

## GREENHILL ROAD PŪRIRI REMNANT

**Survey no.** P08/004  
**Survey date** 7 May 1999  
**Grid reference** 1697377E 6003788N (AY29)  
**Area** 6.6 ha  
**Altitude** 20-60 m a.s.l.

### **Ecological unit**

(a) Pūriri forest on gentle hillslope (90%)

### **Landform/geology**

Hillslopes of Motatau Complex muddy limestone.

### **Vegetation**

This site was mapped as being 8.9 ha in 1999. 2008 aerial photography shows a 2.3-ha reduction in area.

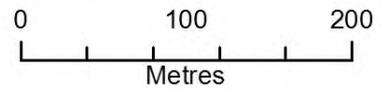
(a) The majority of this remnant (around 90%) is defined by pūriri. Karaka occurs frequently. A diverse range of species occur occasionally including, kauri, rimu, matai, tawa, titoki, taraire, rewarewa, tōtara, kahikatea, kohekohe, ti kōuka and nīkau.

### **Fauna**

None noted.

### **Significance**

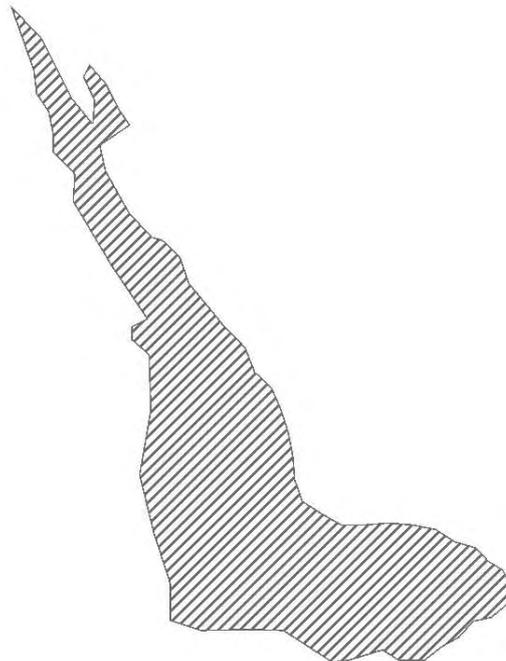
Representative lowland pūriri forest on limestone, which is rare in the Tokatoka Ecological District and throughout Northland generally. This site borders the completely modified Ruawai flats. Most other pūriri-dominated forest remnants in Northland occur on volcanic soils in the Whangarei and Kaikohe Ecological Districts. Pūriri provides an excellent seasonal food source for the regionally significant kūkupa. This site occurs within a 'Chronically Threatened' land environment (A6.1d) (Walker et al. 2007).



### P08/004 Greenhill Road Puriri Remnant

#### Habitat type

-  Forest
-  Shrubland
-  Wetland



## WHENUANUI SCENIC RESERVE

<b>Survey no.</b>	P08/008
<b>Survey date</b>	7 May 1999
<b>Grid reference</b>	1693808E 6007042N (AY29)
<b>Area</b>	40.6 ha, 2 remnants
<b>Altitude</b>	< 20–40 m a.s.l.

### Ecological unit

- (a) Taraire forest on gentle hillslope
- (b) Kauri forest on gentle hillslope
- (c) Kahikatea forest on gentle hillslope
- (d) Nikau forest on gentle hillslope
- (e) Pūriri forest on gentle hillslope
- (f) Kauri-rimu forest on gentle hillslope
- (g) Tōtara-kānuka/mānuka forest on gentle hillslope

### Landform/geology

Hillslope of Motatau Complex muddy limestone.

### Vegetation

The site is fenced and pampas was noted on the edges, as well as exotic trees including macrocarpa, pine and poplar.

(a) An area of abundant taraire occurs on the western side of the reserve (western side of Whenuanui Reserve Road) with frequent pūriri and occasional rewarewa, pukatea, nikau and ti kōuka.

(b) A small area of kauri occurs in this area with frequent rimu. Tōtara, kānuka/mānuka, macrocarpa, and pine are present on the edges.

(c) Kahikatea is common in a small area here. Pukatea, matai, nikau, tōtara, ti kōuka and kānuka/mānuka are also present.

(d) On the eastern side of Whenuanui Road, abundant nikau (comprising approximately 50% of the remnant) occurs along the southeast face. Pūriri is frequent (20%). A number of species are occasional, including pukatea, kahikatea (including one old-growth tree), kohekohe, tōtara, karaka, rewarewa, kōwhai, hangehange, puka and *Coprosma* species.

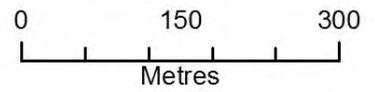
Type (a) taraire forest also occurs behind type (d) by the roadside. Rewarewa, pūriri, kahikatea, tōtara, kānuka/mānuka and nikau are occasional.

(e) North of this, pūriri occurs along with frequent kōwhai and tōtara. Pukatea, kahikatea, rewarewa, nikau, puka and kānuka/mānuka are also present.

Near this, type (b) kauri is common, along with the occasional rewarewa, rimu, tānekaha and tōtara.

Towards the western end of the reserve, a small area of kahikatea, type (c), occurs along with occasional matai, pūriri, rimu, tōtara and kānuka/mānuka.

