4.2 LEVEL 2 SITES

See Section 9 (p. 369) for alphabetical listing of sites.

SITE NAME	SURVEY NO.	GRID REF.
Tetehakehake Stream Shrubland	N02/045	N02 020 395, N02 023 387
Mitimiti Stream & Streak Hill Shrubland	N02/046	N02 058 341
Sandhills Shrubland	N02/048	N02 034 326
Te Karaka Point & Ngakarapu Stream Shrubland	N02/049	N02 075 320, N02 073 310
Parengarenga Shrubland	N02/054	N02 042 407, N02 035 400
Whawhakou Channel Shrublands	N02/059	N02 038 370, N02 040 364
		N02 033 358, N02 040 355
		N02 035 365
Te Kao Shrublands	N03/001	N03 085 270, N03 093 266
Te Keena Rd Shrublands	N03/005	N03 088 285, N03 089 293
Oromanga Sandfield	N03/006	N03 018 257
Te Kao Trig Shrubland	N03/007	N03 066 266
Arterial Rd Shrublands	N03/008	N03 029 299
Salt Rd Shrubland	N03/011	N03 116 240
Ngatumoroki Shrubland	N03/013	N03 103 245
Pahara Shrublands	N03/017	N03 210 067
Kimberley Shrubland	N03/028	N03 173 154
Cemetery Rd Pond	N03/042	N03 194 117
Onepu Swamp	N03/045	N03 128 213
Gully Lake	N03/047	N03 182 088
Big Flat Shrubland	N04/004	N04 264 971
Airstrip Shrubland	N04/012	N04 298 825, O04 307 827
Sweetwater Station Shrublands	N04/013	N04 284 777, N04 289 765
Rangiputa Rd Shrublands	O03/007	O03 384 022, O03 389 007

TETEHAKEHAKE STREAM SHRUBLAND

Survey no. N02/045

Survey date 24 August 1995

Grid reference N02 020 395, N02 023 387

Area 62 ha

Altitude 0-20 m asl

Ecological unit

Kanuka shrubland on coastal hillslope

Landform/geology

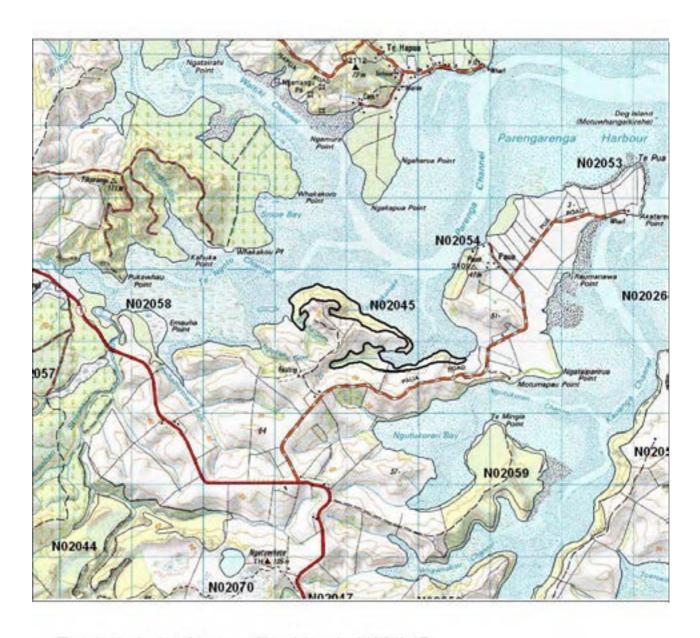
Coastal hillsides and valleys in Mangakahia Complex mudstones.

Vegetation

Kanuka (2-3 m) is dominant with occasional ti kouka.

Fauna

Not surveyed.



Tetehakehake Stream Shrubland N02/045

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

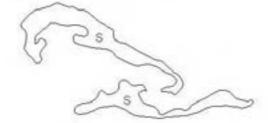
S = shrubland

F = forest

W = wetland

E = estuarine

D = duneland



Significance

This shrubland forms a buffer along a stream draining into the Parengarenga Harbour and along two kilometres of estuarine margin.

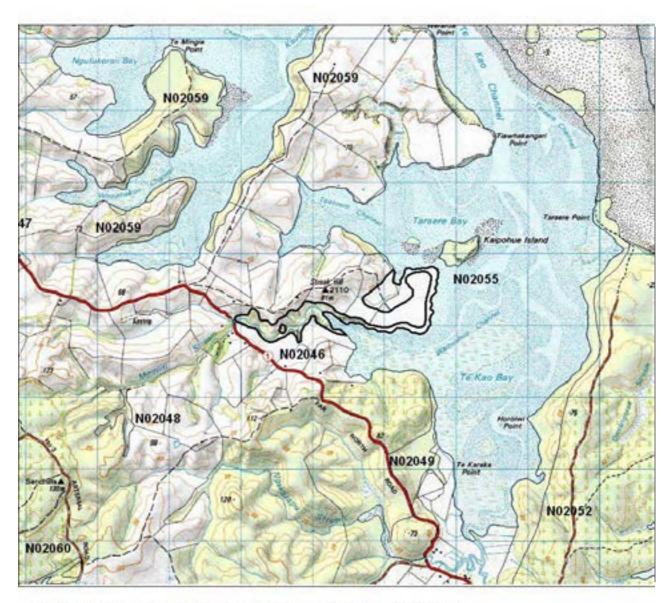
Further surveying is required to determine the full ecological significance of the site.

MITIMITI STREAM & STREAK HILL SHRUBLAND

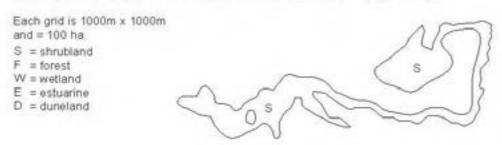
Survey no. N02/046

Survey date 28 August 1995 Grid reference N02 058 341

Area 76 ha Altitude 0-40 m asl



Mitimiti Stream & Streak Hill Shrubland N02/046



Ecological unit

- (a) Kanuka-Sydney golden wattle shrubland on hillslope
- (b) Kanuka shrubland on hillslope & consolidated sand

Landform/geology

Mitimiti Stream: Hillslope of deeply weathered Mangakahia Complex mudstone on true left and with Pleistocene consolidated alluvial sand on true right.

Streak Hill: Terraces on last interglacial consolidated estuarine sands.

Vegetation

- (a) Kanuka to 2-3 m tall is dominant and emergent and Sydney golden wattle is common over about 70% of Mitimiti Stream. Isolated pohutukawa and pine also occur.
- (b) In the remaining area along the stream, the canopy consists solely of kanuka.

Type (b), kanuka shrubland, dominates the shrubland area at Streak Hill, with frequent Sydney golden wattle.

Fauna

Aquatic fauna: 1982 survey of Mitimiti Stream just west of this site recorded redfinned bully, giant bully (Regionally significant species) and banded kokopu (Category C threatened species).

