



NATIVE FOREST REMNANTS OF

WELLINGTON CITY

- A Survey of Five Sites

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MAP 5

Khandallah Park

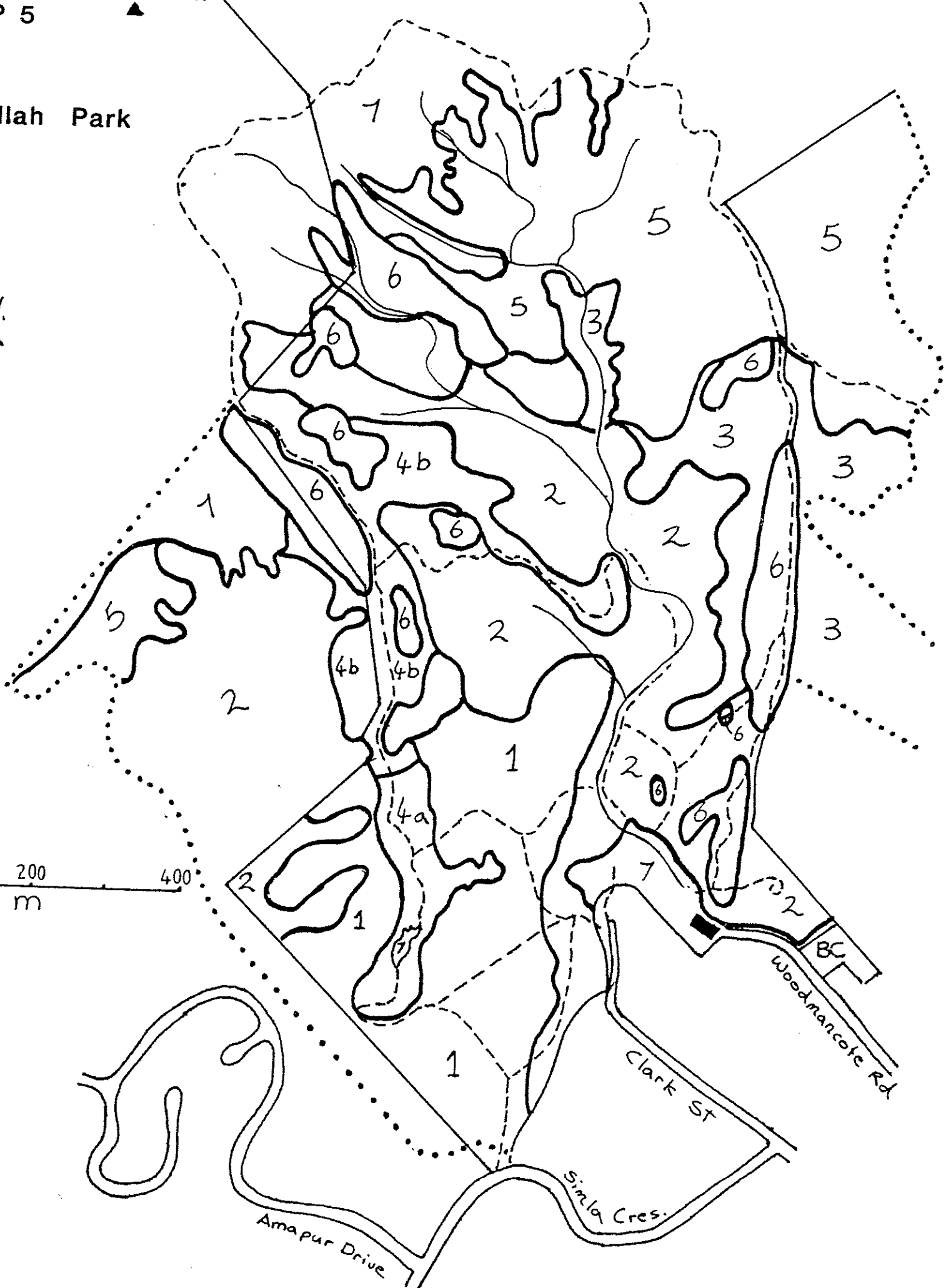
Mt Kaukau ▲

to Johnsonville

N.