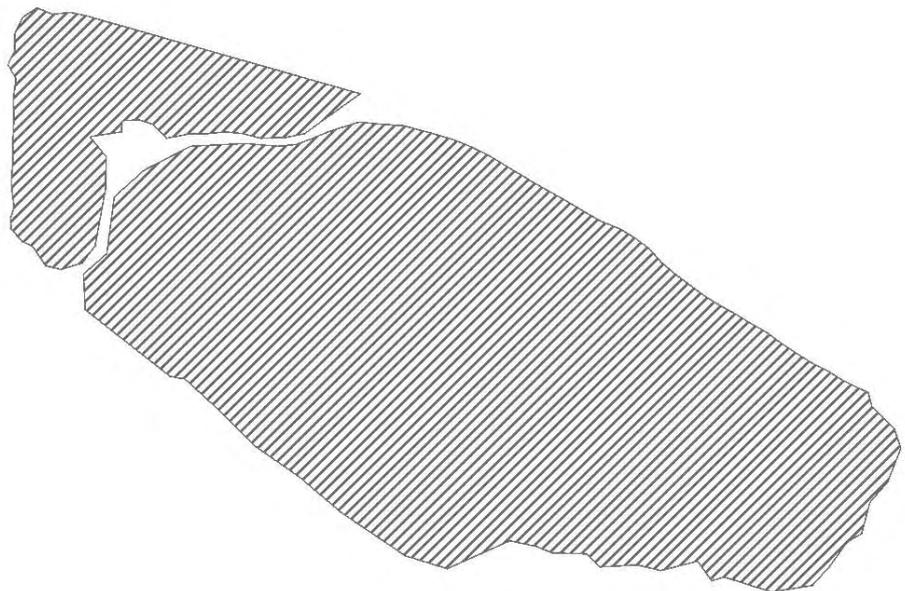
Beyond this, type (a) taraire is common along with a range of occasional species including, pūriri, pukatea, rewarewa, kahikatea, karaka, nikau, puka and kānuka/mānuka.



### P08/008 Whenuanui Scenic Reserve

#### Habitat type

-  Forest
-  Shrubland
-  Wetland



(f) Abundant kauri associated with rimu occurs in approximately 5% of the western end of the reserve. Tānekaha is present.

(g) Adjacent to this at the end of the reserve, tōtara is abundant and kānuka/mānuka is common. Pūriri occurs frequently and rimu, rewarewa, kōwhai, kahikatea, karaka and nikau are occasional.

### ***Significant flora***

#### **1995 records from SSBI P08/H031:**

At Risk: *Doodia mollis* (Naturally Uncommon), kawaka (Naturally Uncommon). Regionally significant: *Asplenium gracillimum* (AK 221747), kaikōmako, black maire, *Rubus schmidelioides* var. *schmidelioides* and kohia.

### **Fauna**

#### **Records from SSBI P08/H031:**

2007 record of kūkupa (regionally significant species), tūi, grey warbler, NI fantail, NI kingfisher, silvereye, kauri snail (Gradual Decline) (several live but many predated) and *Amborhytida dunni* (Gradual Decline) (live). A small skink, probably a copper skink, was also sighted during the 2007 survey.

### **Significance**

A highly significant, diverse lowland forested reserve bordering the completely modified Ruawai flats. Lowland forest is under-represented in the Tokatoka Ecological District and throughout Northland generally. This site also includes a dominant nīkau forest type which is also rare. The reserve supports Threatened, At Risk and several Regionally significant species. The Whenuanui Scenic Reserve is the largest protected remnant in the surrounding area. High utilisation by kūkupa (regionally significant species) was reported in a 1995 survey, with species such as taraire and pūriri providing a year-round food source. Only record of type (f) kauri-rimu forest and one record of type (d) dominant nīkau forest on hillslope in the District.

Representative site for type (b), (d) and (f) vegetation.

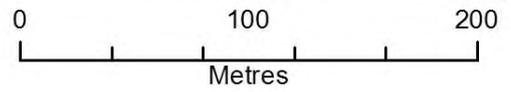
The Whenuanui Scenic Reserve is under the protection and administration of the Kaipara District Council. Approximately 6.2 ha of this site occurs within an 'acutely Threatened' land environment (A5.1b) and 34.4 ha within a 'Chronically Threatened' land environment (A6.1d) Walker et al. 2007).

## **LOWER BLONG REMNANT**

<b>Survey no.</b>	P08/012
<b>Survey date</b>	12 May 1999
<b>Grid reference</b>	1688259E 6007811N (AY29)
<b>Area</b>	6.1 ha
<b>Altitude</b>	< 20-< 40 m a.s.l.

### **Ecological unit**

- (a) Kānuka/mānuka forest on gentle hillslope (50%)
- (b) Kānuka/mānuka-rimu forest on gentle hillslope (< 10%)
- (c) Taraire forest on gentle hillslope (40%)



### P08/012 Lower Blong Remnant

#### Habitat type

-  Forest
-  Shrubland
-  Wetland



## **Landform/geology**

Hillslope of Waitakere Group andesite.

## **Vegetation**

(a) The western side of the remnant contains abundant tall kānuka/mānuka. Frequent pole rimu are dispersed throughout the remnant. Emergent kauri, pūriri, tōwai, rewarewa and kahikatea are occasional.

(b) Adjacent to this, abundant kānuka/mānuka with emergent rimu occurs. Emergent kauri and tōwai are also present.

(c) Taraire is common over the remaining area, with frequent pūriri and tōwai. Kahikatea, karaka, rewarewa, emergent kauri, puka, mamaku, and kānuka/mānuka occur occasionally.

## **Fauna**

None noted.

## **Significance**

Lowland regenerating forest within a very modified Ecological District. Lowland forest is an under-represented forest type within the Tokatoka Ecological District and throughout Northland generally. Close proximity to the Wairoa River in the west and adjacent to the very modified Ruawai flats in the south.

Representative site for type (a) kānuka/mānuka forest. This site occurs within an 'acutely Threatened' land environment (A5.1b) (Walker et al. 2007).

## **TOKATOKA SCENIC RESERVE AND SURROUNDS**

<b>Survey no.</b>	P08/014
<b>Survey date</b>	3 April 1998
<b>Grid reference</b>	1687665E 6009206N (AY29)
<b>Area</b>	40.3 ha, 2 remnants (15.6 ha forest, 24.7 ha shrubland)
<b>Altitude</b>	40-179 m a.s.l.

## **Ecological unit**

- (a) Kānuka/mānuka forest on gentle hillslope
- (b) Taraire forest on moderate hillslope
- (c) Māpou-rangiora shrubland on steep hillslope
- (d) Mānuka-māpou shrubland on steep hillslope

## **Landform/geology**

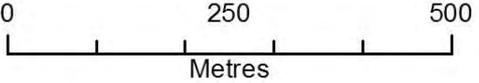
Neck of Waitakere Group andesite.

