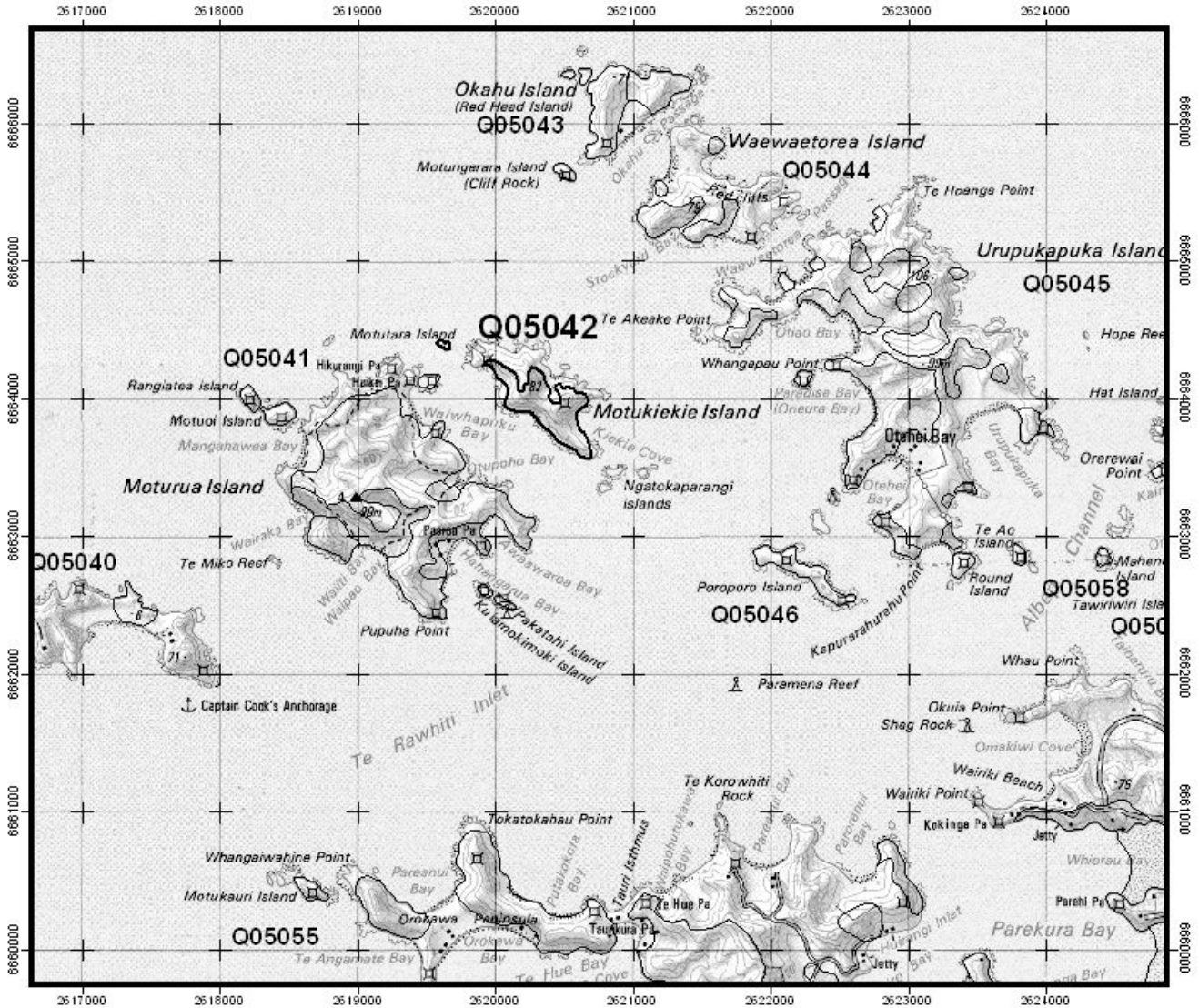


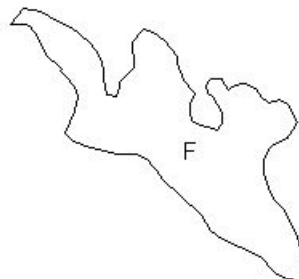
MOTUKIEKIE ISLAND

Survey no. Q05/042
 Survey date 7 April 1998
 Grid reference Q05 203 639, Q05 196 643
 Area 20.5 ha (20 ha forest; 0.5 ha shrubland)
 Altitude 0-82 m asl



Motukiekie Island Q05/042

Each grid is 1000m x 1000m
 and = 100 ha
 S = shrubland
 F = forest
 W = wetland
 E = estuarine
 D = duneland



Ecological unit

- (a) Kanuka coastal forest on hillslope

Landform/geology

Cliffed island of Waipapa Terrane greywacke with sandy pocket beaches.

Vegetation

(a) Kanuka coastal forest dominates Motukiekie Island. *Eucalyptus* sp. and *Pinus* sp. are frequent, with occasional mamaku, kowhai, houpara, ti kouka, and kauri rickers. Pohutukawa occurs on the edges of this vegetation type.

Significant flora

Significant plants include *Colensoa physaloides* (Gradual Decline), *Calystegia marginata* (Sparse), *Scandia rosifolia* (Sparse), and *Psilotum nudum* (Regionally Significant).

Fauna

Reef heron (Nationally Endangered), pied shag (Sparse), Australasian gannet, Australasian harrier, NI fantail, grey warbler, little shag, NZ kingfisher, red-billed gull, silvereye, tui and welcome swallow. Past records of Caspian tern (Nationally Vulnerable), white-fronted tern (Gradual Decline), and variable oystercatcher (Regionally Significant).

Significance

Presence of a range of threatened and regionally significant plant and bird species.

The island is free of rodents and most of it has an overhead canopy, which would favour bird introductions.

