

Queen Elizabeth II National Trust Open Space covenants, totalling 14 ha occur within the southern remnant. Approximately 0.9 ha of this site occurs within an 'At Risk' land environment (A6.1b) and 25.2 ha within a 'Critically Underprotected' land environment (Walker et al. 2007).

HOANGA ROAD SHRUBLAND AND FOREST

Survey no.	P07/101
Survey date	13 October 1999
Grid reference	1684787E 6025092N (AX29)
Area	291.5 ha, 4 remnants (12.1 ha forest, 279.4 ha shrubland)
Altitude	< 20-100 m a.s.l.

Ecological unit

- (a) Tī kōuka forest on alluvium
- (b) Kahikatea forest on alluvium
- (c) Kānuka/mānuka shrubland on gentle to steep hillslope
- (d) Kānuka/mānuka-tōtara shrubland on moderate hillslope
- (e) Kānuka/mānuka-tōtara-tree fern shrubland on moderate hillslope
- (f) Kauri-rimu-tānekaha forest on steep hillslope
- (g) Taraire forest on moderate hillslope
- (h) Tōtara shrubland on moderate hillslope
- (i) Tōtara-kānuka/mānuka shrubland on gentle to moderate hillslope

Landform/geology

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

Vegetation

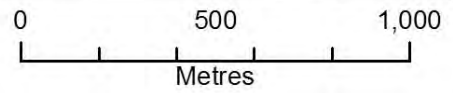
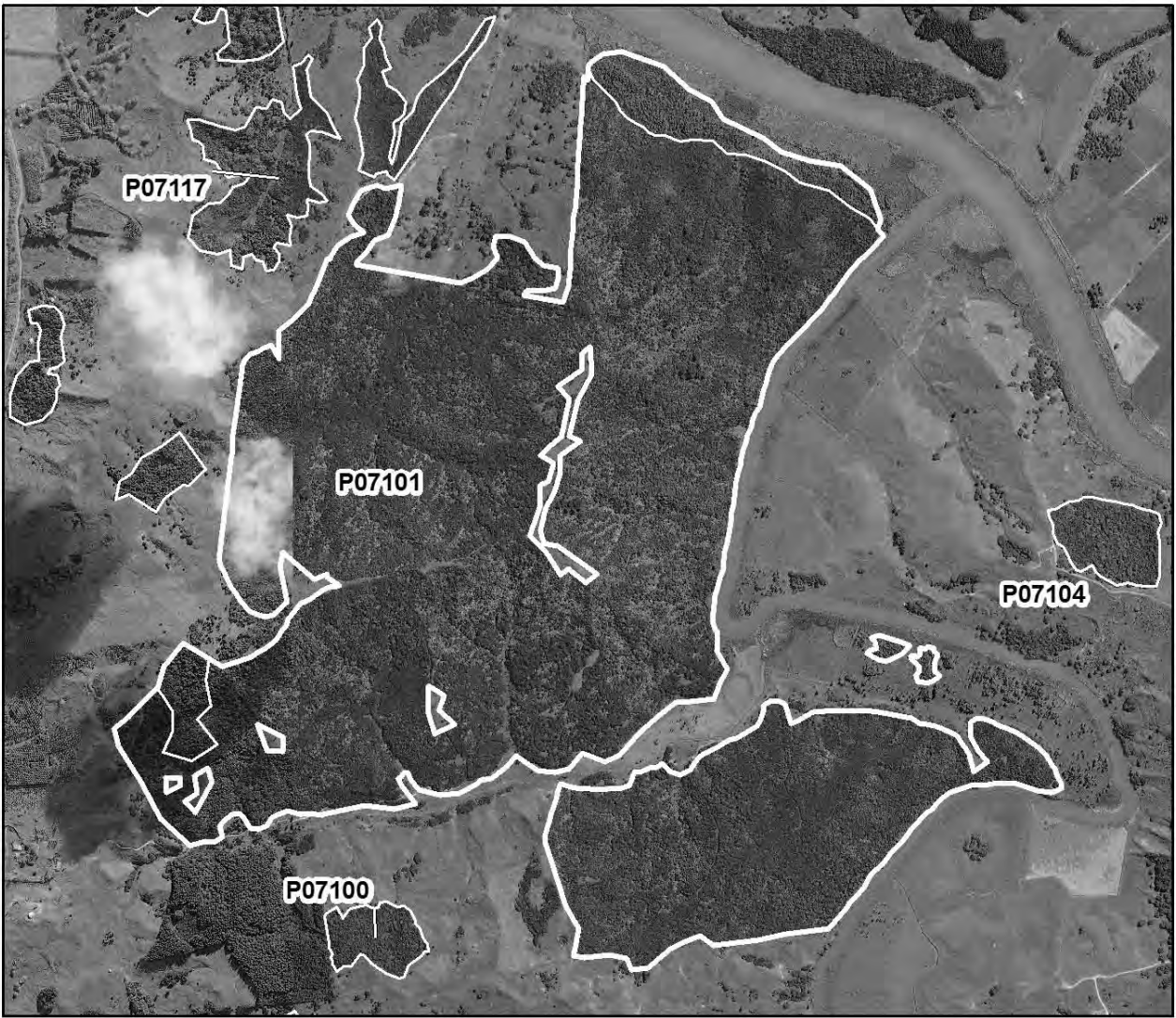
(a) Tī kōuka occurs on the alluvial flat on the northern edge of the large remnant beside the Wairoa River (Manchurian rice grass occurs alongside the river).

(b) Just behind this, kahikatea occurs, along with frequent tī kōuka.

(c) The rest of this large remnant and the southeastern remnant is dominated by kānuka/mānuka. Kānuka/mānuka areas occur in varying heights, presumably as blocks have been cleared and allowed to regenerate. Tōtara is prevalent in many areas and there are a few emerging forest trees such as kauri and kahikatea.

There are small patches of broadleaf/podocarp forest which weren't described. Flowering puawhananga was noted in the canopy at the time of the survey.

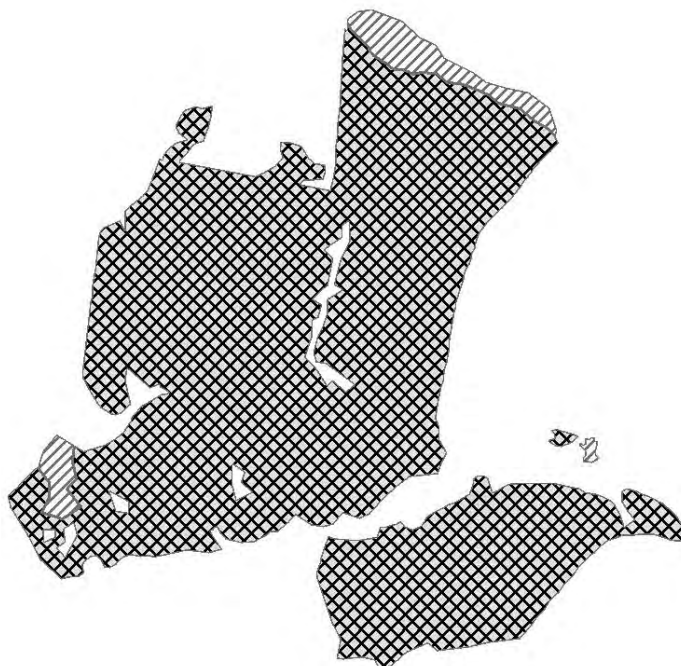
(d) Kānuka/mānuka with tōtara occurs in several areas. Occasional species include tī kōuka, tree fern and, in places, kauri.



P07/101 Hoanga Road Shrubland and Forest

Habitat type

-  Forest
-  Shrubland
-  Wetland



- (e) In the southwest corner of the large remnant, kānuka/mānuka, tōtara and tree fern are associated with the odd tī kōuka and nikau, along with:
- (f) a small area of emergent kauri with rimu and tānekaha and occasional tōtara and rewarewa, as well as a:
- (g) small patch of taraire with several occasional species including, rimu, kahikatea, kohekohe, pukatea, pūriri, tī kōuka, nikau and kānuka/mānuka.
- (h) In the separate southeastern remnant, tōtara-dominant shrubland occurs in a small area with frequent kānuka/mānuka and occasional tānekaha and tree fern.
- (i) On this remnant's north-facing slope, tōtara is dominant with common kānuka/mānuka and some kahikatea.