## **Vegetation**

There are many grassy patches within this site.

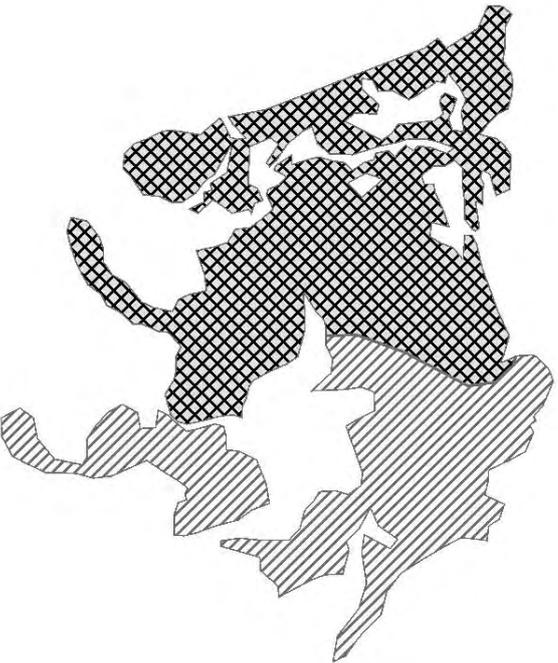


**P08/014 Tokatoka Scenic Reserve and Surrounds**



**Habitat type**

-  Forest
-  Shrubland
-  Wetland



(a) Abundant kānuka/mānuka is prominent in the south on the lower slopes of Tokatoka Peak. Pūriri, tōtara and houhere occur frequently. Occasional species include emergent kauri, kahikatea, rimu, karaka, rewarewa, mamaku, puka, tī kōuka and macrocarpa.

(b) Taraire is dominant in a band of forest north of this. A range of species are occasional including, karaka, emergent rimu and kauri, pūriri, rewarewa, puka, tī kōuka, mamaku, lancewood, emergent macrocarpa and emergent pine.

(c) Grading into the shrubland area on the steep western slopes, abundant māpou is associated with rangiora (2-3-m tall). Houhere, *Hebe* sp., harakeke and bracken are frequent. Tī kōuka and *Coprosma macrocarpa* are occasional.

(d) On the eastern side of this, the shrubland is co-dominant mānuka and māpou (1-2 m tall). Karaka, tānekaha, rangiora, tī kōuka, lancewood, heketara, harakeke, *Hebe* sp., *Coprosma macrocarpa*, bracken and pampas are also present.

### ***Significant flora***

*Helicbrysum lanceolatum*, *Luzula picta* var. *picta* and *Pbormium cookianum* (all regionally significant species) recorded in 1997 (Stanley 1997).

### **Fauna**

**1993 records from SSBI P08/H009:** Australasian harrier, morepork, grey warbler, NI fantail and spur-winged plover.

### **Significance**

Tokatoka peak is an outstanding volcanic landform forming a prominent landmark in the northern Wairoa landscape. The Tokatoka andesite plug (conical peak) is the largest and most exposed peak in the surrounding district and is a geological and landform site of national significance (Kenny & Hayward 1996).

This is a representative site for type (a) kānuka/mānuka forest, type (c) māpou-rangiora shrubland and type (d) mānuka-māpou shrubland with (c) and (d) unrecorded elsewhere in the Tokatoka Ecological District.

Approximately 10.8 ha of Scenic Reserve and an additional small area of public conservation land, 0.2 ha, is administered by DOC. Approximately 1.1 ha of this site occurs within an 'acutely Threatened' land environment (A5.1b), 11 ha within a 'Chronically Threatened' land environment (A6.1d), 24.6 ha within an 'At Risk' land environment (A6.1b) and 3.5 ha within a 'Critically Underprotected' land environment (A6.1c) (Walker et al. 2007).

## BERGHANS BUSH AND SURROUNDS

<b>Survey no.</b>	P08/015
<b>Survey date</b>	12 May 1999
<b>Grid reference</b>	1687549E 6010762N (AY29)
<b>Area</b>	72 ha, 3 remnants
<b>Altitude</b>	40-200 m a.s.l.

### Ecological unit

- (a) Kānuka/mānuka forest on moderate to steep hillslope
- (b) Taraire forest on moderate to steep hillslope
- (c) Kānuka/mānuka-kōwhai-pūriri forest on moderate hillslope
- (d) Nīkau-taraire forest on steep hillslope
- (e) Tī kōuka-kahikatea forest on alluvium
- (f) Kōwhai forest on toeslope

### Landform/geology

Hills of Mangakahia Complex mudstone and Motatau Complex muddy limestone, cut by Waitakere Group basaltic intrusives.

### Vegetation

(a) Kānuka/mānuka forest dominates the northern end of the main remnant (Berghans bush).

(b) Further south along the main east-lying hillslope, abundant taraire is the dominant vegetation type. Nīkau and pūriri are frequent within the canopy. A range of species are occasional including, kauri, rimu, kahikatea, rewarewa, pukatea, kohekohe, puka, tī kōuka, mamaku and kānuka/mānuka.

Towards the southern end of this hillslope, type (a) abundant kānuka/mānuka occurs. Rimu, kahikatea, kauri, tōtara, tī kōuka and nīkau are also present.

(c) In the southeast corner of the main bush remnant, kānuka/mānuka, kōwhai and pūriri are associated with frequent nīkau. Pukatea, karaka, rewarewa, tōtara, tī kōuka are occasional.

To the west along this south-lying face, type (a) abundant kānuka/mānuka is again apparent, with frequent mamaku. Kauri, tānekaha, tōtara and tī kōuka are occasional.

Taraire forest, type (b), occurs west of this, along with frequent nīkau (which occurs mainly in the gullies) and rewarewa. Pūriri, puka, pukatea, emergent kauri, tōtara, kohekohe, kahikatea, tī kōuka and mamaku are occasional.

(d) Further west, nīkau and taraire occur along with some kohekohe, pūriri, rewarewa, mamaku and tī kōuka.

At the western end of the main remnant, taraire forest type (b) occurs with frequent kohekohe. Rewarewa, pukatea, pūriri, tītoki, tī kōuka and nīkau are present in small amounts.