OKAHU ISLAND

Survey no.	Q05/043
Survey date	7 April 1998
Grid reference	Q05 208 660, Q05 205 663, Q05 206 663, Q05 205 656, Q05 222 641
Area	27 ha (12 ha forest, 15 ha shrubland)
Altitude	0 – 71 m asl

Ecological unit

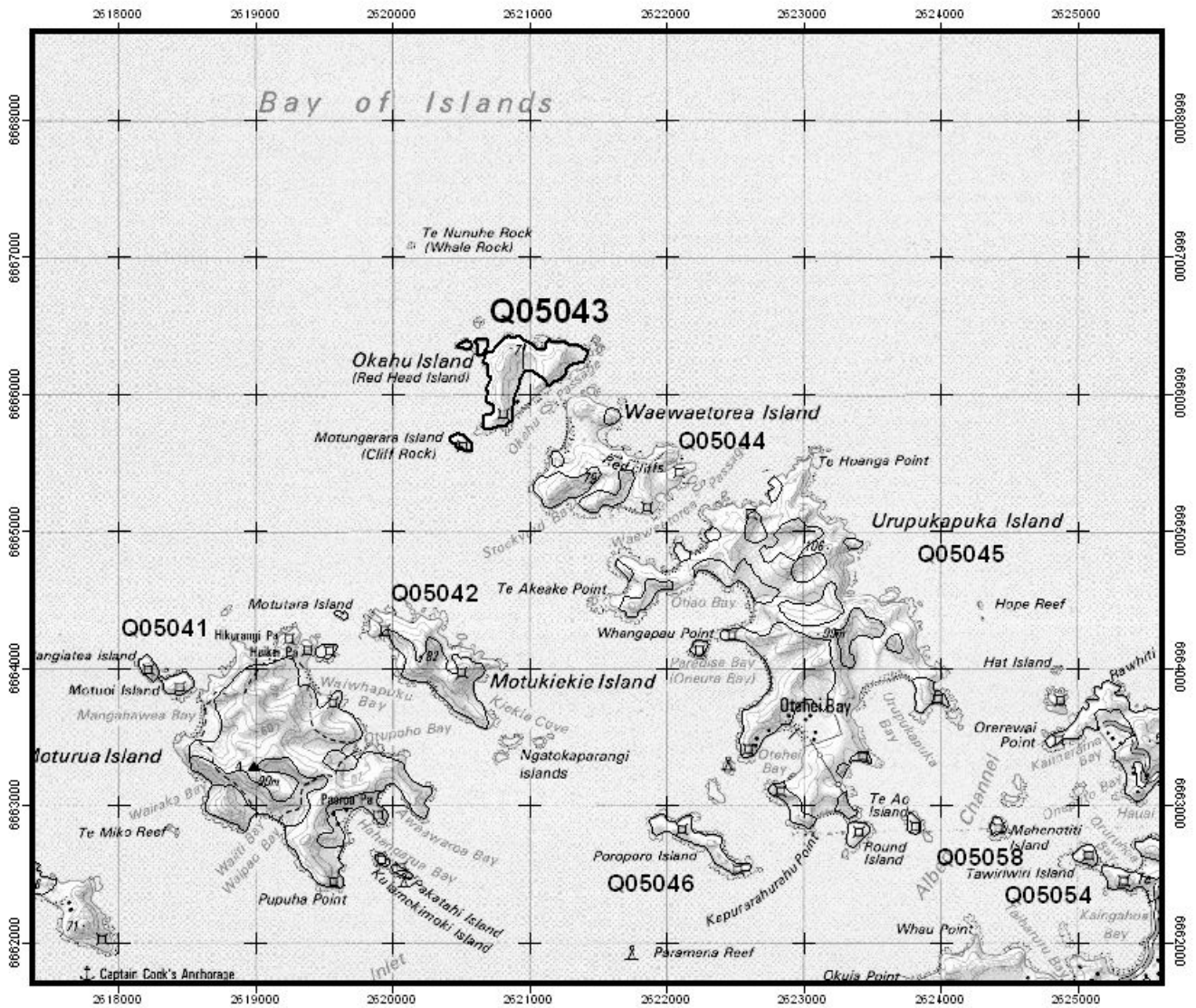
- (a) Kowharawhara-hangehange coastal association on hillslope
- (b) Harakeke-kowharawhara-pohutukawa coastal association on hillslope
- (c) Kanuka-pohutukawa coastal forest on hillslope
- (d) Kikuyu grassland on hillslope
- (e) Kanuka-harakeke coastal association on hillslope
- (f) Pohutukawa coastal forest on steep hillslope

Landform/geology

Cliffed island of Waipapa Terrane greywacke with Holocene beach, dune and colluvial sediments in pocket embayments.

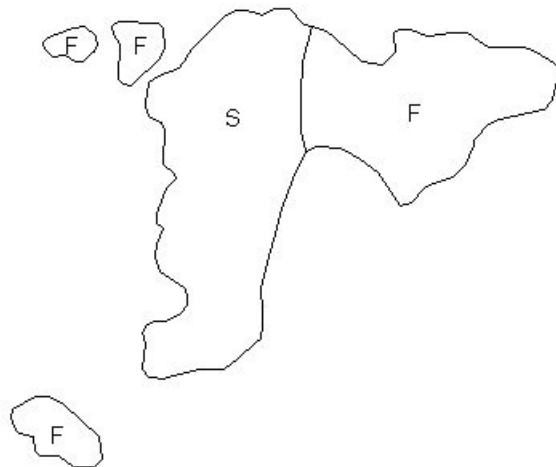
Vegetation

(a) This association is common in a small area on the southern tip of the island. Harakeke and *Coprosma* sp. are frequent. Pohutukawa is present on the edges and *Hebe* sp. and cutty grass are also occasional.



Okahu Island Q05/043

- Each grid is 1000m x 1000m
 and = 100 ha
 S = shrubland
 F = forest
 W = wetland
 E = estuarine
 D = duneland



(b) On the steep cliffs on the western side of the island this association occurs. Kanuka is frequent and hangehange is occasional.

(c) On the south eastern side of the island this forest type occurs along with frequent harakeke, houpara and hangehange. Coastal tussock and ti kouka are also present. In the central part of the island, this type occurs with occasional ti kouka.

(d) Kikuyu is dominant in an area by the beach.

(e) Behind type (d) this association occurs along with occasional ti kouka.

(f) There are three small stacks surrounding Okahu Island; two to the north-west and one to the south. All of these stacks are dominated by pohutukawa forest.

Significant flora

Coastal tussock (Range restricted).

