J.E. Gray, 1831)	Regional Vagrant	Threatened – Nationally Critical	SO	Occasional visitor to harbours in the region from the only NZ breeding location on the Waitangiroto River near Okarito, South Westland.
White tern		<i>Gygis alba candida</i> (Gmelin, 1789)	Regional Vagrant	Threatened – Nationally Critical		Widespread across tropical Indian and Pacific Oceans. In NZ region breeds on Raoul Island, Kermadec Group. Rare vagrant to NZ waters with a few records from Auckland region, including a beach wreck at Muriwai in 1990 (Guest, 1990).
White-capped noddy / black noddy		<i>Anous minutus minutus</i> (Boie, 1844)	Regional Vagrant	Threatened – Nationally Vulnerable		Widespread breeding range across islands in SW Pacific and around Australia. In NZ region breeds at Kermadec Islands. Rare vagrant to mainland NZ. Local records include a live bird at Milford Beach 2020 (Miskelly et al., 2021). Scientific name from 2022 Checklist of the Birds of NZ was used – the 2021 national assessment (Robertson et al., 2021) lists this species as <i>Anous minutus</i> .
White-chinned petrel	Karetai kauae mā	<i>Procellaria aequinoctialis</i> (Linnaeus, 1758)	Regional Vagrant	Not Threatened		Circumpolar breeding range includes Auckland, Campbell and Antipodes Islands (Checklist Committee OSNZ, 2022). Winter range includes seas around northern NZ, and occasionally found as beach wreck on Auckland west coast beaches.
White ibis		<i>Threskiornis molucca molucca</i> (Cuvier, 1829)	Regional Vagrant	Non-Resident Native – Vagrant		Rare Australian vagrant. Record from Helensville in 1989 (Taylor, 1990).
White-naped petrel		<i>Pterodroma cervicalis</i> (Salvin, 1891)	Regional Vagrant	At Risk – Relict		Breeds mainly on Macauley Island, Kermadec Group (Checklist Committee OSNZ, 2022). Ranges to northern NZ waters, an uncommon vagrant to seas around Auckland.

Common Name	Māori Name	Name and Authority	Regional Conservation Status (2023)	National Conservation Status (2021)	Regional Qualifiers	Regional Threat Assessment Notes
White-rumped sandpiper		<i>Calidris fuscicollis</i> (Vieillot, 1819)	Regional Vagrant	Non-Resident Native – Vagrant		Breeds in Canadian Arctic. Very rare vagrant to NZ. Two NZ records including 2 in Manukau Harbour, Dec 1969 (McKenzie, 1970).
White-tailed tropicbird		<i>Phaethon lepturus dorotheae</i> (Mathews, 1913)	Regional Vagrant	Non-Resident Native – Vagrant		Six subspecies breed across tropical Pacific, Indian and Atlantic Oceans. Rare vagrant to NZ and Auckland region. One beach-wrecked at Tāwharanui Regional Park, Feb 2011 (Miskelly et al., 2013).
White-throated needletail		<i>Hirundapus caudacutus caudacutus</i> (Latham, 1802)	Regional Vagrant	Non-Resident Native – Vagrant		Rare Asian migrant with vagrants regularly seen in NZ during summer (Checklist Committee OSNZ, 2022).
White-winged black tern		<i>Chlidonias leucopterus</i> (Temminck, 1815)	Regional Vagrant	Non-Resident Native – Migrant		Regular Asian migrant to NZ (Checklist Committee OSNZ, 2022).

### 3.5.1 Non-Resident Native – Coloniser (2)

**Table 14. Regional Coloniser bird species of Tāmaki Makaurau / Auckland.**

Common Name	Māori Name	Name and Authority	Regional Conservation Status (2023)	National Conservation Status (2021)	National Stronghold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
Australasian little grebe	Tokitokipio	<i>Tachybaptus novaehollandiae novaehollandiae</i> (Stephens, 1826)	Regional Coloniser	Non-Resident Native – Coloniser	No	MATIND<250	Medium	STABLE +/-10%	Low	SO	Widespread in Australia, but very low numbers in NZ. Probably well under 100 across Auckland region where it occurs mainly on Te Korowai-o-Te-Tonga Peninsula (South Kaipara Head) lakes.

Common Name	Māori Name	Name and Authority	Regional Conservation Status (2023)	National Conservation Status (2021)	National Stronghold	Regional Population Size	Regional Confidence Population Size	Regional Trend	Regional Confidence Trend	Regional Qualifiers	Regional Threat Assessment Notes
Black-winged petrel	Karetai kapa mangu	<i>Pterodroma nigripennis</i> (Rothschild, 1893)	Regional Coloniser	Not Threatened	No	MATIND<250	High	DEC 10-30%	Low	CD, DPS, DPT, IE	Widespread breeding species across SW and central South Pacific including Kermadec Islands (Checklist Committee OSNZ, 2022). In Auckland region, small breeding population on Burgess Island that may have declined. Possibly in very early stages of colonisation in region. Monitoring needed to assess colony establishment.

### 3.6 Introduced and Naturalised (28)

Taxa that have become naturalised in the region after being deliberately or accidentally introduced by human agency. To be considered naturalised, a taxon must have established a self-sustaining population in the wild over at least three generations and must have spread beyond the site of initial establishment (Townsend et al., 2008; Michel, 2021; Rolfe et al., 2021).