(e) A separate remnant of tī kōuka with emergent kahikatea occurs to the west of Berghans bush, alongside State Highway 12. Occasional species also present include rimu, mānuka, nīkau, divaricating shrubs and pampas (edges).

The remaining remnant southeast of Berghans bush is predominately type (b) abundant taraire. Other species present include kauri, rewarewa, pūriri, tōtara, tōwai, kōwhai, puka, tī kōuka and nīkau.

(f) On the toeslopes of this remnant, abundant kōwhai occurs along with frequent kānuka/mānuka. Karaka, kahikatea, pūriri and nīkau are also present.

## **Fauna**

### **Records from SSBI P08/H005:**

1992 record of NI brown kiwi (Nationally Vulnerable), 1989 record of kūkupa (regionally significant species) and common forest birds.

## **Significance**

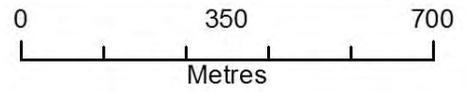
Berghans bush is a large area of diverse forest which is rare within the Tokatoka Ecological District. Kōwhai is a distinctive feature of the canopy. The tī kōuka and kahikatea alluvial remnant next to the Wairoa River is a rare forest type within this District and in Northland generally.

Previous records (1992) of the nationally threatened NI brown kiwi make this one of the few possible populations in the surrounding area. Follow-up survey is required.

Representative site for type (b) taraire forest, type (c) kānuka/mānuka-kōwhai-pūriri forest, type (d) nīkau-taraire forest, type (e) tī kōuka-kahikatea forest and type (f) kōwhai forest (elsewhere in the District, abundant kōwhai occurs on alluvium). Sole record of type (c) kōwhai-pūriri forest in this District. Contained within this site (Grid ref: 6010623N 1687186E (AY29)) is a nationally significant geological and landform area for:

- (i) High-temperature Tokatoka thermal metamorphism.
- (ii) Assimilation at a basalt-limestone contact.
- (iii) Presence of kilchoanite and rankinite, one of three identified localities. (Kenny & Hayward 1996)

Approximately 3.1 ha of this site occurs within an 'acutely Threatened' land environment (A5.1b), 7.6 ha within a 'Chronically Threatened' land environment (A6.1d), 33 ha within an 'At Risk' land environment (A6.1b), and 27.7 ha within a 'Critically Underprotected' land environment (A6.1c) (Walker et al. 2007).



### P08/015 Berghans Bush and Surrounds

#### Habitat type

-  Forest
-  Shrubland
-  Wetland



## DREADON ROAD BUSH

**Survey no.** P08/017  
**Survey date** 20 May 1999  
**Grid reference** 1693206E 6011566N (AY29)  
**Area** 8.7 ha, 2 remnants  
**Altitude** < 60-100 m a.s.l.

### **Ecological unit**

- (a) Pūriri forest on gentle hillslope
- (b) Pūriri-taraire forest on gentle hillslope

### **Landform/geology**

Gentle slopes of Motatau Complex muddy limestone.

### **Vegetation**

(a) Pūriri is abundant in the eastern remnant. Kōwhai and tōtara occur frequently. Taraire, kahikatea, kauri, tītoki, pukatea, tī kōuka and nīkau are occasional.

(b) The western remnant is mainly pūriri and taraire with frequent tōtara. Kahikatea, kauri, pukatea, tītoki, tī kōuka, nīkau and kānuka/mānuka are occasional.

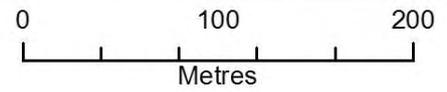
### **Fauna**

None noted.

### **Significance**

This site contains representative pūriri-dominant lowland forest types which are rare within the Tokatoka Ecological District and throughout Northland generally.

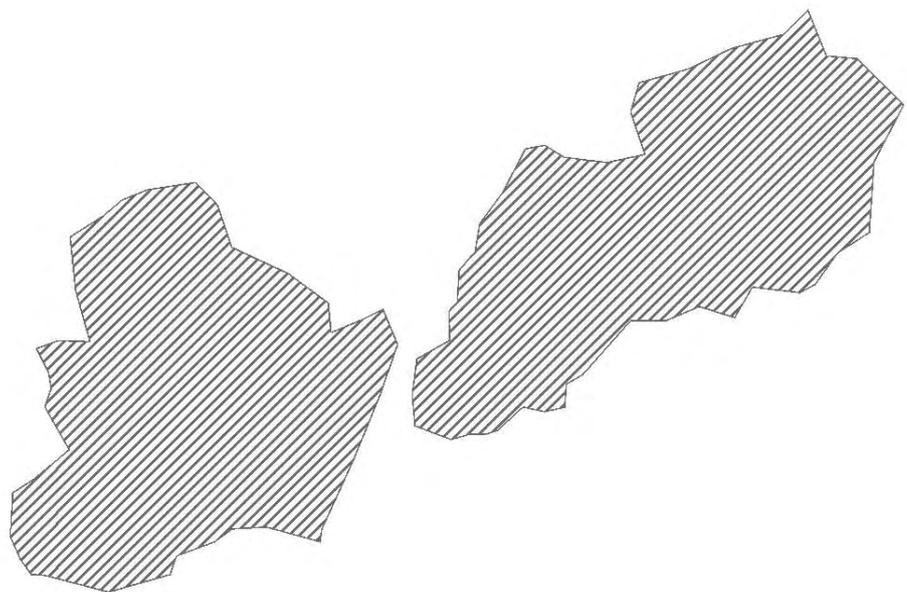
The western remnant (4.1 ha) is protected by a Queen Elizabeth II National Trust Open Space covenant. Approximately 8.5 ha of this site occurs within a 'Chronically Threatened' land environment (A6.1d) and 0.1 ha within an 'At Risk' land environment (A6.1b) (Walker et al. 2007).



