

PUKETOTARA FOREST REMNANTS 7

Survey no. Q09/011
 Survey date 30 November 2005
 Grid reference Q09 279 468 (3 remnants)
 Area 6.1 ha
 Altitude 66-140 m asl

Ecological unit

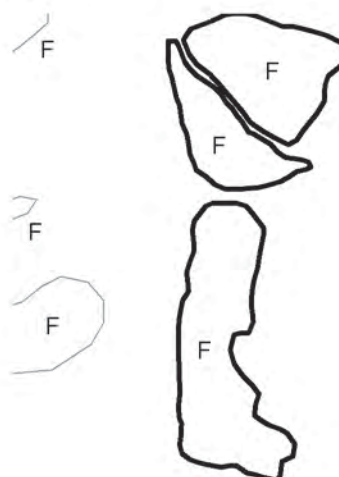
(a) Kanuka-totara-tanekaha forest on moderate to steep hillslope (100%)



Q09/011 Puketotara Forest Remnants 7

S = Shrubland
 F = Forest
 W = Wetland
 E = Estuarine

0 250 500 1,000 Metres



Landform/geology

Escarpment underlain by Miocene polymict igneous conglomerate (Waitemata Group).

Vegetation

This site comprises three patches of forest on east-facing slopes in landscape of pasture. All remnants contain more than 60% kanuka with common totara and tanekaha. Scattered individuals of tarata, kahikatea, ti kouka, kauri, rewarewa and mamangi occur. A major farm track passes through the northern section of the site dividing the northern patch from the southern two patches. Some tall manuka shrubland on the northern side, which links the site with Timber Bay Forest (Q09/001) and Puketotara Forest Remnant 11 (Q08/018), is in the process of being cleared, and there are domesticated goats kept in that area. Grazing animals have free access to the understorey, leaving it relatively bare of any vegetation other than unpalatable species.

Fauna

Not surveyed.

Significance

As a relatively small site with only one vegetation type, which is in relatively poor in condition and is becoming increasingly isolated from other forest patches, this natural area is not representative. Its primary value is as a habitat 'stepping stone' for mobile wildlife, which reduces the overall distance crossing pasture between other nearby natural areas of higher ecological value, e.g. Timber Bay Forest (Q09/001) to the north, Puketotara Forest Remnants 3 (Q09/006) to the west and Puketotara Forest Remnant 9 (Q09/016) to the southeast.

PUKETOTARA FOREST REMNANT 8

Survey no.	Q09/012
Survey date	9 November 2005
Grid reference	Q09 260 461 (5 remnants)
Area	12.6 ha
Altitude	39-140 m asl

Ecological units

- (a) Kanuka forest on moderate to steep hillslope (95%)
- (b) Kauri-kanuka forest on local very steep slope (5%)

Landform/geology

Hillslopes and gullies underlain by Miocene muddy sandstone and volcanoclastic gravelly sandstone (Waitakere Group).

Vegetation

This site comprises five indigenous forest remnants in small, steep, southwest-flowing gullies in the southwestern corner of Puketotara Peninsula.

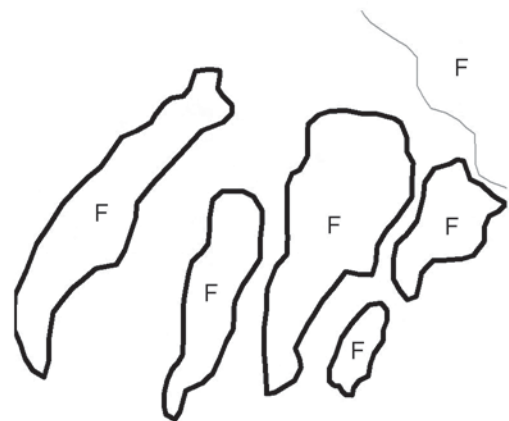
- (a) The main canopy tree is kanuka. Puriri are scattered throughout, and one or two appear to be dead and heavily laden with perching lily.
- (b) Stands of dense kauri rickers mixed with kanuka occur at the gully heads.



