

BAKER

Survey no. O04/193
Survey date 3 August 1994
Grid reference O04 595 838
Area 68.8 ha
Altitude 60-160 m asl

Ecological unit

(a) Manuka-kanuka shrubland on hillslope

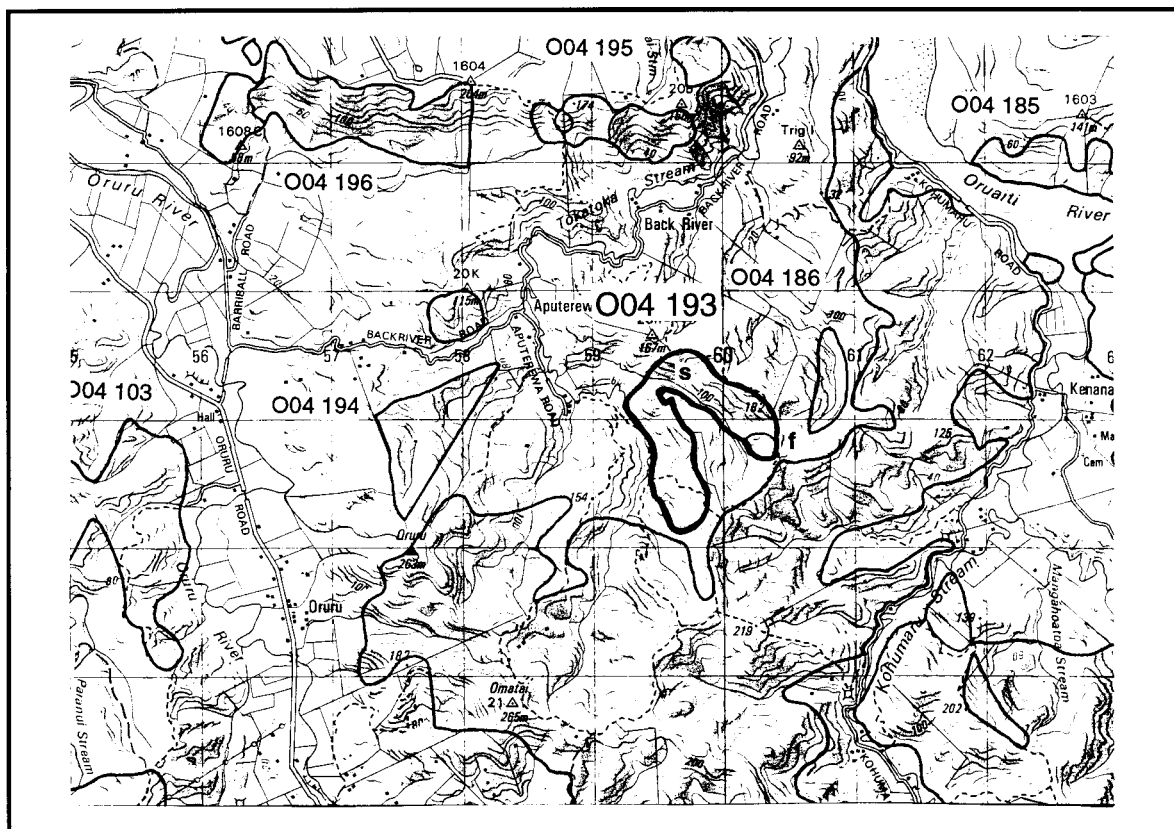
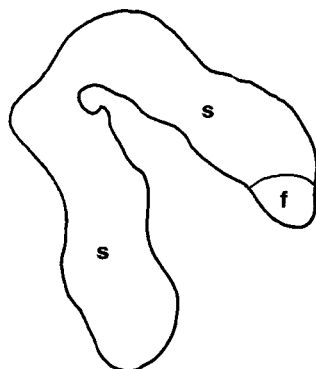


Figure 129. Baker, O04 193

Each grid is 1000 m x 1000 m and equals 100 ha.

f = forest; s = shrubland.



(b) Taraire-kanuka forest on hillslope

Landform/geology

Hill country of Tangihua Complex igneous rock units.

Vegetation

Type (a) Manuka-kanuka shrubland. The majority of this area is manuka-kanuka with frequent gorse and occasional pine, tree fern, tobacco weed, totara and cabbage tree.

Type (b) Taraire-kanuka forest. About 10% of the area with puriri, rewarewa and nikau. Karaka, kahikatea, rimu and kauri are also present.

Fauna

NI brown kiwi (Category A threatened species).

Significance

Contiguous with Oruru complex (O04/186) and habitat for kiwi.

DUIRS

Survey no.	O04/194
Survey date	3 August 1994
Grid reference	O04 576 856
Area	47 ha
Altitude	80-120 m asl

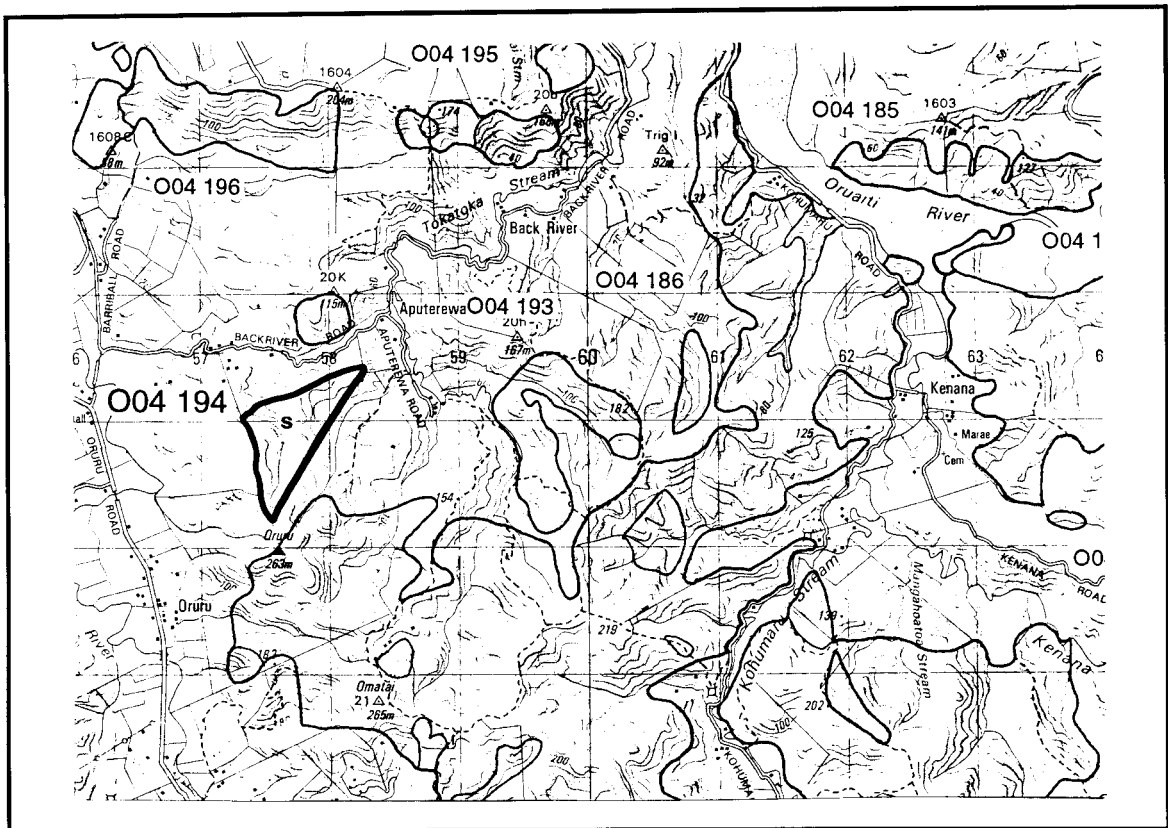


Figure 130. Duirs, O04 194
Each grid is 1000 m x 1000 m and equals 100 ha. s = shrubland.

Ecological unit

(a) Manuka-kanuka shrubland on hillslope

Landform/geology

Hill country of Tangihua Complex igneous rock units.

Vegetation

Manuka-kanuka shrubland with frequent cabbage tree and mamaku and occasional rewarewa. It is close to Oruru and linked to that peak by scrub containing manuka-kanuka, gorse and tobacco weed.

Fauna

NI brown kiwi (Category A threatened species).

Significance

Close to Oruru O04/186 and linked to it by scrub.

Habitat for kiwi.

BACKRIVER RD

Survey no.	O04/195
Survey date	3 August 1994
Grid reference	O04 580 848, 595 865
Area	61.4 ha
Altitude	40-160 m asl

Ecological unit

- (a) Taraire forest on hillslope
- (b) Puriri-taraire-kanuka forest on hillslope
- (c) Puriri-taraire forest on hillslope
- (d) Manuka-kanuka shrubland on moderate to steep hillslope
- (e) Towai-kanuka-rewarewa shrubland on hillslope

Landform/geology

Hill country of Tangihua Complex igneous rock units.

Vegetation

Three areas, almost linked by pine and scrub.

Type (a) Taraire forest. At Aputerewa is a taraire remnant within the pines, with frequent puriri, rewarewa and towai. Also present are kanuka, kahikatea, karaka, tawa, tanekaha, titoki and nikau.

Further up the road, opposite the church, are two further forest remnants:

Type (b) Puriri-taraire-kanuka forest. With towai, rewarewa and kauri rickers. Rimu, matai, kahikatea, tanekaha, and northern rata are also present.

Type (c) Puriri-taraire forest. With nikau and occasional rimu, kahikatea, matai and kauri.

The adjoining shrubland is of two types:

Type (d) Manuka-kanuka shrubland. Of low height with frequent gorse and occasional cabbage tree, pate, rewarewa and tanekaha.

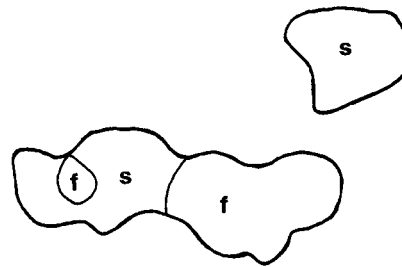
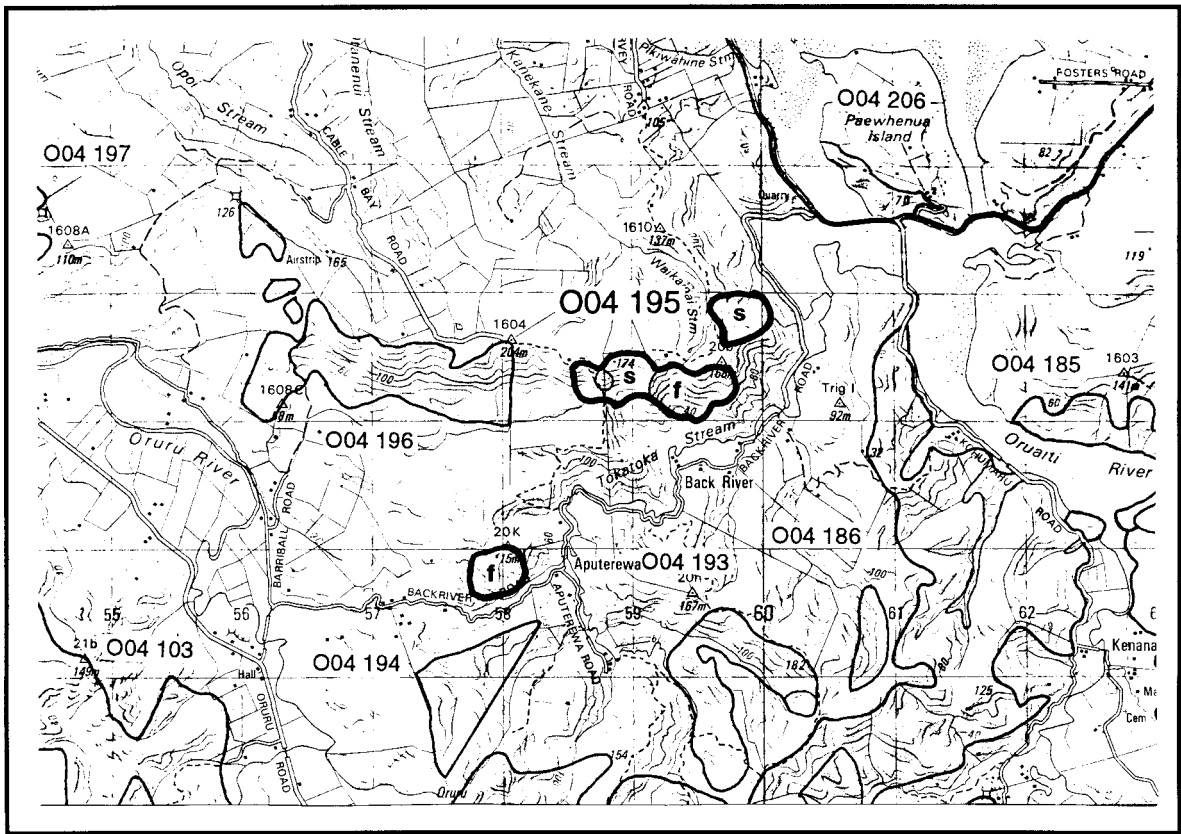


Figure 131. Backriver Road, O04 195

Each grid is 1000 m x 1000 m and equals 100 ha.

f = forest; s = shrubland.



Type (e) Towai-kanuka-rewarewa shrubland. Between 4 and 6 m tall.

Amongst the pine trees to the north is a large area of tall manuka-kanuka with frequent towai and occasional cabbage tree and mamaku. There is a smaller area of lower shrubland which also contains gorse, *Hakea*, mahoe, tanekaha as well as cabbage tree and mamaku.

Fauna

NZ pigeon (Category B threatened species), NI brown kiwi (Category A threatened species).

Significance

Representative site for taraire forest, taraire-kanuka-puriri forest and towai-kanuka-rewarewa shrubland.

The forest remnants are used by NI brown kiwi and NZ pigeon.

Two thirds of this site (39.9 ha) is protected under Conservation Covenant.

GARTON BLOCK (APUTEREWA)

Survey no.	O04/196
Survey date	4 August 1994
Grid reference	O04 572 864
Area	115.8 ha
Altitude	20-200 m asl

Ecological unit

- (a) Towai-taraire forest on hillslope
- (b) Kanuka forest on hillslope
- (c) Towai-kanuka forest on hillslope
- (d) Manuka-kanuka shrubland on hillslope

Landform/geology

Escarpment of Tangihua Complex igneous rock units passing downslope into Mangakahia Complex sandstone lithofacies

Vegetation

Type (a) Towai-taraire forest. Forms the major part of this area with kanuka and occasional puriri, kahikatea, totara, rimu, tanekaha, rewarewa, kohekohe, miro, karaka, northern rata and mature emergent kauri on some ridges, including stands of old rickers up to 1 m in diameter above breast height. Kawaka is locally common with the kauri.