In the two very small remnants, Type (b) kahikatea forest occurs. These remnants appear to be grazed. The understorey is open with occasional mānuka and native shrub species.

Fauna

Records from SSBI P07/H044:

Historical record of NI brown kiwi (Nationally Vulnerable), last officially recorded by the New Zealand Wildlife Service in 1978. A 1992 kiwi survey did not record kiwi; however, the landowner reported hearing a male kiwi in that year—an updated survey is required. Common birds recorded are Australasian harrier, shining cuckoo, morepork, NZ kingfisher, grey warbler and NI fantail.

1992 record of kauri snail (Gradual Decline).

In 1978 the New Zealand Wildlife Service also recorded 'several species of skink' (not listed), including the ornate skink (Declining), updated survey is recommended.

Significance

This site is very significant, as it sustains the largest and most representative shrubland area in the Tokatoka Ecological District. Shrubland areas can provide important habitat for a range of threatened and uncommon species including kiwi, orchids and lizards, and kiwi, skinks and kauri snails have been recorded at this site in the past. The area surrounding the site is particularly modified, with indigenous vegetation scarce, making the site an important refuge and area of developing forest. An updated habitat survey of the site is recommended.

The site borders the Manganui River in the east and is adjacent to the Wairoa River in the north. Although kiwi have not been recorded for some time, it is possible they still reside there.

Representative site for type (a) tī kōuka forest. Representative site for several shrubland types, type (c), (d), (e), (f) and (i) and only example of type (e) and (f) in Tokatoka Ecological District. Approximately 9.3 ha of this site occurs within an 'Acutely Threatened' land environment (A5.1b), 18.3 ha within a 'Chronically Threatened' land environment (A5.2a, A7.1a, G3.1b), 14 ha within an 'At Risk' land environment (A6.1b), 176.4 ha within a 'Critically Underprotected' land environment (A6.1a, A6.1c) and 76.2 ha within a 'Less reduced and better protected' land environment (D1.1b) (Walker et al. 2007).

WAIMA STREAM MOUTH REMNANT

Survey no. P07/103
Survey date 19 October 1999
Grid reference 1683730E 602694N (AX28)
Area 2.5 ha
Altitude 0-40 m a.s.l.

Ecological unit

(a) Kahikatea forest on alluvium

Landform/geology

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

Vegetation

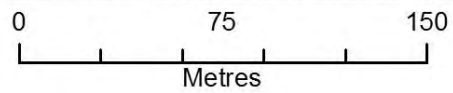
(a) A kahikatea dominant remnant adjacent to the Wairoa River. Ti kōuka and nikau occur within the canopy.

Fauna

None noted.

Significance

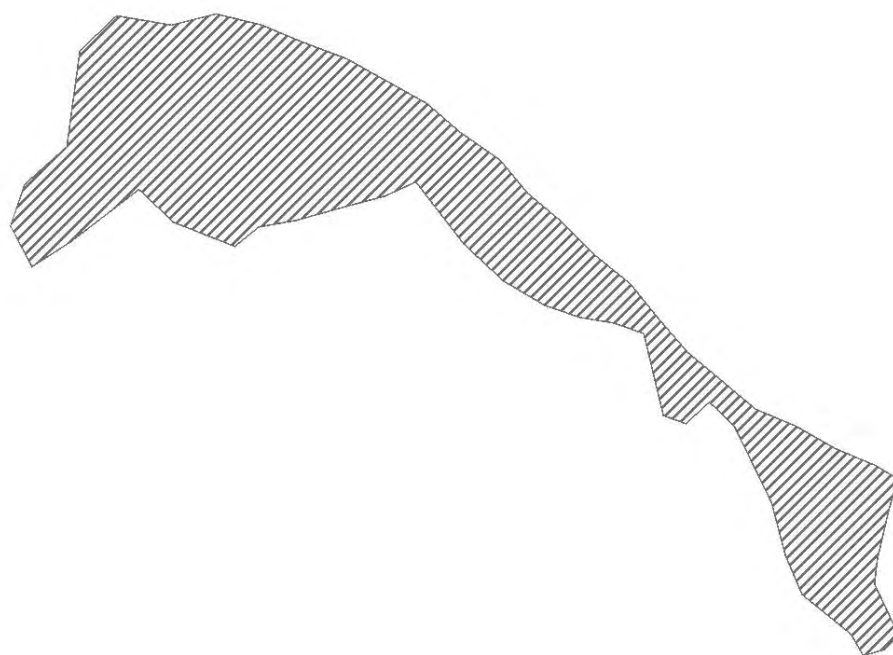
Alluvial forest is a rare forest type within the Tokatoka Ecological District and throughout Northland, and even though this site is small and linear in shape, it is significant and representative because of the scarcity of alluvial habitat along the Wairoa River. The quality of the understorey is unknown. Approximately 1.4 ha of this site is within an 'acutely Threatened' land environment (A5.1b) and 0.8 ha within a 'Critically Underprotected' land environment (A6.2c) (Walker et al. 2007).



P07/103 Waima Stream Mouth Remnant

Habitat type

-  Forest
-  Shrubland
-  Wetland



NORTHERN WAIROA RIVER BROADLEAF REMNANT

Survey no.	P07/104
Survey date	19 October 1999, 10 May 1995
Grid reference	1686246E 6025145N (AX29)
Area	5.6 ha
Altitude	0–60 m a.s.l.

Ecological unit

- (a) Taraire forest on moderate hillslope (90%)
- (b) Kahikatea forest on alluvium (10%)

Landform/geology

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

Vegetation

(a) Taraire is common on the hillslope of this remnant, along with several frequently occurring species including tōtara, pūriri, kahikatea and nikau. Kohekohe, rewarewa, rimu, puka, ti kōuka and kānuka/mānuka are occasional.

(b) The 1995 survey of this remnant recorded kahikatea forest on the toeslope adjacent to the Wairoa River. Mānatu and ti kōuka are frequent and harakeke and nikau are occasional.

The 2008 aerial photography shows some pasture gaps.

Significant flora

Mānatu (regionally significant species) recorded in the 1995 survey.

Fauna

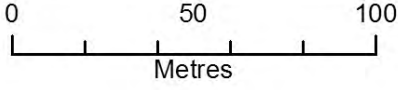
None noted.

Significance

Kahikatea forest on alluvium is an uncommon forest type within the Tokatoka Ecological District and throughout Northland generally. Although this remnant is small, its importance is elevated because of the paucity of this habitat type throughout the District and, in particular, along the Wairoa River. This site occurs within a 'Critically Underprotected' land environment (A6.1c) (Walker et al. 2007).