**Table 15. Introduced and Naturalised bird species of Tāmaki Makaurau / Auckland.**

Common Name	Māori Name	Name and Authority	Regional Conservation Status (2023)	National Conservation Status (2021)	Regional Population Notes	Qualifiers
Australian brown quail	Kuera	<i>Synoicus ypsilophora australis</i> (Latham, 1802)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND= 1000-5000	SO
Australian magpie	Makipai	<i>Gymnorhina tibicen</i> (Latham, 1801)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND=5000-20000	SO
Barbary dove		<i>Streptopelia risoria</i> (Linnaeus, 1758)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND= 1000-5000; INC>10%	SO
California quail	Tikaokao	<i>Callipepla californica</i> (Shaw, 1789)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND= 1000-5000	SO
Canada goose*	Kuihi	<i>Branta canadensis</i> (Linnaeus, 1758)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND= 1000-5000; INC>10%	SO
Chaffinch	Pahirini	<i>Fringilla coelebs</i> (Linnaeus, 1758)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND=20000-100000	SO
Common myna	Maina	<i>Acridotheres tristis</i> (Linnaeus, 1766)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND>100000	SO
Common pheasant	Peihana	<i>Phasianus colchicus</i> (Linnaeus, 1758)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND= 1000-5000	SO
Common redpoll		<i>Acanthis flammea</i> (Linnaeus, 1758)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND= 1000-5000	SO
Common starling	Tāringi	<i>Sturnus vulgaris vulgaris</i> (Linnaeus, 1758)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND>100000	SO
Dunnock		<i>Prunella modularis</i> (Linnaeus, 1758)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND= 1000-5000	SO
Eastern rosella*	Kākā uhi whero	<i>Platyercus eximius</i> (Shaw, 1792)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND= 5000-20000	SO
Eurasian blackbird	Manu pango	<i>Turdus merula merula</i> (Linnaeus, 1758)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND>100000	SO
Eurasian skylark	Kaireka	<i>Alauda arvensis</i> (Linnaeus, 1758)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND= 5000-20000	SO

Common Name	Māori Name	Name and Authority	Regional Conservation Status (2023)	National Conservation Status (2021)	Regional Population Notes	Qualifiers
European goldfinch	Kōurarini	<i>Carduelis carduelis britannica</i> (Hartert, 1903)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND>100000	SO
European greenfinch		<i>Chloris chloris</i> (Linnaeus, 1758)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND=20000-100000	SO
Galah*		<i>Eolophus roseicapillus</i> (Vieillot, 1817)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND<250	SO
Greylag goose	Kuihi	<i>Anser anser</i> (Linnaeus, 1758)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND=250-1000	SO
House sparrow	Tiu	<i>Passer domesticus domesticus</i> (Linnaeus, 1758)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND>100000	SO
Laughing kookaburra		<i>Dacelo novaeguineae novaeguineae</i> (Hermann, 1783)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND<250	SO
Mallard duck	Rakiraki	<i>Anas platyrhynchos</i> (Linnaeus, 1758)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND>-100000	SO
Peafowl	Pīkao	<i>Pavo cristatus</i> (Linnaeus, 1758)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND=250-1000	SO
Rock pigeon	Kererū aropari	<i>Columba livia</i> (Gmelin, 1789)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND>100000	SO
Song thrush	Manu-kai-hua-rakau	<i>Turdus philomelos</i> (Brehm, 1831)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND=20000-100000	SO
Spotted dove		<i>Streptopelia chinensis tigrina</i> (Temminck, 1809)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND=5000-20000	SO
Sulphur-crested cockatoo*		<i>Cacatua galerita</i> (Latham, 1790)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND<250	SO
Wild turkey	Korukoru	<i>Meleagris gallopavo</i> (Linnaeus, 1758)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND=1000-5000	SO
Yellowhammer	Hurukōwhai	<i>Emberiza citrinella</i> (Linnaeus, 1758)	Regionally Introduced and Naturalised	Introduced and Naturalised	MATIND=5000-20000	SO

\* Species listed as pest species in Mahere ā-Rohe Whakahaere Kaupapa Kōiora Orotā mō Tāmaki Makaurau Auckland Regional Pest Management Plan 2020-2030 (Auckland Council, 2020).

## 4 Discussion

Of the 230 bird taxa identified as present or occasionally present in Tāmaki Makaurau / Auckland, 34 are considered Regionally Threatened and 20 Regionally At Risk. The number of taxa identified as present or occasionally present in the region represents nearly half of all those present or occasionally present in New Zealand based on the Checklist of the Birds of New Zealand (5<sup>th</sup> edition) (Checklist Committee OSNZ, 2022). This highlights the importance of Tāmaki Makaurau / Auckland for birds in New Zealand.

This regional conservation assessment will help guide the prioritisation of taxa for targeted survey, monitoring, management and research, to ensure the regional viability of indigenous species of birds is maintained over the long-term.