Type (b) Kanuka forest. About 10% is kanuka with totara, kauri, kahikatea and tree fern.

Type (c) Towai-kanuka forest. A smaller area than (b) with scattered rewarewa and tree fern. The understorey is sparse with occasional *Alseuosmia* sp., and small-leaved *Coprosma* species, mapou and occasional sedges and ferns.

Type (d) Manuka-kanuka shrubland. Almost contiguous on the neighbouring property is manuka-kanuka to 6 m with cabbage tree, tanekaha, pine and wattle or manuka-kanuka with frequent tree fern and occasional puriri, kauri and kohekohe.

Significant flora

Kawaka - notable in the Ecological District.

Fauna

NI brown kiwi (Category A threatened species), NZ pigeon (Category B threatened species); kauri snail (Category C threatened species).

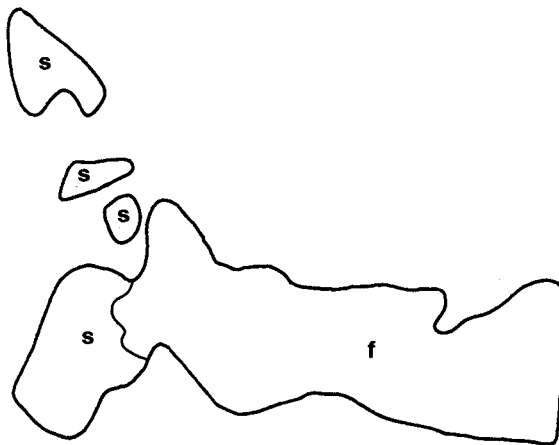
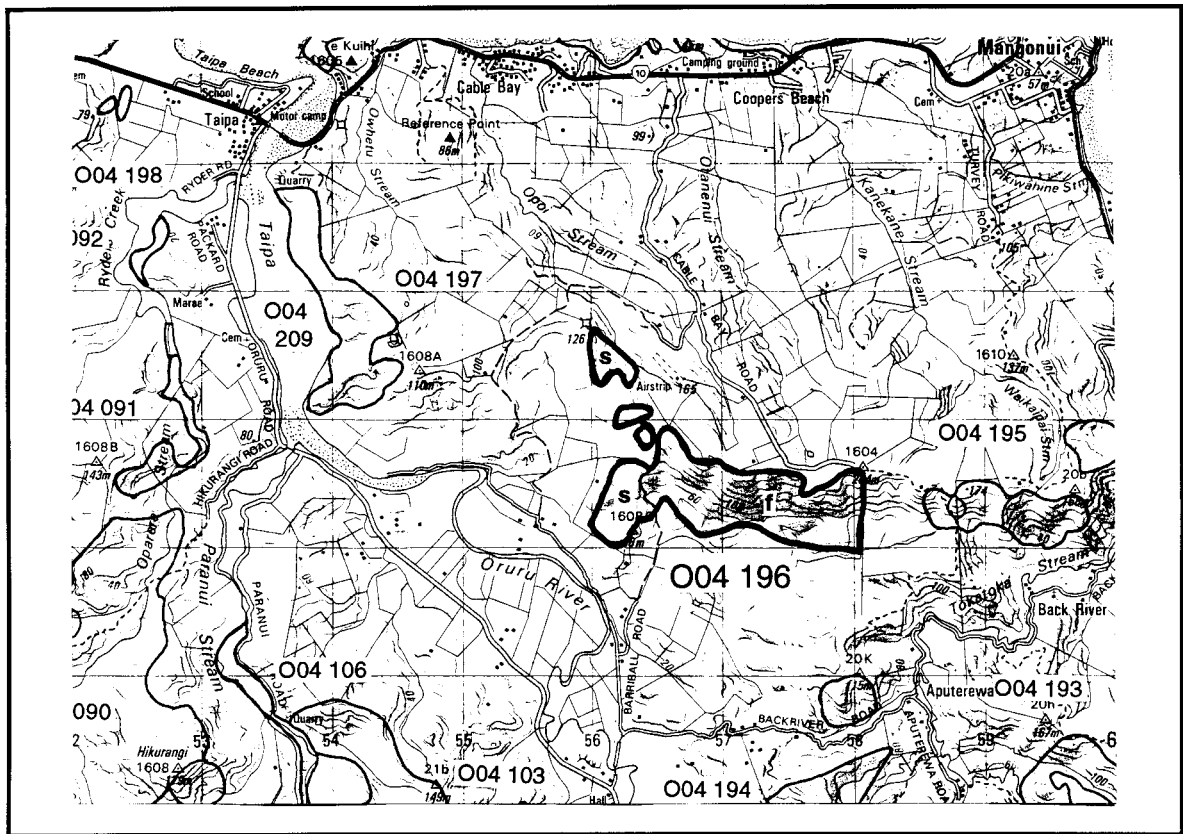


Figure 132. Garton Block (Aputerewa), O04 196
 Each grid is 1000 m x 1000 m and equals 100 ha.
 f = forest; s = shrubland.

Significance

A sizeable area of bush; the best example of its type closest to the coast where there is little other indigenous vegetation, and a representative example of towai-taraire forest with emergent kauri.

The main bush area (72.9 ha) has been purchased by the Department of Conservation and is classified as Scenic Reserve.

TAIPA RIVER EAST BANK

Survey no. O04/197
Survey date February 1996
Grid reference O04 542 875
Area 66.2 ha
Altitude sea level-110 m asl

Ecological unit

- (a) Secondary kanuka forest on hillslope
- (b) Manuka-kanuka shrubland on hillslope

Landform/geology

Hill slope adjoining Taipa River estuary consisting of Motatau Complex calcareous mudstone and sandstone lithofacies adjacent to the coast, and Mangakahia Complex sandstone and siliceous mudstone lithofacies in the upper part of the slope.

Vegetation

Type (a) Kanuka forest. Mostly secondary kanuka to 12 m with an open canopy. Where the area has been grazed or otherwise disturbed, there is a sub-canopy of mapou, mamangi and smaller kanuka with frequent mingimingi and tanekaha. *Gabnia lacera* is locally abundant. In the south-west portion, which has been more heavily grazed, the shrub layer is sparse, and there is a cleared area of about half a hectare amongst gorse and tobacco weed.

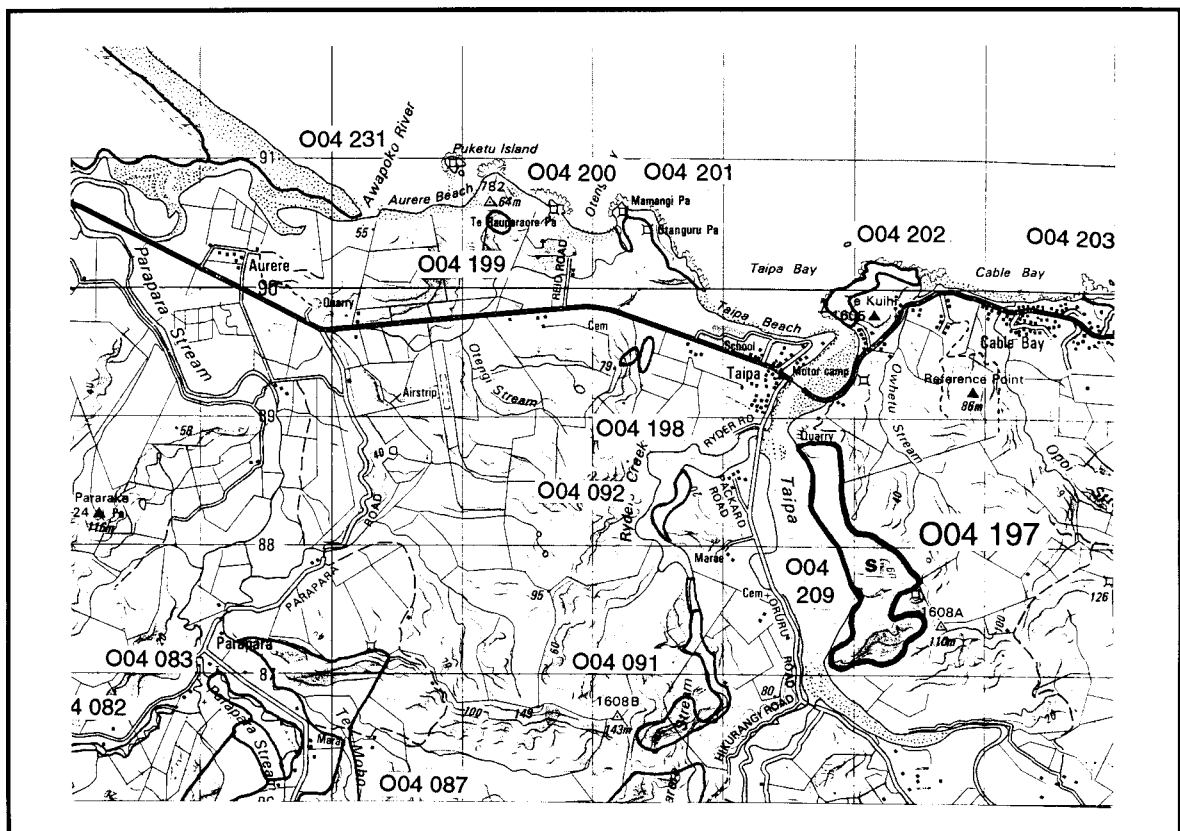


Figure 133. Taipa River East Bank, O04 197

Each grid is 1000 m × 1000 m and equals 100 ha. s = shrubland.

Further north, the understorey is more dense, with maidenhair fern and hooksedge in the ground layer, and tanekaha abundant in the sub-canopy. Totara is also frequent. Sapling kohekohe are locally common, as are kowhai along the foreshore.

About 20% of the area contains more frequent kahikatea and totara in the canopy, together with taraire, puriri and occasional kauri and pohutukawa. Wattle and Chinese privet also occur sporadically, mainly towards the quarry along the shoreline.

Type (b) Manuka-kanuka shrubland. About 3–4 m tall, occurs on the margins. Mangroves occur between the river channel and land margin (O04/209), but have been severely affected by stock intrusion. There is still one area of unmodified saltmarsh of oioi and sea rush which grades into wet open manuka shrubland with *Schoenus tendo*, several *Carex* species, kiokio, flax, cabbage tree, putaputaweta and kahikatea.

Fauna

NZ pigeon (Category B threatened species), NI brown kiwi (Category A threatened species); Northland green gecko (Northland endemic and regionally significant species) reported.

Significance

A buffer reflecting the coastal character on steep slopes above the Taipa River. Although the canopy of emergent kanuka is open, beneath it there is generally a very vigorous regeneration, particularly of tanekaha.

Three important fauna species are reported, and the vegetation on the river margin is used as bird roost sites (black and pied shags).

Although a variety of adventives are present, they are confined to margins and disturbed areas, with the bulk of the area in a natural state, and being a representative site of kanuka forest.

TAIPA STRAIGHT

Survey no.	O04/198
Survey date	29 September 1994
Grid reference	O04 525 896
Area	3 ha
Altitude	up to 20 m asl

Ecological unit

- (a) Puriri forest on coastal sands
- (b) Manuka shrubland on hillslope

Landform/geology

Hill slope of Mangakahia sandstone and siliceous mudstone lithofacies, and adjoining Holocene coastal foredune belt.

Vegetation

Type (a) Puriri forest. A small puriri remnant with kahikatea, taraire, cabbage tree and occasional karaka. Other species present include totara, mapou, and *Coprosma macrocarpa*. Houpara, karo and taupata are represented by

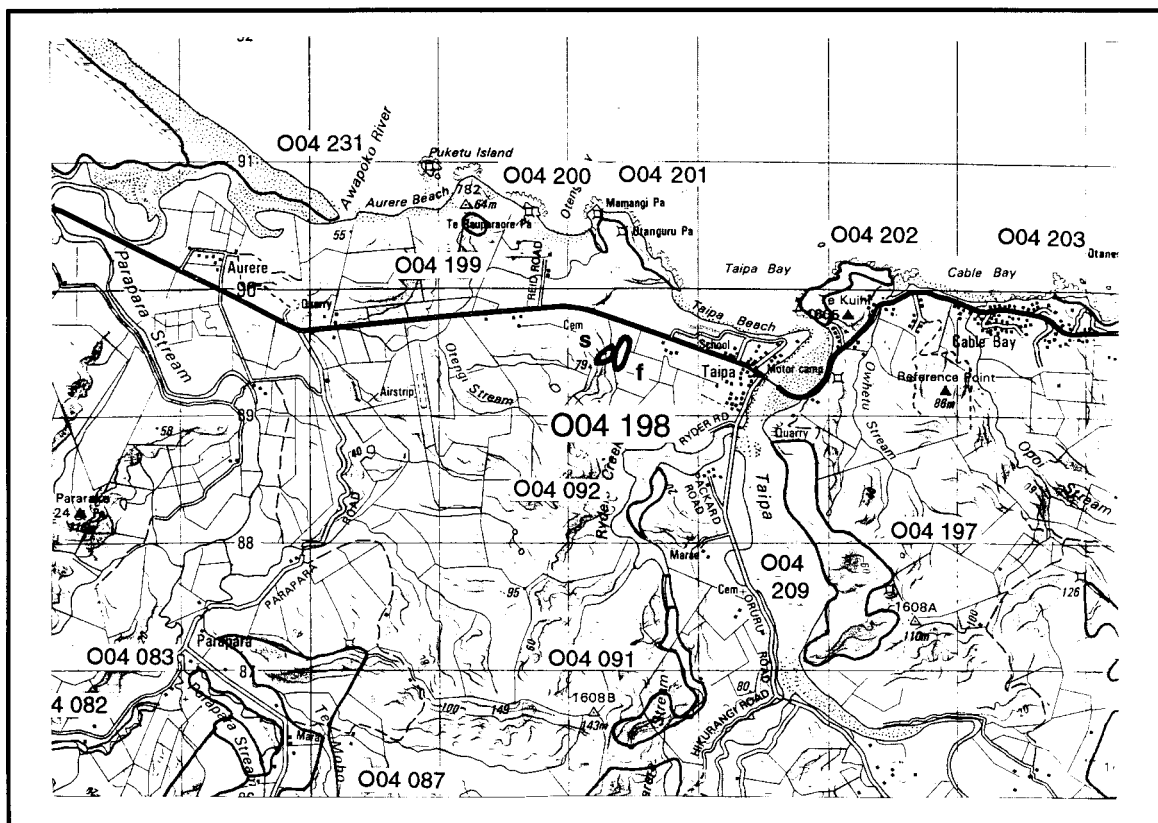


Figure 134. Taipa Straight, O04 198

Each grid is 1000 m x 1000 m and equals 100 ha. f = forest; s = shrubland.

individual plants. The understorey consists of *Carex* species, rasp fern, Arum lily, tobacco weed and pasture grasses.