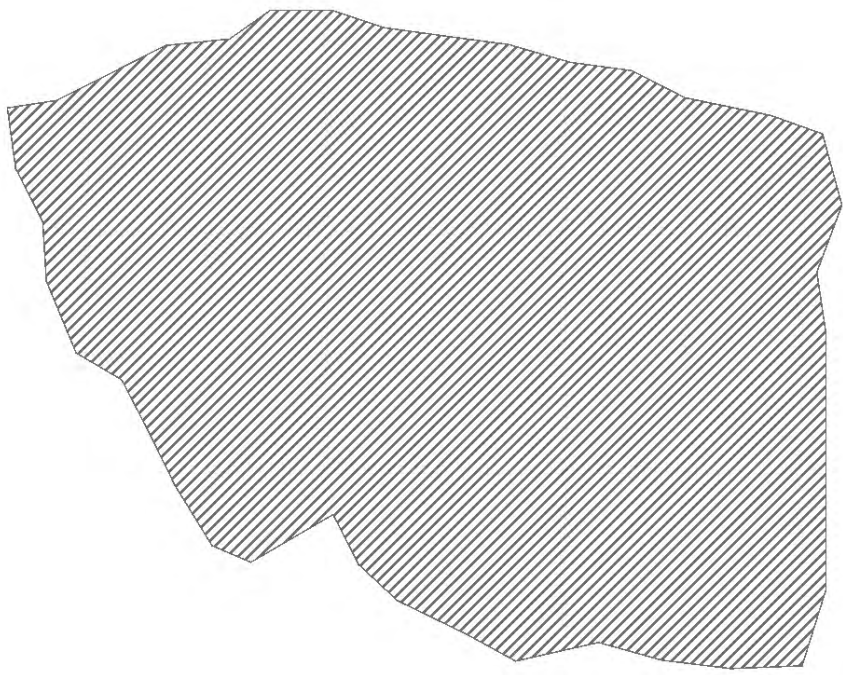


P07/104 Northern Wairoa River Broadleaf Remnant



Habitat type

-  Forest
-  Shrubland
-  Wetland



MANGANUI TRIG FOREST

Survey no.	P07/108
Survey date	20 October 1999
Grid reference	1691316E 6023234N (AX29)
Area	31.9 ha, 2 remnants
Altitude	40-120 m a.s.l.

Ecological unit

- (a) Tōtara-tōwai forest on moderate hillslope
- (b) Tānekaha-tōtara forest on moderate hillslope

Landform/geology

Hillslopes of Mangakahia Complex sandstone and mudstone.

Vegetation

- (a) On the western side of the largest remnant, tōtara and tōwai are associated with frequently occurring tānekaha and taraire. Rewarewa, pūriri, kahikatea, puka, nikau and kānuka/mānuka are occasional.
- (b) On the east-facing hillslope adjacent to this, tānekaha and tōtara are common with occasional rimu, rewarewa, kauri, taraire, mamaku and kānuka/mānuka.

The southeastern remnant was not surveyed separately but is likely to contain similar forest types.

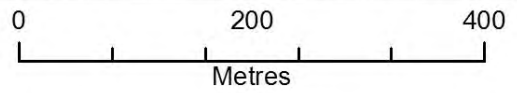
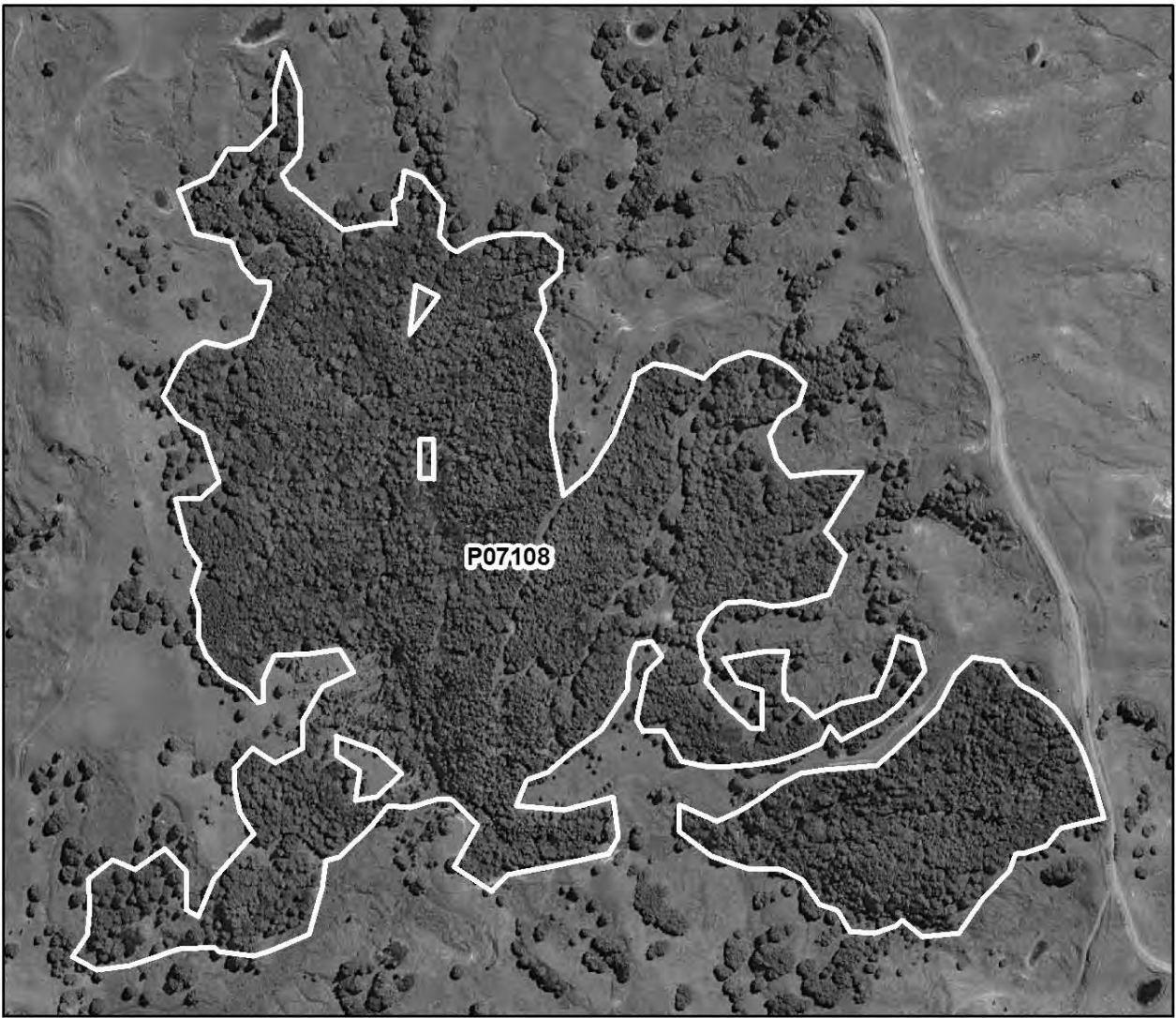
Fauna

None noted.

Significance

Located just north of Manganui River Complex (P07/086) providing important stepping stone habitat within a very modified Ecological District.

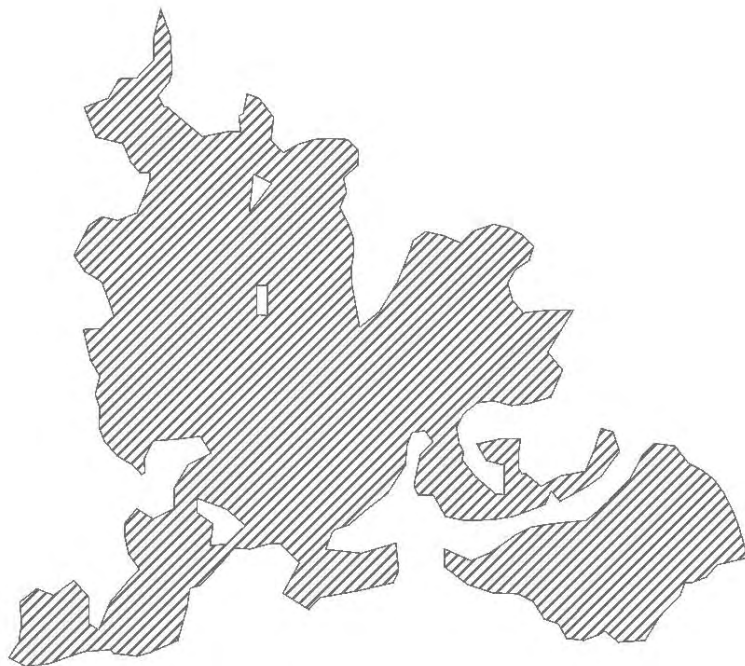
This site is representative for both vegetation types. This site occurs within a 'Critically Underprotected' land environment (A6.1c) (Walker et al. 2007).