Completing regional conservation status assessments for birds in Tāmaki Makaurau / Auckland is a component of Auckland Council's Biodiversity Focus Area programme. Biodiversity Focus Areas represent the minimum set of sites requiring targeted management of critical pressures to ensure the regional viability of indigenous ecosystems, sequences and species is maintained over the long-term (>50 years). The BFA programme helps to fulfil objectives of Auckland Council's Indigenous Biodiversity Strategy (2012).

Auckland Council has delivered and supported conservation activities for a range of bird species for a number of years, with further council-supported research, survey, monitoring and management underway or planned.

### **Predator management**

Many resident bird species in Tāmaki Makaurau / Auckland benefit from the establishment and ongoing management of predator-free islands of the Hauraki Gulf, particularly Te Hauturu-o-Toi / Little Barrier Island. The status of many species in this assessment has been influenced by having moderate-large stable populations on Te Hauturu-o-Toi / Little Barrier Island, whereas regional mainland populations of these species may be in decline or have been historically lost.

The conservation status of 38 bird species in Tāmaki Makaurau / Auckland is qualified as being conservation dependent, with many of these species requiring predator-free locations to persist. In partnership with mana whenua, communities and other agencies, Auckland Council contributes to maintaining the predator-free status of these locations within the region. This includes biosecurity measures to maintain the predator-free status of Hauraki Gulf islands in partnership with the Department of Conservation, and incursion surveillance and response at Auckland Council-managed mainland sanctuaries.

Increased predator management is essential to protect and recover a number of bird taxa. Through the Natural Environment Targeted Rate (NETR), Auckland Council has been able to lead or support the expansion of predator management at several locations across the region. Expanded predator control in the Te Ngāherehere o Kohukohunui/ Hūnua Ranges, including regular landscape scale pest

control operations, has benefitted several indigenous bird species, particularly North Island kōkako, with the Hūnua Ranges now holding one of the largest mainland populations. The substantial growth in community-led pest-management initiatives across the region in recent years is benefitting many bird species including Northern New Zealand dotterel, kererū and tūī (Auckland Council 2023). Auckland Council plays a significant role in supporting and resourcing these community projects.

Community-led initiatives such as the Waiheke Collective are key drivers to activate and drive conservation efforts. Te Korowai o Waiheke project, funded by Predator Free 2050 Ltd, Auckland Council and Foundation North, aspires to eradicate stoats and rats from the island. Efforts to date showed significant increases in counts of native birds since 2020, ranging from kākā to fantail and Variable oystercatcher / Tōrea pango.

### **Translocations and reintroductions**

There have been many conservation translocations and reintroductions of bird species within the region to predator-free islands and mainland sanctuaries (Miskelly and Powlesland 2013). Many of these have resulted in self-sustaining populations. Auckland Council has led or supported a number of these, particularly in the Hūnua Kōkako Management Area within Te Ngāherehere o Kohukohunui and at Tāwharanui and Shakespear Open Sanctuaries, working alongside mana whenua and community partners. As a result of these translocations, reintroductions and intensive predator management, the conservation status of species such as North Island kōkako is better than it would have been otherwise in the region.

Several species have recolonised areas naturally following the control or removal of mammalian predators. Seabirds including grey-faced petrel, Northern diving petrel and fluttering shearwater settling at Tāwharanui and Shakespear Open Sanctuaries, kākā and bellbird at Tāwharanui; red-crowned parakeet/kākāriki, bellbird and fernbird at Shakespear and North Island weka and kākā on Waiheke Island.

### **Species survey and monitoring**

Tāmaki Makaurau / Auckland, especially the wider Hauraki Gulf, is recognised internationally as a global hotspot for seabird diversity (Gaskin and Rayner 2013). In 2018, Auckland Council started developing a regional Seabird Monitoring and Research Programme, funded by the Natural Environment Targeted Rate. Its purpose is to increase knowledge on the presence, health, and trends of seabird populations in the Auckland region, and to explore the factors affecting population distributions and trends in order to advise future management actions. Survey and monitoring work under this programme has informed the status of many of the resident breeding seabird species in this assessment. As the programme is developed further, it will inform future conservation management by confirming population sizes and trends for these species in the region and help us to understand the pressures they face, including emerging threats.

Auckland Council undertakes regular forest and wetland bird monitoring as part of its state of the environment reporting for the region. An analysis of these data from 2009-2019 highlighted the importance of large-forested areas and sites with intensive predator control for supporting high



proportions of indigenous bird species, and the role they play as refuges and source populations of indigenous birds to recolonise surrounding areas (Landers et al., 2021).

The council also undertakes long-term forest bird monitoring at selected sites to assess responses to predator management. These include Te Ngāherehere o Kohukohunui/ Hūnua Ranges and Te Wao nui a Tiriwa/ Waitākere Ranges, Dunns Bush (near Puhoi), and Tāwharanui and Shakespear Open Sanctuaries. In Te Wao nui a Tiriwa/ Waitākere Ranges, following a ground-based possum control programme in 1997-98 carried out by the former Auckland Regional Council, total bird numbers have increased by 75%, largely due to a significant increase in indigenous birds (Lovegrove and Parker 2023). Following aerial predator control operations in Te Ngāherehere o Kohukohunui/ Hūnua Ranges, along with intensive ground-based predator control in the Hūnua Kōkako Management Area, among indigenous birds, the numbers of kererū, kaka, tūī, bellbird and kōkako have increased significantly, the numbers of kingfishers, grey warblers and tomtits did not change much, while the numbers of fantails and silvereyes declined (Auckland Council unpubl. data). Similar trends have been found at Tāwharanui, where endemic birds, including kererū, tūī, bellbird and deeper endemic species such as kaka, and whitehead, now form a greater proportion of total birds, while the proportion of more recent natives such as silvereye, and introduced birds has declined. This pattern has been reported in sanctuary projects elsewhere (e.g. Miskelly 2018, Binny et al., 2021).