Fauna

Northern NZ dotterel (Nationally Vulnerable), northern little blue penguin (Gradual Decline), pied shag (Sparse), variable oystercatcher (Regionally Significant), Australasian harrier, black-backed gull, NI fantail, grey warbler, little shag, NZ pipit, red-billed gull, silvereye.

Significance

Presence of threatened and regionally significant bird species. Recent breeding records for northern New Zealand dotterel and variable oystercatcher.

Representative site for type (a) kowharawhara-hangehange coastal association, type (b) harakeke-kowharawhara-pohutukawa coastal association, and type (c) kanuka-harakeke coastal association. Only record of types (a) and (f) in the Ecological District.

An example of coastal forest, which is a nationally rare vegetation type. Presence of a threatened plant species.

17.5 ha at this site are a Scenic Reserve administered by the Department of Conservation.

WAEWAETORIA ISLAND

Survey no.	Q05/044
Survey date	7 April 1998
Grid reference	Q05 216 658, Q05 212 653, Q05 216 653, Q05 211 655
Area	15 ha
Altitude	0-79 m asl

Ecological unit

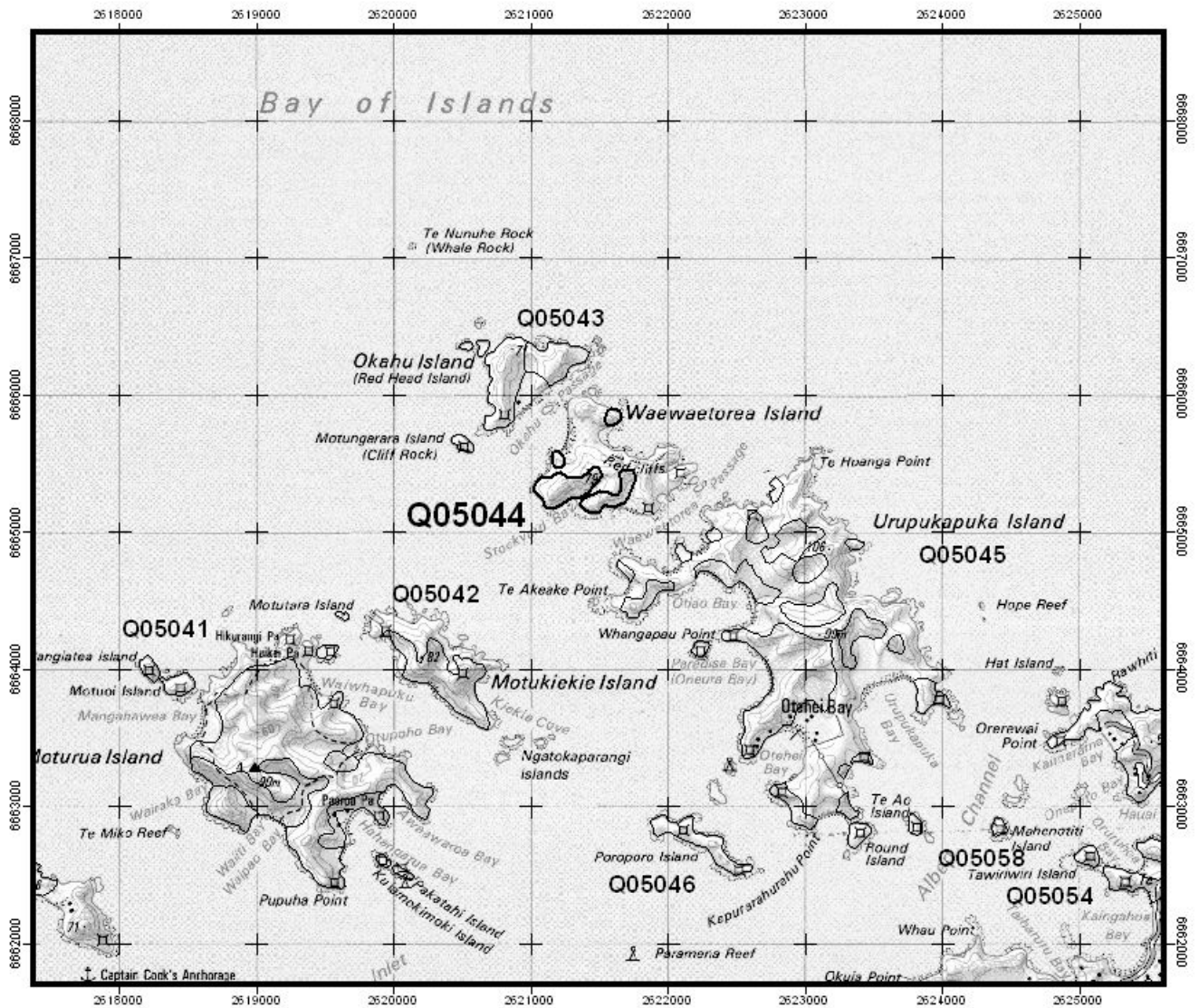
- (a) Pohutukawa coastal forest on hillslope
- (b) Kanuka coastal forest on hillslope

Landform/geology

Cliffed island of Waipapa Terrane greywacke with Holocene beach, dune and colluvial sediments in pocket embayments.

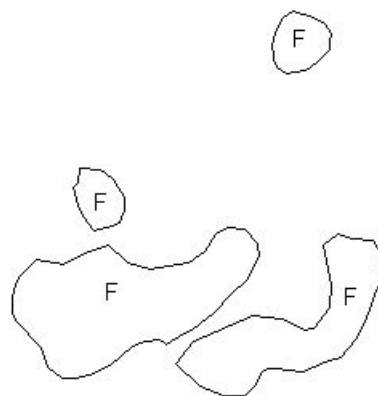
Vegetation

(a) Pohutukawa forest is sited along the coast on the Okahu Passage side of the island. Other species occurring but in small amounts are harakeke, ti kouka and kanuka.



Waewaetorea Island Q05/044

Each grid is 1000m x 1000m
 and = 100 ha
 S = shrubland
 F = forest
 W = wetland
 E = estuarine
 D = duneland



(b) On the southern side of the island and at the south west point, kanuka forest is abundant. Pohutukawa and ti kouka appear occasionally.

Significant flora

Coastal maire (Regionally Significant).