### P08/017 Dreadon Road Bush

#### Habitat type

-  Forest
-  Shrubland
-  Wetland



## RINGROSE ROAD REMNANTS

<b>Survey no.</b>	P08/018
<b>Survey date</b>	20 May 1999
<b>Grid reference</b>	1695704E 6011777E (AY29)
<b>Area</b>	29.7 ha, 3 remnants
<b>Altitude</b>	< 20–40 m a.s.l.

### **Ecological unit**

- (a) Kōwhai-tōtara forest on alluvium
- (b) Kōwhai forest on alluvium
- (c) Kahikatea-tōtara forest on gentle hillslope
- (d) Kahikatea-kānuka/mānuka forest on alluvium
- (e) Kānuka/mānuka-rimu forest on gentle hillslope
- (f) Kānuka/mānuka forest on gentle hillslope
- (g) Kōwhai-tōtara forest on alluvium
- (h) Kānuka/mānuka-tōtara forest on gentle hillslope
- (i) Kahikatea forest on alluvium
- (j) Tōtara forest on alluvium

### **Landform/geology**

Floodplain of Holocene alluvium and hillslopes of Mangakahia Complex mudstone.

### **Vegetation**

Abundant kōwhai is a prominent feature of the northern riparian remnant.

(a) Kōwhai is associated with tōtara and occasional kahikatea, tītoki, tī kōuka and kānuka/mānuka (about 40% of the northern remnant).

(b) Frequent tōtara, tītoki and kahikatea occur within a kōwhai-dominant canopy. Mataī, tī kōuka and kānuka/mānuka are present (about 40% of this northern remnant).

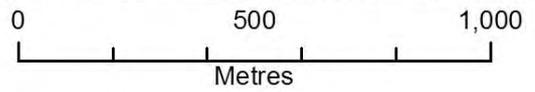
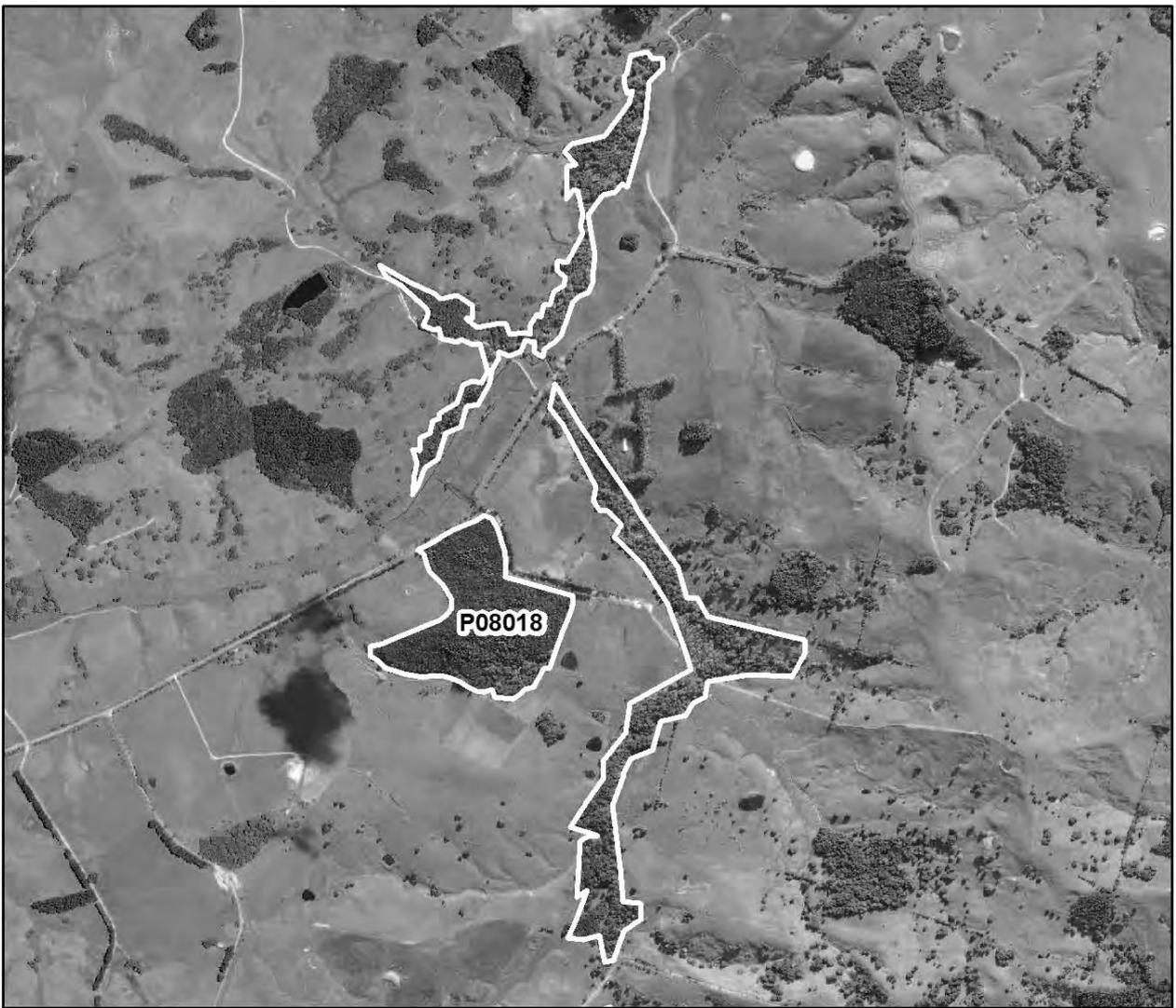
(c) A small area of kahikatea and tōtara occurs west of this with frequent kauri and occasional kānuka/mānuka.

(d) On the narrow southwest strip of this remnant, kahikatea and kānuka/mānuka are common, and there are frequent tōtara. Rimu, emergent kauri, tītoki, and tī kōuka are occasional.

Two vegetation types were identified in the hillslope remnant south of this:

(e) approximately 70% of this remnant is kānuka/mānuka-dominant with common emergent pole rimu. Kauri, tānekaha, kahikatea and tōtara are occasional.