For community-led conservation management projects, increases in the proportions of indigenous birds, along with increases in conspicuous indicator species such as kererū and tūī (Monks et al., 2013), provide useful and measurable indicators of success.

There are several species-specific bird survey and monitoring projects that Auckland Council has led or supported. For example, in 2019-2020 Auckland Council commissioned acoustic surveys for Australasian bittern (Soundcounts, 2019; 2020). The information gained in these baseline surveys contributed to this assessment and will help inform future survey efforts and the prioritisation of sites for management for this regionally and nationally critically threatened species.

Auckland Council supports community monitoring and management efforts for a number of species. An example of this is the community dotterel minders programme. The recovery of Northern New Zealand dotterel, particularly in the Auckland region, has been attributed in part to the management done by volunteers and community groups (Dowding, 2020b), which the council has supported. Breeding data collected by the community has been used to inform the status of Northern New Zealand dotterel in this assessment.

### **Climate impacts and emerging threats**

The conservation status of 35 bird species in this assessment were qualified as likely or predicted to be negatively affected by climate change. However, it is also likely that all bird species will be affected to some extent by the effects from future climate change (Ministry for the Environment 2020, Keegan et al. 2022, Weinhäupl and Devenish-Nelson 2024). New Zealand's unique endemic species are particularly vulnerable due to interactions between climate change, habitat loss, and invasive species (Macinnis-Ng et al. 2021). Intact forest cover is crucial for the survival of endemic forest birds and increasing temperatures may exacerbate their decline by altering habitat suitability and increasing the range of invasive mammalian predators (Walker et al. 2019).

For shorebirds terns and gulls, likely impacts include changes to food resources, foraging habitats, roosts and breeding sites being inundated and eroded by sea level rise and storm events, and the potential loss of some roosts and breeding sites altogether. We will need to consider, where possible, how these sites will be protected and how to establish new, secure roosts and breeding sites if these species are to persist in the region. Domestic and international migratory shorebirds that visit the region are also facing significant challenges from climate change at their breeding sites and across their migration routes.

For the seabirds that breed locally, or visit the waters of the region, significant impacts from climate change are also expected. Most seabirds are long-lived and slow maturing, making them less resilient or adaptable to rapidly changing environmental conditions (Whitehead et al., 2019). Climate change effects on seabirds include changing abundance and location of food resources and loss of breeding and roosting sites to erosion and flooding during extreme weather events.

Climate change further interacts with or exacerbates existing threats for birds, such as invasive species or the spread of avian pathogens. While not yet detected in New Zealand, the H5N1 strain of Highly Pathogenic Avian Influenza (HPAI) poses several significant risks to our bird populations. Outbreaks of HPAI overseas have caused unprecedented mortality of wild birds globally (WOAH 2023). Since the virus has never been detected in New Zealand, it remains unclear what the impact on our birds here would be but based on overseas evidence, colony nesting seabirds and raptors are particularly vulnerable (Gartrell et al. 2024).

It is essential that conservation planning considers better ways to support population and habitat resilience under rapidly changing environmental conditions.

### **Next steps**

A comprehensive framework and plan for managing threatened species as well as species-led outcome monitoring are being developed under Auckland Council's BFA programme and through the regional Seabird Monitoring and Research Programme under the Marine Ecology programme. This aims to provide more reliable data on population sizes and trends, allow for adaptive management, and generally improve outcomes for threatened species in the region.

It is recognised that this assessment and the methodologies it follows do not include specific consideration of values of importance to tangata whenua/ Māori. It is anticipated that work to address this will be undertaken in accordance with the requirements of the NPS-IB (Ministry for the Environment 2023b) to identify and acknowledge taonga species.

Significant future work is also required to survey, monitor, manage and protect threatened bird species within the region (Department of Conservation 2020, Ministry for the Environment, 2023a; 2023b). Working alongside mana whenua, community volunteers, researchers, private landowners, and other agencies including the Department of Conservation and Birds New Zealand, will be critical to ensure the long-term survival of the birds of Tāmaki Makaurau / Auckland.