Significance

A contiguous shrubland area providing a buffer to the Parengarenga Harbour from farmland.

Further surveying is required to determine the full ecological significance of the site.

SANDHILLS SHRUBLAND

Survey no. N02/048

Survey date 22 August 1995 Grid reference N02 034 326

Area 12 ha

Altitude 40-100 m asl

Ecological unit

Kanuka-Sydney golden wattle shrubland on hillslope

Landform/geology

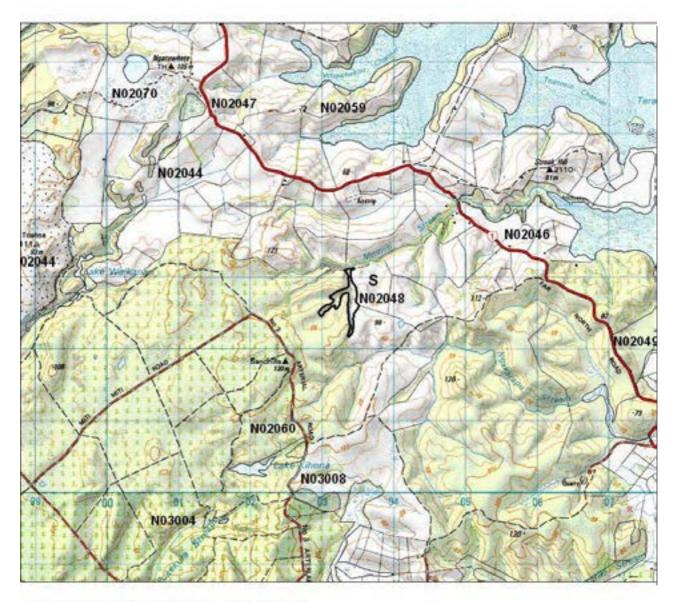
Pleistocene consolidated parabolic dunes.

Vegetation

Kanuka to 2 m is dominant with Sydney golden wattle commonly occurring.

Fauna

Not surveyed.



Sandhills Shrubland N02/048

Each grid is 1000m x 1000m

and = 100 ha.

S = shrubland

F = forest

W = wetland

E = estuarine

D = duneland

Significance

An area of shrubland between exotic forest plantations and farmland.

Further surveying is required to determine the full ecological significance of this site.

TE KARAKA POINT & NGAKARAPU STREAM SHRUBLAND

Survey no. N02/049

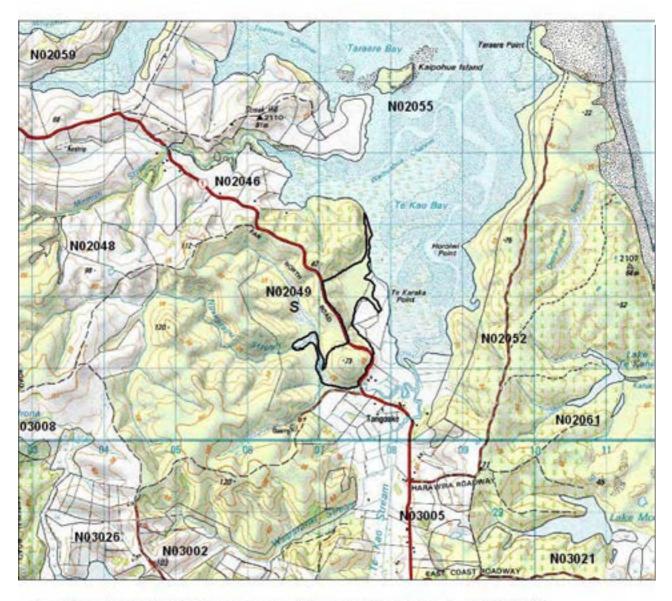
Survey date 23 August 1995

Grid reference N02 075 320, N02 073 310

Area 87 ha Altitude 5-73 m asl

Ecological unit

(a) Kanuka-manuka shrubland on hillslope



Te Karaka Point & Ngakarapu Stream Shrubland N02/049

Each grid is 1000m x 1000m

and = 100 ha.

S = shrubland

F = forest

W = wetland

E = estuarine

D = duneland

- (b) Kanuka/manuka shrubland on hillslope
- (c) Kanuka shrubland on hillslope

Landform/geology

Coastal hills of deeply weathered Parengarenga Group sandstone bounded by last interglacial consolidated estuarine sands.

Vegetation

- (a) Abundant kanuka with common manuka dominates the site. Occasional species include *Callistachys lanceolata*, prickly hakea and Sydney golden wattle.
- (b) 90% of the shrubland along the stream is kanuka/manuka dominant with frequent Sydney golden wattle and occasional prickly hakea, kumarahou, blue pine, gorse, mingimingi and pines.
- (c) A kanuka dominant canopy occurs in the remaining area along the stream.

Fauna

Not surveyed.

Significance

Provides a buffer area along approximately 2 km of coastal margin on the Parengarenga Harbour.

Additional surveying is required to determine the full ecological significance of this site.

PARENGARENGA SHRUBLAND

Survey no. N02/054

Survey date 24 August 1995

Grid reference N02 042 407, N02 035 400

Area 27 ha
Altitude 0-42 m asl

Ecological unit

Kanuka shrubland on flat to gently sloping hill country

Landform/geology

North-east: terrace on last interglacial consolidated estuarine sands. South-west: hillslope on Mangakahia Complex mudstone.

Vegetation

Kanuka to 2-3 m in height with occasional Sydney golden wattle.

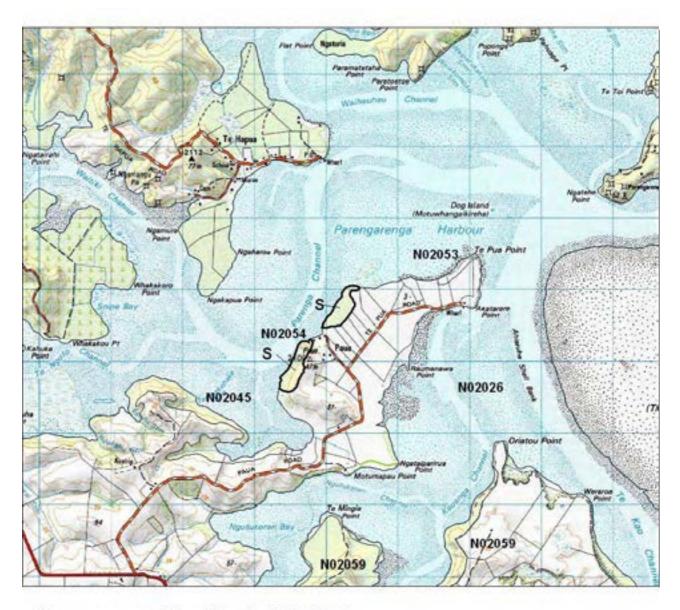
Fauna

SI pied oystercatcher, turnstone, bar-tailed godwit, spur-winged plover, cattle egret and white-faced heron (OSNZ year 2000 survey) (probably recorded from nearby pasture).