Fauna

Northern NZ dotterel (Nationally Vulnerable), northern little blue penguin (Gradual Decline), black shag (Sparse), little black shag (Sparse), pied shag (Sparse), variable oystercatcher (Regionally Significant), NI fantail, grey warbler, NZ kingfisher, NZ pipit, red-billed gull, shining cuckoo, silvereye, tui, welcome swallow. Shore skink is the only lizard species recorded.

Significance

Representative site for pohutukawa coastal forest, which is also a nationally rare vegetation type.

The island provides important habitat for threatened and regionally significant species.

14.2 ha at this site area Recreation Reserve administered by the Department of Conservation.

URUPUKAPUKA ISLAND & SURROUNDS

Survey no.	Q05/045
Survey date	7 April 1998
Grid reference	Q05 238 628, Q05 232 632, Q05 234 627, Q05 239 638, Q05 234 633, Q05 231 644, Q05 233 642, Q05 228 638, Q05 218 645, Q05 216 647, Q05 236 641, Q05 225 646, Q05 221 648, Q05 233 649, Q05 223 649, Q05 230 647, Q05 229 649, Q05 229 630, Q05 226 650, Q05 233 630, Q05 227 653
Area	98 ha (67 ha forest, 31 ha shrubland)
Altitude	0 - 106 m asl

Ecological unit

- (a) Exotic grass spp. grassland on hillslope
- (b) Kanuka-pohutukawa coastal forest on hillslope
- (c) Kanuka coastal forest on hillslope
- (d) Pohutukawa coastal forest on hillslope

Landform/geology

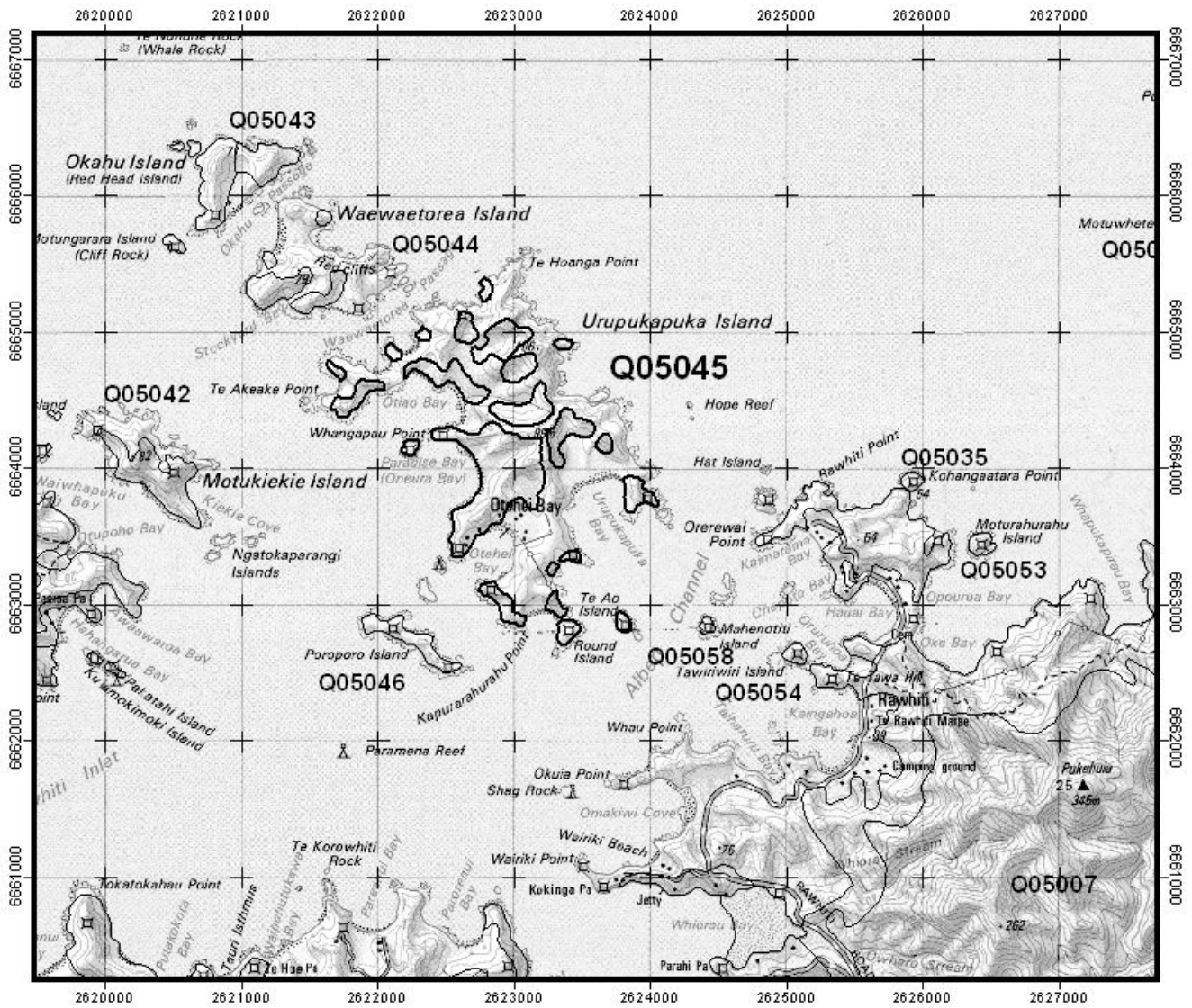
Cliffed island and islets of Waipapa Terrane greywacke with Holocene beach, dune and colluvial sediments in pocket embayments.

Vegetation

(a) Pasture dominates most of this site, and is also dominant in an area at Cable Bay.