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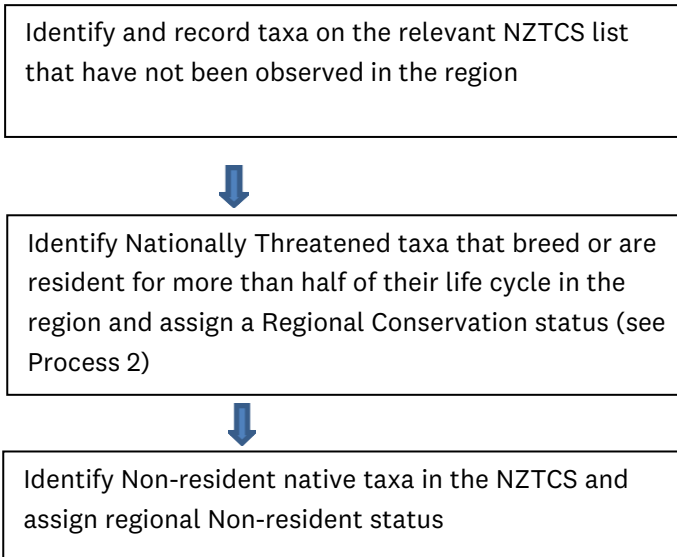
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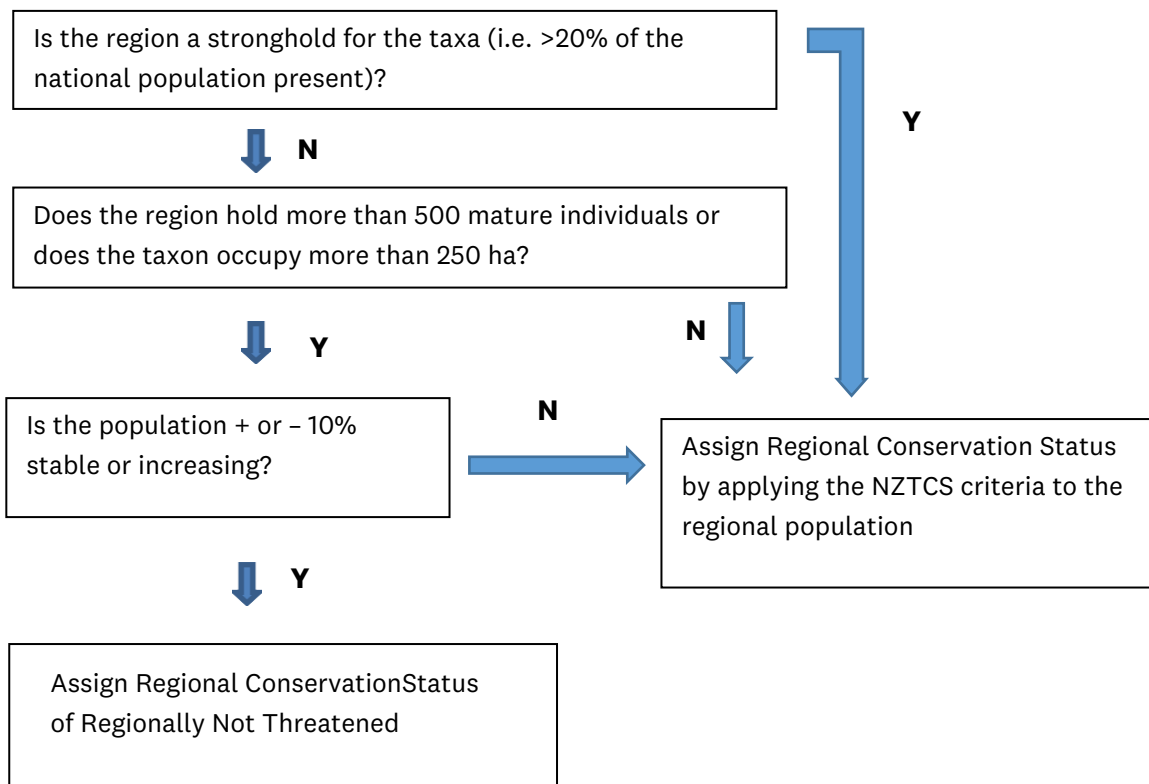
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## Appendix 1: Process for determining the regional conservation status of a species

### Process 1: Determination of regional conservation status



### Process 2: Determination of strongholds and Regionally Not Threatened species



## Appendix 2: List of national and regional qualifiers

Code	Qualifier	Qualifier Type	National/ Regional	Description
CD	Conservation Dependent	Pressure Management Qualifier	National	The taxon is likely to move to a worse conservation status if current management ceases. The term 'management' can include indirect actions that benefit taxa, such as island biosecurity. Management can make a taxon CD only if cessation of the management would result in a worse conservation status. The influence of the benefits of management on the total population must be considered before using CD. The benefit of managing a single subpopulation may not be adequate to trigger CD, but may trigger Partial Decline (PD). Taxa qualified CD may also be PD because of the benefits of management.
CI	Climate Impact	Pressure Management Qualifier	National	<p>The taxon is adversely affected by long-term climate trends and/or extreme climatic events. The following questions provide a guide to using the CI Qualifier:</p> <p>Is the taxon adversely affected by long-term changes in the climate, such as an increase in average temperature or sea-level rise?</p> <p>If NO = no Qualifier but needs monitoring and periodic re-evaluation because projected changes to the average climate and sea-level rise may adversely impact the taxon (including via changes to the distribution and prevalence of pests, weeds and predators) in the future.</p> <p>If YES = CI Qualifier</p> <p>Is the taxon adversely affected by extreme climate events, such as a drought, storm or heatwave?</p> <p>If No = no Qualifier but needs monitoring and periodic re-evaluation because projected changes to the climate are likely to increase the frequency and/or severity of these events in the future.</p> <p>If YES = CI Qualifier</p> <p>Use of the Climate Impact Qualifier would indicate the need for more in-depth research, ongoing monitoring of climate impacts, and potentially a climate change adaptation plan for the taxon.</p>
CR	Conservation Research Needed	Pressure Management Qualifier	National	Causes of decline and/or solutions for recovery are poorly understood and research is required.
DE	Designated	Assessment Process Qualifier	National	A taxon that the Expert Panel has assigned to what they consider to be the most appropriate status without full application of the criteria. For example, a commercial fish stock that is being fished down to Biomass Maximum Sustainable yield (BMSy) may meet criteria for 'Declining', however, it could be designated as 'Not Threatened' if the Expert Panel believes that this better describes the taxon's risk of extinction