Q09/012 Puketotara Forest Remnants 8

S = Shrubland
 F = Forest
 W = Wetland
 E = Estuarine

0 250 500 1,000 Metres



Fauna

Welcome swallow.

Significance

The poor condition of puriri trees and the grazing pressure in the understorey all reduce this site's natural character and function. Neither of the ecological units is a good representative example of its type. Despite this, the forest cover in these five remnants provides some erosion protection for slopes of very steep gradient, which form the upper catchment of the raupo wetland at Frenchman's Bay Forest and Wetland (Q09/015).

FRENCHMAN'S BAY FOREST AND WETLAND

Survey no.	Q09/015
Survey date	9 November 2005
Grid reference	Q09 264 453 (4 remnants)
Area	25.7 ha (25.0 ha forest, 0.7 ha wetland)
Altitude	0-100 m asl

Ecological units

- (a) Kanuka forest on gentle coastal margin (60%)
- (b) Puriri forest on gentle coastal margin (20%)
- (c) Kauri-kanuka forest on ridge top (10%)
- (d) Pohutukawa forest on steep coastal margin (5%)
- (e) Raupo reedland in small depression (5%)

Landform/geology

Coastal hillsides and gullies underlain by Miocene thinly interbedded sandstone and mudstone (Waitemata Group) and Miocene muddy sandstone and volcanoclastic gravelly sandstone (Waitakere Group).

Vegetation

This site comprises one large and three small remnants of indigenous forest and wetland on the southern coast of Puketotara Peninsula. The main remnant covers a gently sloping headland and extends up a series of narrow gullies flowing southwestwards. The ridge tops between the gullies are covered in pasture with scattered gorse. The westernmost remnant contains mainly wetland and is located at the mouth of the small basin behind Frenchman's Bay. The remaining two forest remnants are in the same catchment slightly higher on the slope.

- (a) Kanuka forest with few associated species covers most of the area.
- (b) A more diverse grove of coastal forest occurs on the sheltered eastern side of the headland with abundant puriri and frequent kowhai and kahikatea.
- (c) On the edge of one of the cleared ridges, and above type (b), there is a stand of kauri rickers mixed with kanuka. This is the most prominent feature on the skyline when viewing the remnant from land or water.
- (d) The most exposed western side of the headland has pohutukawa forest with frequent kanuka and occasional puriri. Pohutukawa extends up the creek some way, opposite mangrove shrubland on the Oruawharo River North Coast (Q09/020).
- (e) At the westernmost gully's junction with the saltmarsh, there is a raupo reedland extending approximately 250 m inland from the coast. It has scattered kanuka trees around it.

Fauna

The landowner has provided unconfirmed, anecdotal reports of Australasian bittern (Nationally Endangered) occurring here (Tony Walden pers. comm.).

Significance

The presence of Australasian bittern would certainly elevate this site's significance to Level 1, but there are no confirmed records of this bird in



Q09/015 Frenchman's Bay Forest and Wetland

S = Shrubland
 F = Forest
 W = Wetland
 E = Estuarine

0 250 500 1,000 Metres



Otamatea ED Northland from recent times. Both wetland and forest habitats are in mediocre condition, as they continue to be grazed and are poorly connected, therefore the ecological units present cannot be considered particularly good or extensive examples of their types. The pohutukawa appear heavily browsed, which is an indicator of the presence of possums at high density.