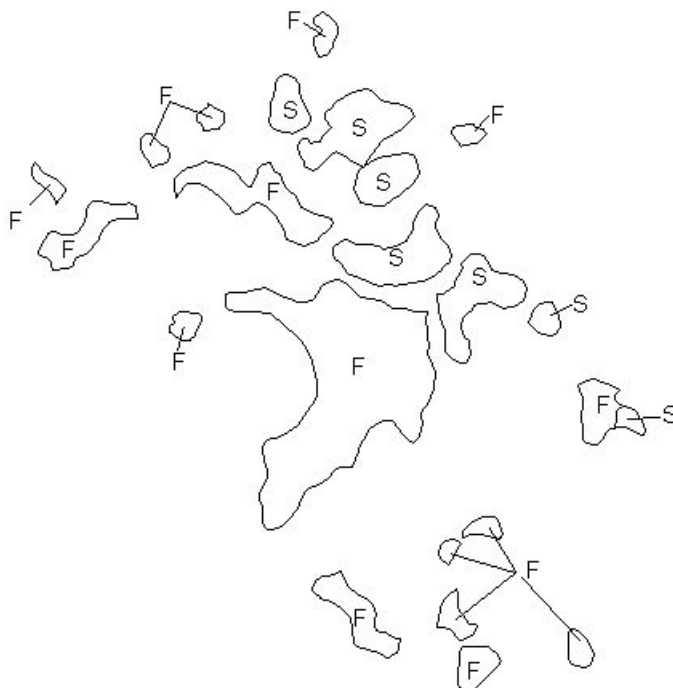
(b) Kanuka-pohutukawa coastal forest is dominant in several areas at this site. It is present on the north-western side of the island, particularly in patches on cliffs, and at the southern end of the island, along with frequent ti kouka. This association is also common on Round Island, which is situated off a southern point of Urupukapuka Island. Ti kouka and sweet pea shrub are frequent and kowharawhara and mingimingi are occasional.

(c) Kanuka forest is the most abundant forest type over the majority of the island, and is present in particular at Te Akeake Point. Pohutukawa is rare along the edges of this forest type.



Urukupuka Island & surrounds Q05/045

Each grid is 1000m x 1000m
 and = 100 ha
 S = shrubland
 F = forest
 W = wetland
 E = estuarine
 D = duneland



(d) Pohutukawa is dominant on Te Ao Island, along with frequent rengarenga lily and bracken. Occasional species are ti kouka, coastal tussock and knobby clubbrush.

Significant flora

Calystegia marginata (Sparse), coastal tussock (Range Restricted) and *Metrosideros carminea* (Regionally Significant) have been recorded on Urupukapuka Island. *Hebe* "Whangarei" (Regionally Significant) has been recorded growing on a nearby stack (Q05 241 637) and also on Te Ao Island.

Fauna

Pateke (Nationally Endangered), northern NZ dotterel (Nationally Vulnerable), black shag (Sparse), pied shag (Sparse), variable oystercatcher (Regionally Significant), Australasian gannet, black-backed gull, little shag, paradise shelduck, red-billed gull, welcome swallow.

Significance

An example of coastal forest, which is a nationally rare vegetation type.

Urupukapuka Island is a significant habitat for threatened and regionally significant plant and bird species.

Representative site for type (b) kanuka-pohutukawa coastal forest, type (c) kanuka coastal forest, and type (d) pohutukawa coastal forest.

88.1 ha at this site are a Recreation Reserve administered by the Department of Conservation.

POROPORO ISLAND

Survey no.	Q05/046
Survey date	7 April 1998
Grid reference	Q05 222 627
Area	8 ha
Altitude	0-30 m asl

Ecological unit

(a) Kanuka coastal forest on hillslope

Landform/geology

Cliffed island of Waipapa Terrane greywacke with sandy pocket beaches.

Vegetation

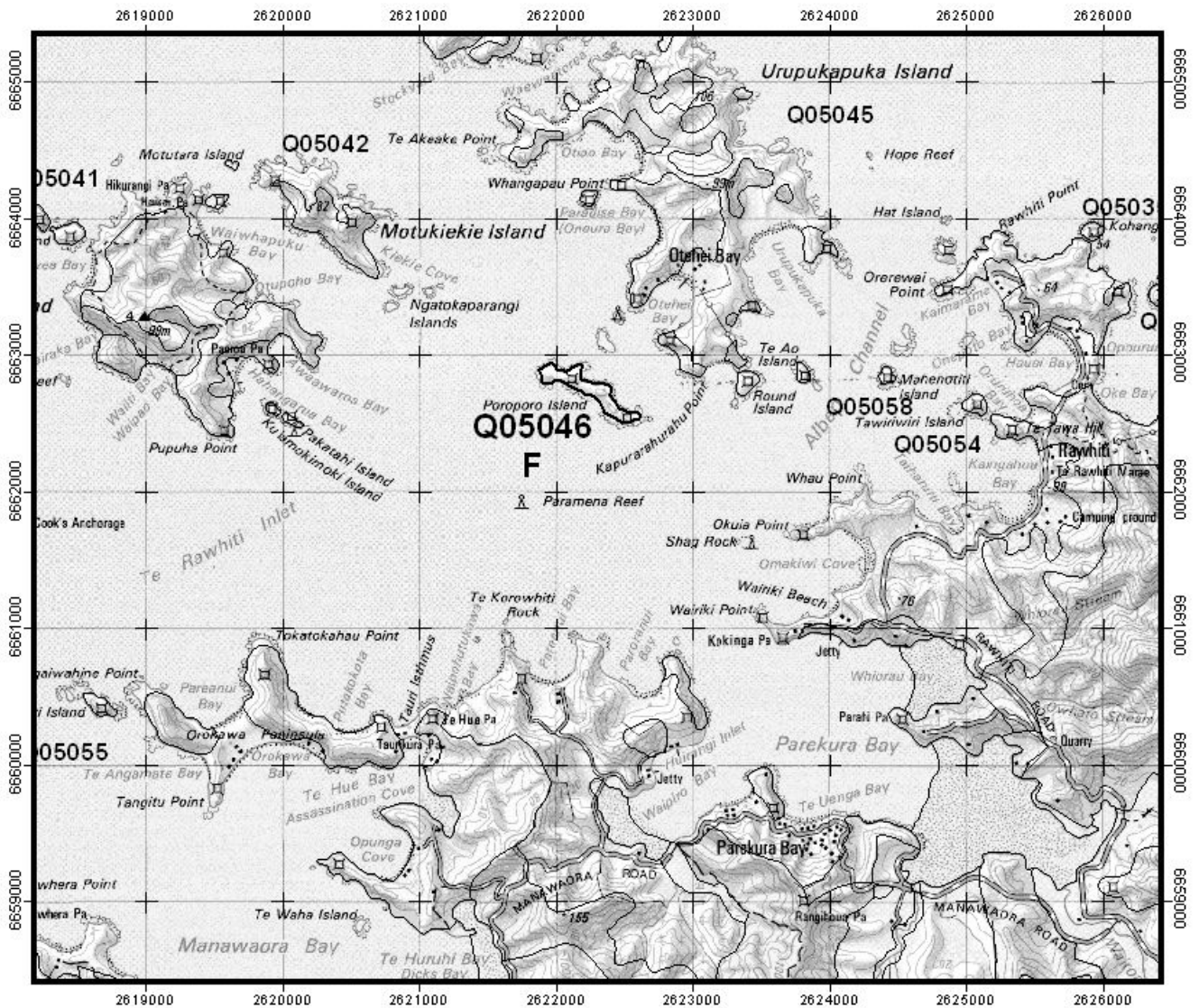
(a) The abundant canopy cover is kanuka forest. The sweet pea shrub is frequent over the island and pohutukawa, hangehange, *Olearia* sp., rengarenga lily and wattle are occasional.

