



NATIVE FOREST REMNANTS OF

WELLINGTON CITY

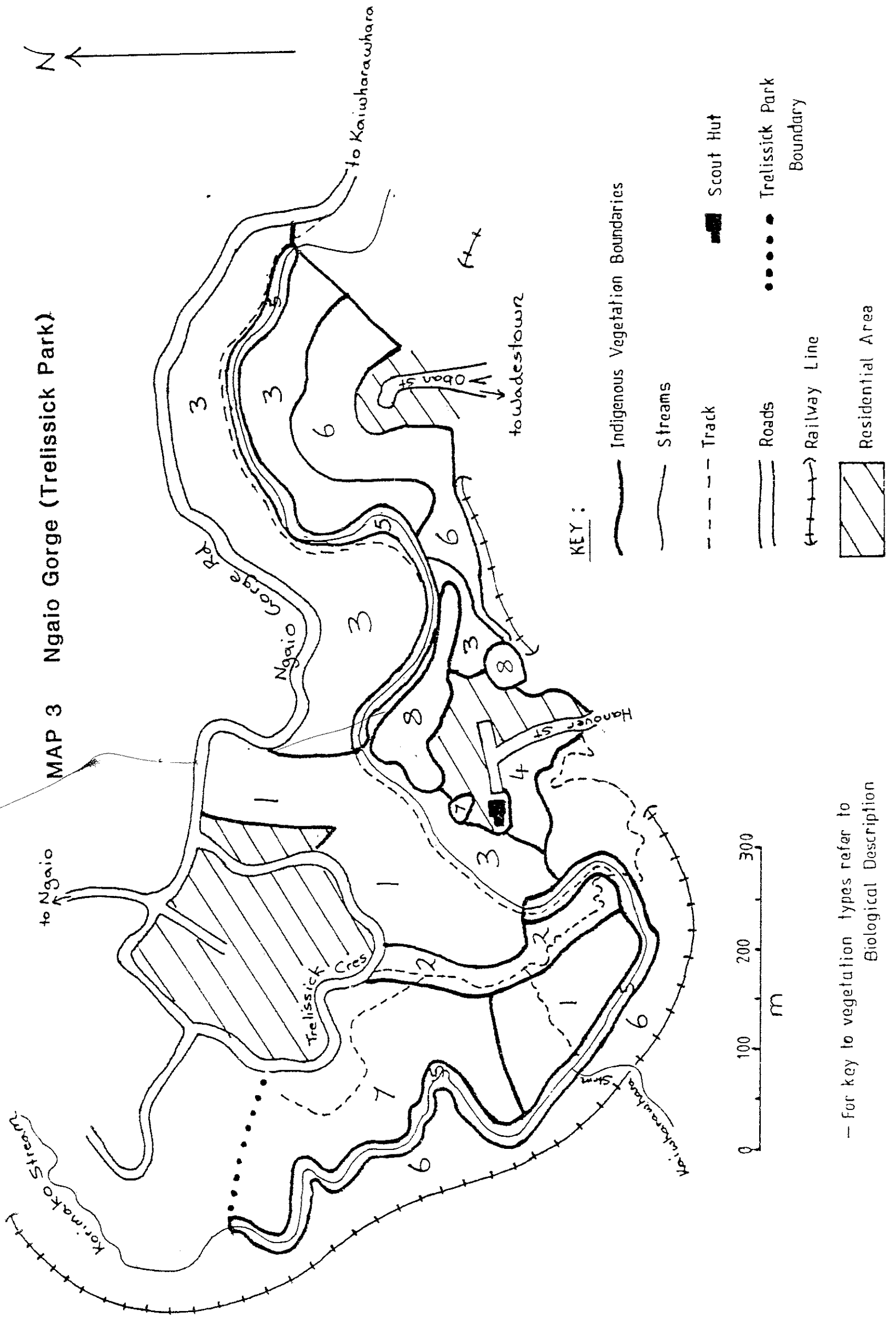
- A Survey of Five Sites

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MAP 3 Ngaio Gorge (Trelissick Park)