PUKETOTARA FOREST REMNANT 11

Survey no. Q09/018
Survey date 30 November 2005
Grid reference Q09 285 473
Area 4.6 ha
Altitude 5-27 m asl

Ecological unit

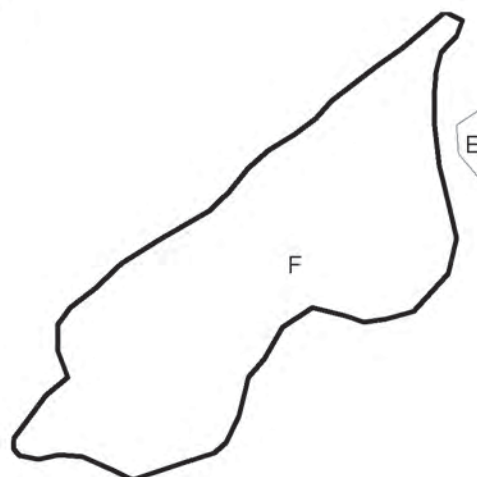
(a) Totara-kanuka forest in gully (100%)



Q09/018 Puketotara Forest Remnant 11

S = Shrubland
F = Forest
W = Wetland
E = Estuarine

0 250 500 1,000 Metres



Landform/geology

Gully underlain by Oligocene micritic limestone (Mahurangi Limestone, Motatau Complex) and Miocene thinly interbedded sandstone and mudstone (Waitemata Group).

Vegetation

This small forest remnant is dominated by totara and kanuka which are frequently associated with matai, puriri, kowhai, rewarewa, kahikatea, titoki and nikau, and occasional karaka and ti kouka. The site is mainly surrounded by pasture, though to the west, an area of tall manuka shrubland is currently under clearance and being grazed by free-roaming domestic goats. Stock access is unrestricted (goats and cattle mainly), and the forest edges are somewhat degraded. Ongoing clearance of manuka shrubland in contiguous paddocks is likely to cause some exposure damage to the western forest edge.

Fauna

Not surveyed.

Significance

This site contains a common ecological unit which is better represented at other sites in Otamatea ED Northland with fewer pressures on them. Grazing and edge effects are the main obvious detractors of condition at this location. It still has some value as a habitat patch for mobile wildlife, such as forest birds moving between the different forest remnants in the landscape.

TINOPAI COASTAL MARGIN

Survey no.	Q09/019
Survey date	10 November 2005
Grid reference	Q09 229 487 (2 remnants)
Area	0.9 ha
Altitude	0-20 m asl

Ecological unit

(a) Pohutukawa-brush wattle treeland on steep coastal margin (100%)