Significance

An area of shrubland buffering the Parengarenga Harbour from farmed area.

Additional surveying is recommended to determine the full ecological significance of this site.



Parengarenga Shrubland N02/054

Each grid is 1000m x 1000m

and = 100 ha.

S = shrubland

F = forest

W = wetland

E = estuarine D = duneland

WHAWHAKOU CHANNEL SHRUBLANDS

Survey no. N02/059

Survey date August 1995

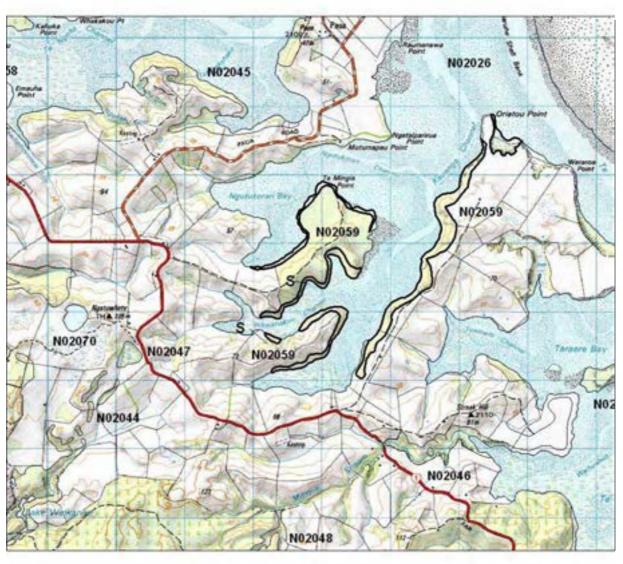
Grid reference N02 038 370, N02 040 364, N02 033 358, N02 040 355,

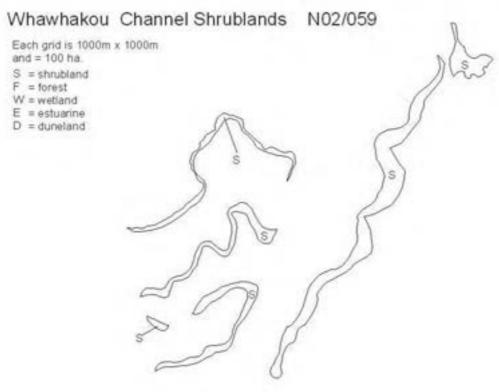
N02 055 365

Area 108 ha Altitude 0-40 m asl

Ecological unit

Kanuka shrubland on coastal hillslope





Landform/geology

Coastal hillslope on Mangakahia Complex sedimentary rocks and Pleistocene estuarine sands.

Vegetation

Kanuka dominant.

Fauna

Not surveyed.

Significance

This shrubland forms a buffer along several kilometres of estuarine margin on the Parengarenga Harbour.

Additional surveying is recommended to determine the full ecological significance of this site.

TE KAO SHRUBLANDS

Survey no. N03/001

Survey date 18 August 1995

Grid reference N03 085 270, N03 093 266

Area 102 ha Altitude 10-40 m asl

Ecological unit

- (a) Kanuka shrubland on consolidated sand hillslopes
- (b) Sydney golden wattle scrub on consolidated sand hillslopes

Landform/geology

Gullies in Pleistocene leached consolidated sand.

Vegetation

- (a) Most of the area is kanuka shrubland between 1 m and 3 m. Prickly hakea, gorse, Sydney golden wattle and macrocarpa are scattered in the canopy.
- (b) The remainder is Sydney golden wattle scrub 3-4 m tall.

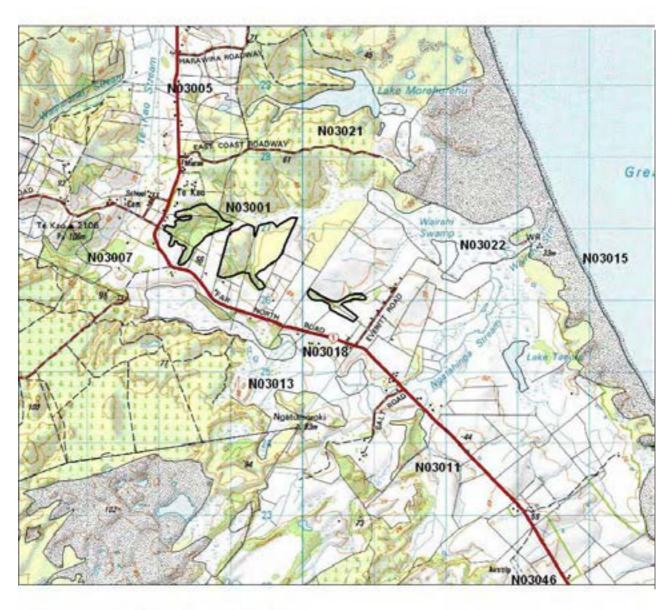
Fauna

Not surveyed.

Significance

Three areas of shrubland providing a linkage between the various wetlands, sand dunes, forest remnants and shrublands that stretch along Aupouri Peninsula.

Additional surveying is recommended to determine the full ecological significance of this site.



Te Kao Shrublands N03/001

Each grid is $1000m \times 1000m$ and = 100 ha.

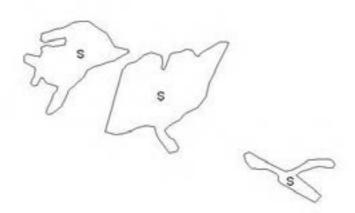
S = shrubland

F = forest

W = wetland

E = estuarine

D = duneland



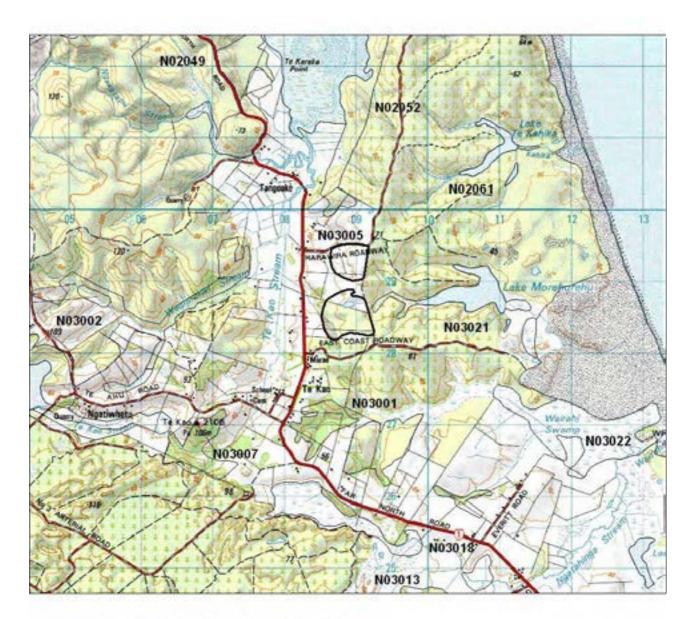
TE KEENA RD SHRUBLANDS

Survey no. N03/005

Survey date 28 August 1995

Grid reference N03 088 285, N03 089 293

Area 58 ha Altitude 20-65 m asl



Te Keena Rd Shrublands N03/005

Each grid is 1000m x 1000m

and = 100 ha.