P07/108 Manganui Trig Forest

Habitat type

-  Forest
-  Shrubland
-  Wetland



PUKEHUIA ROAD BUSH

Survey no.	P07/109
Survey date	20 October 1999
Grid reference	1690661E 6025847N (AX29)
Area	26.8 ha, 2 remnants
Altitude	< 20-100 m a.s.l.

Ecological unit

- (a) Taraire forest on gentle to moderate hillslope
- (b) Tōtara-kānuka/mānuka on moderate hillslope
- (c) Kauri forest on gentle hillslope

Landform/geology

Hillslopes of Mangakahia Complex sandstone and mudstone.

Vegetation

(a) In the northern remnant, taraire occurs along with frequent tōtara and kahikatea. Emergent kauri, rimu, rewarewa, tōwai, miro, pūriri and puka are occasional.

(b) An area of abundant tōtara with common kānuka/mānuka also occurs here. Kahikatea, rimu, kauri and nikau are occasional.

The southern remnant it is mostly defined (90%) by Type (a) taraire with frequent tōtara. A range of species are occasional including emergent kauri, rimu, tawa, kohekohe, kahikatea, matai, tōwai, pukatea, nikau, puka and kānuka/mānuka.

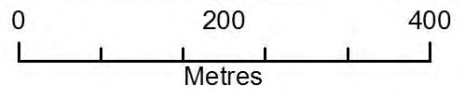
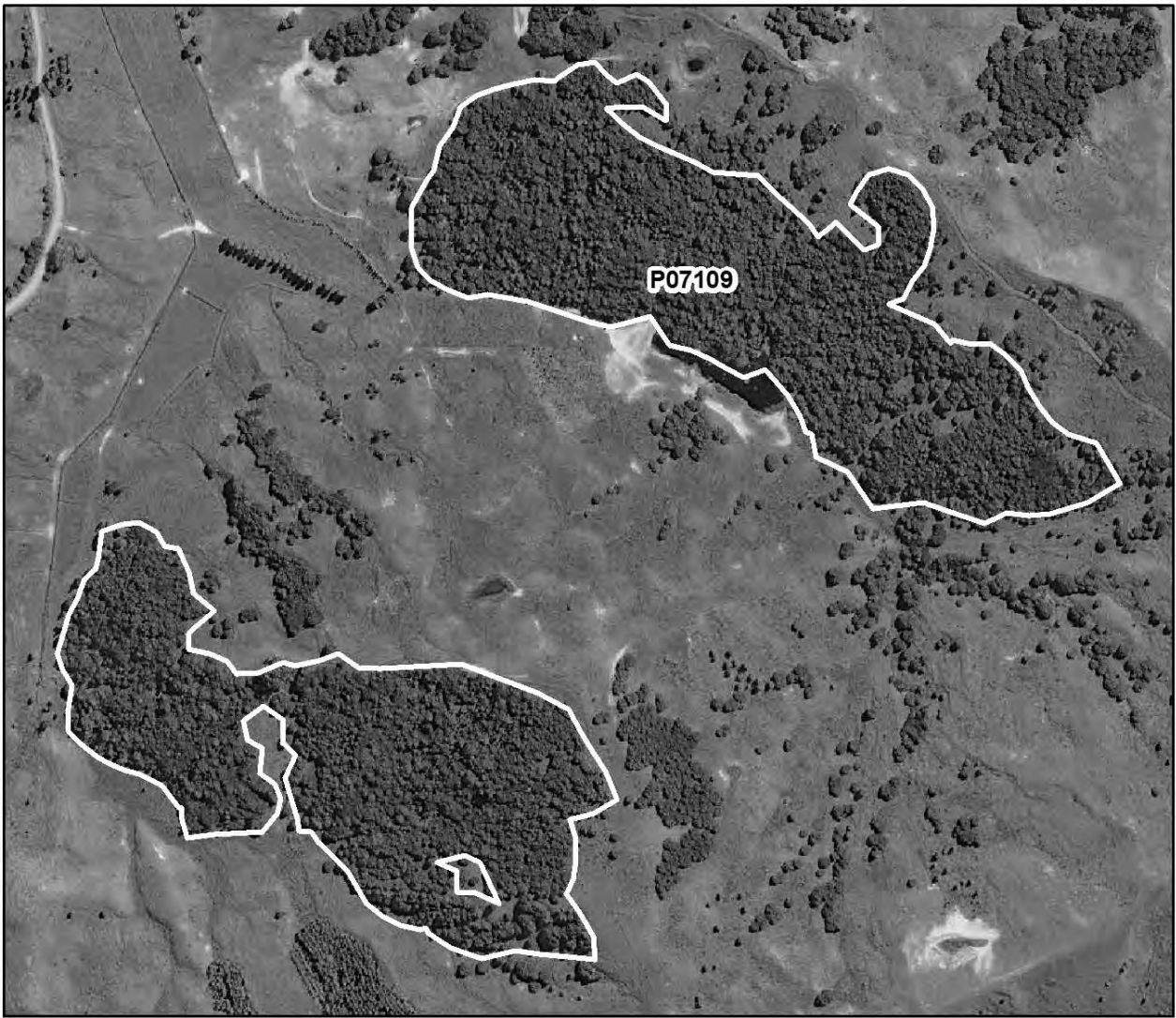
(c) There is also a very small area of emergent kauri with some rimu and tōtara.

Fauna

None noted.

Significance

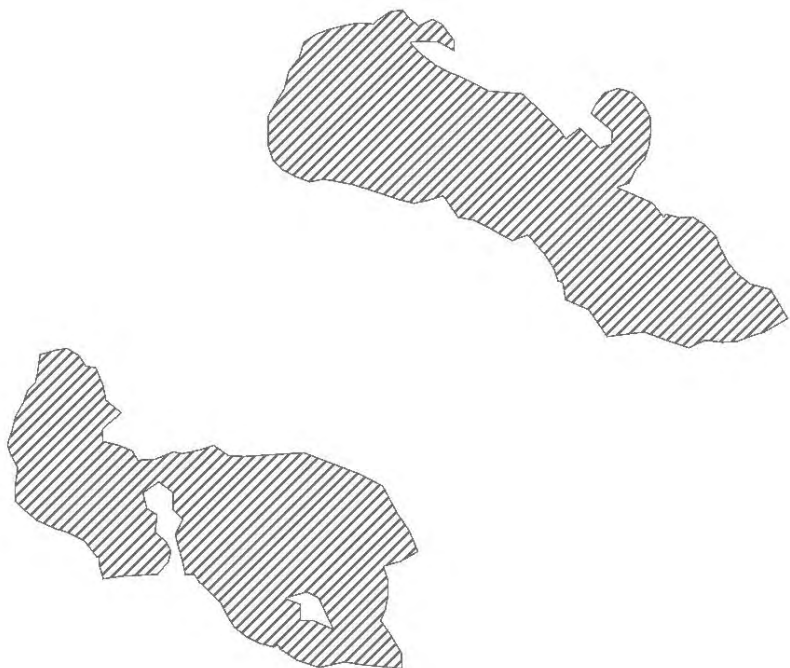
Reasonably-sized indigenous forest remnants within a very modified Ecological District providing stepping stone habitat, including a potential food source (particularly taraire), for the regionally significant kūkupa. Approximately 0.3 ha of this site occurs within a 'Chronically Threatened' land environment (G3.1b) and 26.4 ha occurs within a 'Critically Underprotected' land environment (A6.1a) (Walker et al. 2007).



P07/109 Pukehuia Road Bush

Habitat type

-  Forest
-  Shrubland
-  Wetland



BOAR STREAM BUSH

Survey no.	P07/110
Survey date	20 October 1999
Grid reference	1693452E 6023926N (AX29)
Area	34.3 ha, 3 remnants
Altitude	20-80 m a.s.l.

Ecological unit

- (a) Tōtara forest on moderate hillslope
- (b) Taraire-tōtara forest on moderate hillslope
- (c) Kahikatea forest on alluvium

Landform/geology

Hillslopes of Mangakahia Complex sandstone and mudstone.

Vegetation

(a) The northeastern remnant is mainly tōtara with frequent kānuka/mānuka and some taraire.