Type (b) Manuka shrubland. Nearby is a manuka shrubland on the hillside.

Fauna

Not surveyed.

Significance

Although small and degraded, the puriri remnant is an important representative site, being the only example of its type on coastal sands in this Ecological District and a rare type in Northland.

OTENGI BAY

Survey no.	O04/200
Survey date	14 November 1994
Grid reference	O04 523 906
Area	3.1 ha
Altitude	0-20 m asl

Ecological unit

- (a) Pohutukawa treeland on coastal hillslope and cliffs
- (b) Coastal shrubland on coastal hillslope and cliffs

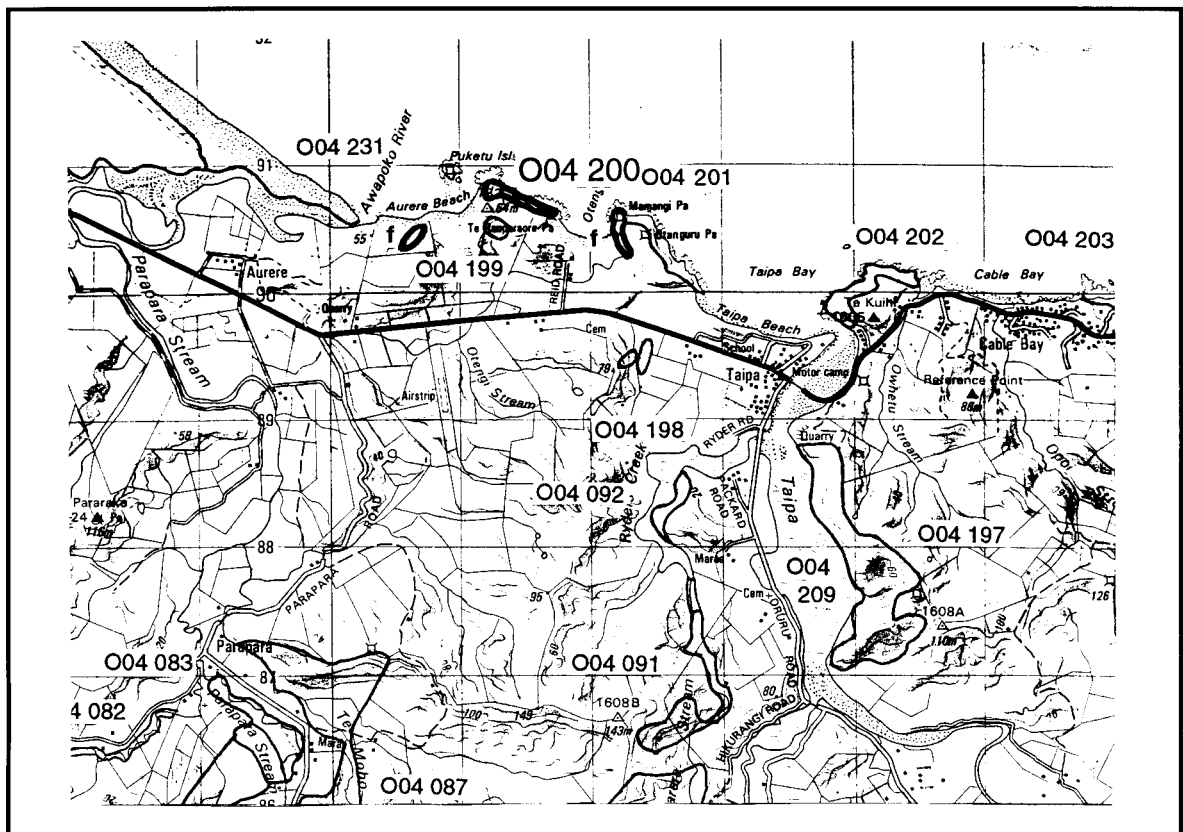


Figure 135. Otengi Bay, O04 200
 Each grid is 1000 m x 1000 m and equals 100 ha.
 f = forest.



Landform/geology

Coastal hills of Tangihua Complex igneous rock units, and adjoining coastal foredunes in Otengi Bay.

Vegetation

Type (a) Pohutukawa treeland. At the southern end of the bay, gorse and grass are the dominant vegetation, but pohutukawa is frequent to occasional. Other species present are taupata, flax, karaka, houpara, cabbage tree, puriri, *Coprosma macrocarpa*, coastal *Astelia* and tawapou.

Further west there is no gorse and the native species are similar.

On the mainland opposite the island, there are some mature pohutukawa with scrambling parasite *Cassytha*.

Type (b) Coastal shrubland. On Puketu Island, grass is dominant and gorse frequent, along with flax. Renga lily, cabbage tree and taupata also occur.

Significant flora

Tawapou - regionally significant species.

Fauna

NZ dotterel (Category B threatened species).

Significance

A representative site for both vegetation types. Puketu Island and the area at the southern end of the bay are the best examples of coastal vegetation in the Ecological District, despite being modified (some pohutukawa are dead, and others have severe dieback). Some of the landowners are undertaking possum control.

OTANGURU CLIFFS

Survey no.	O04/201
Survey date	4 August 1994
Grid reference	O04 526 905
Area	7.3 ha
Altitude	0-20 m asl

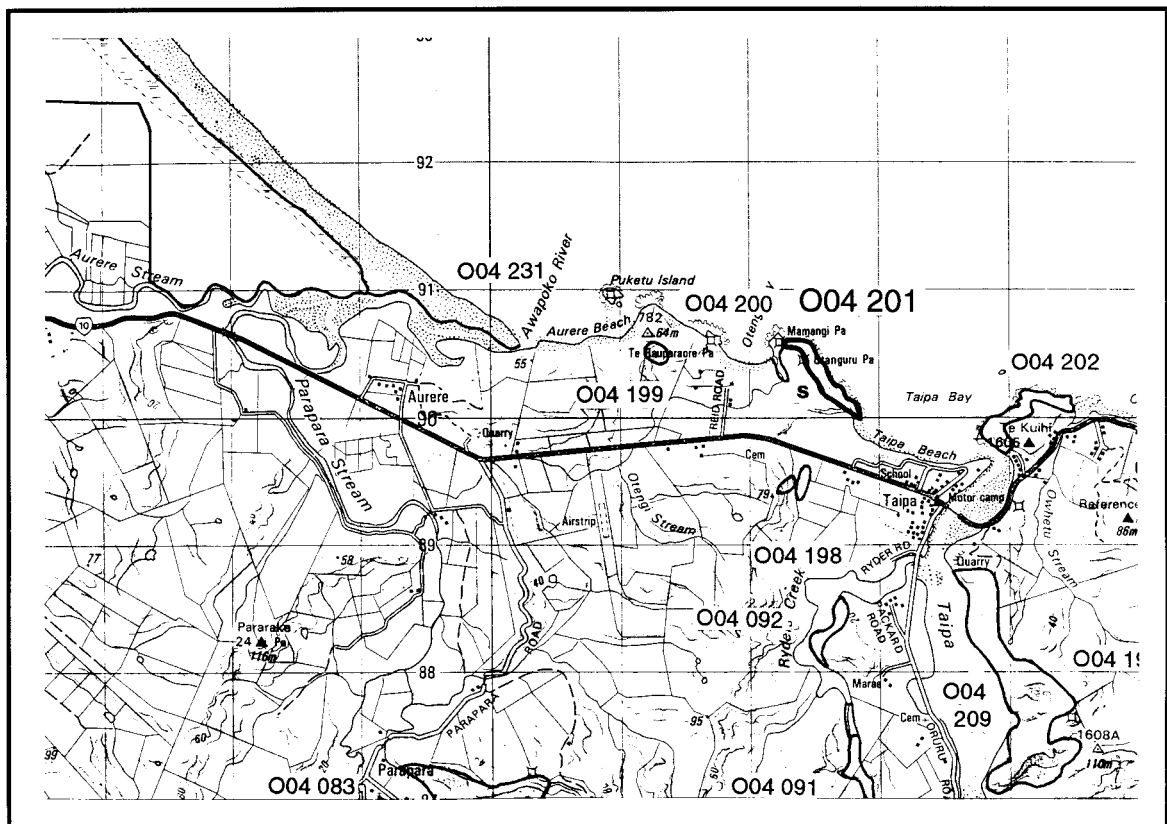


Figure 136. Otanguru Cliffs, O04 201

Each grid is 1000 m x 1000 m and equals 100 ha. s = shrubland.

Ecological unit

(a) Pohutukawa treeland on coastal cliffs

Landform/geology

Coastal hills of Tangihua Complex igneous rock units.

Vegetation

Pohutukawa is frequent among abundant gorse. Karaka, flax and other exotic species occur rarely. The vegetative cover is about 80%.

Fauna

Not surveyed.

Significance

Representative remnant of coastal vegetation, rare in the Ecological District.

TE KUIHI (TAIPA HEAD)

Survey no.	O04/202
Survey date	4 August 1994
Grid reference	O04 542 900
Area	12.7 ha
Altitude	0-20 m asl

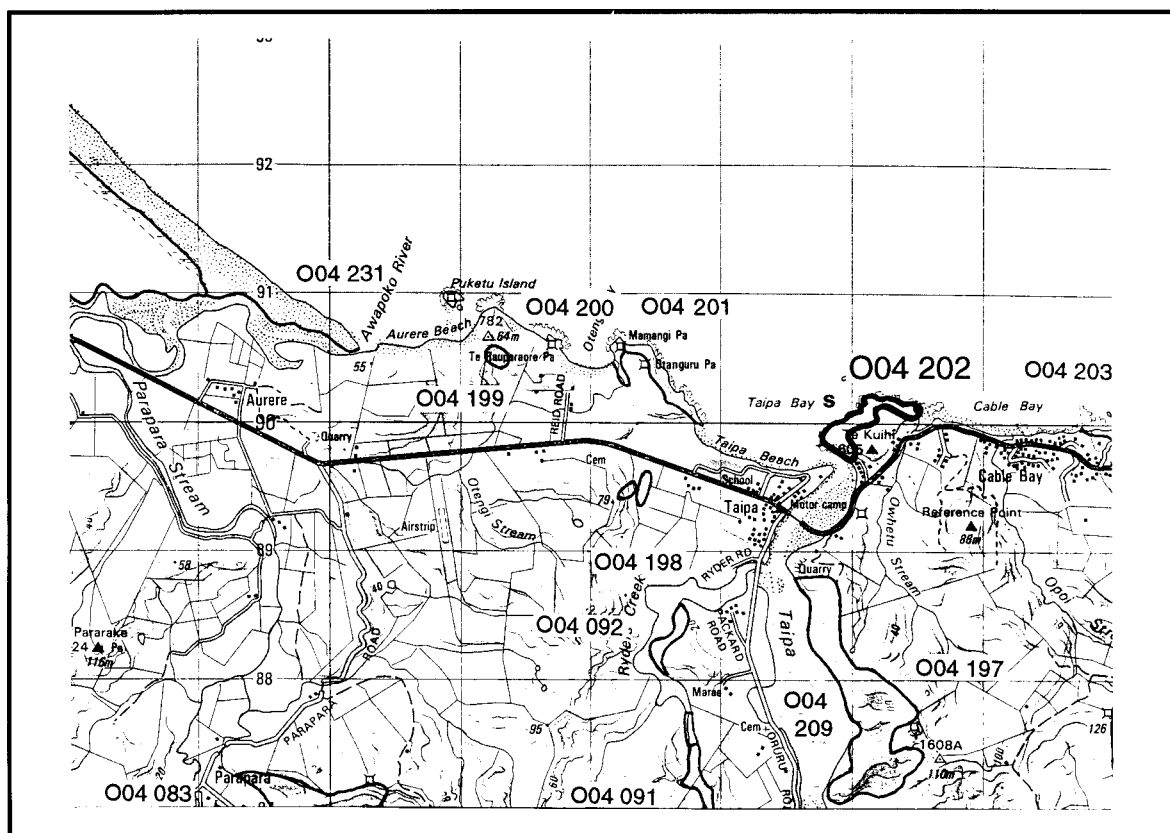


Figure 137. Te Kuihi, O04 202

Each grid is 1000 m x 1000 m and equals 100 ha. s = shrubland.

Ecological unit

(a) Manuka-kanuka shrubland on coastal hillslope and clifftop

Landform/geology

Coastal hills of Tangihua Complex igneous rock units.

Vegetation

A coastal strip around Te Kuihi is mostly covered in manuka-kanuka shrubland between 3 and 6 m tall.

On or near the cliffs there is frequent boneseed, with occasional pine, *Hakea*, totara and pohutukawa.

Taupata, houpara and flax occur rarely on the cliffs.

Facing the estuary, pohutukawa, kohekohe, puriri, rewarewa, lancewood, mamaku, pine and other exotic species are scattered through the shrubland.

Fauna

Not surveyed.

Significance

Representative site and one of the largest remnants of coastal vegetation, which is uncommon in the Ecological District.

TAUMARUMARU

Survey no.	O04 203
Survey date	14 November 1994
Grid reference	O04 566 900
Area	7.9 ha
Altitude	0-10 m asl

Ecological unit

(a) Open pohutukawa treeland on coastal hillslope and cliff

(b) Gorse scrub on coastal cliff

(c) Gorse-boneseed-kanuka shrubland on coastal cliff

(d) Kanuka shrubland on coastal cliff

(e) Mangrove shrubland on estuarine margin

(f) Pampas-mamaku shrubland on coastal cliff

Landform/geology

Coastal hills of Tangihua Complex igneous rock units.

Vegetation

Type (a) Pohutukawa treeland and Type (b) Gorse scrub. The Taumarumaru Reserve is 70% grass with frequent gorse and scattered pohutukawa.

Along the cliff from Chuck's Cove to Cable Bay, pohutukawa occurs with pampas and kanuka and with boneseed and occasional karo, houpara, taupata, and the adventives *Polygala* and *Cotoneaster*.