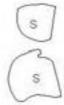
S = shrubland

F = forest

W = wetland

E = estuarine

D = duneland



Ecological unit

Manuka shrubland on gently rolling hill country

Landform/geology

Low hill country of Pleistocene leached consolidated sand overlying deeply weathered Parengarenga Group sandstone.

Vegetation

Manuka to 2 m is abundant with kanuka and *Callistachys lanceolata* occurring frequently. Rushes, harakeke and prickly hakea also occur.

Fauna

Not surveyed.

Significance

Two areas of shrubland abutting exotic forestry providing a link with the various wetlands, sand dunes, forest remnants and shrublands that stretch along Aupouri Peninsula. Additional surveying is recommended to determine the full ecological significance of this site.

OROMANGA SANDFIELD

Survey no. N03/006

Survey date 23 August 1995 Grid reference N03 018 257

Area 2.3 ha
Altitude 45-62 m asl

Ecological unit

Sandfield

Landform/geology

Holocene dunes overlying deflated Pleistocene parabolic dunes.

Vegetation

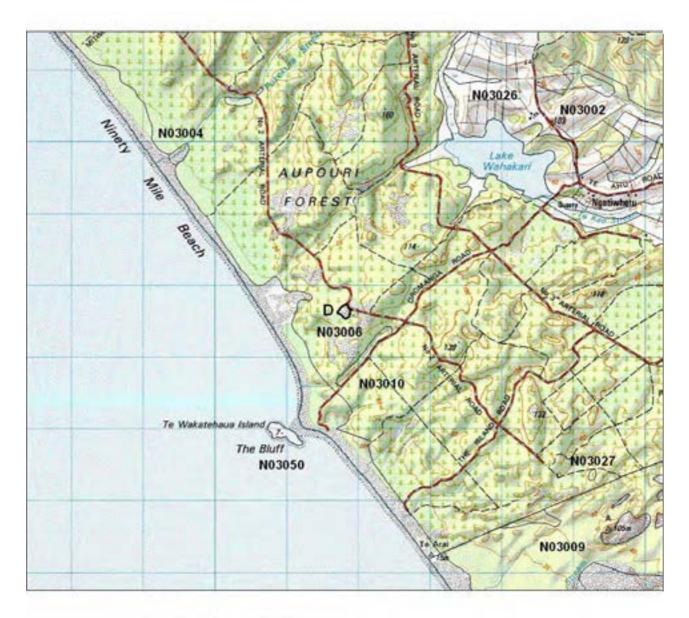
An area of hard sand pans and mobile dunes with sparse vegetation. Marram and toetoe are locally frequent. Tauhinu, *Coprosma acerosa*, sedges and Sydney golden wattle also occur.

Fauna

Not surveyed.

Significance

A small inland dune area.



Oromanga Sandfield N03/006

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

S = shrubland

F = forest

W = wetland

E = estuarine D = duneland

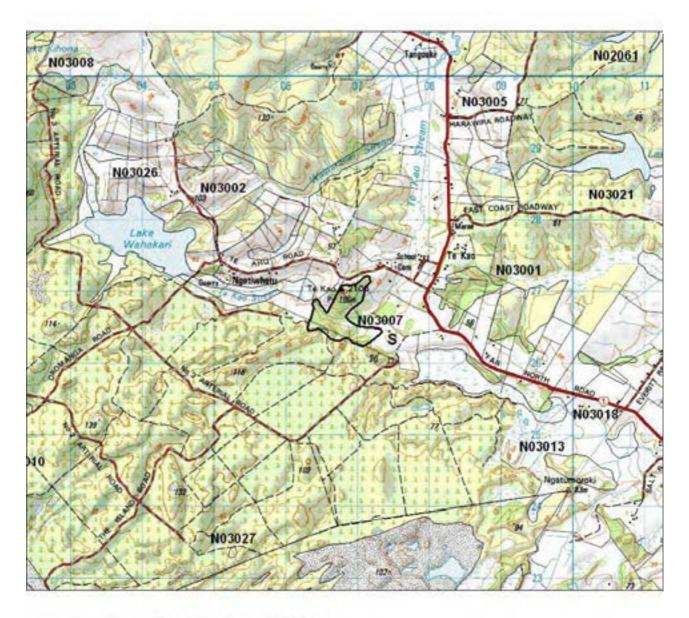
TE KAO TRIG SHRUBLAND

Survey no. N03/007

Survey date 15 August 1995 Grid reference N03 066 266

Area 44 ha

Altitude 40-106 m asl



Te Kao Trig Shrubland N03/007

Each grid is 1000m x 1000m

and = 100 ha.

S = shrubland

F = forest

W = wetland

E = estuarine

D = duneland

Ecological unit

- (a) Kanuka shrubland on hillslope
- (b) Sydney golden wattle shrubland on hillslope

Landform/geology

Hill country of deeply weathered Tangihua Complex volcanics bounded by Pleistocene parabolic dunes to the south of Te Kao Stream.

Vegetation

(a) Shrubland partly kanuka dominant and partly type (b), Sydney golden wattle dominant covers the slope south of the Te Kao Trig into a gully of the Te Kao Stream.

Fauna

Not surveyed.

Significance

An area of shrubland midway between east and west coasts providing a buffer to the Te Kao Stream and a linkage between the various wetlands, sand dunes, forest remnants and shrublands that stretch along Aupouri Peninsula. Additional surveying is recommended to determine the full ecological significance of this site.

ARTERIAL RD SHRUBLANDS

Survey no. N03/008

Survey date 23 August 1995 Grid reference N03 029 299

Area 12 ha

Altitude 62-100 m asl

Ecological unit

Manuka shrubland on gently sloping consolidated sand

Landform/geology

Pleistocene consolidated parabolic dunes.

Vegetation

Manuka to 2 m is abundant with occasional harakeke and emergent Sydney golden wattle.