Significant flora

Ranunculus urvilleanus (Regionally Significant).

Fauna

Included in the fauna records are northern little blue penguin (Gradual Decline), breeding variable oystercatcher (Regionally Significant), Australasian gannet, black-backed gull, NI fantail, grey warbler, NZ kingfisher, red-billed gull, silvereye, and welcome swallow. Past records of the reef heron (Nationally Endangered).



Poroporo Island Q05/046

- Each grid is 1000m x 1000m
- and = 100 ha
- S = shrubland
- F = forest
- W = wetland
- E = estuarine
- D = duneland

Significance

Presence of threatened bird species, and a breeding site for the regionally significant variable oystercatcher.

Presence of a regionally significant plant species.

5.6 ha at this site are a Scenic Reserve administered by the Department of Conservation.

MOTUKOKAKO ISLAND

Survey no.	Q05/047
Survey date	27 April 1998
Grid reference	Q05 327 693, Q05 328 696
Area	7 ha
Altitude	0-152 m asl

Ecological unit

(a) Mahoe-pohutukawa coastal forest on steep hillslope

Landform/geology

Cliffed island of Waipapa Terrane greywacke and unconformably overlying bioclastic limestone (Whangarei Limestone, Te Kuiti Group). Both the limestone and greywacke are cut by Zn-Pb-Cu mineralised quartz veins, and limestone at the northern end of Piercy is altered to Zn-Pb mineralised calc-silicate skarns.

Vegetation

This is the common canopy cover on the island with frequent puriri and kohekohe. Species that occur in small amounts are karaka, nikau, harakeke and coastal tussock.

Significant flora

New Zealand watercress *Rorippa divaricata* (Nationally Endangered), *Colensoa physaloides* (Gradual Decline), large-leaved milk tree (Sparse), parapara (Sparse), coastal tussock (Range Restricted), coastal maire (Regionally Significant), tawapou (Regionally Significant), and tawaroa (Regionally Significant).

Fauna

Kukupa (Gradual Decline), northern little blue penguin (Gradual Decline), red-crowned kakariki (Regionally Significant), Australasian harrier, black-winged petrel, NI fantail, grey-faced petrel, grey warbler, silvereve, welcome swallow. Pacific gecko (Gradual Decline), copper skink, and shore skink. Threatened snails include *Amborhytida* sp. "Motukokako" (Range Restricted), *Pbrixgnathbus paralaomiformis* (Range Restricted), and Punctidae sp. 230 (Range Restricted).

Significance

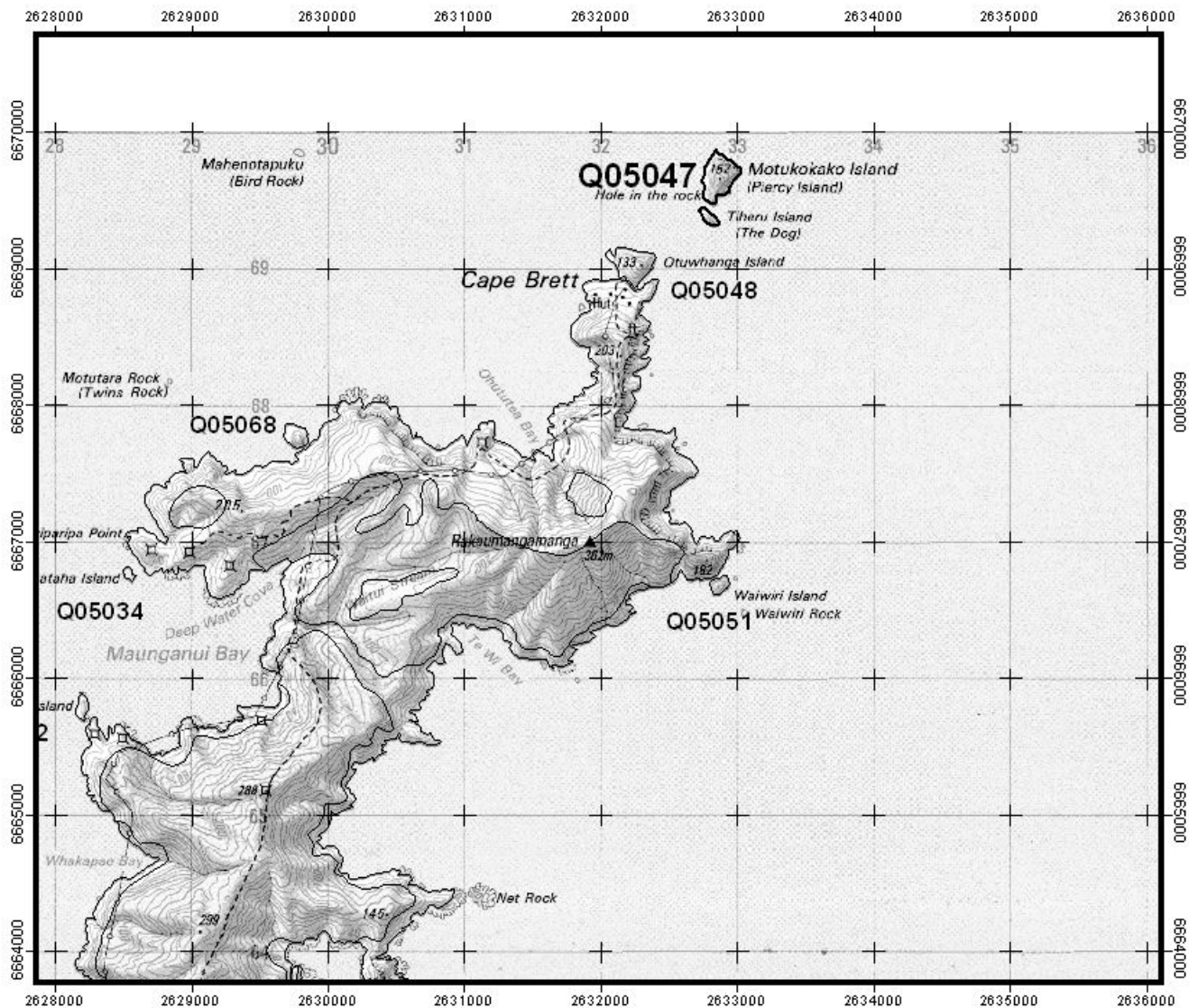
Significant representative coastal forest that supports many threatened and regionally significant plant and animal species.