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m



KEY:

Indigenous Vegetation Boundaries

Streams

Tracks

Roads

Proposed Boundary Extensions

BC Bowling Club

Swimming Pool

Existing Park Boundaries

- For key to vegetation types refer to Biological Description

<p>KHANDALLAH PARK</p>	<p>GRID REF NZMS 260 R27 595949</p>
<p>LOCATION</p> <p>Lies to the north-west of Khandallah suburb, occupying a large valley leading up to Mt Kaukau.</p>	<p>AIR PHOTO</p> <p>5497 D/10 (1980)</p>
<p>AREA DESCRIPTION</p> <p>Khandallah Park contains an extensive area of native broadleaved forest and forms part of the Northern Walkway in Wellington rising to a summit (Mt Kaukau) overlooking Wellington city, suburbs and harbour. Much of the park is covered in regenerating tawa-kohekohe and kohekohe-mahoe forest with low scrub on the hillsides and ridges. The oldest section of the park, near Simla Crescent, contains a beautiful stand of sizable pukatea, tawa and kohekohe trees. Many exotic pines are present on the upper ridges and are occasionally emergent over the broadleaved forest.</p>	<p>AREA</p> <p>80 ha</p> <p>CONTROL</p> <p>W.C.C.</p> <p>STATUS/CURRENT PROTECTION</p> <p>Recreational reserve.</p>
<p>ACCESS</p> <p>Main entrance is at Woodmancote Road (via Box Hill Road) with other entrances off Simla Crescent and Clark Street. Trains run frequently between Wellington and Khandallah.</p>	

BIOLOGICAL DESCRIPTION Community Types	% area	Res Wgtn	native			ex	regen	NAT	trend	exotics
			1°	2°	ind					
1. Tawa canopy with kohekohe forming subcanopy. Rewarewa and hinau are also common in the canopy while pukatea often dominates the stream sides and lower slopes.	17.3	YES		✓			M	H	S	L
2. Kohekohe canopy with tawa, hinau and rewarewa occasionally emergent. Mahoe, heketara, mapou and tree ferns are also common and kawakawa dominates the understorey.	27.2	YES		✓			M	H	S	L
3. Regenerating broadleaved forest, dominated by mahoe, with kohekohe, mapou, fivefinger, tarata and pigeonwood common. Rewarewa or hinau are occasionally emergent.	5.9	YES		✓			M	H	I	L
4. Broadleaved scrub on ridge tops and higher slopes. Occasional pines.	9.7	YES		✓	✓		M	H	I	M
a. Mixed broadleaved species with fivefinger, hangehange, mapou, rewarewa, hinau, kohekohe, puka and ponga common.										
b. Dominated by rangiora and raurekau, with bracken, gorse, broom and <i>Coprosma foetidissima</i> common.										
5. Gorse, barberry scrub.	23.2					✓		L	I	H
6. Stands of exotic pines and marcocarpas with native broadleaved species forming understorey.	10.3					✓				
7. Grass.	6.5					✓				

Comments on species

- *Cyathea cunninghamii*, rare in the Wellington region, is found in Khandallah Park.
- The relatively mature stand of tawa-pukatea near Simla Crescent is a significant feature.

VALUES

Scientific

Important area of secondary broadleaved forest in Wellington with good regeneration. Listed as a forested site of potential value for wildlife².

Scenic

Forms a visual backdrop to the suburb. Dramatic views of the city environs from Mt Kaukau and the ridge tracks.

Recreation

High recreational use. Forms part of the Northern Walkway.

MODIFICATIONS AND TRENDS

The original broadleaved-podocarp forest on the land was milled for timber in the late 1800's, and then burnt in some places repeatedly, to open it up for pasture¹. As early as 1919, when the park was transferred to W.C.C. control, native regeneration was proceeding and in the oldest section of the park near Simla Crescent regeneration dates back to the 1880's.

The old exotic pines and macrocarpas on the upper ridges and other areas of the park were planted by early settlers and native regeneration of broadleaved species is proceeding beneath them. A number of the pines were destroyed during the 'Wahine Storm' in 1968 and in 1975 summer bush fires also destroyed much of the native regeneration and pines in the upper regions of the park. Many native plants have since been planted in these areas, in an effort to re-establish regeneration.