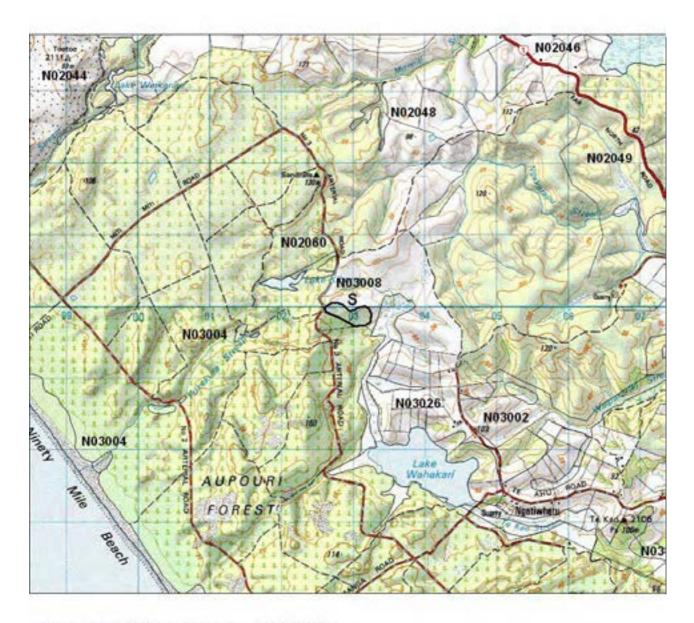
Fauna

Not surveyed.

Significance

Small area of shrubland abutting exotic forest area and providing a linkage from Lake Wahakari to Lake Kihona.

Additional surveying is recommended to determine the full ecological significance of this site.



Arterial Rd Shrublands N03/008

Each grid is 1000m x 1000m

and = 100 ha.

S = shrubland

F = forest

W = wetland

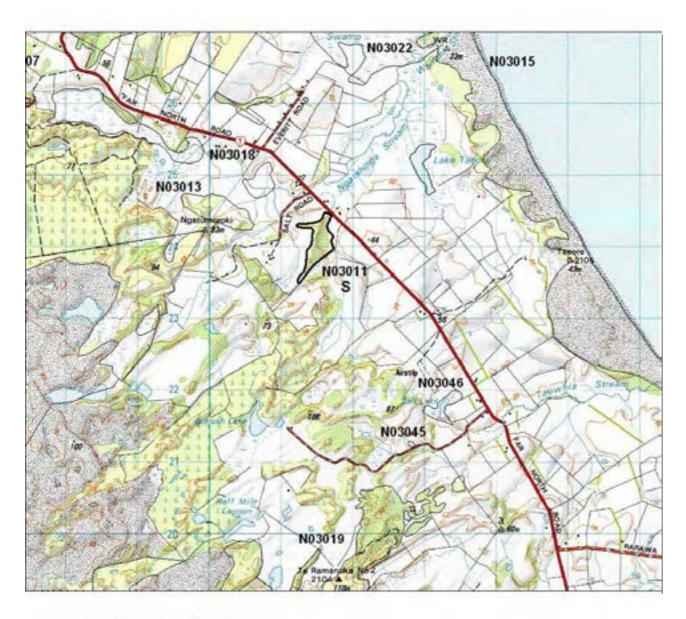
SALT RD SHRUBLAND

N03/011 Survey no.

Survey date 15 August 1995 Grid reference N03 116 240

19 ha Area

Altitude 15-40 m asl



Salt Rd Shrubland N03/011

Each grid is $1000m \times 1000m$ and = 100 ha.

S = shrubland

F = forest

W = wetland

Ecological unit

- (a) Kanuka shrubland on gentle hill country
- (b) Manuka-raupo swamp association on interdune flat

Landform/geology

Late Pleistocene parabolic dunes and interdune flats.

Vegetation

- (a) Almost all of the area is kanuka shrubland between 2 m and 6 m with occasional pine, ti kouka, prickly hakea, *Eucalyptus* sp., black wattle, manuka, gorse and Sydney golden wattle.
- (b) A small area occurs at the north eastern corner of the habitat with kanuka and raupo, and occasional ti kouka, harakeke, bracken, gorse, tobacco weed and mamaku.

Fauna

Not surveyed.

Significance

A link in the various habitats that stretch along Aupouri Peninsula.

Additional surveying is recommended to determine the full ecological significance of this site.

NGATUMOROKI SHRUBLAND

Survey no. N03/013

Survey date 15 August 1995 Grid reference N03 103 245

Area 29 ha

Altitude 20-60 m asl

Ecological unit

Kanuka shrubland on flat to gentle hill country

Landform/geology

Late Pleistocene parabolic dunes.

Vegetation

Kanuka is dominant with frequent Sydney golden wattle and occasional prickly hakea, harakeke and emergent pines.

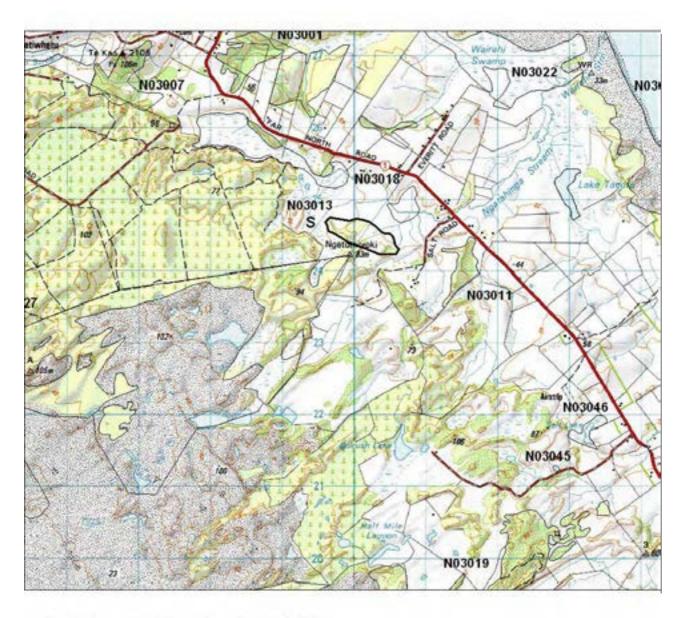
Fauna

Not surveyed.

Significance

A small shrubland area buffering the adjacent wetland and acting as a linkage between habitats on the Aupouri Peninsula.

Additional surveying is recommended to determine the full ecological significance of this site.



Ngatumoroki Shrubland N03/013

Each grid is 1000m x 1000m

and = 100 ha.

S = shrubland

F = forest

W = wetland

E = estuarine D = duneland

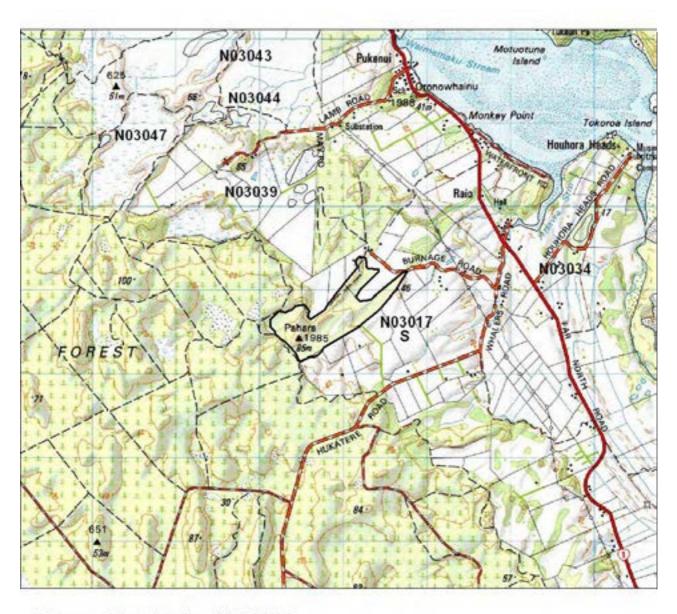
PAHARA SHRUBLANDS

Survey no. N03/017

Survey date 23 August 1995 Grid reference N03 210 067

Area 69 ha

Altitude 35-85 m asl



Pahara Shrublands N03/017

Each grid is 1000m x 1000m

and = 100 ha.