Type (c) Gorse-boneseed-kanuka shrubland on coastal cliff. On the cliffs below Otanenui Pa, gorse is abundant, with boneseed and kanuka frequent. Scattered throughout are pohutukawa, mapou, houpara, haekaro, taupata, cabbage tree,

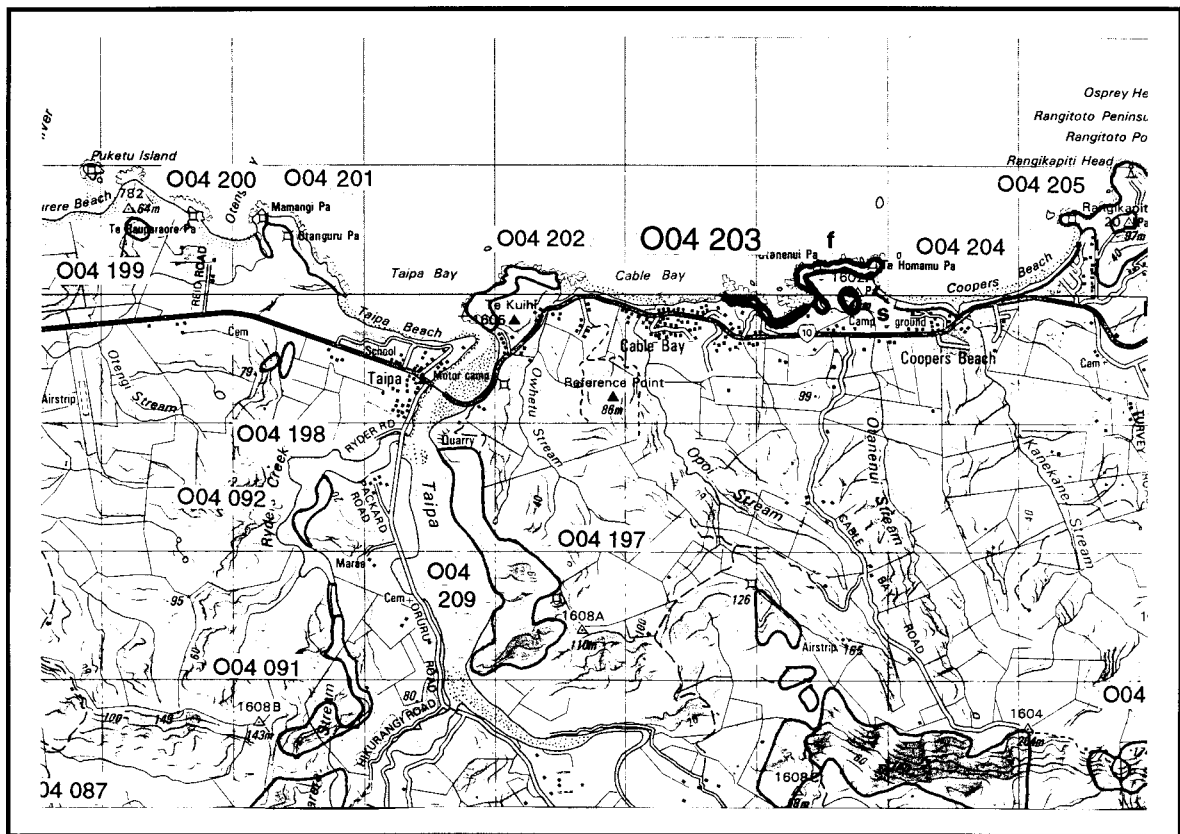


Figure 138. Taumarumaru, O04 203

Each grid is 1000 m x 1000 m and equals 100 ha.

f = forest; s = shrubland.



flax, koromiko, hangehange, mahoe, ponga, mingmingi, akepiro, kumeraho, coastal *Astelia*, pampas, tobacco weed, and rush and sedge species.

Type (d) Kanuka shrubland. On the south-facing slope is a small area of kanuka shrubland with totara and towai, with *Coprosma parviflora* on the margin.

Along the cliff from Chuck's Cove to Cable Bay there is a small amount of scrub with gorse, boneseed, manuka and pampas. About one-third of the area is kanuka with frequent houpara.

Type (e) Mangrove shrubland. Around Chuck's Cove is a small mangrove stand with small patches of oioi and *Baumea juncea*. On the drier land pohutukawa is frequent and kanuka isolated.

Type (f) Pampas-mamaku shrubland. Along the cliff from Chuck's Cove to Cable Bay there is a small amount of scrub with gorse, boneseed, manuka and pampas.

Fauna

Not surveyed.

Significance

In spite of the frequent weeds, this area is the only easily accessible area to the public on the east coast of this Ecological District where there is a semblance of coastal vegetation remaining.

This site is classified as Recreation Reserve and is administered by the Department of Conservation.

COOPERS BEACH

Survey no. O04/204
Survey date 4 August 1994
Grid reference O04 578 900
Area 9.7 ha
Altitude 0-20 m asl

Ecological unit

(a) Pohutukawa treeland on coastal cliffs and terraces

Landform/geology

Coastal cliffs in Mangonui Formation carbonaceous sandstone, mudstone, lignite and conglomerate.

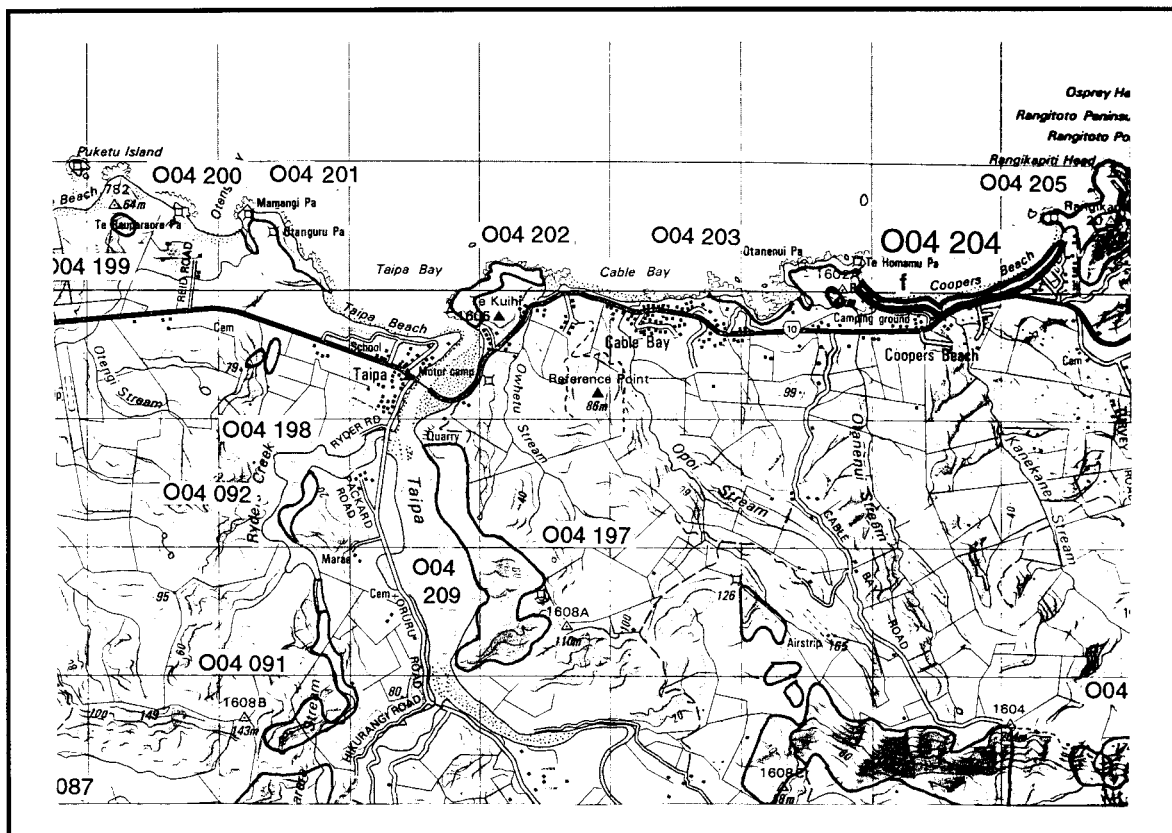


Figure 139. Coopers Beach, O04 204

Each grid is 1000 m x 1000 m and equals 100 ha. f = forest.

Vegetation

Scattered large mature pohutukawa on cliffs, especially at the southern end of the beach, but scattered isolated trees are also on the terraces above the beach at the northern end.

Fauna

Not surveyed.

Significance

Although now surrounded by residential development, this site represents a fine example of mature pohutukawa trees in a coastal setting. Trees located on the former camping ground are protected by covenant under the Resource Management Act.

RANGIKAPITI

Survey no.	O04/205
Survey date	4 March 1994
Grid reference	O04 588 906
Area	31.6 ha
Altitude	0-80 m asl

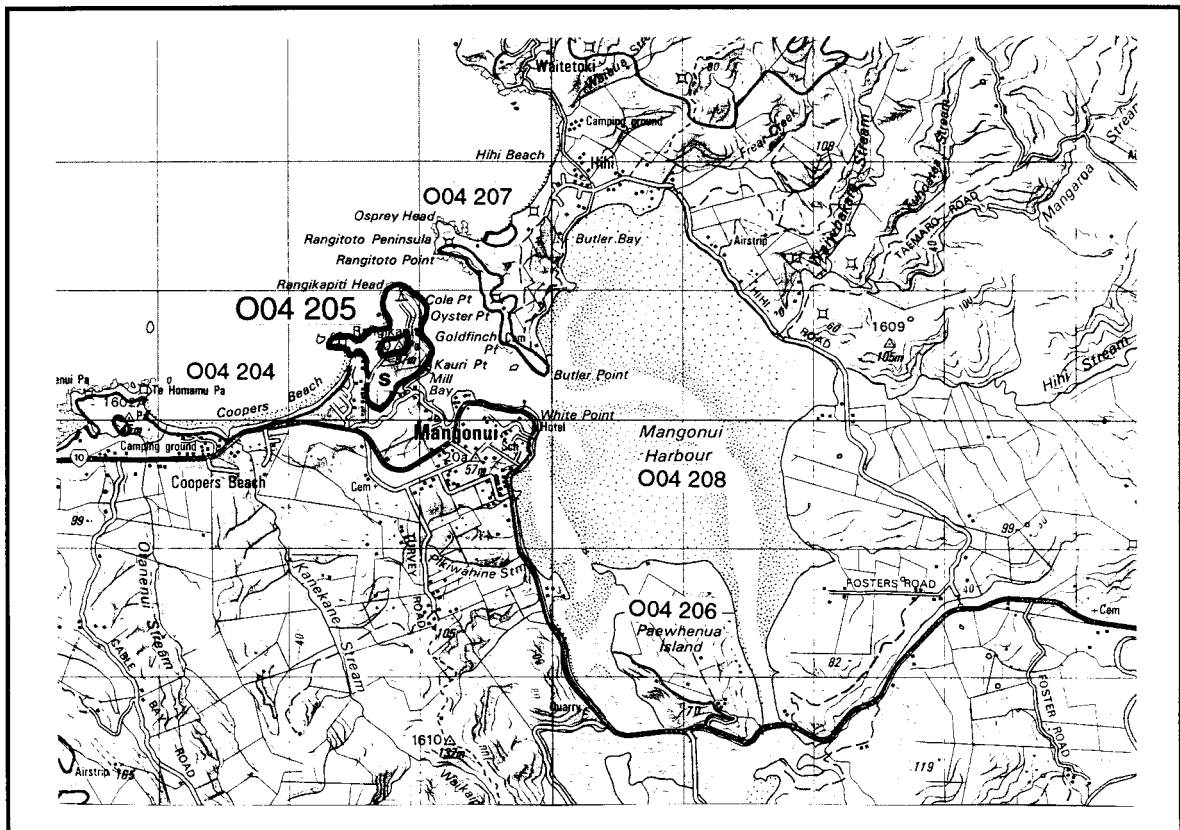


Figure 140. Rangikapiti, O04 205

Each grid is 1000 m x 1000 m and equals 100 ha. s = shrubland.

Ecological unit

(a) Manuka-kanuka shrubland on coastal hillslope and cliffs

(b) Wattle shrubland on coastal hillslope

Landform/geology

Coastal hills of Tangihua Complex igneous rock units.

Vegetation

Type (a) Manuka-kanuka shrubland. About half the shrubland is between 2 and 4 m tall with wattle frequent, and mapou and Chinese privet present. Most of the remainder is 6 to 8 m tall with pohutukawa frequent on the coastal margin and occasional puriri and cabbage tree.

Type (b) Wattle shrubland. About 10% is wattle dominated scrub with mamaku and gorse.

Fauna

Not surveyed.

Significance

One of the few areas of coastal vegetation in the Ecological District.

Much of this vegetation at this site is part of the 34 ha Rangikapiti Pa Historic Reserve and is administered by the Department of Conservation. (Note that a large area of the Historic Reserve is grassland and is not part of the PNAP Site. Some of the vegetation included in this site is on private land.)

PAEWHENUA

Survey no.	O04/206
Survey date	7 July 1994
Grid reference	O04 607 878
Area	18.1 ha
Altitude	0-60 m asl

Ecological unit

(a) Manuka-kanuka shrubland on coastal hillslope

Landform/geology

Hillslope of Tangihua Complex igneous rock units, running to Oruaiti River estuary.

Vegetation

Manuka-kanuka shrubland between 3 and 6 m tall with occasional gorse, *Hakea*, mamaku, wattle, cabbage tree, karamu and bracken.

Fauna

Not surveyed.

Significance

Coastal buffer on a steep hillside grading into mangroves.

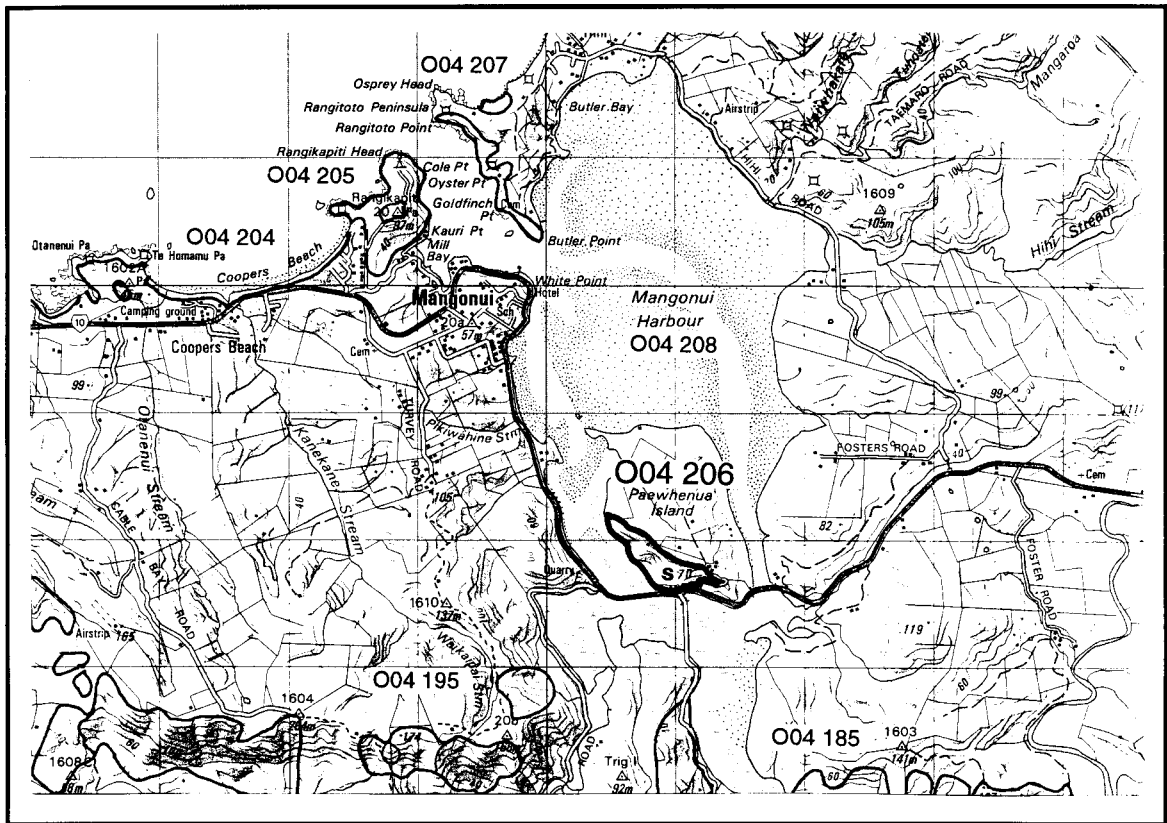


Figure 141. Paewhenua, O04 206

Each grid is 1000 m x 1000 m and equals 100 ha. s = shrubland.