(b) The middle remnant is predominantly (90%) taraire and tōtara with frequent pūriri. Occasional species include kauri, rimu, rewarewa, kahikatea, kohekohe and puka.

(c) A small area of abundant kahikatea is associated with Boar Stream. Tī kōuka is occasional.

Type (b) taraire and tōtara occur in the remaining remnant. Pūriri is also frequent here and rewarewa, rimu, kahikatea, kohekohe, puka and nīkau are occasional.

Fauna

Historical 1980 records from SSBI P07/H047:

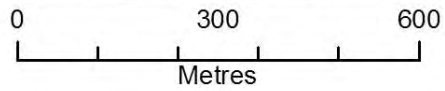
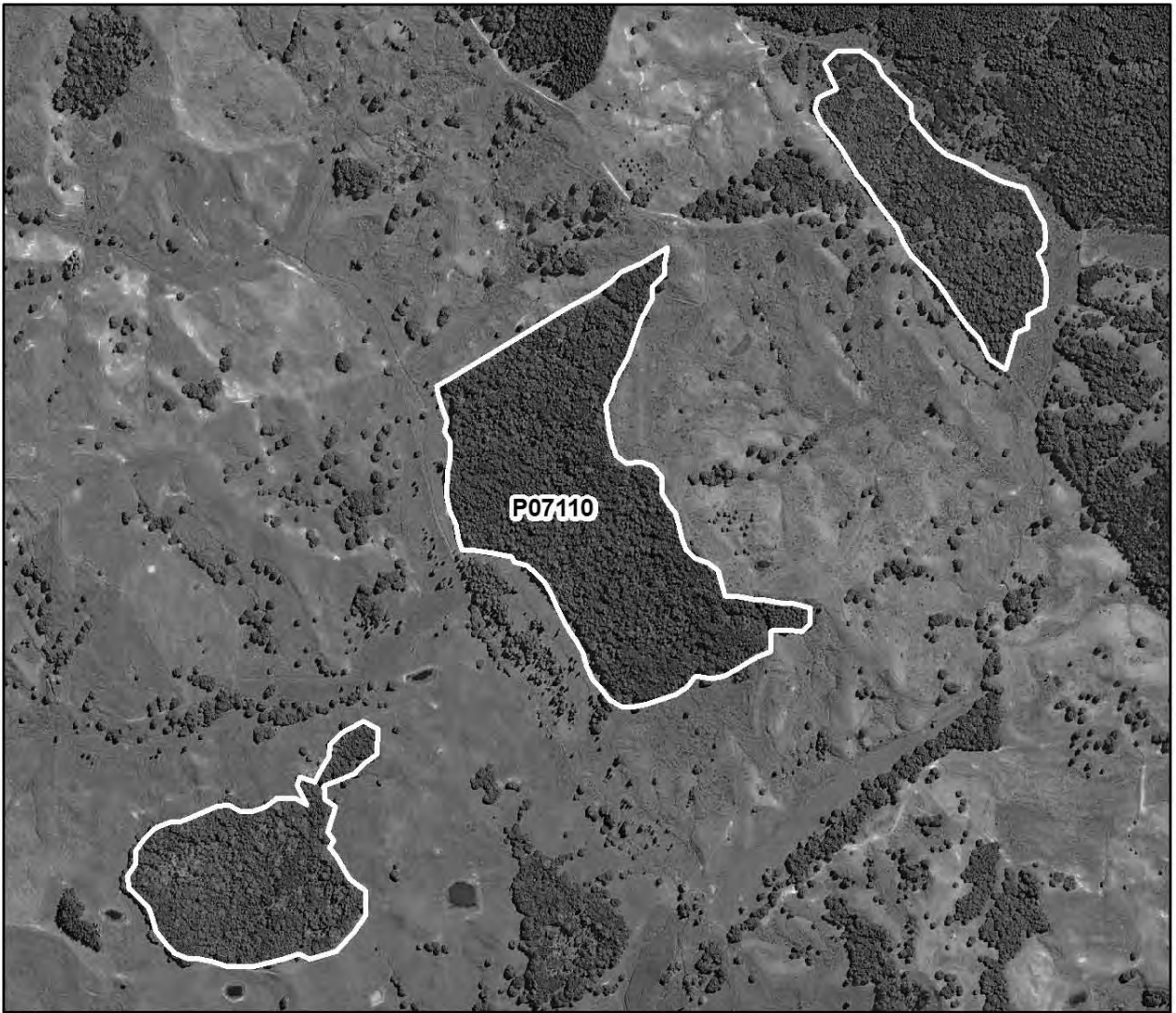
NI brown kiwi (Nationally Vulnerable), kūkupa (regionally significant species), shining cuckoo (reported), grey warbler, silvereye, tūi and kauri snail (Gradual Decline).

Significance

Past records (1980) of Threatened and Regionally significant species. A large, old growth tōtara tree was recorded in 1980 (SSBI P07/H047) but was not recorded in this survey.

Representative site for taraire-tōtara forest, type (b).

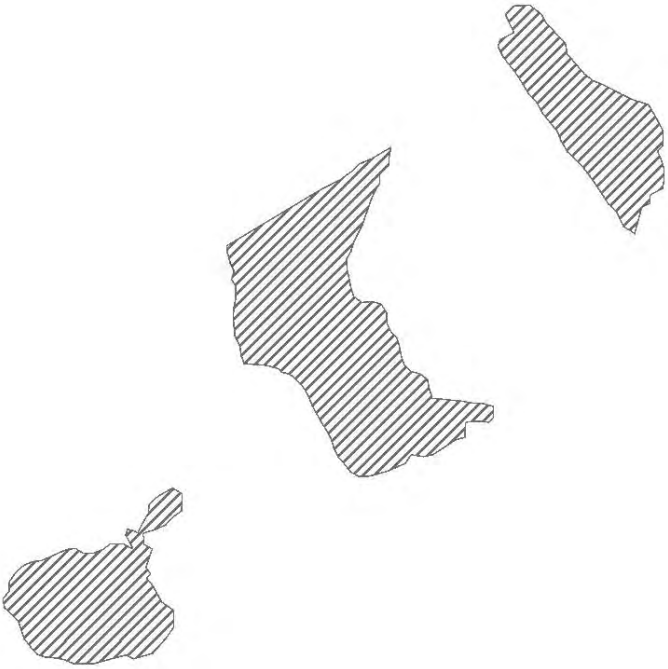
The southern remnant (15.8 ha) is protected by a Queen Elizabeth II National Trust Open Space covenant. Approximately 1 ha of this site occurs within a 'Chronically Threatened' land environment (G3.1b) and 33.2 ha within a 'Critically Underprotected' land environment (A6.1a, A6.1c) (Walker et al. 2007).



P07/110 Boar Stream Bush

Habitat type

- Forest
- Shrubland
- Wetland



GIRLS HIGH SCHOOL ROAD BUSH

Survey no. P07/112
Survey date 20 October 1999
Grid reference 1695126E 6025391N (AX29)
Area 34.1 ha
Altitude 60-100 m a.s.l.

Ecological unit

- (a) Kānuka/mānuka-tānekaha-tōtara forest on moderate hillslope
- (b) Kauri forest on ridge
- (c) Kānuka/mānuka-tōtara forest on moderate hillslope

Landform/geology

Hillslopes of Mangakahia Complex mudstone.

Vegetation

(a) An association of kānuka/mānuka, tānekaha and tōtara occurs on the east-facing hillslope. Kauri, rimu, tōwai, lancewood and *Acacia* sp. are occasional.

(b) On a small ridge east of this, a small area of kauri occurs with frequent rimu and tānekaha. Tōtara and kānuka/mānuka are present.

(c) Adjacent to this, kānuka/mānuka and tōtara are co-dominant with some kauri, rimu and kahikatea.