— for key to vegetation types refer to Biological Description

<p>NGAIO GORGE (TRELISSICK PARK)</p> <p>LOCATION Covers the northern and southern slopes of Kaiwharawhara Stream, in Ngaio Gorge, between Ngaio and Wadestown.</p> <p>AREA DESCRIPTION Ngaio Gorge is an area of lowland, moderate to steep, streamside and hillside vegetation following the Kaiwharawhara Stream. It is bordered on the north by Ngaio Gorge Road and Trelissick Crescent, and on the south by the Johnsonville railway line. The majority of the forest covers the steeper northern slopes and consists of secondary broadleaved forest and regenerating podocarp-broadleaved forest. Scrub on the southern slopes provides a buffer zone while adventive species and willows dominate the stream banks.</p> <p>ACCESS Entrances are off Trelissick Crescent and the lower end of Ngaio Gorge Road in Ngaio and off Hanover Street in Wadestown.</p>	<p>GRID REF NZMS260 R27 585 928</p> <p>AIR PHOTO 5497 C/8 (1980)</p> <p>AREA 18 ha</p> <p>CONTROL W.C.C.</p> <p>STATUS/CURRENT PROTECTION Although only parts of the park fall under the Reserves Act (1977) the whole park is proposed to be administered as a recreation reserve¹. The land to the south of the Kaiwharawhara Stream is owned by N.Z. Railways and is generally accessible as part of the park.</p>
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BIOLOGICAL DESCRIPTION	% area	Res Wgtn	native ex			regen	NAT	trend	exotics
Community Types			1°	2°	ind				
1. Tawa dominant forest with rewarewa. Hinau and kamahi also common on the western side of the Trelissick Crescent track. Titoki, karaka and mahoe occur on the lower slopes.	13.4	YES	✓			M	H	S	M
2. Regenerating broadleaved-podocarp forest. A mixed broadleaved canopy of fivefinger, hinau, rewarewa and tawa with occasional kahikatea, matai and totara trees.	4.5	YES	✓			M	H	I	L
3. Karaka forest with titoki co-dominant or dominant in places. Rewarewa and tawa are often emergent. <i>Melicope simplex</i> becomes significant in the canopy towards the western end, below the Scout hut. <i>Muehlenbeckia australis</i> is also important as a vine, covering much of the canopy in places.	30.7	YES	✓			M	H	S	M
4. Low broadleaved forest. Mahoe, mapou, lemonwood, kohuhu with occasional karaka and titoki trees.	3.0	YES	✓	✓		H	M	I	M
5. Streamside vegetation. Crack willow is dominant canopy species with other adventives common. Native species present, include, kotukutuku, native passionfruit, wineberry, mahoe, titoki and karaka.	8.6	YES			✓	L	D	H	
6. Gorse, broom scrub with occasional mahoe, rangiora and lemonwood shrubs.	21.7				✓	M	L	I	H
7. Mahoe dominant canopy with occasional hinau.	14.9	YES	✓			M	H	S	M
8. Stands of exotic pines and sycamores. Titoki, karaka and mahoe are present.	3.3				✓				

Comments on species

- Banded kokopu and eels have been found above the Kaiwharawhara Stream and Korimako Stream junction.
- A glow-worm colony exists in one of the sewage tunnels on the northern side of the gorge.

VALUES

Scientific

Contains important karaka, titoki forest and maturing broadleaved forest. Listed as a forested site of potential value for wildlife².

Scenic

The scenic value of the forest is important to the residents and the park forms a backdrop to the surrounding suburbs.

Recreation

The park forms part of the Northern Walkway and is used extensively by residents, and school and scout groups.

MODIFICATIONS AND TRENDS

The original forest in Ngaio Gorge, believed to be tawa forest with emergent rimu and kahikatea, was milled heavily about 150 years ago and has since been left to regenerate¹. Additionally, the landscape has been modified by the formation of the railway line on the southern slope and the development of a sewerage pipe system in the Gorge. These developments caused much of the land to be cleared on the southern slopes and the bush has been slow to regenerate. The channeling of sewerage pipes through the Gorge caused the pollution of the Kaiwharawhara Stream and considerable effort has since been made to reduce this.

Introduced weeds have become a major problem in the area, particularly on the streamside and areas where sewerage pipes have been laid. *Clematis vitalba*, blackberry, *Tradescantia*, tree lupin, broom and others are continuing to spread and are preventing the regeneration and establishment of native species. The gorse scrub on the southern slopes, however, is providing a good environment for native regeneration, with the help of residents and volunteer groups who have recently planted a number of native plants in areas of the park to aid regeneration.

THREATS

1. Spread of adventive plants especially *Clematis vitalba*, blackberry, tree lupin.
2. Continued pollution of the stream from sewerage pipes and other sources. This is endangering the fauna living in the stream and the surrounding vegetation.
3. Dumping of rubbish in the area and the effect of leftover construction debris.
4. Fire is a threat within the scrub on the southern slope.

IMPROVEMENTS NEEDED

1. Clearing and control of adventive plants and replacement with native species, particularly the stream sides.
2. Further planting of species native to the area particularly on the southern slopes, to aid regeneration.
3. Inclusion of all areas of the park under the Reserves Act (1977) and extension of the boundaries where possible.
4. Improvement of existing tracks and development of others in the area.
5. Improvement of the water quality in Kaiwharawhara Stream.

COMMENTS, RECOMMENDATIONS

Ngaio Gorge is an important area of maturing secondary forest and regenerating scrub, which forms part of the Northern Walkway and is used extensively by residents and the public. The residents of Wadestown and Ngaio have given many suggestions on the future of the park and they are eager for the visual quality to be developed and maintained and for it to remain as a 'wild or semi-wild reserve'¹. Wadestown residents have also planted many native species in the area to aid regeneration. Further planting should be encouraged, and is welcomed, on N.Z. Railways land, within their instructions¹.