An example of a nationally rare vegetation type.

The only record of type (a) vegetation in the Ecological District.

Geologically, Motukokako Island is a site of international scientific importance, with:

- New Zealand's best ilvaite exposure with the best of three babingtonite occurrences.
- A well exposed example of Pb/Zn skarn (Kenny & Hayward 1996).



Motukokako Island Q05/047

Each grid is 1000m x 1000m

and = 100 ha

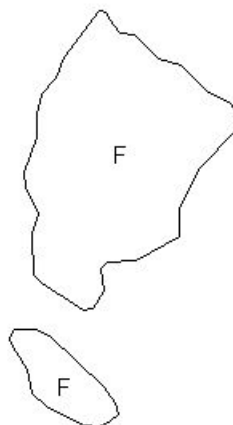
S = shrubland

F = forest

W = wetland

E = estuarine

D = duneland

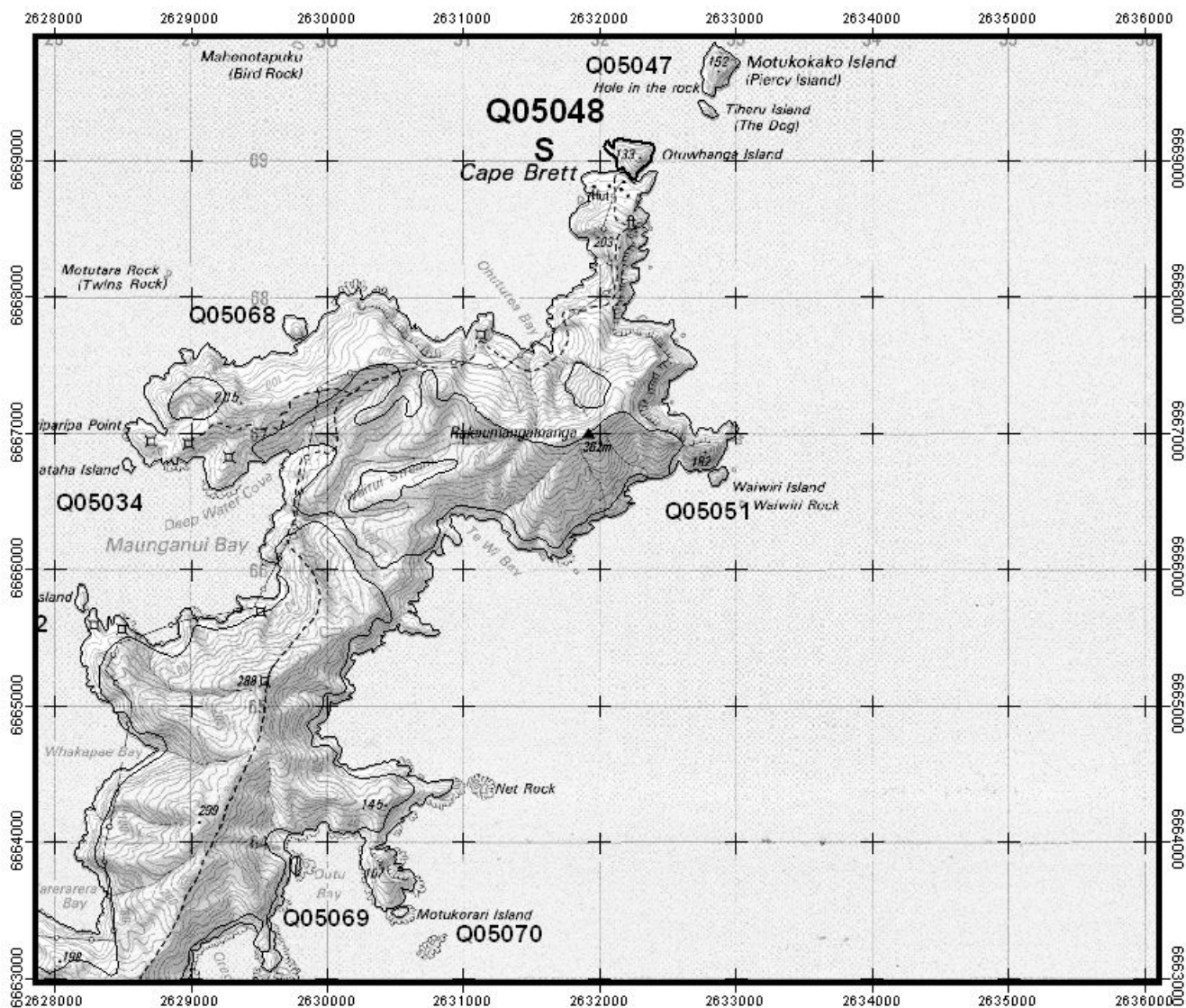


OTUWHANGA ISLAND

Survey no. Q05/048
 Survey date 27 April 1998
 Grid reference Q05 322 690
 Area 6 ha
 Altitude 0-133 m asl

Ecological unit

- (a) Harakeke coastal flaxland on hillslope
- (b) Taupata coastal shrubland on hillslope



Otuwhanga Island Q05/048

Each grid is 1000m x 1000m
 and = 100 ha
 S = shrubland
 F = forest
 W = wetland
 E = estuarine
 D = duneland

Landform/geology

Cliffed island of Waipapa Terrane greywacke.