Code	Qualifier	Qualifier Type	National/ Regional	Description
DPR	Data Poor: Recognition	Assessment Process Qualifier	National	Confidence in the assessment is low because of difficulties in determining the identity of the taxon in the field and/or in the laboratory. Taxa that are DPR will often be DPS and DPT. In such cases, the taxon is most likely to be Data Deficient.
DPS	Data Poor: Size	Assessment Process Qualifier	National	Confidence in the assessment is low because of a lack of data on population size.
DPT	Data Poor: Trend	Assessment Process Qualifier	National	Confidence in the assessment is low because of a lack of data on population trend.
EF	Extreme Fluctuations	Pressure Management Qualifier	National	The taxon experiences extreme unnatural population fluctuations, or natural fluctuations overlaying human-induced declines, that increase the threat of extinction. When ranking taxa with extreme fluctuations, the lowest estimate of mature individuals should be used for determining population size, as a precautionary measure.
EW	Extinct In The Wild	Pressure Management Qualifier	National	The taxon is known only in captivity or cultivation or has been reintroduced to the wild but is not self-sustaining. Assessment of a reintroduced population should be considered only when it is self-sustaining. A population is deemed to be self-sustaining when the following two criteria have been fulfilled: it is expanding or has reached a stable state through natural replenishment and at least half the breeding adults are products of the natural replenishment, and it has been at least 10 years since reintroduction.
FR	Former Resident		Regional	Breeding population (existed for more than 50 years) extirpated from region but continues to arrive as a regional vagrant or migrant. FR and RN are mutually exclusive.
HR	Historical Range		Regional	The inferred range (extending in any direction) of the taxon in pre-human times meets its natural limit in the region.
IE	Island Endemic	Biological Attribute Qualifier	National	A taxon whose natural distribution is restricted to one island archipelago (e.g. Auckland Islands) and is not part of the North or South Islands or Stewart Island/Rakiura. This qualifier is equivalent to the 'Natural' Population State value in the database.
IN	Introduced Native		Regional	Introduced to the region, though not known to have previously occurred in it.
INC	Increasing	Pressure Management Qualifier	National	There is an ongoing or forecast increase of > 10% in the total population, taken over the next 10 years or three generations, whichever is longer. This qualifier is redundant for taxa ranked as 'Recovering'.
NS	Natural State	Biological Attribute Qualifier	National	A taxon that has a stable or increasing population that is presumed to be in a natural condition, i.e., has not experienced historical human-induced decline.
NO	Naturalised Overseas	Population State Qualifier	National	A New Zealand endemic taxon that has been introduced by human agency to another country (deliberately or accidentally) and has naturalised there e.g., <i>Olearia traversiorum</i> in the Republic of Ireland.
NR	Natural Range		Regional	The known range (extending in any direction) of the taxon meets its natural limit in the region.
NStr	National Stronghold		Regional	More than 20% of the national population breeding or resident for more than half their life cycle in the region.

Code	Qualifier	Qualifier Type	National/ Regional	Description
OL	One Location	Population State Qualifier	National	Found at one location in New Zealand (geographically or ecologically distinct area) of less than 100 000 ha (1000 km <sup>2</sup> ), in which a single event (e.g. a predator irruption) could easily affect all individuals of the taxon, e.g. L'Esperance Rock groundsel ( <i>Senecio esperensis</i> ) and Open Bay Island leech ( <i>Hirudobdella antipodum</i> ). 'OL' can apply to all 'Threatened', 'At Risk', Non-resident Native - Coloniser and Non-resident Native - Migrant taxa, regardless of whether their restricted distribution in New Zealand is natural or human-induced. Resident native taxa with restricted distributions but where it is unlikely that all sub-populations would be threatened by a single event (e.g. because water channels within an archipelago are larger than known terrestrial predator swimming distances) should be qualified as 'Range Restricted' (RR).
PD	Partial Decline	Pressure Management Qualifier	National	The taxon is declining over most of its range, but with one or more secure populations (such as on offshore islands).  Partial decline taxa (e.g. North Island kākā <i>Nestor meridionalis septentrionalis</i> and Pacific gecko <i>Dactylocnemis pacificus</i> ) are declining towards a small stable population, for which the Relict qualifier may be appropriate.
PE	Possibly/Presumed Extinct	Pressure Management Qualifier	National	A taxon that has not been observed for more than 50 years but for which there is little or no evidence to support declaring it extinct.  This qualifier might apply to several Data Deficient and Nationally Critical taxa.
PF	Population Fragmentation	Pressure Management Qualifier	National	Gene flow between subpopulations is hampered as a direct or indirect result of human activity. Naturally disjunct populations are not considered to be 'fragmented'.
RE	Regional Endemic		Regional	Known to breed only in the region.
Rel	Relict	Pressure Management Qualifier	National	The taxon has declined since human arrival to less than 10% of its former range but its population has stabilised.  The range of a relictual taxon takes into account the area currently occupied as a ratio of its former extent. Reintroduced and self-sustaining populations within or outside the former known range of a taxon should be considered when determining whether a taxon is relictual.  This definition is modified from the definition of the At Risk - Relict category in the NZTCS manual (Townsend et al. 2008). The main difference is that trend is not included in the qualifier definition. This enables the qualifier to be applied to any taxon that has experienced severe range contraction, regardless of whether that contraction continues or has been arrested.  This qualifier complements the 'Naturally Uncommon (NU)' qualifier which can be applied to taxa whose abundance has declined but which continue to occupy a substantial part of their natural range.