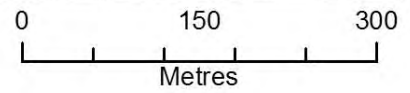
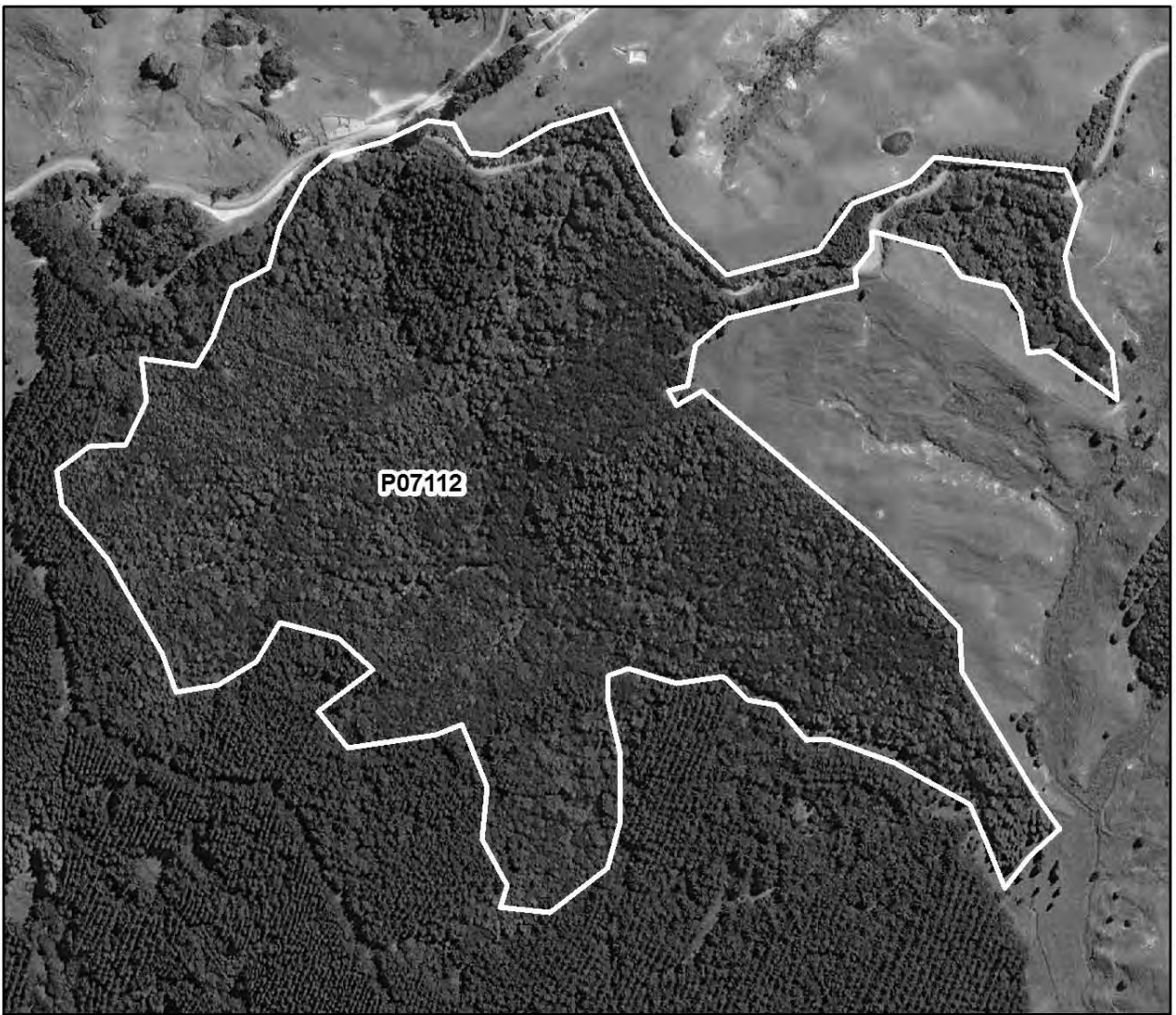
Pine forest borders the site in the south.

Fauna

Record of NI brown kiwi (Nationally Vulnerable) in 1992/93 DOC Northland kiwi survey (DOC internal files).

Significance

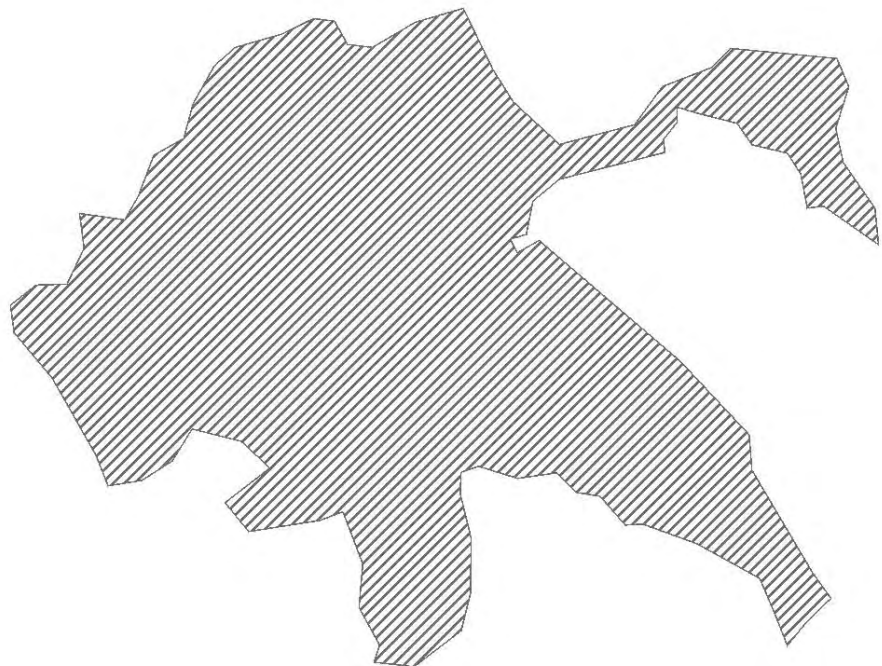
A relatively large regenerating podocarp-broadleaf/kauri remnant providing important stepping stone habitat within a very modified Ecological District. Possible presence of the threatened NI brown kiwi (1992/93)—updated survey required. Approximately 1.4 ha of this site occurs within an 'At Risk' land environment (A6.1b) and 32.9 ha within a 'Critically Underprotected' land environment (A6.1a and A6.1c) (Walker et al. 2007).



P07/112 Girls High School Road Bush

Habitat type

-  Forest
-  Shrubland
-  Wetland



OMANA LOWLAND FOREST REMNANT

Survey no. P07/114
Survey date 21 October 1999
Grid reference 1699045E 6024356N (AX29)
Area 4 ha
Altitude 20-40 m a.s.l.

Ecological unit

(a) Rimu forest on gentle hillslope

Landform/geology

Hillslopes of Mangakahia Complex sandstone and mudstone.