S = shrubland

F = forest

W = wetland

E = estuarine

D = duneland

Ecological unit

Kanuka-manuka-wattle shrubland on gentle hillslope

Landform/geology

North-west area: Pleistocene consolidated parabolic dunes and interdune flats. South-east area: Holocene unconsolidated parabolic dunes.

Vegetation

The northern sector is kanuka-manuka and wattle in association. Other species present are prickly moses, prickly hakea, pine and *Eucalyptus*.

In the south, manuka is absent and scattered pine is the only other canopy species.

Fauna

Not surveyed.

Significance

Shrubland area to the west of Houhora Harbour that provides an important function of linking the various wetlands, sand dunes, forest remnants and shrublands that stretch along Aupouri Peninsula.

Additional surveying is recommended to determine the full ecological significance of this site.

KIMBERLEY SHRUBLAND

Survey no. N03/028

Survey date 15 August 1995 Grid reference N03 173 154

Area 8.1 ha
Altitude < 40 m asl

Ecological unit

Kanuka shrubland on gentle slope

Landform/geology

Pleistocene consolidated parabolic dunes and interdune flats.

Vegetation

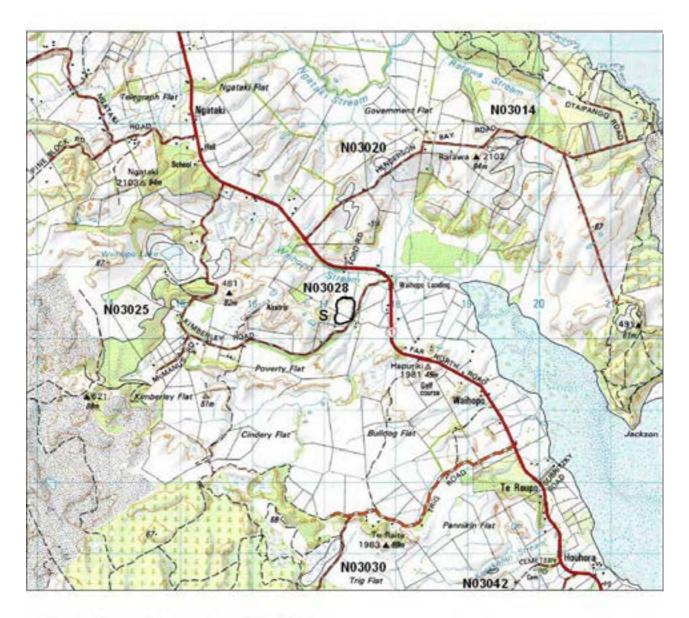
Low kanuka shrubland of 1-2 m dominates the site with Sydney golden wattle occurring occasionally.

Fauna

Not surveyed.

Significance

Small, isolated shrubland area north-west of the Houhora Harbour.



Kimberley Shrubland N03/028

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

S = shrubland

F = forest

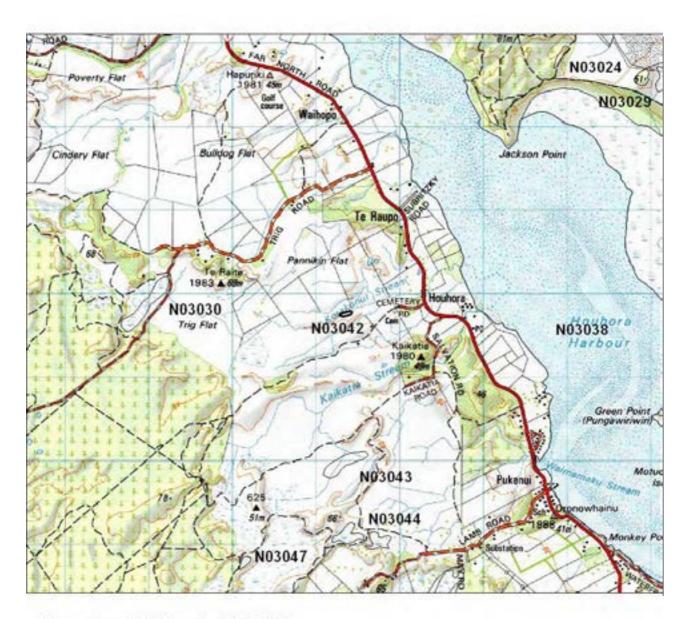
W = wetland

CEMETERY RD POND

Survey no. N03/042

Survey date 17 January 1996 Grid reference N03 194 117

Area 0.59 ha Altitude < 20 m asl



Cemetery Rd Pond N03/042

Each grid is 1000m x 1000m

and = 100 ha.

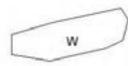
S = shrubland

F = forest

W = wetland

E = estuarine

D = duneland



Ecological unit

- (a) Eleocharis sphacelata reedland in dune hollow
- (b) Open water

Landform/geology

Freshwater wetland on interdune flat of Pleistocene parabolic dunefield.

Vegetation

- (a) *Eleocharis sphacelata* is abundant in more than half the area. Raupo and harakeke are present.
- (b) The remainder is open water formed by the damming of a creek. Sydney golden wattle occurs on the margins.

Fauna

Common bird species. Other fauna not surveyed.

Significance

A small area providing habitat for common bird species.

ONEPU SWAMP

Survey no. N03/045

Survey date 18 January 1996 Grid reference N03 128 213

Area 0.5 ha Altitude 40 m asl

Ecological unit

Raupo reedland in dune hollow

Landform/geology

Freshwater wetland in gully in Holocene parabolic dunefield.