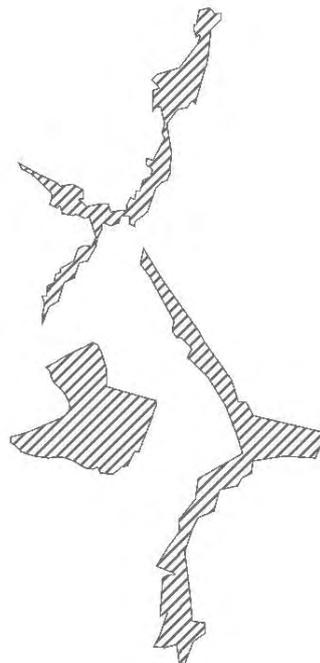
(f) Abundant kānuka/mānuka occurs over the remaining area, along with frequent tānekaha in some areas and also occasional kauri and tī kōuka.



### P08/018 Ringrose Road Remnants

#### Habitat type

-  Forest
-  Shrubland
-  Wetland



Five vegetation types were identified in the remaining southeastern remnant:

(g) a small area of co-dominant kōwhai and tōtara occurs with occasional kahikatea, tītoki and tī kōuka in north.

Along from this, type (b) abundant kōwhai occurs with occasional kahikatea, tī kōuka and tōtara (about 10% of this remnant).

(h) A small hillslope of abundant kānuka/mānuka with common tōtara extends to the east (about 25% of this remnant). Occasional kahikatea and kauri are also present.

(i) Just south of this, back on the river, a small stand of kahikatea (2-3% of this remnant) occurs, along with some kānuka/mānuka and tōtara.

(j) The rest of the riparian strip is dominant tōtara with frequent kahikatea, kōwhai and kānuka/mānuka (about 35% of this remnant). Tītoki, mataī and tī kōuka are occasional.

### **Fauna**

None noted.

### **Significance**

Forest on alluvium is an under-represented habitat type in the Tokatoka Ecological District and throughout Northland generally.

Representative site for type (a) kōwhai-tōtara forest and type (e) kānuka/mānuka-rimu forest, with type (d) kahikatea-kānuka/mānuka forest unrecorded elsewhere in this District. Approximately 3.7 ha of this site occurs within an 'Acutely Threatened' land environment (A5.1b); 19 ha within a 'Chronically Threatened' land environment (A6.1d and G3.1b) and 7 ha within a 'Critically Underprotected' land environment (A6.1a and A6.1c) (Walker et al. 2007).

## **BENTLEY ROAD BUSH**

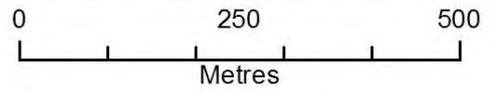
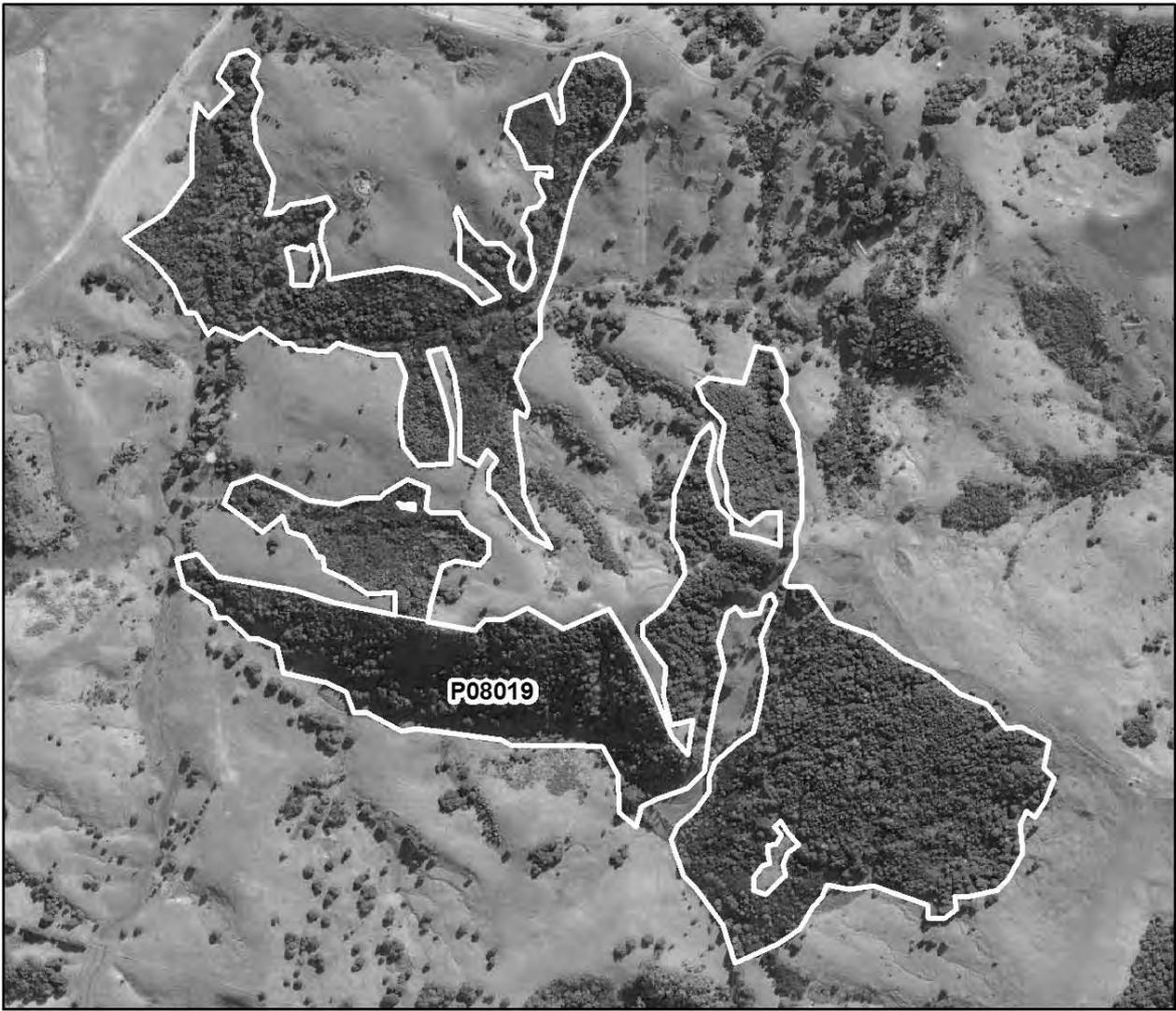
<b>Survey no.</b>	P08/019
<b>Survey date</b>	19 May 1999
<b>Grid reference</b>	1696189E 6010170N (AY29)
<b>Area</b>	37.3 ha, 2 remnants (34.7 ha forest, 2.6 ha shrubland)
<b>Altitude</b>	20-100 m a.s.l.