Landform/geology

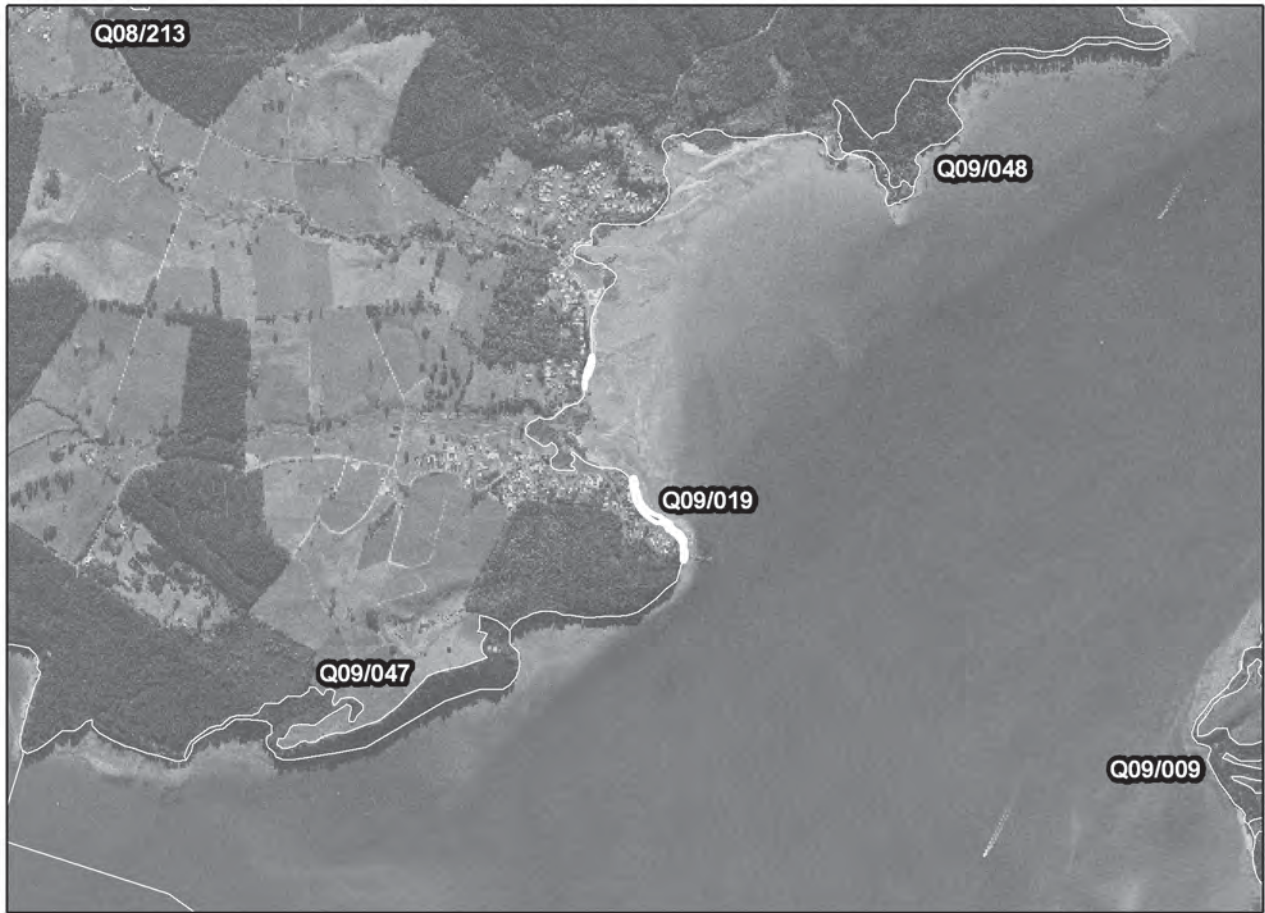
Coastal banks of Miocene andesitic tuff breccia and pumiceous pyroclastic flow deposits (Waitakere Group).

Vegetation

Pohutukawa treeland occupies a very narrow fringe below the road at the shoreline of Komiti Bay and between pine forest at the beach at Te Whau Point. Mature pohutukawa are interspersed with large brush wattle, over tall a understory of houpara, *Gabnia lacera*, kowharawhara, cotoneaster, kahili ginger and watsonia, as well as many other weedy shrubs and herbs. Bamboo and several other weeds naturalised from surrounding gardens threaten the natural character of the pohutukawa treeland.

Fauna

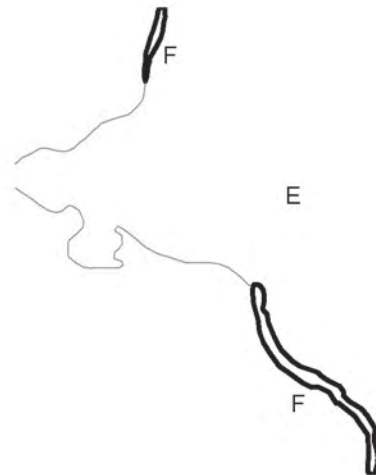
Not surveyed.



Q09/019 Tinopai Coastal Margin

S = Shrubland
 F = Forest
 W = Wetland
 E = Estuarine

0 250 500 1,000 Metres



Significance

Weeds are a serious issue at this site, particularly as they compete with the typical indigenous understorey of pohutukawa forest as well as attaining the canopy. Also, the site is extremely narrow and extends along the coast, road and pine forest, with limited options for expansion. Its proximity to residential housing means that domestic cats and dogs may impact wildlife trying to settle or breed there. Other animal pests are probably present. Overall this site is too small, poorly buffered, weed infested and vulnerable to predation to be considered ecologically significant. The trees do, however, play a role in

stabilising the coastline and in beautifying the landscape around the settlement, as long as they remain healthy.