BUTLER POINT

Survey no. O04/207
 Survey date 4 August 1994
 Grid reference O04 598 905
 Area 12.8 ha
 Altitude 0-20 m asl

Ecological unit

- (a) Pohutukawa treeland on coastal cliff
- (b) Manuka-kanuka shrubland on low coastal hillslope
- (c) Bracken-mamaku shrubland on low coastal cliff

Landform/geology

Coastal cliffs on Tangihua Complex igneous rock units.

Vegetation

Type (a) Pohutukawa treeland. Approximately 60% of the coastline is pohutukawa dominant with frequent kanuka. Also present is puriri, kohekohe, cabbage tree, mamaku, Japanese cedar and other exotic species. The canopy is open and discontinuous.

Type (b) Manuka-kanuka shrubland. Most of the remaining area is manuka-kanuka shrubland between 4 and 6 m with cabbage tree, mamaku, puriri, mahoe and pine occurring occasionally.

Type (c) Bracken-kanuka shrubland. About 10% is mixed bracken and mamaku with manuka, kanuka, gorse, mahoe, hangehange and cabbage tree.

Fauna

Not surveyed.

Significance

Coastal vegetation which is uncommon in the Ecological District. Representative example of mature pohutukawa trees.

This site includes approximately 0.5 ha of stewardship land under the Conservation Act (Oyster Point).

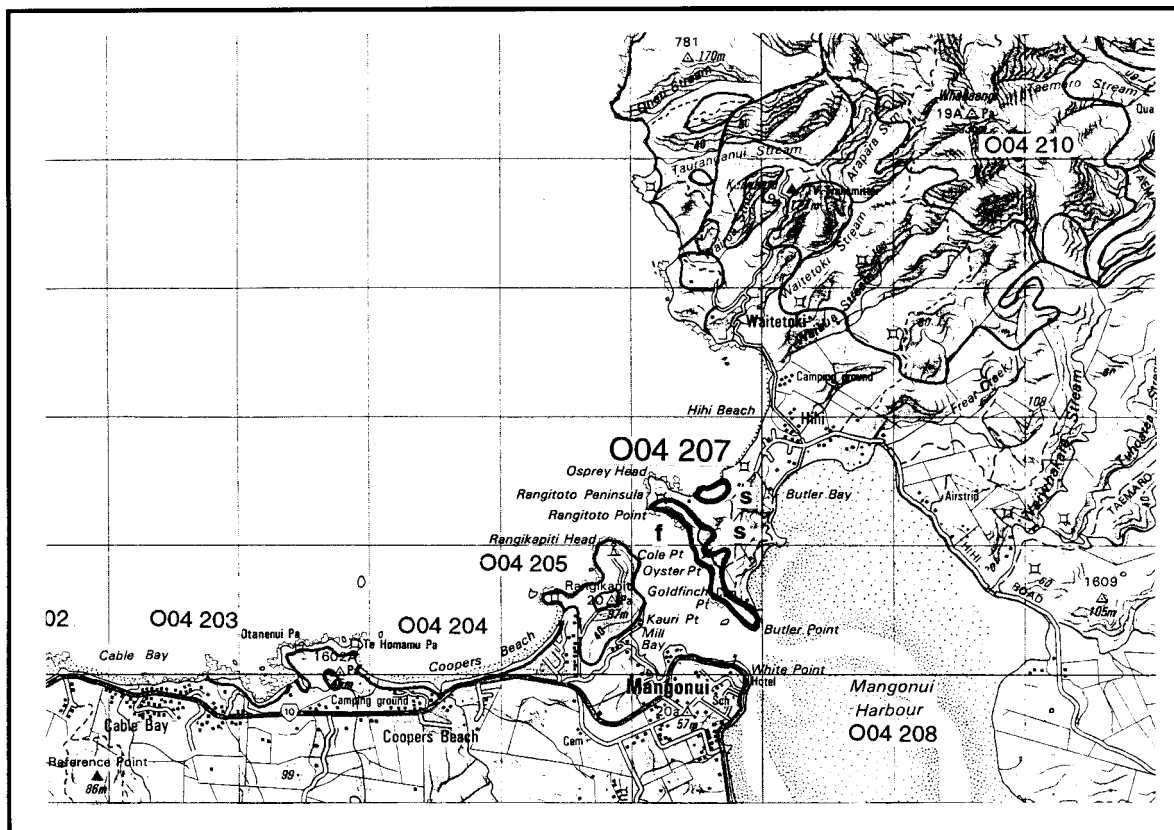
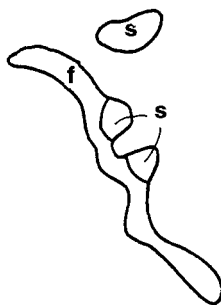


Figure 142. Butler Point, O04 207

Each grid is 1000 m x 1000 m and equals 100 ha.

f = forest; s = shrubland.



MANGONUI HARBOUR

Survey no. O04/208
Survey date 1995
Grid reference O04 610 900
Area 625.1 ha
Altitude sea level

Ecological unit

- (a) Tidal flats on estuary
- (b) Mangrove forest on estuary
- (c) Oioi saltmarsh

Landform/geology

River mouth estuary, with mouth and shores fringed by Tangihua Complex igneous rock units, and Holocene alluvium and colluvium.

Vegetation

Approximately half the harbour consists of tidal flats, the remainder being mostly mangrove with a small area of saltmarsh that is oioi dominant with sea rush. These areas are mostly in the Oruaiti River but there is a small amount along Hihi Rd.

Fauna

NZ dotterel (Category B threatened species), white-fronted tern (Category C threatened species), variable oystercatcher (Category C threatened species),

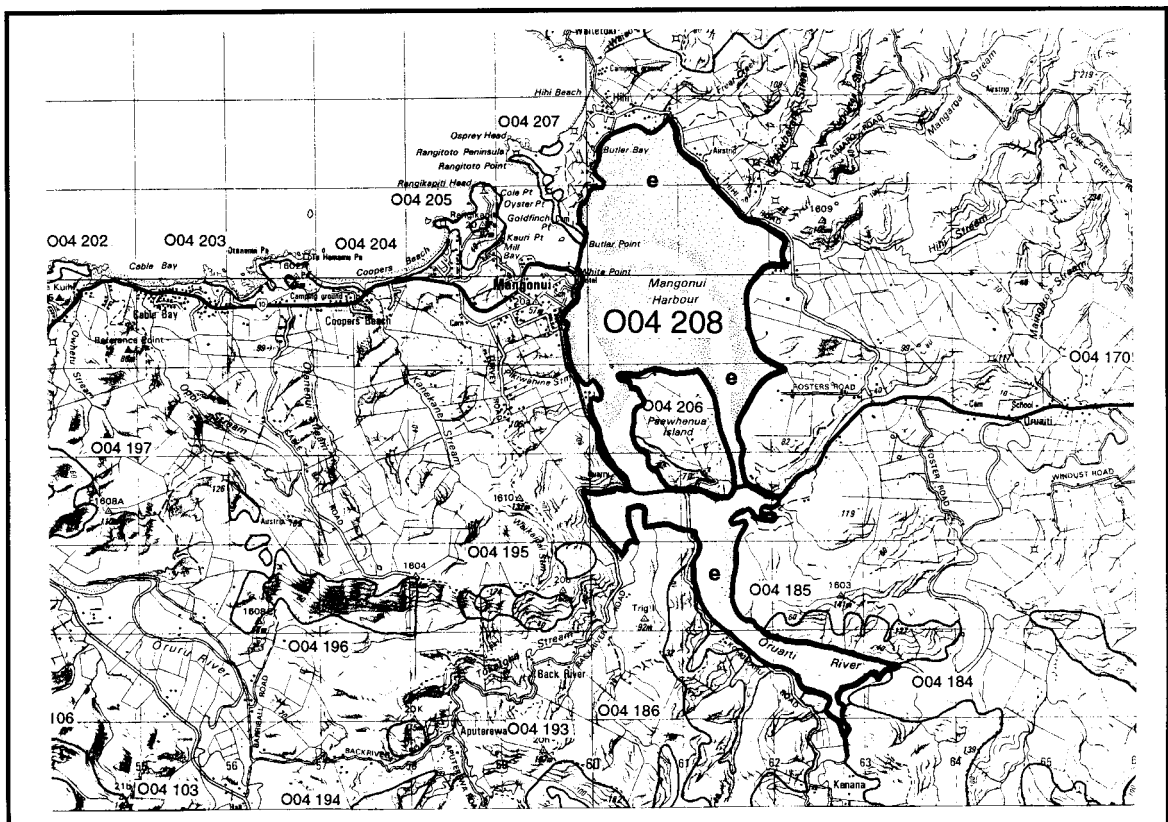


Figure 143. Mangonui Harbour, O04 208

Each grid is 1000 m x 1000 m and equals 100 ha. e = estuary.

reef heron (Category O threatened species), Caspian tern (Category O threatened species), spotless crane, banded rail, NI fernbird (all regionally significant species), bar-tailed godwit (migratory species).

Significance

Representative site for oioi saltmarsh and mangrove forest.

Important estuarine habitat, especially the Oruaiti River and important habitat for threatened and regionally significant estuarine birds.

TAIPA ESTUARY

Survey no. O04/209
 Survey date 9 September 1994
 Grid reference O04 535 88
 Area 142.3 ha
 Altitude sea level

Ecological unit

- (a) Tidal flats on estuary
- (b) Mangrove forest on estuary
- (c) Oioi saltmarsh

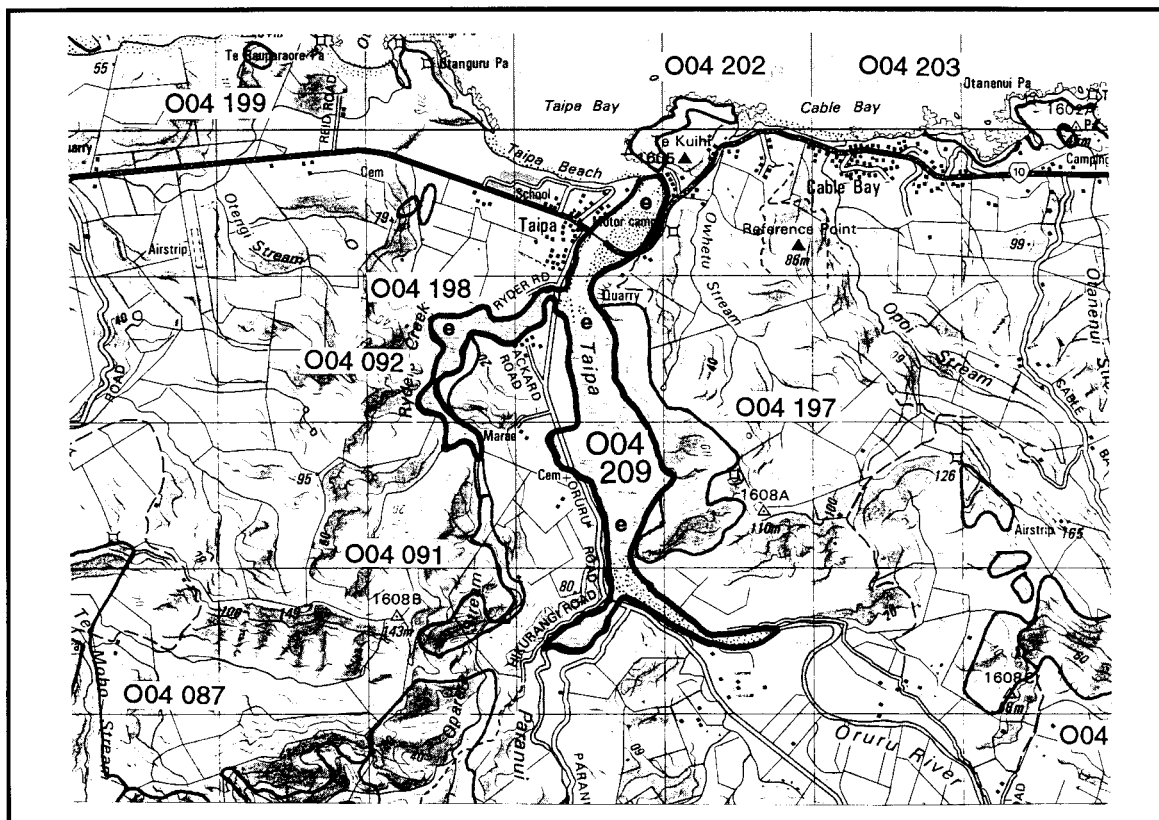


Figure 144. Taipa Estuary, O04 209
 Each grid is 1000 m x 1000 m and equals 100 ha. e = estuary.

Landform/geology

River mouth estuary with an entrance channel bounded by a rocky coast on the eastern shore, and a Holocene coastal foredune belt on the western side. Upstream the estuary is bounded by Mangakahia Complex and Motatau Complex sedimentary rock units, and Holocene alluvium and colluvium.

Vegetation

Mostly mangroves, about 25% being tidal flats, and a small area of oioi saltmarsh at the mouth of the Paranui Stream.

A small *Spartina* infestation also occurs in this vicinity.

Fauna

Reef heron (Category O threatened species), Caspian tern (Category O threatened species), banded rail, NI fernbird (both regionally significant species), especially around Paranui Stream mouth.

Significance

Representative site for oioi saltmarsh and mangrove forest.

The upper estuary in particular is relatively intact, as far as the mouth of the Paranui Stream, and supports a high bird diversity.

WHATAKAU WETLAND

Survey no.	O04/234
Survey date	June 1996
Grid reference	O04 610 760
Area	12 ha
Altitude	100 m asl

Ecological unit

- (a) Raupo reedland on alluvium
- (b) Kanuka shrubland on hillslope

Landform/geology

Holocene freshwater wetlands along stream valleys and hill country of Tangihua complex igneous rock units.

Vegetation

An extensive raupo reedland in a main gully with two arms extending into side gullies.