### **Ecological unit**

- (a) Kānuka/mānuka-tōtara forest on alluvium
- (b) Kānuka/mānuka-tōtara forest on gentle hillslope
- (c) Kānuka/mānuka shrubland on gentle hillslope
- (d) Tōtara forest on gentle hillslope
- (e) Taraire forest on moderate hillslope
- (f) Kahikatea-tōtara forest on moderate hillslope

### **Landform/geology**

Floodplain of Holocene alluvium, and hillslopes of Mangakahia Complex sandstone and mudstone.



### P08/019 Bentley Road Bush

#### Habitat type

-  Forest
-  Shrubland
-  Wetland



## Vegetation

(a) Adjacent to the bridge on Bentley Road in the northern remnant, kānuka/mānuka and tōtara are common, and kōwhai frequent over about 50% of this remnant. Emergent kahikatea and some tī kōuka are also present.

(b) To the south, kānuka/mānuka and tōtara are associated with occasional emergent kauri, kahikatea and tānekaha.

(c) Abundant kānuka/mānuka occurs in the shrubland area of the southern remnant south of this, along with occasional tōtara.

(d) Adjacent to this, abundant tōtara occurs in the forested area with frequent kānuka/mānuka. Kauri, tānekaha, pūriri, rimu, mamaku and tī kōuka are occasional.

(e) Abundant taraire occurs in the southeast with occasional kauri, kahikatea, rewarewa, pūriri, pukatea and nīkau.

(f) An area of co-dominant kahikatea and tōtara also occurs here with some rimu, rewarewa, pūriri, and tī kōuka.

## Fauna

None noted.

## Significance

This site contains forest on alluvium which is an under-represented habitat type within the Tokatoka Ecological District and throughout Northland generally. It provides important stepping stone habitat within a very modified Ecological District.

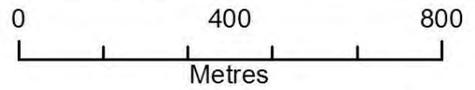
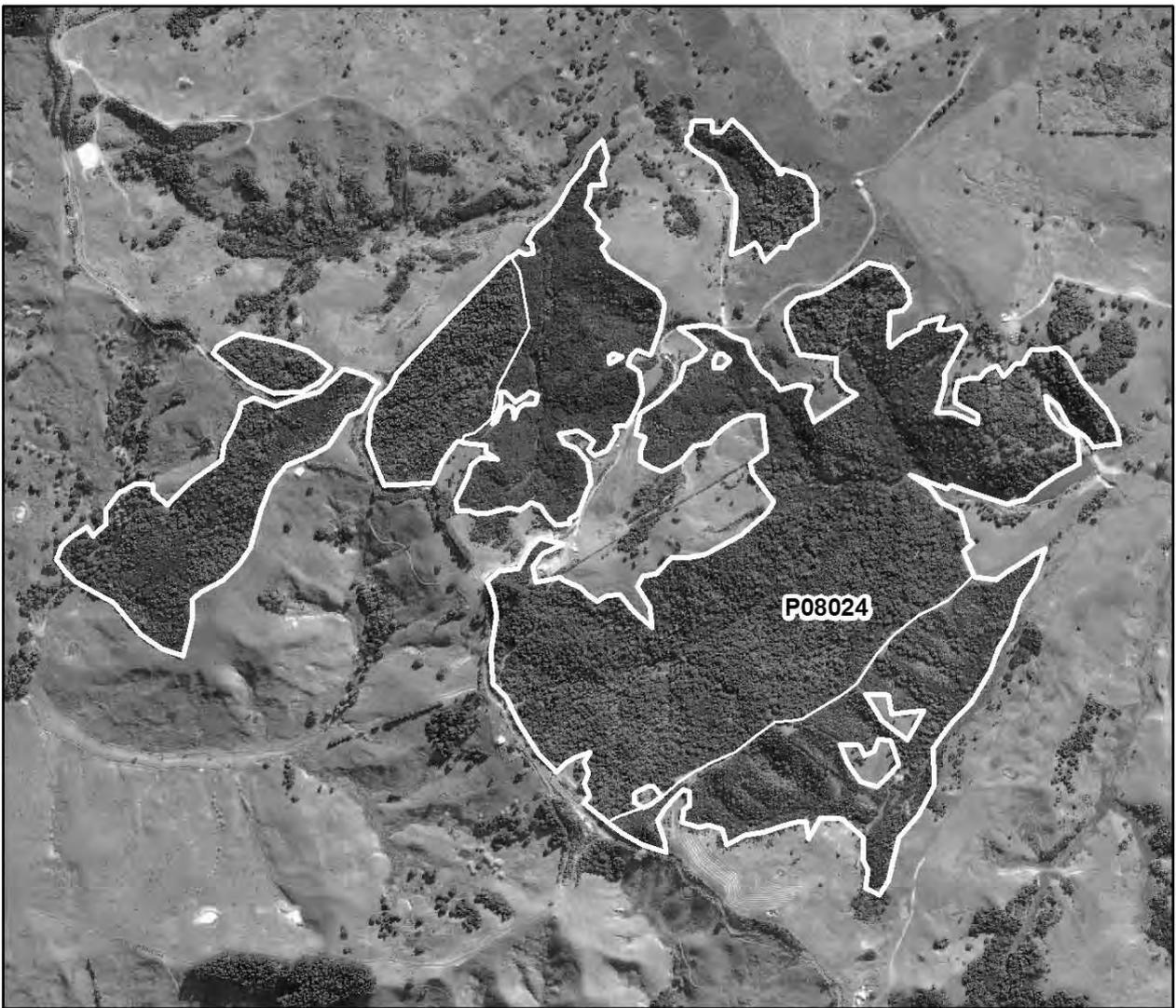
The site occurs within a 'Critically Underprotected' land environments (A6.1a and A6.1c) (Walker et al. 2007).