Vegetation

(a) A large proportion of the island is dominated by harakeke with frequent grass spp. Species that occur occasionally are, pohutukawa, taupata, ti kouka, native iceplant and rush sp.

(b) Taupata shrubland is concentrated around a small area at the north west point of the island. Pohuehue and grass sp are frequent and harakeke and native iceplant are occasional.

Significant flora

Coastal tussock (Range Restricted), *Asplenium northlandicum* (Regionally Significant), coastal maire (Regionally Significant) and tawapou (Regionally Significant) have been recorded on the island.

Fauna

Red-billed gull, silvereye, shore skink.

Significance

A representative example of a nationally rare habitat type.

Presence of threatened and regionally significant plant species.

Only record of type (b) vegetation in the Ecological District.

MOTUKUMARA ISLAND

Survey no.	Q05/049
Survey date	27 April 1998
Grid reference	Q05 304 618
Area	2 ha
Altitude	0-60 m asl

Ecological unit

(a) Harakeke coastal flaxland on hillslope

Landform/geology

Cliffed islet of Waipapa Terrane greywacke.

Vegetation

Harakeke sward is scattered with frequent mingimingi and coastal tussock. Species occurring occasionally are taupata, karaka, mahoe, cutty grass, kowharawhara and native iceplant.

Significant flora

Coastal tussock (Range Restricted), coastal maire (Regionally Significant).

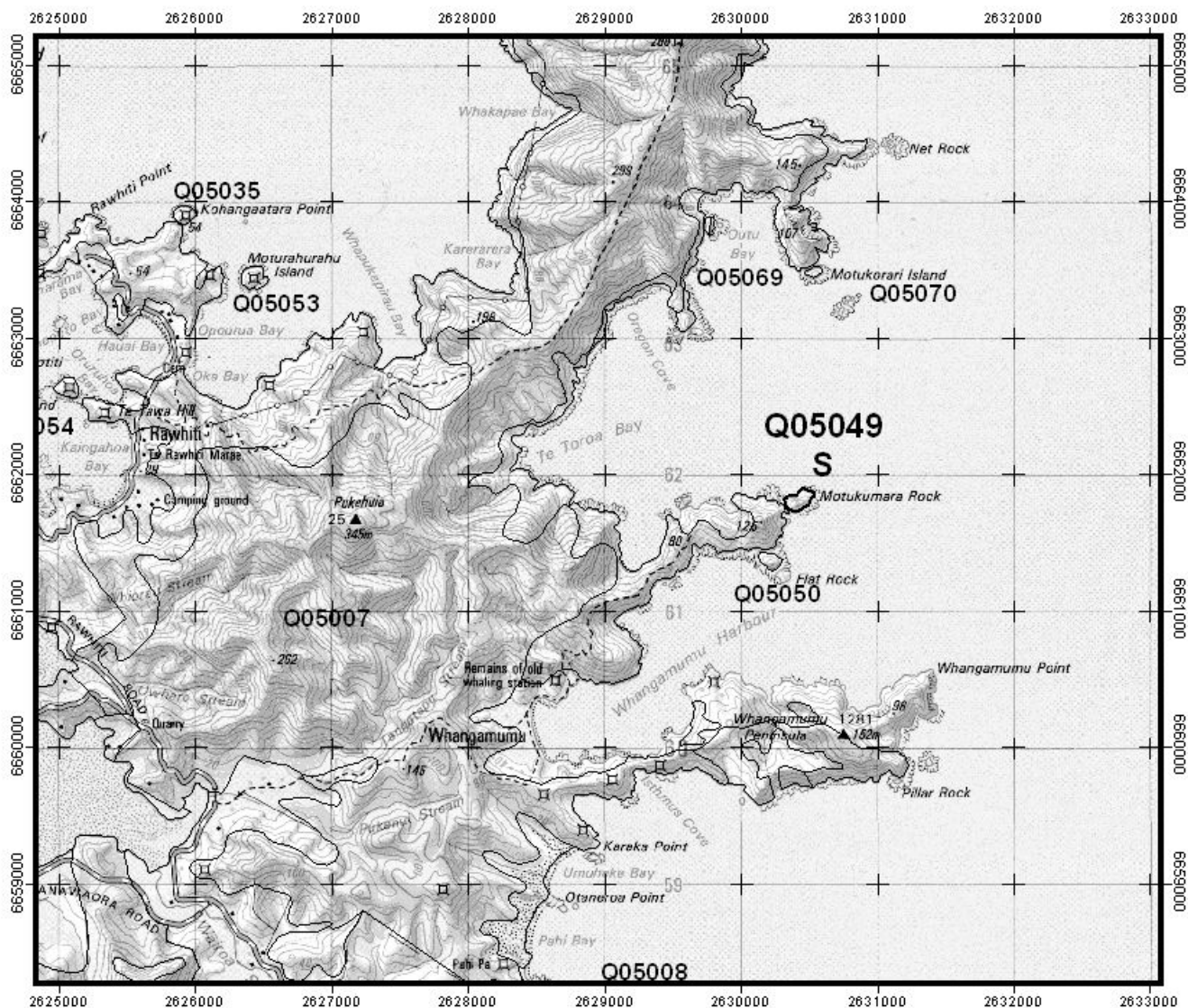
Fauna

Black-backed gull, shore skink.

Significance

Representative example of a nationally rare habitat type.

Presence of threatened and regionally significant plant species.



Motukumara Island Q05/049

Each grid is 1000m x 1000m
 and = 100 ha
 S = shrubland
 F = forest
 W = wetland
 E = estuarine
 D = duneland

FLAT ROCK ISLAND

Survey no. Q05/050
 Survey date 27 April 1998
 Grid reference Q05 302 613
 Area 1.5 ha
 Altitude 0-40 m asl

Ecological unit

(a) Pohutukawa-kanuka coastal forest on hillslope

Landform/geology

Cliffed islet of Waipapa Terrane greywacke.