Code	Qualifier	Qualifier Type	National/ Regional	Description
RF	Recruitment Failure	Pressure Management Qualifier	National	The age structure of the current population is such that a catastrophic decline is likely in the future.  Failure to produce new progeny or failure of progeny to reach maturity can be masked by apparently healthy populations of mature specimens.  Population trend qualifiers
RN	Restored Native		Regional	Reintroduced to the region after having previously gone extinct there.
RR	Range Restricted	Biological Attribute Qualifier	National	A taxon naturally confined to specific substrates, habitats or geographic areas of less than 1000 km <sup>2</sup> (100 000 ha), this is assessed by taking into account the area of occupied habitat of all sub-populations (and summing the areas of habitat if there is more than one sub-population), e.g. Chatham Island forget-me-not ( <i>Myosotidium hortensia</i> ) and Auckland Island snipe ( <i>Coenocorypha aucklandica aucklandica</i> ).  This qualifier can apply to any 'Threatened' or 'At Risk' taxon. It is redundant if a taxon is confined to 'One Location' (OL).
S?O	Secure? Overseas	Population State Qualifier	National	It is uncertain whether the taxon is secure in the parts of its natural range outside New Zealand.
SO	Secure Overseas	Population State Qualifier	National	The taxon is secure in the parts of its natural range outside New Zealand.
SO?	Secure Overseas?	Population State Qualifier	National	It is uncertain whether a taxon of the same name that is secure in the parts of its natural range outside New Zealand is conspecific with the New Zealand taxon.
Sp	Sparse	Biological Attribute Qualifier	National	The taxon naturally occurs within typically small and widely scattered subpopulations. This qualifier can apply to any 'Threatened' or 'At Risk' taxon.
TL	Type Locality		Regional	The type locality of the taxon is within the region. Ignore if the taxon is or has ever been regionally extinct.
T?O	Threatened? Overseas	Population State Qualifier	National	It is uncertain whether the taxon is threatened in the parts of its natural range outside New Zealand.
TO	Threatened Overseas	Population State Qualifier	National	The taxon is threatened in the parts of its natural range outside New Zealand.
TO?	Threatened Overseas?	Population State Qualifier	National	It is uncertain whether a taxon of the same name that is threatened in the parts of its natural range outside New Zealand is conspecific with the New Zealand taxon.

### Appendix 3: Species that have become extinct or may have formerly occurred in the Tāmaki Makaurau / Auckland region

Name and Authority	Common Name	Maori Name	Status	Notes
<i>Aegotheles novaezealandiae</i> Scarlett, 1968	New Zealand owlet-nightjar		Extinct	NZ-wide distribution (Checklist Committee OSNZ, 2022).
<i>Anomalopteryx didiformis</i> Owen, 1844	little bush moa	<b>Moariki</b>	Extinct	NZ-wide distribution (Checklist Committee OSNZ, 2022).
<i>Aptornis otidiformis</i> Owen, 1844	North Island adzebill		Extinct	North Island distribution (Checklist Committee OSNZ, 2022).
<i>Biziura delautouri</i> Forbes, 1892	New Zealand musk duck		Extinct	NZ-wide distribution (Checklist Committee OSNZ, 2022).
<i>Capellirallus karamu</i> Falla, 1954	snipe-rail		Extinct	North Island distribution (Checklist Committee OSNZ, 2022).
<i>Chenonetta finschi</i> Van Beneden, 1875	Finsch's duck	<b>Manutahora</b>	Extinct	NZ-wide distribution (Checklist Committee OSNZ, 2022).
<i>Circus teauteensis</i> Forbes, 1892	Eyles' harrier	<b>Kēurangi</b>	Extinct	NZ-wide distribution (Checklist Committee OSNZ, 2022).
<i>Cnemiornis gracilis</i> Forbes, 1892	North Island goose	<b>Tarepo</b>	Extinct	North Island distribution (Checklist Committee OSNZ, 2022).
<i>Coenocorypha barrierensis</i> Oliver, 1955	North Island snipe		Extinct	North Island distribution. Caught on Te Hauturu-o-Toi / Little Barrier Island in 1870 and one bird shot on Motukorea Island in Hauraki Gulf in 1820 (Checklist Committee OSNZ, 2022).
<i>Corvus moriorum antipodum</i> (Forbes, 1893)	North Island raven		Extinct	North Island distribution (Checklist Committee OSNZ, 2022).
<i>Coturnix novaezealandiae</i> Quoy and Gaimard, 1830	New Zealand quail	<b>Koreke</b>	Extinct	NZ-wide distribution, including Aotea/ Great Barrier Island. Last North Island sighting 1869 (Checklist Committee OSNZ, 2022).