## LUSK ROAD BUSH

<b>Survey no.</b>	P08/024
<b>Survey date</b>	23 June 1998
<b>Grid reference</b>	1699662E 6012828N (AY29)
<b>Area</b>	118.3 ha, 5 remnants (86.2 ha forest, 32.1 ha shrubland)
<b>Altitude</b>	40-100 m a.s.l.

## Ecological unit

- (a) Tōtara forest on gentle hillslope
- (b) Kānuka/mānuka forest on gentle hillslope
- (c) Kauri forest on ridge and hillslope
- (d) Kānuka/mānuka shrubland on gentle hillslope
- (e) Taraire forest on gentle hillslope
- (f) Tōtara shrubland on moderate hillslope
- (g) Kānuka/mānuka-tōtara shrubland on moderate hillslope



### P08/024 Lusk Road Bush

#### Habitat type

-  Forest
-  Shrubland
-  Wetland



## **Landform/geology**

Hillslope of Mangakahia Complex mudstone.

## **Vegetation**

In 1999, a shrubland remnant of around 15 ha was described on the western side of Lusk Road. This remnant does not exist in 2008 aerial photography and so it has been removed from this site.

The view of this site, especially of the largest remnant on the eastern side of Lusk Road, was very limited. The small northern forest remnant was unsurveyed.

(a) In the forested remnant on the western side of Lusk Road, tōtara is common in the southern end, while kāmuka/mānuka occurs frequently. Emergent kauri, tānekaha, pūriri and tōwai are occasional.

(b) Closer to Lusk Road, kāmuka/mānuka is abundant with emergent rimu occurring frequently. Emergent kauri and some tōtara are also present.

(c) An area of kauri also occurs here. Tōtara and kāmuka/mānuka are frequent and rimu and tānekaha are occasional.

In 1999, an area of kāmuka/mānuka shrubland was recorded in a separate remnant just south of this. However, this remnant does not exist in the 2008 aerial photography.

On the eastern side of the road, type (c) kauri occurs in the forested part of the remnant. Rimu, tānekaha and kāmuka/mānuka are frequent and tōtara occurs mainly on the edges.

(d) Kāmuka/mānuka occurs in the shrubland area adjoining this, along with occasional tī kōuka, tōtara and tānekaha.

In the main remnant south of this, type (a) common tōtara occurs adjacent to Lusk Road. Kahikatea and kāmuka/mānuka are frequent, and pūriri, emergent kauri and rewarewa, rimu, tānekaha, tī kōuka and pine are present in smaller amounts.

(e) Northeast of this, abundant taraire occurs with occasional tānekaha, kahikatea, rewarewa, rimu and nīkau.

The shrubland area adjoining this area has been cut over.

Type (d), kāmuka/mānuka occurs by the roadside, along with frequent tōtara. Mamaku and tī kōuka occur occasionally.

(f) Patches of tōtara shrubland occur. Kāmuka/mānuka is frequent and kahikatea, tānekaha and mamaku are occasional.

(g) Kāmuka/mānuka and tōtara also occur in patches, with some rimu and mamaku.

## **Fauna**

### **Records from SSBI P08/H025:**

1992 record of kūkupa (regionally significant species), morepork, NZ kingfisher, grey warbler, NI fantail, silvereye and tūī. A freshly dead kauri snail (Gradual Decline) was found in 1999, Kōura (Gradual Decline) were recorded in 1992 and a *Peripatus* sp. (regionally significant species) was recorded in 1992.

## **Significance**

Habitat that has supported Threatened and Regionally significant species and also provides important stepping stone habitat within a very modified Ecological District.

Representative site for kauri forest, type (c). Approximately 0.8 ha of this site occurs within a 'Chronically Threatened' land environment (G3.1b) and 117.4 ha within an 'At Risk' land environment (A6.1b) (Walker et al. 2007).

## **MITITAI/OKAHU STREAM REMNANTS**

<b>Survey no.</b>	P08/025
<b>Survey date</b>	20 May 1999
<b>Grid reference</b>	1696036E 6014844N (AY29)
<b>Area</b>	16 ha, 2 remnants
<b>Altitude</b>	< 20-60 m a.s.l.

## **Ecological unit**

- (a) Tōtara forest on gentle hillslope
- (b) Tī kōuka forest on alluvium

## **Landform/geology**

Floodplain of Holocene alluvium, and hillslope of Mangakahia Complex sandstone and mudstone.

## **Vegetation**

(a) In the northern remnant, the hillslope forest next to Tokatoka Road contains abundant tōtara. Emergent kauri, kahikatea, tānekaha, mataī, tī kōuka and kānuka/mānuka occur occasionally.

(b) The swamp forest on the western end of this remnant is common tī kōuka in an open canopy. Kōwhai, mānatu, kahikatea and divaricating shrubs are also present.

The small southeastern remnant was not described.

## ***Significant flora***

Mānatu (regionally significant species) recorded during this survey.

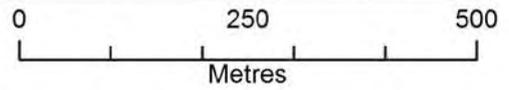
## **Fauna**

None noted.

## **Significance**

Swamp forest is a rare habitat type within the Tokatoka Ecological District and throughout Northland generally, with type (b) tī kōuka forest on alluvium particularly rare. This ecological unit is therefore representative.

Approximately 7.1 ha of this site occurs within a 'Chronically Threatened' land environment (G3.1b) and 8.9 ha within an 'At Risk' land environment (A6.1b) (Walker et al. 2007).



### P08/025 Mititai/Okahu Stream Remnants

#### Habitat type

-  Forest
-  Shrubland
-  Wetland