Vegetation

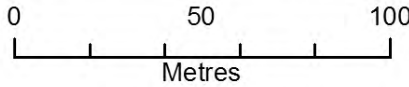
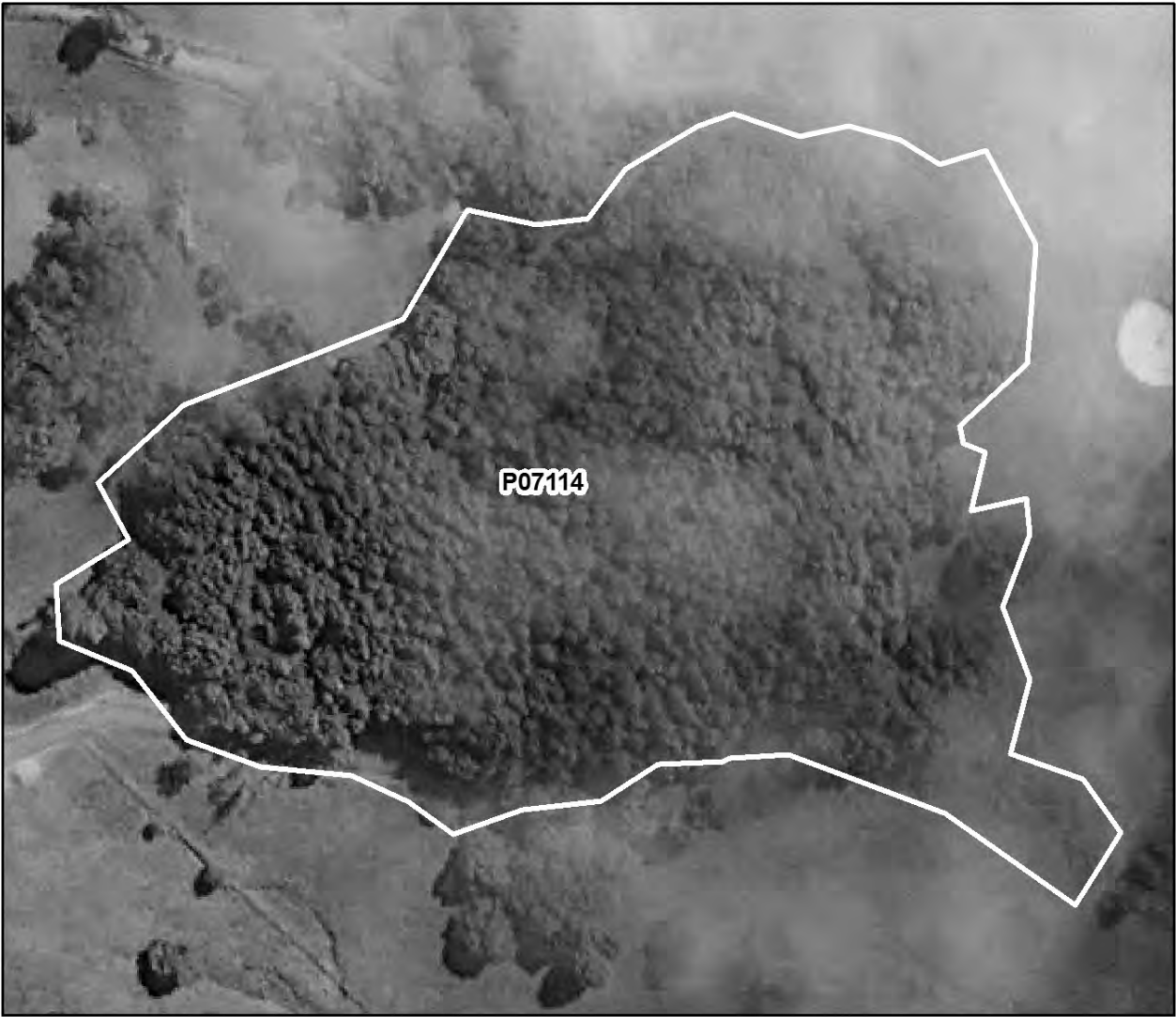
(a) A small lowland podocarp remnant dominated by secondary rimu with frequent kauri and tōtara and occasional kahikatea.

Fauna

None noted.

Significance

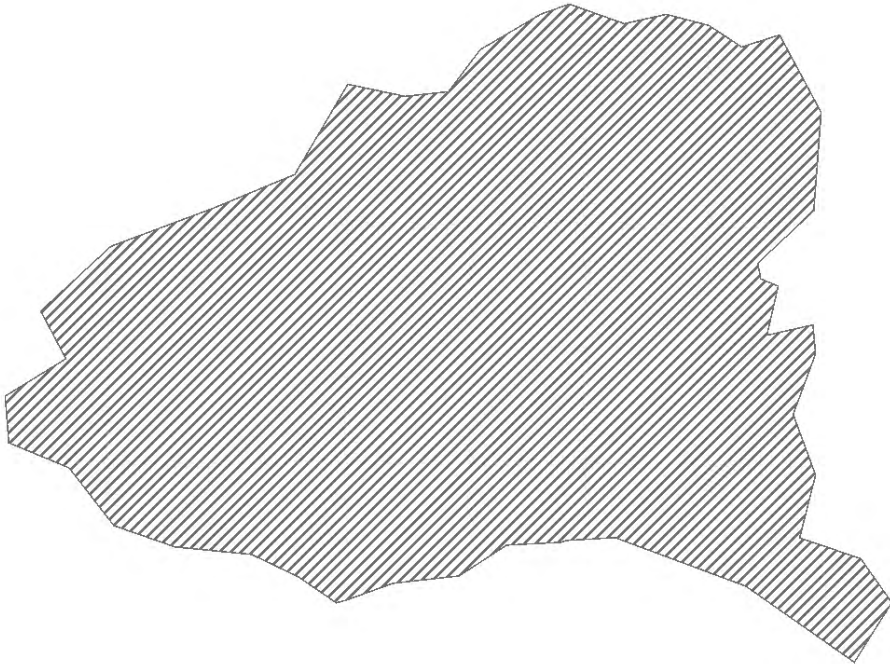
Lowland forest is under-represented within the Tokatoka Ecological District and throughout Northland generally. This site is located within a very modified Ecological District and is a representative site for rimu forest. This site occurs within a 'Critically Underprotected' land environment (A6.1a) (Walker et al. 2007).



P07/114 Omana Lowland Forest Remnant

Habitat type

-  Forest
-  Shrubland
-  Wetland



REHIA BUSH AND SURROUNDS

Survey no.	P08/001
Survey date	17 April 1998
Grid reference	1698871E 6004467N (AY29)
Area	70.7 ha, 5 remnants (63.5 ha forest, 7.2 ha shrubland)
Altitude	40-162 m a.s.l.

Ecological unit

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

Landform/geology

Hillslopes of Mangakahia Complex sandstone and mudstone.

Vegetation

The large forested remnant:

- (a) Emergent kauri with tōtara is co-dominant in the northern end of Rehia Bush (Grid ref: 6004220N 1599057E (AY29)). Frequent species include rimu and tānekaha. Pūriri is occasional.
- (b) Abundant taraire is associated with pūriri in the west. Occasional species include rewarewa, nikau, kauri and kahikatea.
- (c) Abundant tōtara occurs in the southern end with occasional rimu, ti kōuka, pūriri, rewarewa, kauri, tānekaha and kānuka/mānuka (edges).
- (d) An area in the northeast is taraire dominant. Emergent kauri, rimu and rewarewa occur frequently. A diversity of species are occasional including kawaka, tawa, kahikatea, pūriri, matai, tōwai, tānekaha, ti kōuka, mamaku, lancewood, pukatea, puka, tōtara (mainly edges) and kānuka/mānuka (edges).
- (e) The northern most outlier remnant contains abundant kānuka/mānuka with associated tōtara. Emergent pūriri, emergent kahikatea, kauri and ti kōuka are occasional.
- (f) In the remnant just southwest of this, kānuka/mānuka is common with frequent tōtara. Occasional species include rewarewa, karaka, pūriri, emergent kauri, rimu and ti kōuka.
- (g) The shrubland remnant close to Rehia Bush is kānuka/mānuka-dominant with frequent tōtara. Kahikatea, pūriri, rewarewa, kauri and nikau are occasional.

(h) Co-dominant pūriri and tōtara occur in the forested remnant south of Rehia Bush, adjacent to the farm track. Taraire is frequent. A range of species occur occasionally including emergent old growth rimu, kauri, kohekohe, kahikatea, pukatea, tītoki, nikau, puka, tī kōuka and kākūka/mānuka.

Significant flora

Kawaka (Naturally Uncommon) recorded during this survey.