The surrounding land is mostly open farmland with some gum trees, and regenerating kanuka shrubland at the head of the valley.

Fauna

Spotless crane recorded 1978; banded rail noted nearby (both regionally significant species).

Significance

Representative example of raupo swamp, being larger than most of the raupo swamps in this Ecological District.

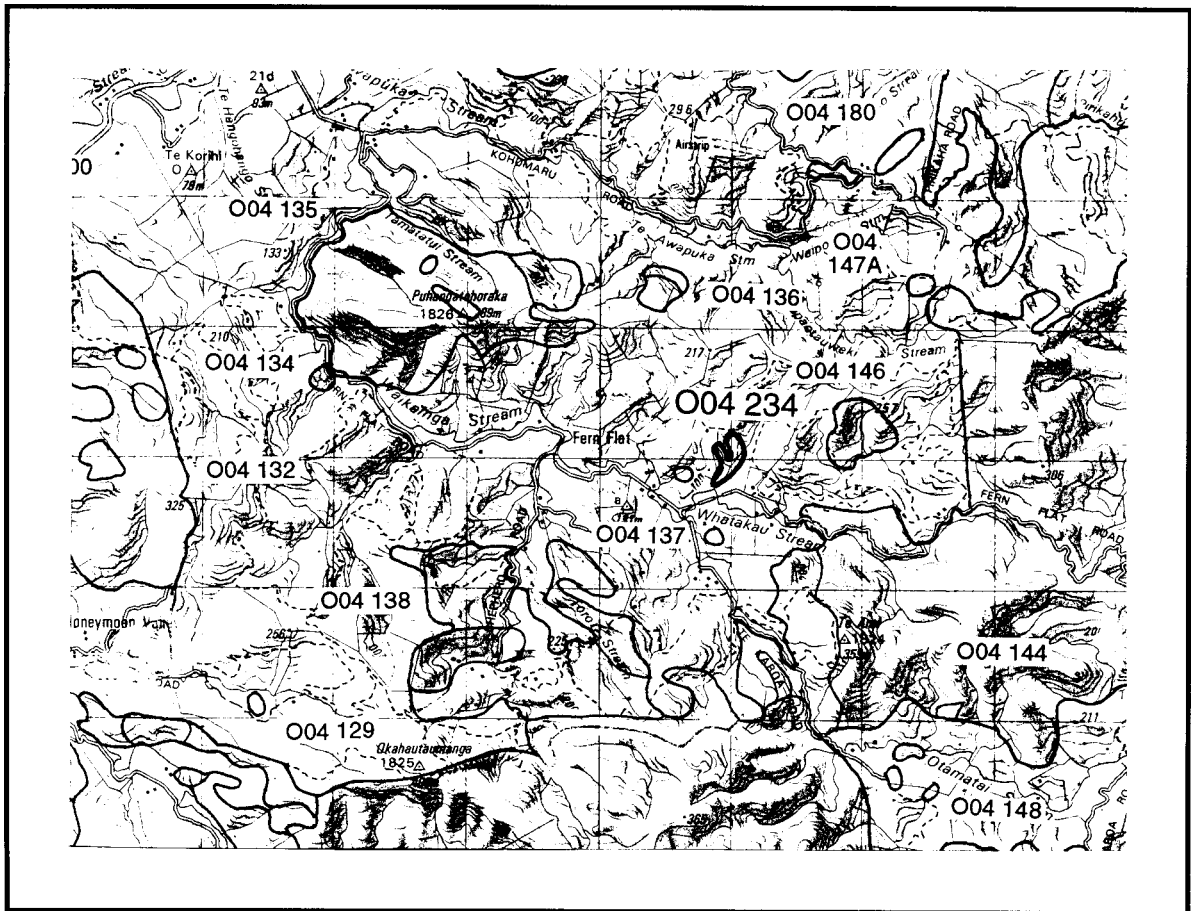


Figure 145. Whatakau Wetland, O04 234
 Each grid is 1000 m × 1000 m and equals 100 ha.
 f = forest; s = shrubland.



HAYES BROTHERS' FARM

Survey no.	P04/020
Survey date	22 March 1995
Grid reference	P04 740 770 (7 sites in vicinity)
Area	143 ha
Altitude	20-140 m asl

Ecological unit

- (a) Taraire forest on hillslope
- (b) Totara-kahikatea forest on hillslope
- (c) Kanuka forest on hillslope

Landform/geology

Hill country of Mangakahia Complex sandstone and siliceous mudstone lithofacies.

Vegetation

Type (a) Taraire forest. Five of the seven sites are primarily taraire-dominant broadleaf-podocarp forest. Although none of the sites are apparently fenced, all blocks have a relative diversity of canopy species, compared with other blocks in the District. Species common to all blocks include puriri, totara, kahikatea, rewarewa, towai, and nikau. Other common species are kohekohe, mamaku, kanuka and rimu.

The best example is at GR P04 735 760 (contiguous with pine forest). In addition to the species already mentioned, there is kauri, northern rata, tanekaha, pukatea, matai, tawa and karaka. At GR P04 734 775, titoki, narrow-leaf maire and toro also occur.

Type (b) Totara-kahikatea forest. Comprises one remnant, with occasional puriri.

Type (c) Kanuka forest. One of the sites has an area of secondary kanuka forest with kauri and rimu.

Fauna

NI brown kiwi (Category A threatened species) and NZ pigeon (Category B threatened species (reported from the area).

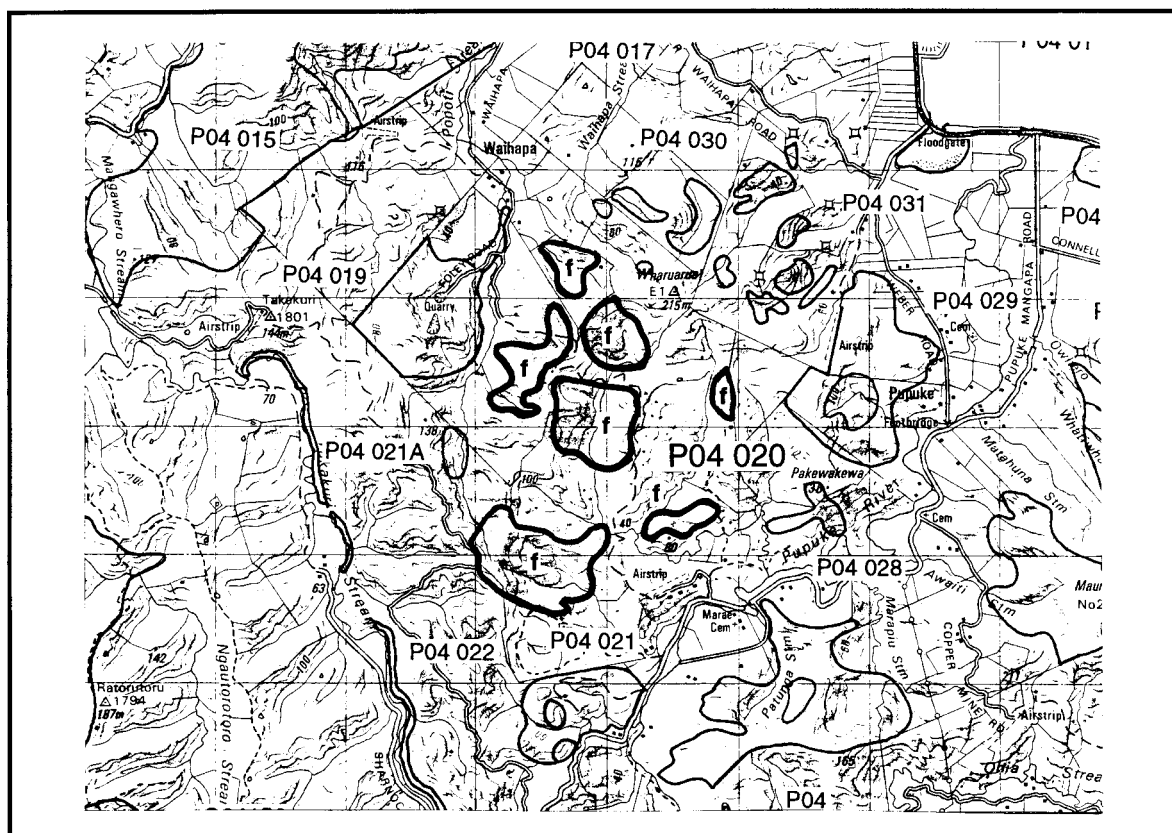


Figure 146. Hayes Brothers' Farm, P04 020
Each grid is 1000 m x 1000 m and equals 100 ha. f = forest.

Significance

Several large areas of native forest which still retain a high degree of canopy diversity and are habitat for threatened species.

It is a representative site and the largest site in the Ecological District of totara-kahikatea forest.

TAKAKURI STREAM

Survey no. P04/022
Survey date 14 December 1994
Grid reference P04 715 775
Area 35.3 ha
Altitude c. 30 m asl

Ecological unit

(a) Manuka-kanuka shrubland on alluvium

Landform/geology

Holocene alluvial flats in the Takakuri Stream valley

Vegetation

Riparian vegetation, manuka-kanuka 4 to 6 m tall with occasional cabbage tree, kahikatea, mahoe and karaka.

Fauna

Not surveyed.

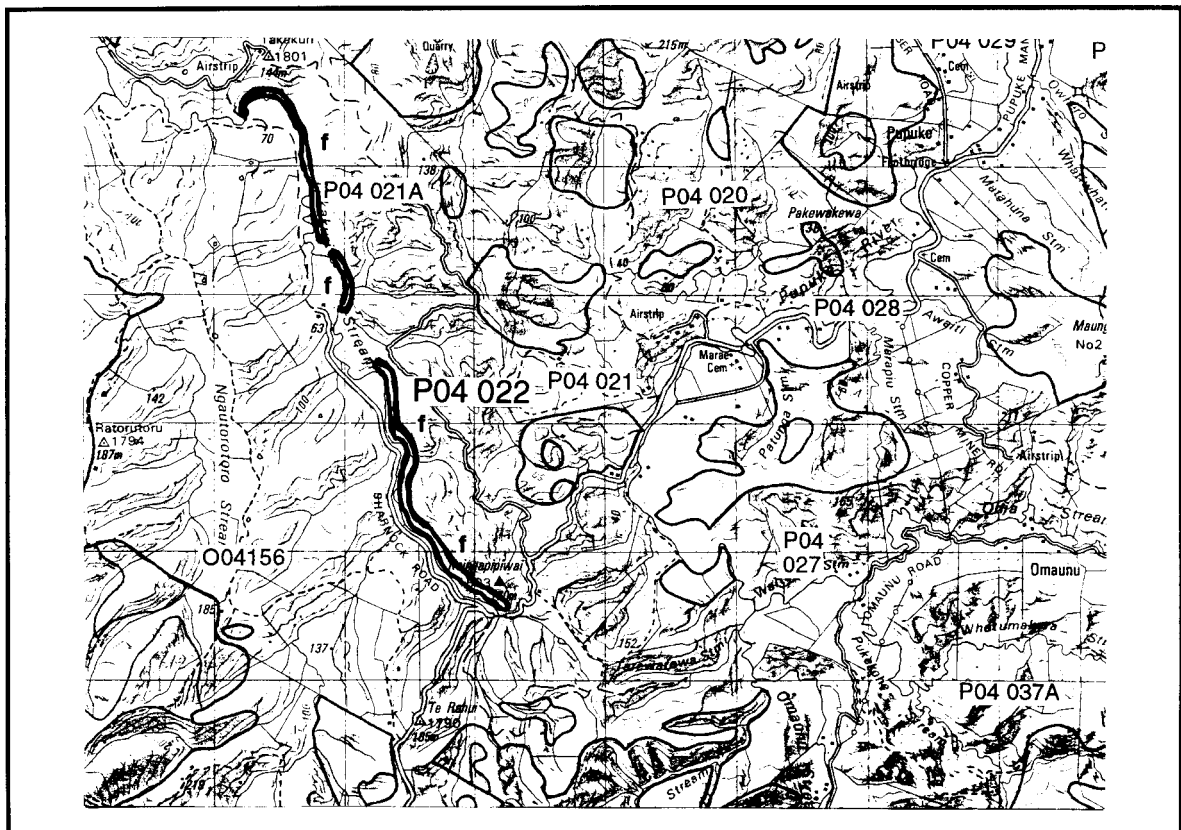


Figure 147. Takakuri Stream, P04 022

Each grid is 1000 m x 1000 m and equals 100 ha. f = forest.

Significance

Representative site of manuka-kanuka shrubland on alluvium, of which there are few examples in the Ecological District.

Also a riparian buffer to a tributary of the Wainui River, an important part of the Oruaiti River system.

WHAKATETEREKIA STREAM

Survey no.	P04/023
Survey date	14 December 1994
Grid reference	P04 715 710 (6 sites)
Area	16.4 ha
Altitude	30-60 m asl

Ecological unit

- (a) Secondary kahikatea forest on hillslope
- (b) Taraire forest on hillslope
- (c) Kanuka-kahikatea forest on hillslope
- (d) Totara-kahikatea forest on hillslope
- (e) Totara-taraire forest on hillslope
- (f) Secondary totara forest on hillslope

Landform/geology

Stream valley in Mangakahia Complex mudstone.

Vegetation

A series of secondary podocarp and broadleaf podocarp remnants.

Type (a) Secondary kahikatea forest. Comprises c. 20% of the eastern remnant, with occasional rewarewa, totara, puriri and pukatea.

Type (b) Taraire forest. Comprises c. 80% of the eastern remnant with frequent kahikatea and occasional rewarewa, nikau, pukatea and puriri.

Type (c) Kanuka-kahikatea forest. Found in the northern block by the road with occasional totara, tanekaha and taraire.

Type (d) Totara-kahikatea forest. Occurs at GR P04 713 707 with occasional pukatea, titoki, taraire and pukatea.

Type (e) Totara-taraire forest. Occurs in the western remnant with frequent kahikatea and occasional nikau.

Type (f) Secondary totara forest. Occurs in two remnants, GR P04 714 703 and P04 716 711. The former, the larger and most southerly, has occasional rimu, kahikatea, rewarewa and taraire. The other block has frequent taraire, kahikatea and kanuka and occasional tawa, rimu, nikau, puriri and northern rata.

Fauna

Not surveyed.

Significance

Riparian buffer and food source for the threatened NZ pigeon.

The eastern-most remnant at GR P04 724 713 is a representative site for kahikatea forest.