A major problem in the park is the spread of exotic species, especially beside the stream, which are threatening native regeneration. Control of these and replacement with species native to the park is urgent and will provide a more attractive plant cover.

The Parks and Recreation Department are planning to acquire additional land, where possible, to extend the park boundary and eventually to link up with Otari Open Air Native Plant Museum¹. This and other improvements will increase the recreational and scenic value of the park and strengthen its links with the other areas of native forest in Wellington city.

REFERENCES

1. Trelissick Park Management Plan. Prepared by Parks & Recreation Dept, Wellington City Council. February 1984.
2. Parrish, G.R. (1984). Wildlife and Wildlife Sites of the Wellington Region. N.Z. Wildlife Service Fauna Survey Unit Report No 38.

COMMON INDIGENOUS HIGHER PLANTS OF NGAIO GORGE

Trees and Shrubs

SCIENTIFIC NAME	MAORI/Common NAME
<i>Alectryon excelsus</i>	titoki
<i>Aristotelia serrata</i>	wineberry
<i>Beilschmiedia tawa</i>	tawa
<i>Brachyglottis repanda</i>	rangiora
<i>Coprosma grandifolia</i>	raurekau
<i>C. lucida</i>	karamu
<i>C. rhamnoides</i>	
<i>C. robusta</i>	karamu
<i>Cordyline australis</i>	cabbage tree
<i>Coriaria arborea</i>	tutu
<i>Corynocarpus laevigatus</i>	karaka
<i>Dacrycarpus dacrydioides</i>	kahikatea
<i>Dodonaea viscosa</i>	akeake
<i>Elaeocarpus dentatus</i>	hinau
<i>Fuchsia excorticata</i>	kotukutuku
<i>Geniostoma ligustrifolium</i>	hangehange
<i>Hebe stricta</i>	
<i>Hedycarya arborea</i>	pigeonwood
<i>Hoheria populnea</i>	houhere, lacebark
<i>Knightea excelsa</i>	rewarewa
<i>Kunzea ericoides</i>	kanuka
<i>Leptospermum scoparium</i>	manuka
<i>Lophomyrtus bullata</i>	ramarama
<i>Macropiper excelsum</i>	kawakawa
<i>Melicope simplex</i>	
<i>M. simplex X ternata</i>	
<i>Melicytus ramiflorus</i>	mahoe
<i>Myoporum laetum</i>	ngaio
<i>Myrsine australis</i>	mapou
<i>Nestegis lanceolata</i>	white maire
<i>Olearia paniculata</i>	akiraho, golden akeake
<i>O. rani</i>	heketara
<i>Pennantia corymbosa</i>	kaikomako
<i>Pittosporum crassifolium</i>	karo
<i>P. eugenoides</i>	tarata, lemonwood
* <i>P. ralphii</i>	
<i>P. tenuifolium</i>	kokuhu
<i>Podocarpus totara</i>	totara
<i>Prumnopitys ferugineus</i>	miro
<i>P. taxifolius</i>	matai
<i>Pseudopanax arboreus</i>	five-finger
<i>P. crassifolius</i>	lancewood
<i>Schefflera digitata</i>	pate
<i>Sophora microphylla</i>	kowhai
<i>Urtica ferox</i>	ongaonga
<i>Weinmannia racemosa</i>	kamahi

Climbers and Lianes

Clematis paniculata
Freycinetia baueriana ssp. *banksii*
Metrosideros fulgens
Muehlenbeckia australis
M. complexa

Parsonsia heterophylla
Passiflora tetrandra
Ripogonum scandens
Rubus cissoides

Grasses and like Plants

Microlaena avenacea
Phormium tenax
Uncinia uncinata

Herbs

Astelia solandri
Collosperrum hastatum

Ferns

Adiantum cunninghamii
Anarthropteris lanceolata
Asplenium bulbiferum
A. flaccidum
A. oblongifolium
Blechnum capense
B. chambersii
B. filiforme
Cyathea dealbata
C. medullaris
Histiopteris incisa
Hymenophyllum demissum

Lastreopsis glabella
L. hispida
L. velutina
Pellaea rotundifolia
Phymatosorus diversifolius
P. scandens
Pneumatopteris pennigera
Polystichum richardii
Pteridium esculentum
Pyrrosia serpens

* native species outside their natural range.

Common Adventive Plants

SCIENTIFIC NAME

Acer pseudo-platanus
Allium triquetrum
Berberis glaucocarpa
Calystegia sepium
Clematis vitalba
Cytisus scoparius
Foeniculum vulgare
Hakea sp.
Leycesteria formosa
Lonicera japonica
Lupinus arboreus
Pinus sp.
Rubus fruticosus
Salix fragilis
Selaginella sp.
Tradescantia fluminensis
Ulex europaeus

COMMON NAME

sycamore
onion weed
barberry
greater bindweed
Old Man's beard
yellow flowered broom
fennel

Himalaya honeysuckle
Japanese honeysuckle
tree lupin

blackberry
crack willow

wandering jew
gorse