Name and Authority	Common Name	Maori Name	Status	Notes
<i>Cyanoramphus malherbi</i> (Souancé 1857)	Orange-fronted Parakeet	<b>Kākāriki Karaka</b>	Regionally Extirpated	Former NZ-wide distribution but now restricted to Canterbury (Checklist Committee OSNZ, 2022). Present in the North Island (Buller 1882), on Hen (Taranga) and Te Hauturu-o-Toi / Little Barrier Island (Buller 1884, Reischek 1887, 1952) during early European settlement. A tentatively identified bird was sighted on Taranga Island in 1985 (Taylor 1998).
<i>Cygnus sumnerensis sumnerensis</i> (Forbes 1890)	New Zealand swan	<b>Matapu</b>	Extinct	Former NZ-wide distribution (Checklist Committee OSNZ, 2022). Not included in 2021 national bird assessment (Robertson et al., 2021).
<i>Dinornis novaezealandiae</i> Owen, 1843	North Island giant moa	<b>Kuranui</b>	Extinct	North Island distribution (Checklist Committee OSNZ, 2022).
<i>Euryapteryx curtus curtus</i> Owen, 1846	coastal moa		Extinct	North Island distribution incl GBI (Checklist Committee OSNZ, 2022).
<i>Fulica prisca</i> Hamilton, 1893	New Zealand coot		Extinct	North Island distribution (Checklist Committee OSNZ, 2022).
<i>Heteralocha acutirostris</i> (Gould, 1837)	huia	<b>Huia</b>	Extinct	North Island distribution (Checklist Committee OSNZ, 2022).
<i>Hymenolaimus malacorhynchos</i> (Gmelin 1789)	Blue duck	<b>Whio</b>	Regionally Extirpated	NZ-wide distribution. Late Pleistocene and Holocene deposits and midden records from both North and South Islands (Checklist Committee OSNZ, 2022). Suitable habitat in Auckland suggests they would have been present.
<i>Ixobrychus novaezealandiae</i> (Purdie, 1871)	New Zealand little bittern	<b>Kaoriki</b>	Extinct	NZ-wide distribution (Checklist Committee OSNZ, 2022).
<i>Leucocarbo septentrionalis</i> Rawlence, Till, Easton, Spencer, Schuckard, Melville, Scofield, Tennyson, Rayner & Waters, 2017	kōhatu shag	<b>Kawau kōhatu</b>	Extinct	Possibly present in Auckland. Northland distribution (Checklist Committee OSNZ, 2022).
<i>Malacorhynchus scarletti</i> Olson, 1977	Scarlett's duck		Extinct	NZ-wide distribution (Checklist Committee OSNZ, 2022).



Name and Authority	Common Name	Maori Name	Status	Notes
<i>Mergus australis</i> Hombron-Jacquinet, 1841	Auckland Island Merganser	<b>Miuweka</b>	Extinct	NZ-wide distribution (Checklist Committee OSNZ, 2022).
<i>Ninox albifacies rufifacies</i> (Buller, 1904)	North Island laughing owl		Extinct	North Island distribution (Checklist Committee OSNZ, 2022).
<i>Oxyura vantetsi</i> Worthy, 2005	New Zealand blue-billed duck		Extinct	NZ-wide distribution (Checklist Committee OSNZ, 2022).
<i>Pachyornis geranoides</i> Oliver, 1955	Mantell's moa	<b>Moa ruarangi</b>	Extinct	North Island distribution (Checklist Committee OSNZ, 2022).
<i>Podiceps cristatus australis</i> (Gould 1844)	Australasian Crested Grebe	<b>Pūteketeke</b>	Regionally Extirpated	Currently breeding South Island only but few North Island records since European colonisation from the late 1970's. Late Holocene and midden records suggest NZ-wide distribution. A Tairua (Coromandel) midden record suggests they might also have been in the Auckland region (Checklist Committee OSNZ, 2022).
<i>Porphyrio mantelli</i> Owen, 1848	North Island takahe	<b>Moho</b>	Extinct	North Island distribution (Checklist Committee OSNZ, 2022).
<i>Traversia lyalli</i> Rothschild, 1894	Stephens Island wren		Extinct	NZ-wide distribution (Checklist Committee OSNZ, 2022).
<i>Tribonyx hodgenorum</i> Scarlett, 1955	Hodgens' waterhen		Extinct	NZ-wide distribution (Checklist Committee OSNZ, 2022).
<i>Turnagra tanagra</i> (Schlegel, 1866)	North Island piopio	<b>Piopio</b>	Extinct	North Island distribution (Checklist Committee OSNZ, 2022).
<i>Xenicus jagmi</i> (Millener, 1988)	North Island stout-legged wren		Extinct	North Island distribution (Checklist Committee OSNZ, 2022).
<i>Xenicus longipes stokesii</i> G.R. Gray, 1862	North Island bush wren	<b>Mātuhituhi</b>	Extinct	North Island distribution (Checklist Committee OSNZ, 2022).



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