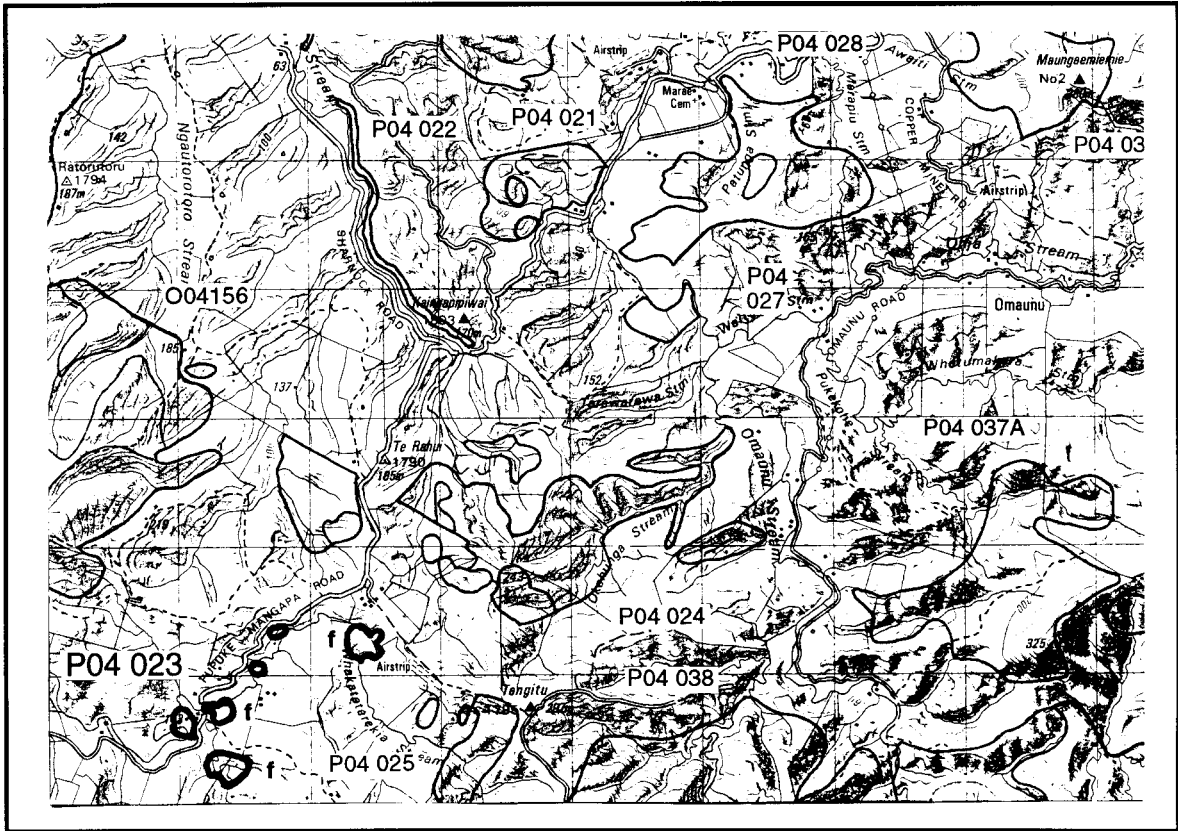
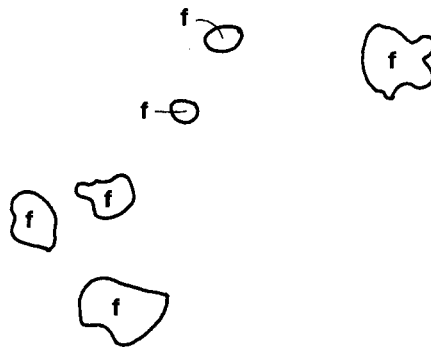


Figure 148. Whakaterekiā, P04 023

Each grid is 1000 m x 1000 m and equals 100 ha.

f = forest.



TE RAHUI

Survey no.	P04/024
Survey date	14 December 1994
Grid reference	P04 735 720
Area	142.2 ha
Altitude	80-240 m asl

Ecological unit

- (a) Manuka-kanuka shrubland on hillslope
- (b) Secondary kanuka forest on hillslope
- (c) Secondary kauri forest on hillslope
- (d) Secondary towai-kanuka forest on hillslope
- (e) Secondary totara-kahikatea forest on hillslope
- (f) Taraire forest on hillslope
- (g) Raupo reedland in valley bottom

Landform/geology

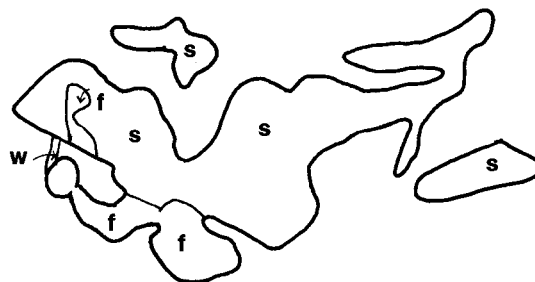
Hill country in Mangakahia Complex siliceous mudstone.



Figure 149. Te Rahui, P04 024

Each grid is 1000 m x 1000 m and equals 100 ha.

f = forest; s = shrubland; w = wetland.



Vegetation

Type (a) Manuka-kanuka shrubland. The majority of this site is manuka-kanuka shrubland with mamaku and towai.

Type (b) Kanuka forest. Lower vegetation grades into taller secondary forest with totara, rewarewa, tanekaha, rimu and kauri.

Type (c) Secondary kauri forest. There is a small area of kauri rickers with occasional rimu.

The more mature vegetation types include:

Type (d) Towai-kanuka forest.

Type (e) Totara-kahikatea forest.

Kanuka and tanekaha are frequent and northern rata, rimu and rewarewa are occasional.

Between trig point 243 and Tangitu, there is extensive kahikatea-totara treeland.

Type (f) Taraire forest. On the southern side of the trig point 243 there is taller broadleaf forest, taraire dominant with tawa, towai, kauri and kahikatea, and occasional northern rata, rewarewa, totara and puriri.

Type (g) Raupo reedland. Occurs in the gully below Te Rahui. It adjoins the forest, but is mostly bound by pasture.

Fauna

NI brown kiwi (Category A threatened species) and NZ pigeon (Category B threatened species).

Significance

A large mosaic of native vegetation linked through a pine plantation to Puketi Forest (Puketi Ecological District), providing extended habitat, including for threatened bird species, as well as riparian buffers.

Representative site for kahikatea-totara forest and secondary kauri forest.

PUPUKE-MANGAPA

Survey no.	P04/026
Survey date	14 December 1994
Grid reference	P04 720 724
Area	38.8 ha
Altitude	100-180 m asl

Ecological unit

(a) Manuka shrubland on moderate to steep hillslope

(b) Secondary kanuka forest on hillslope

Landform/geology

Hill country in Mangakahia Complex sandstone and siliceous mudstone

Vegetation

Mostly manuka shrubland between 2 and 4 m tall with occasional totara, tanekaha and rewarewa. There is also some lower manuka shrubland with scattered mamaku.

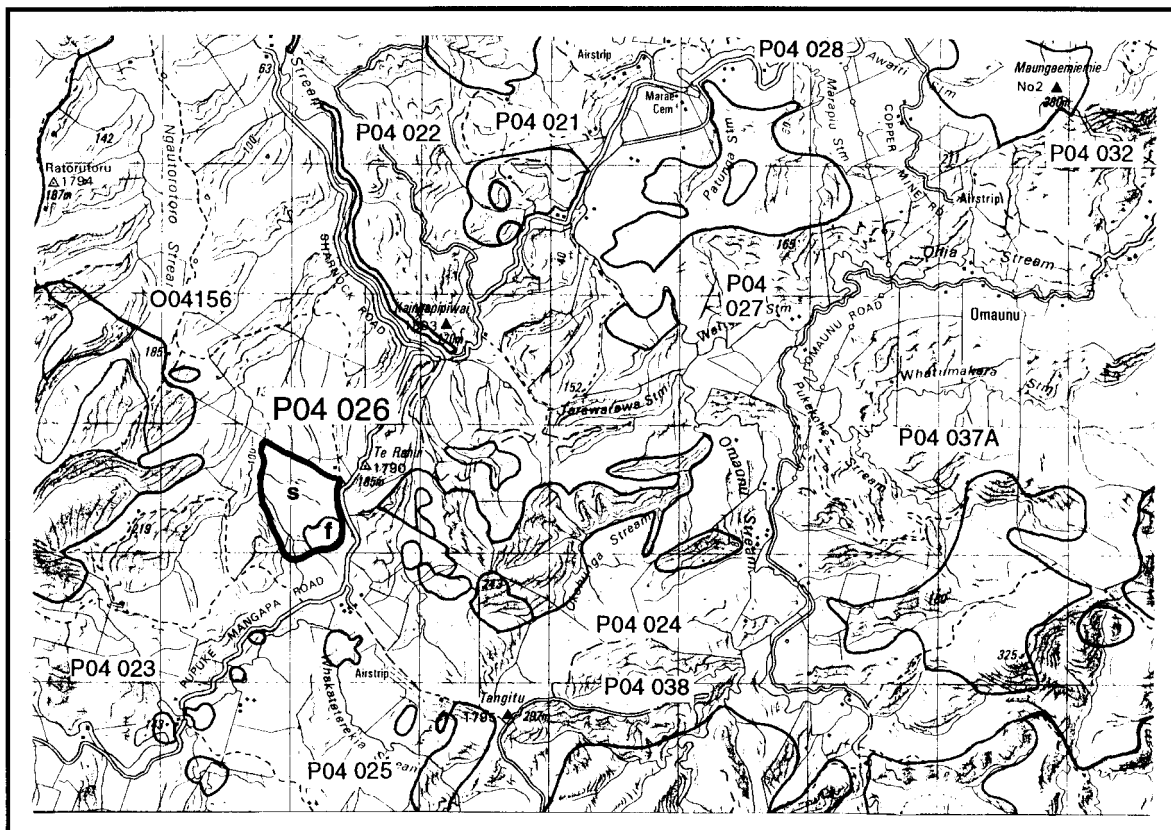


Figure 150. Pupuke-Mangapa, P04 026

Each grid is 1000 m x 1000 m and equals 100 ha. f = forest; s = shrubland.

On the southern side the vegetation is more advanced in succession. Kanuka is common with frequent tanekaha. Kauri, towai, rimu, kahikatea and mamaku are also present.

Fauna

NI brown kiwi (Category A threatened species).

Significance

Habitat for kiwi comprising good regeneration over a large area. It contains a small but good example of regenerating kanuka forest with podocarps emerging.

PAKEWAKEWA

Survey no.	P04/028
Survey date	13 January 1995
Grid reference	P04 755 764
Area	8.8 ha
Altitude	40-100 m asl

Ecological unit

(a) Puriri-kahikatea forest on hillslope

Landform/geology

Hill country of Mangakaha Complex sandstone.

Vegetation

A broadleaf-podocarp remnant, puriri-kahikatea-dominant with frequent taraire and kanuka and scattered totara, rimu, nikau, karaka and towai. It is adjacent to Hayes Brothers' Farm P04/020, Wharuarua P04/030 and Weber Rd P04/031 (the two latter in Whangaroa Ecological District).

Fauna

Not surveyed.

Significance

Representative site and the largest example of puriri-kahikatea forest in the Ecological District. It is close to Whangaroa Ecological District which contains only one example of this vegetation type.

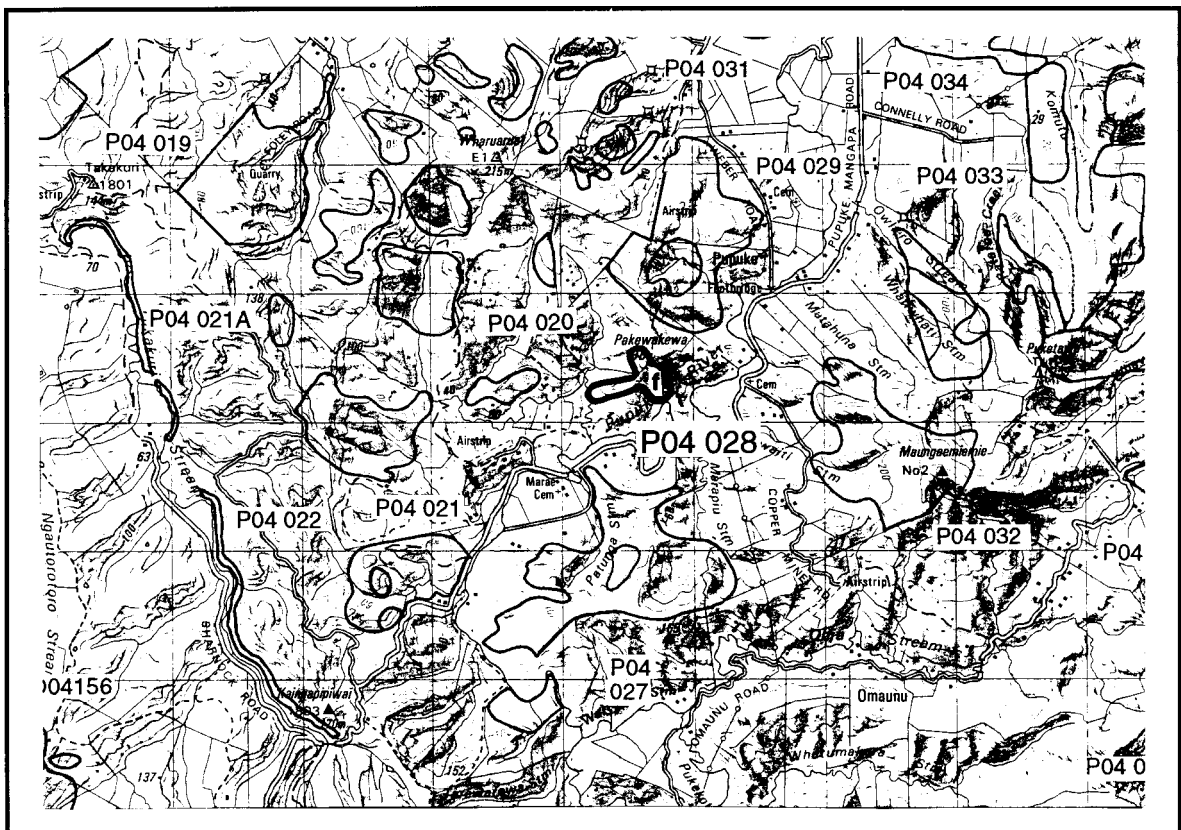


Figure 151. Pakewakewa, P04 028

Each grid is 1000 m x 1000 m and equals 100 ha. f = forest.