Vegetation

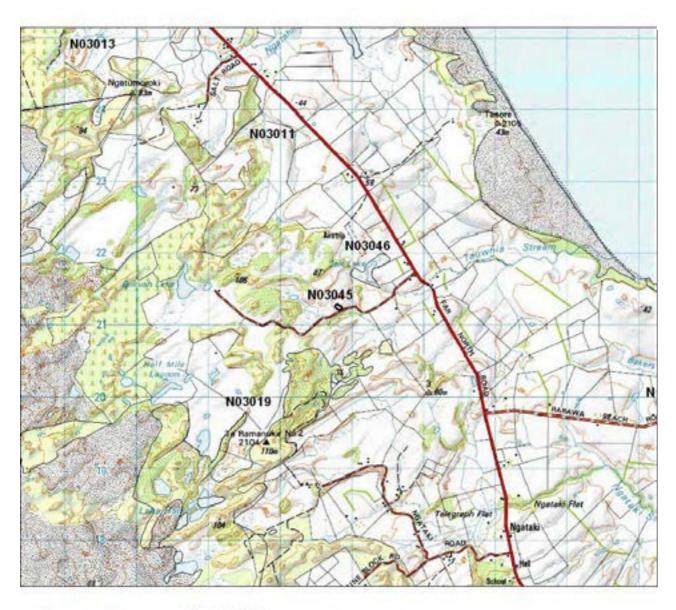
Predominantly raupo. Other species present include *Baumea articulata*, harakeke, ti kouka, bracken, kanuka and manuka.

Fauna

Not surveyed.

Significance

A small fenced raupo wetland with potential wildlife value. Survey recommended for spotless crake (Regionally significant species).



Onepu Swamp N03/045

Each grid is $1000m \times 1000m$ and = 100 ha.

S = shrubland

F = forest

W = wetland

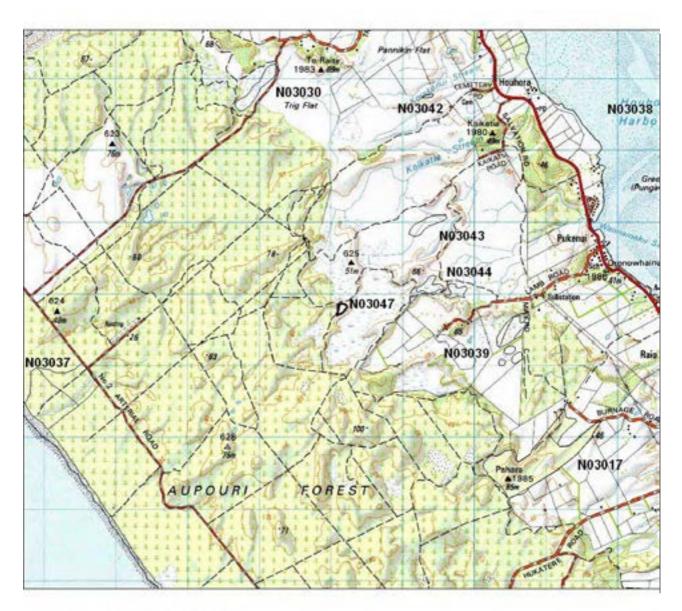


GULLY LAKE

N03/047 Survey no.

29 February 1996 Survey date Grid reference N03 182 088

1.2 ha Area Altitude 40 m asl



Gully Lake N03/047

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

S = shrubland

F = forest

W = wetland

E = estuarine

D = duneland



Ecological unit

Manuka shrubland in dune hollow

Landform/geology

Hollow between dune ridges of Pleistocene parabolic dunefield.

Vegetation

Low manuka is abundant. Sydney golden wattle is frequent. Pampas and ti kouka are also present.

This wetland appears to be drying out possibly from the effects of dense Sydney golden wattle on the eastern periphery and Sydney golden wattle and pines on the remaining boundaries.

Fauna

Grey duck (1986).

Significance

A small area previously habitat for native duck species. Continued monitoring is recommended to record its ecological evolution.

BIG FLAT SHRUBLAND

Survey no. N04/004

Survey date 14 August 1995
Grid reference N04 264 971
Area 11.9 ha
Altitude 20-50 m asl

Ecological unit

Kanuka shrubland on gentle hill country

Landform/geology

Pleistocene consolidated parabolic dune.

Vegetation

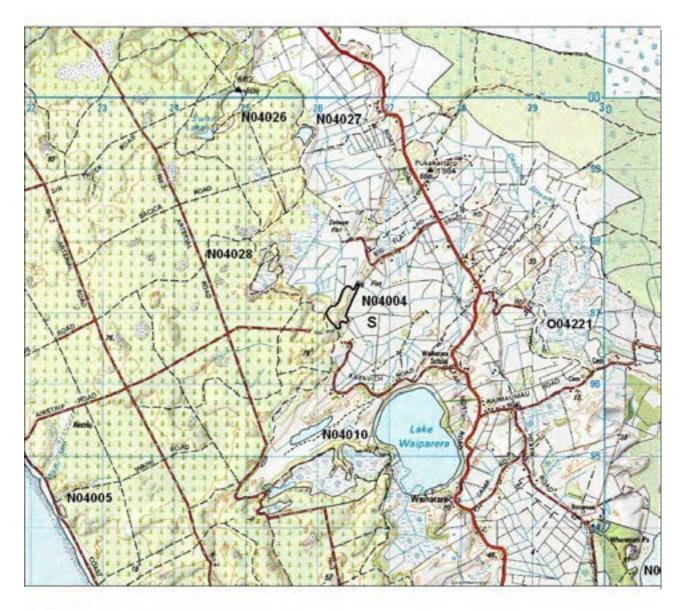
Kanuka is dominant with Sydney golden wattle locally frequent. Prickly hakea is also present.

Fauna

Not surveyed.

Significance

Small shrubland habitat providing the function of linking the various wetlands, sand dunes, forest remnants and shrublands that stretch along Aupouri Peninsula.



Big Flat Shrubland N04/004

Each grid is $1000m \times 1000m$ and = 100 ha.

S = shrubland

F = forest

W = wetland

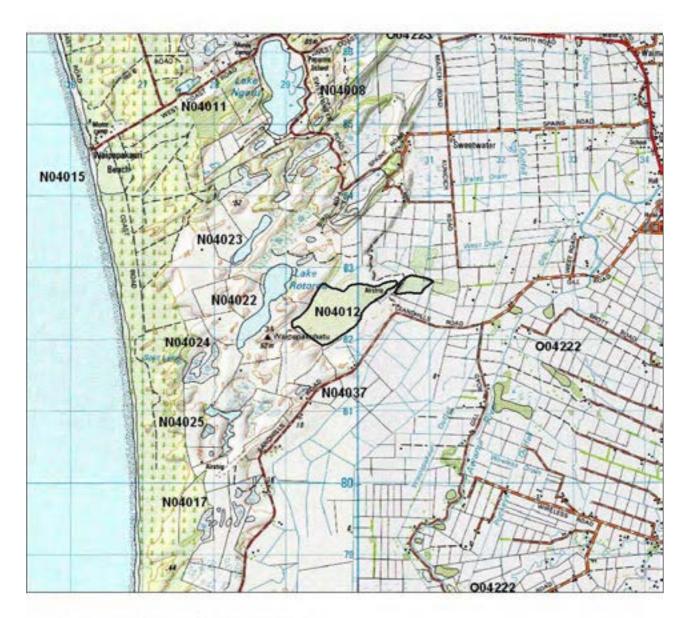
AIRSTRIP SHRUBLAND

Survey no. N04/012

Survey date 7 August 1995

Grid reference N04 298 825, O04 307 827

Area 71 ha Altitude 5-10 m asl



Airstrip Shrubland N04/012

Each grid is 1000m x 1000m

and = 100 ha.