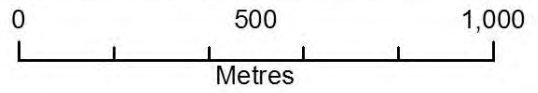
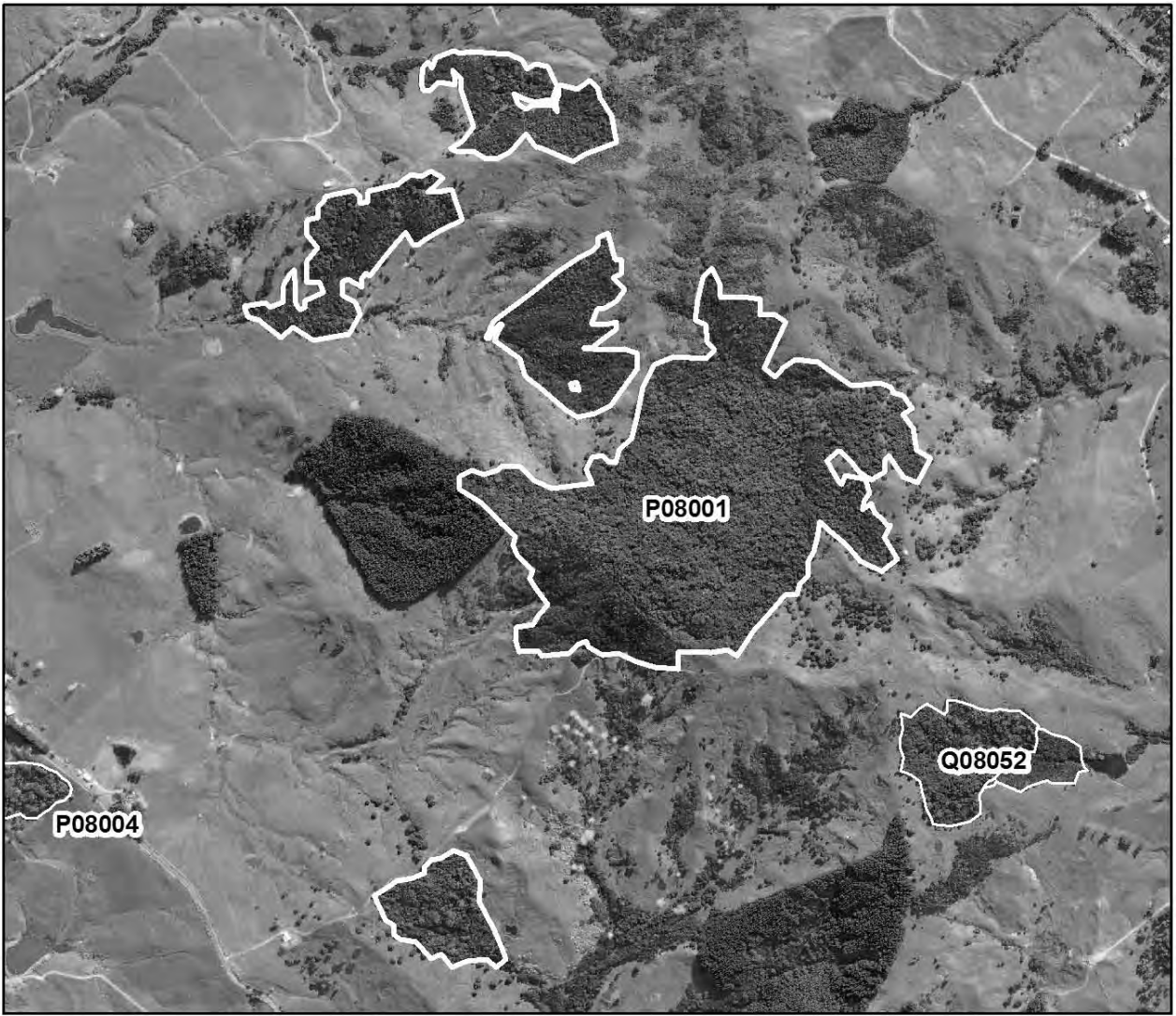
Fauna

NI brown kiwi (Nationally Vulnerable), were not detected in a 1992/1993 DOC Northland kiwi survey (SSBI P08/H013). At the time of this survey (1998), the landowner had reported hearing kiwi in the past.

Significance

Rehia Bush is a prominent landmark and represents one of the last remaining mature forest remnants in the area. The forest represents mature kauri-podocarp-broadleaf forest supporting a diversity of forest species including kawaka—an At Risk, Naturally Uncommon podocarp tree. Only one of two sites in the Tokatoka Ecological District containing kawaka; the other site is Whenuanui Scenic Reserve (P08/008).

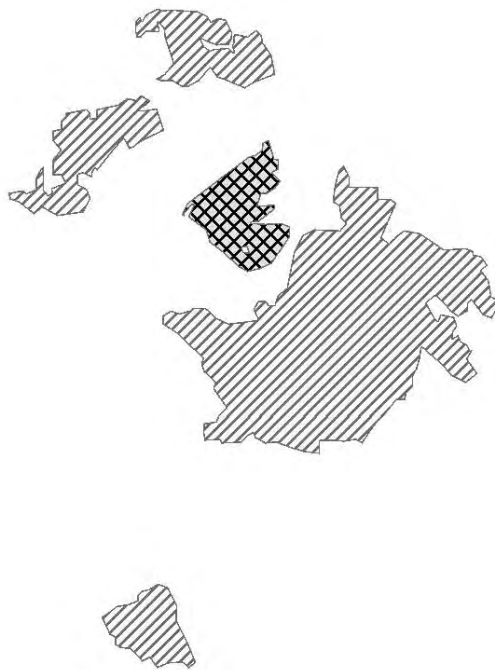
Representative site for type (a) kauri-tōtara forest, type (b) taraire-pūriri forest, type (c) tōtara forest and type (d) taraire forest. Approximately 1.2 ha of this site occurs within an 'At Risk' land environment (A6.1b), 40.1 ha within a 'Critically Underprotected' land environment (A6.1a, A6.1c), and 29.7 ha within a 'Less reduced and better protected' land environment (D1.1b) (Walker et al. 2007).



P08/001 Rehia Bush and Surrounds

Habitat type

-  Forest
-  Shrubland
-  Wetland



STATE HIGHWAY 12 REMNANTS

Survey no.	P08/002
Survey date	7 May 1999
Grid reference	1697939E 6002635N (AY29)
Area	17.8 ha, 3 remnants
Altitude	< 20–60 m a.s.l.

Ecological unit

- (a) Kahikatea-pūriri-tōtara forest on gentle hillslope
- (b) Nikau-pūriri-tōtara forest on gentle hillslope
- (c) Ti kōuka-kahikatea-nikau forest on flat
- (d) Nikau-taraire forest on gentle hillslope

Landform/geology

Hillslopes of Mangakahia Complex sandstone/mudstone.

Vegetation

- (a) The northwestern remnant is predominantly an association of kahikatea, pūriri and tōtara. Kōwhai is frequent within the canopy. Species that are occasional include emergent kauri, matai, tōtara, rewarewa, taraire, karaka, pukatea, rimu, ti kōuka and nikau. Some pampas occurs on the edges.
- (b) Nikau, pūriri and tōtara defines the middle remnant with frequent kōwhai and kākūka/mānuka. A range of species are occasional including kahikatea, matai, pukatea, rewarewa, taraire and puka.
- (c) A small area of ti kōuka, kahikatea and nikau occur in the southern end and eastern corner of this remnant. Karaka is present.
- (d) The remaining remnant in the east is mostly co-dominant nikau and taraire with frequently occurring pūriri. Occasional species include kahikatea, rewarewa, matai, karaka, pukatea, kohekohe, puka, poplar (edges) and pine (edges).

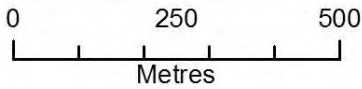
Fauna

None noted.

Significance

Lowland forest is under-represented within the Tokatoka Ecological District and throughout Northland generally, and these forest remnants also border the now completely modified Ruawai flats. The remnants are defined by distinctive and unusual forest associations. Nikau dominance is a feature, which is rare in this District and throughout Northland.

Representative site for all ecological units and sole record of three types in this District—types (a), (b) and (c). Approximately 13.3 ha of the site occurs within a 'Chronically Threatened' land environment (A6.1d) and 4.4 ha within a 'Critically Underprotected' land environment (A6.1a) (Walker et al. 2007).



P08/002 State Highway 12 Remnants

Habitat type

-  Forest
-  Shrubland
-  Wetland