MAUNGAEMIEMIE

Survey no. P04/032
Survey date January 1995
Grid reference P04 775 757
Area 86.5 ha
Altitude 100-380 m asl

Ecological unit

(a) Taraire forest on hillslope

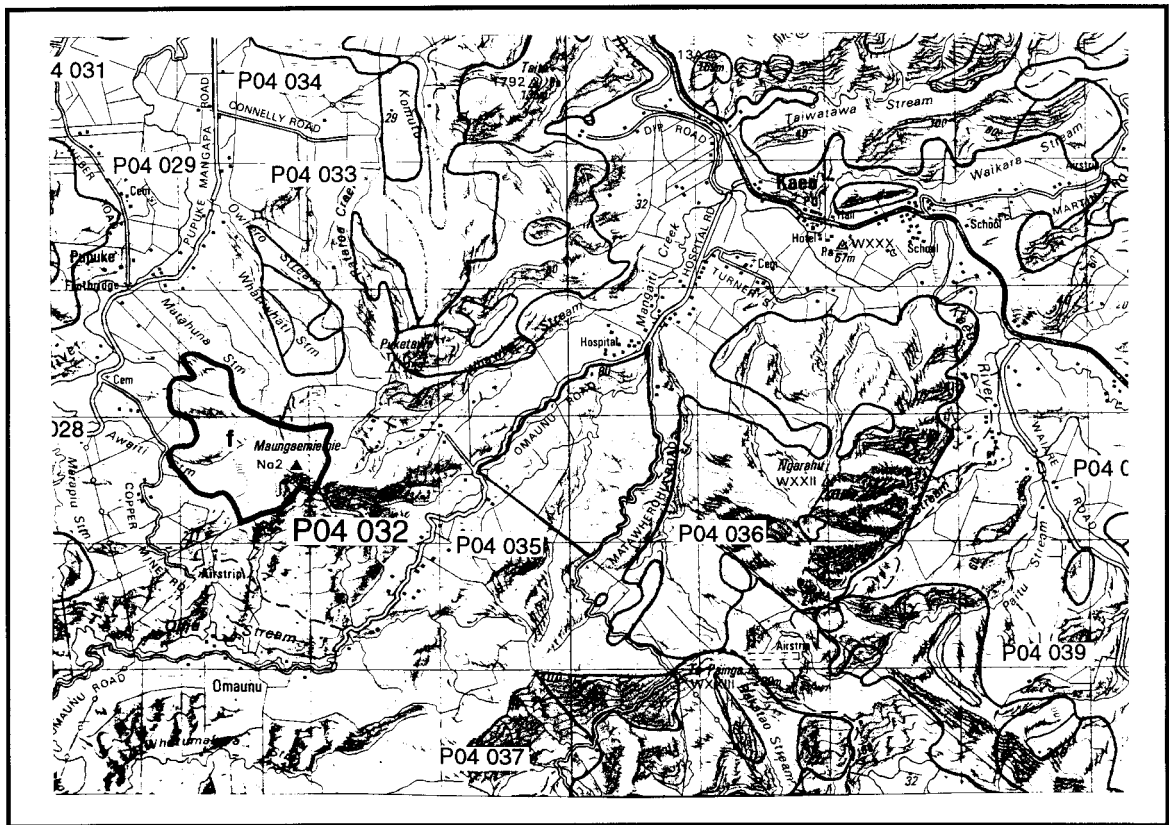


Figure 152. Maungaemimie, P04 032
 Each grid is 1000 m × 1000 m and equals 100 ha. f = forest.

Landform/geology

Hill of Tangihua Complex igneous rocks, capped by a Kerikeri volcanics basalt flow remnant, and with alluvial basalt blocks on flanks.

Vegetation

A large taraire-dominant broadleaf forest with frequent puriri.

Other canopy species include rimu, northern rata, tawa, totara, rewarewa, matai, kahikatea, kanuka, karaka, nikau and mamaku.

In the past, the summit in particular was badly browsed by goats. Goat control has been undertaken in the recent past.

Fauna

Not surveyed.

Significance

An unusual landform and a major local landscape feature, this is one of the largest areas of broadleaf forest in the Ecological District away from the main forest blocks and a representative site for taraire forest.

MATAWHEROHIA BUSH

Survey no.	P04/037
Survey date	2 February 1995
Grid reference	P04 805 730
Area	427.8 ha [c. 118 ha cleared since survey]
Altitude	60-400 m asl

Ecological unit

- (a) Towai-taraire forest on hillslope
- (b) Taraire-tawa forest on steep hillslope
- (c) Manuka-kanuka shrubland on hillslope
- (d) Secondary manuka-kanuka-towai forest on hillslope
- (e) Towai-mahoe shrubland on steep hillslope
- (f) Taraire forest on hillslope

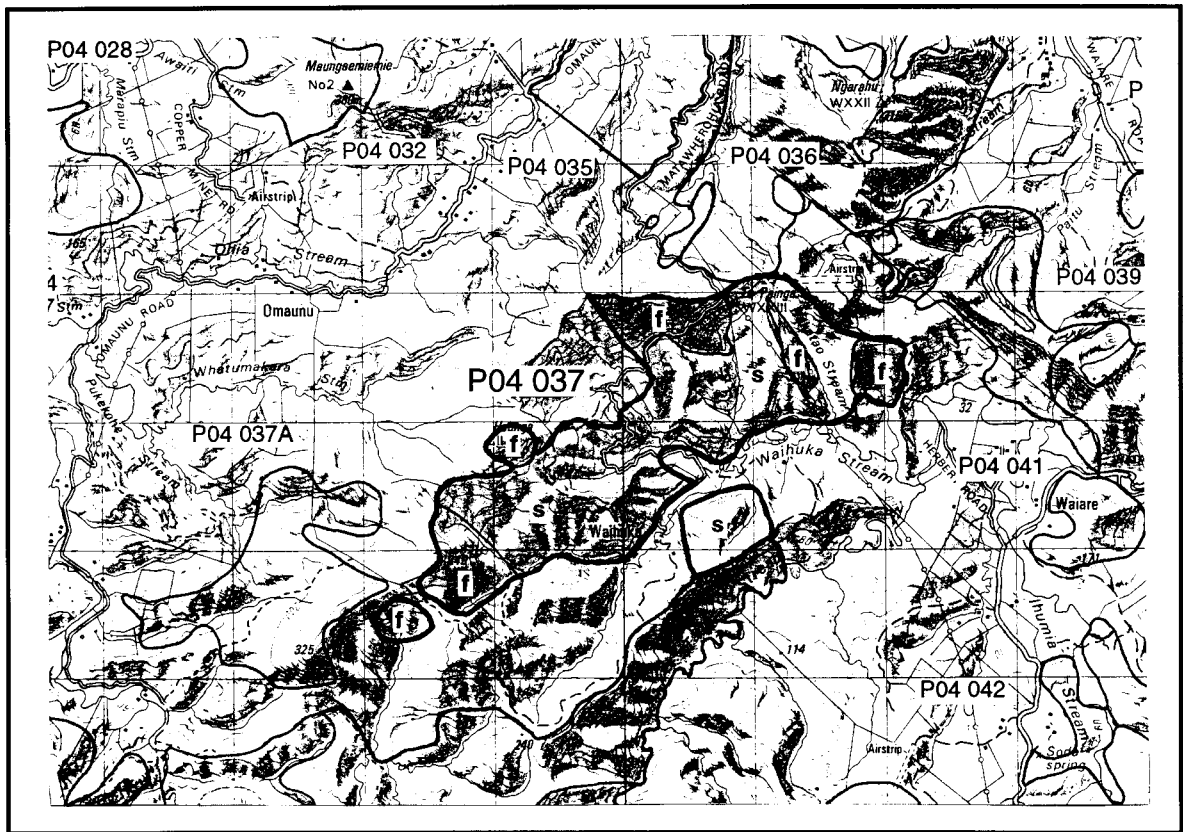
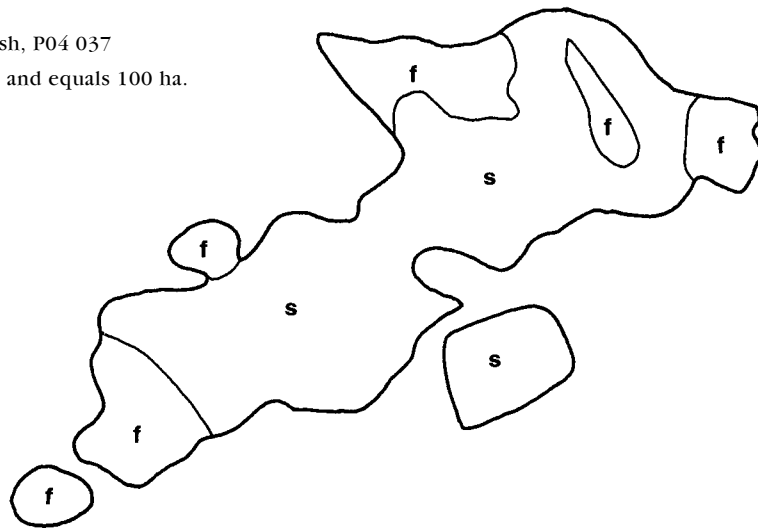


Figure 153. Matawherohia Bush, P04 037

Each grid is 1000 m x 1000 m and equals 100 ha.

f = forest; s = shrubland.



Landform/geology

Hill country with Tangihua Complex igneous rocks south west of Haunga and Te Painga, Mangakahia Complex sandstone in the Waihuka area and Wairakau volcanics breccia in the vicinity of Te Painga.

Vegetation

A mosaic of regenerating bush with several areas of mature forest which is predominantly Type (a).

Type (a) Towai-taraire forest. With puriri and a diversity of other species including tawa, miro, northern rata, karaka, kauri, kohekohe, pukatea, totara, kahikatea, and rewarewa. Occurs below trig point 349 and in the north-west of the site.

Type (b) Taraire-tawa forest. Occurs on the peak 'Haunga' with frequent puriri. Also present are rimu, towai, rewarewa and matai.

Type (c) Manuka-kanuka shrubland. About 3 or 4 m tall with towai, mamaku and occasional totara and puriri.

Type (d) Secondary towai-manuka-kanuka forest. With kahikatea, rewarewa, totara, nikau and mamaku scattered throughout.

Type (e) Towai-mahoe shrubland. An open canopy to 4 m with frequent mamaku, gorse, manuka and kanuka. Totara is occasional.

Type (f) Taraire forest. Found in gullies south of Te Painga with frequent puriri and occasional kahikatea, rimu, rewarewa, kauri and mamaku.

Fauna

NI brown kiwi (Category A threatened species), NZ pigeon (Category B threatened species), kauri snail (Category C threatened species).

Significance

A large contiguous habitat with linkages to Ngarahu P04/036 in Whangaroa Ecological District and to Puketi-Omahuta Forest P04/038 (Puketi Ecological District).

Habitat for kiwi and other threatened species.

Representative site for towai-taraire forest and secondary manuka-kanuka-towai forest and the only site in the Ecological District where taraire-tawa forest and towai-mahoe shrubland have been recorded.

OMAUNU

Survey no.	P04/037A
Survey date	31 January 1995
Grid reference	P04 773 717
Area	161.1 ha
Altitude	60-320 m asl

Ecological unit

- (a) Taraire forest on moderate to steep hillslope
- (b) Secondary totara-kanuka forest on hillslope
- (c) Secondary kahikatea forest on hillslope

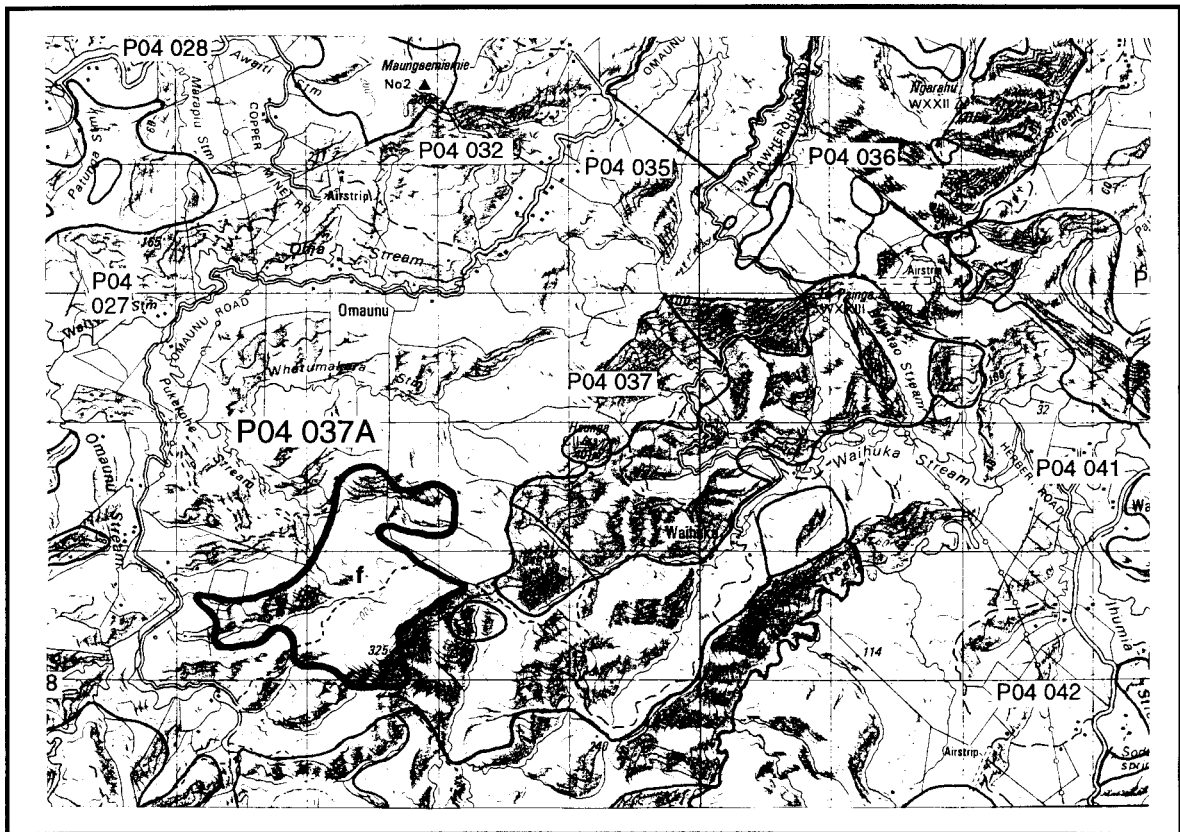


Figure 154. Omaunu, P04 037A

Each grid is 1000 m x 1000 m and equals 100 ha. f = forest.

Landform/geology

Hill country of Tangihua Complex igneous rocks with a small area of Mangakahia Complex sandstone in the stream valley on the western margin.

Vegetation

Type (a) Taraire forest. A large area of tall, taraire-dominant forest with a diversity of other canopy species including tawa, pukatea, rewarewa, totara, rimu, nikau, kauri, tanekaha, karaka, northern rata, towai, kohekohe and titoki.

Type (b) Secondary totara-kanuka forest. Occurs on the eastern side.

Type (c) Secondary kahikatea forest. Occurs in the upper Pukekohe Stream valley.

Fauna

NI tomtit (regionally significant species), NI brown kiwi (Category A threatened species) and NZ pigeon (Category B threatened species).

Significance

A large area with a diversity of canopy species providing good quality habitat for a range of fauna including threatened species.