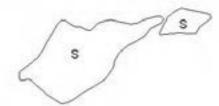
S = shrubland

F = forest

W = wetland

E = estuarine

D = duneland



Ecological unit

- (a) Kanuka shrubland on interdune flat
- (b) Gorse-kanuka shrubland on interdune flat

Landform/geology

Interdune flat in dunefield of Pleistocene consolidated parabolic dunes.

Vegetation

Two adjacent habitats in Sandhills Rd. The eastern area is kanuka dominant. Gorse is common and mamaku, tobacco weed and brush wattle are frequent.

The remainder is mostly gorse with frequent brush wattle and tobacco weed and occasional pampas. About 10% is kanuka to 5 m. There is a small area of pine.

Fauna

Not surveyed.

Significance

A large, semi-contiguous shrubland habitat with major weed invasion but a habitat that provides an important function of linking the various wetlands, sand dunes, forest remnants and shrublands that stretch along Aupouri Peninsula.

Additional surveying is recommended to determine the full ecological significance.

SWEETWATER STATION SHRUBLANDS

Survey no. N04/013

Survey date 7 August 1995

Grid reference N04 284 777, N04 289 765

Area 43 ha

Altitude 10-20 m asl

Ecological unit

- (a) Manuka-gorse shrubland on interdune flat
- (b) Kanuka shrubland on peaty swamp deposits

Landform/geology

North-west: Interdune flat in dunefield of Pleistocene consolidated parabolic dunes. South-east: Holocene swamp deposits.

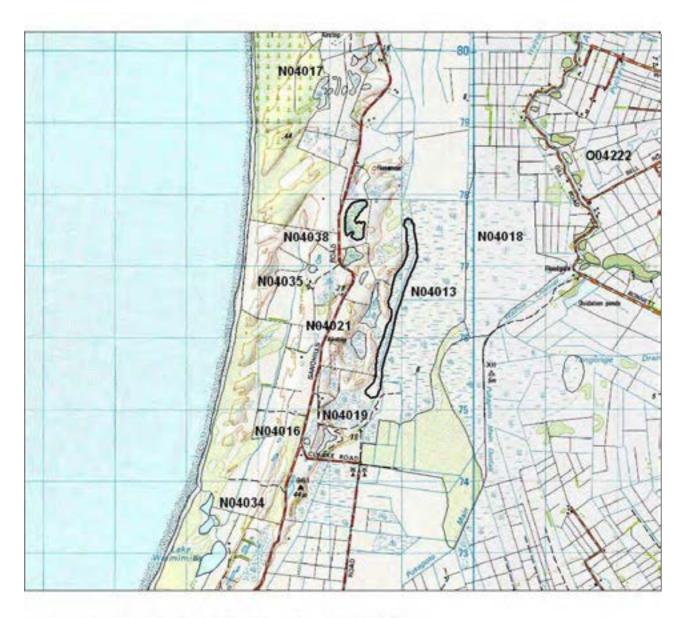
Vegetation

Two shrubland areas between Sandhills Rd and Lake Tangonge.

- (a) The western area is manuka dominant with gorse commonly occurring. Ti kouka, sedges, pampas and tobacco weed are also present. This area was a wetland and has dried out.
- (b) The eastern area is mostly kanuka with frequent gorse and pampas and occasional ti kouka. There is a small area of pine.

Fauna

Not surveyed.



Sweetwater Station Shrublands

N04/013

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

S = shrubland

F = forest

W = wetland



Significance

Two small shrubland areas providing a function of linking the various wetlands, sand dunes, forest remnants and shrublands that stretch along Aupouri Peninsula. Additional survey is required to determine their full ecological significance.

RANGIPUTA RD SHRUBLANDS

Survey no. 003/007

Survey date 22 August 1995

Grid reference O03 384 022, O03 389 007

Area 73 ha
Altitude 2-26 m asl

Ecological unit

(a) Kanuka-manuka-Sydney golden wattle shrubland on gentle slopes and flats

(b) Manuka shrubland on gentle slopes and flats

Landform/geology

Pleistocene consolidated parabolic dunes and coastal foredunes with intercalated area of Holocene sandy alluvium. Underlying Houhora Complex greywacke and felsic intrusions outcrop in shore platforms and coastal cliffs north of Rangiputa.

Vegetation

- (a) The southern area is kanuka shrubland 2-4 m with manuka and Sydney golden wattle commonly occurring. Pohutukawa, pine, ti kouka, brush wattle and prickly hakea are occasional.
- (b) Around the Rangiputa settlement low manuka shrubland is abundant. Kanuka, Sydney golden wattle and *Eucalyptus* are frequent. *Epacris pauciflora*, prickly hakea and bottlebrush are also present.

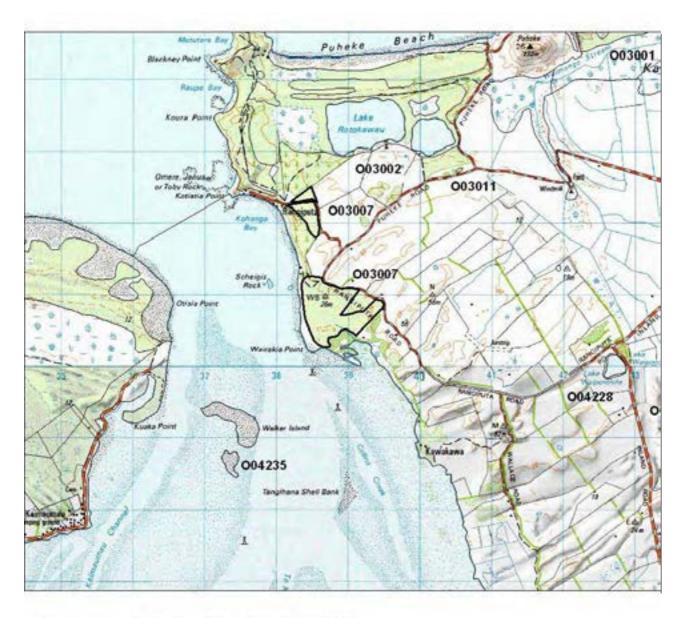
Fauna

Common birds were recorded by the OSNZ in early 2000.

Significance

An area of shrubland on the north eastern side of Rangaunu Harbour mouth providing a buffer to the harbour/coast from exotic forestry and farmland.

Approximately 5.5 ha of this site is Far North District Council reserve land and 3.3 ha is Marginal Strip administered by the Department of Conservation.



Rangiputa Rd Shrublands 003/007

Each grid is $1000m \times 1000m$ and = 100 ha.

S = shrubland

F = forest

W = wetland