PUKETOTARA FOREST REMNANT 12

Survey no. Q09/023
Survey date 30 November 2005
Grid reference Q09 283 3448 (3 remnants)
Area 18.2 ha
Altitude 20-100 m asl



Q09/023 Puketotara Forest Remnant 12

S = Shrubland
F = Forest
W = Wetland
E = Estuarine

0 250 500 1,000 Metres



Ecological units

- (a) Kanuka forest on moderate hillslope (70%)
- (b) Puriri forest on moderate hillslope (30%)

Landform/geology

Gullies underlain by Miocene polymict igneous conglomerate and gravelly sandstone (Waitemata Group).

Vegetation

Most of this indigenous forest remnant is around a small stream draining southwest from the main axis of Puketotara Peninsula. An additional forested slope in the upper catchment is included. The latter is joined with the stream remnant at its lower end via a narrow stand of kanuka. The remnant is not fenced and there is evidence of heavy stock trampling and grazing under the forest.

- (a) Degraded kanuka forest with frequent tarata, tanekaha and mamangi, and occasional mamaku and rewarewa covers most areas.
- (b) Puriri forest with frequent taraire and pukatea, and occasional nikau, titoki and karaka occurs on the slope to the south of the stream.

Fauna

Not surveyed.

Significance

Neither of the ecological units here is representative, but this site is still valuable as a habitat 'stepping stone' for mobile fauna, such as birds, which use a number of such forest remnants to meet their habitat needs. It also serves as riparian protection to the stream.

PUKETOTARA FOREST REMNANT 14

Survey no.	Q09/025
Survey date	30 November 2005
Grid reference	Q09 291 432
Area	7.2 ha
Altitude	15-91 m asl

Ecological units

- (a) Kanuka-kauri forest on local very steep hillslope (75%)
- (b) Kanuka treeland on local very steep hillslope (25%)

Landform/geology

Coastal hillslope underlain by melange (undifferentiated Mangakahia & Motatau Complex lithologies) and Miocene thinly interbedded sandstone and mudstone, and gravelly sandstone (Waitemata Group).

Vegetation

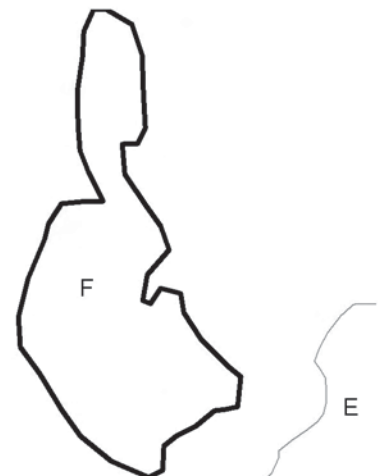
This site constitutes the only remaining stand of indigenous forest in the small basin behind Schnapper Point, which has otherwise been cleared for pastoral farming. It covers a very steep, east-facing slope above gently sloping pasture leading down to mudflats and mangroves which are part of the Oruawharo River North Coast (Q09/020).



Q09/025 Puketotara Forest Remnant 14

S = Shrubland
 F = Forest
 W = Wetland
 E = Estuarine

0 250 500 1,000 Metres



(a) Kanuka forest with common kauri rickers covers the majority of the area. Also present are kahikatea, puriri and two emergent mature pine species (radiata pine and maritime pine).

(b) The rest of the area is covered in much degraded kanuka treeland.

Fauna

Not surveyed.

Significance

The forest here provides stability to a local steep slope which would otherwise erode onto an area of beach, mudflat and mangrove on the Oruawhoro River

North Coast (Q09/020). The canopy in this site is relative low density and the understorey is grazed, therefore neither ecological unit is a good representative example of its type.

NGAMOTU FARM POND

Survey no. Q09/031
 Survey date 30 November 2005
 Grid reference Q09 287 484
 Area 1.6 ha



Q09/031 Ngamotu Farm Pond

S = Shrubland
 F = Forest
 W = Wetland
 E = Estuarine