There is good native regeneration occurring in most areas of the park and if left undisturbed the zones of scrub should regenerate into forest. Possums browsing, however, has had some affect on the vegetation and native regeneration.

THREATS

1. Fire threatens the gorse and scrub on the ridges and upper regions of the park.
2. Spread of barberry which is in quite high density amongst the gorse and broadleaved scrub.
3. Browsing of the native vegetation by possums and livestock if they escape.
4. Damage to bush and tracks by public misuse.

IMPROVEMENTS NEEDED

1. Further planting of native species to establish and encourage regeneration within the gorse and broadleaved scrub.
2. Control of barberry in the scrub zones and replacement with native species.
3. Control of possum numbers.
4. Inclusion of proposed park boundaries within the reserve.
5. Management policies directed at preservation of the native forest.

COMMENTS, RECOMMENDATIONS

Khandallah Park contains a large area of native broadleaved forest, with dense kohekohe-tawa forest in the mullies buffered by regenerating forest and scrub on the hillsides. It maintains an important link between native forest remnants in Wellington city and in the Hutt Valley and is notable for its abundant native birdlife. If regeneration of the scrub areas is encouraged these may eventually return to forest. The park is an important recreational facility for Khandallah and increasing residential development will result in greater use of the reserve¹. Public education and management policies to protect the native forest will therefore be necessary.

REFERENCES

1. Mt Kaukau Reserves Management Plan. Parks & Recreation Dept. WCC. March 1981.
2. Parrish, G.R. (1984). Wildlife and Wildlife Sites of the Wellington Region. NZWS Fauna Survey Unit Report No 38.

COMMON INDIGENOUS HIGHER PLANTS OF KHANDALLAH PARK

Trees and Shrubs

SCIENTIFIC NAME	COMMON NAME
<i>Alectryon excelsus</i>	titoki
<i>Aristotelia serrata</i>	wineberry, makomako
<i>Beilschmiedia tawa</i>	tawa
<i>Brachyglottis repanda</i>	rangiora
<i>Cassinia leptophylla</i>	tauhinu
<i>Carpodetus serratus</i>	putaputaweta
<i>Coprosma areolata</i>	
<i>C. foetidissima</i>	
<i>C. grandifolia</i>	raurekau
<i>C. lucida</i>	karamu
<i>C. rhamnoides</i>	
<i>C. robusta</i>	karamu
<i>Corynocarpus laevigatus</i>	karaka
<i>Dacrycarpus dacrydioides</i>	kahikatea
<i>Dodonaea viscosa</i>	akeake
<i>Dysoxylum spectabile</i>	kohekohe
<i>Elaeocarpus dentatus</i>	hinau
<i>Fuchsia excorticata</i>	kotukutuku
<i>Gaultheria antipoda</i>	snowberry
<i>Geniostoma ligustrifolium</i>	hangehange
<i>Griselinia lucida</i>	puka
<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>Laurelia novae-zelandiae</i>	pukatea
<i>Leucopogon fasciculatus</i>	mingimingi
<i>Lophomyrtus bullata</i>	ramarama
<i>Leptospermum scoparium</i>	manuka
<i>Macropiper excelsum</i>	kawakawa
<i>Melicytus ramiflorus</i>	mahoe
<i>Myoporum laetum</i>	ngaio
<i>Myrsine australis</i>	mapou
<i>Nestegis cunninghamii</i>	black maire
<i>Olearia rani</i>	heketara
<i>Pennantia corymbosa</i>	kaikomako
<i>Pittosporum eugenoides</i>	tarata, lemonwood
* <i>P. ralphii</i>	
<i>P. tenuifolium</i>	kohuhu
<i>Podocarpus totara</i>	totara
<i>Prumnopitys ferrugineus</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

Climbers and Lianes

Clematis paniculata
Freycinetia baueriana ssp. *banksii*
Metrosideros diffusa
M. fulgens
M. perforata
Muehlenbeckia australis
M. complexa
Parsonsia capsularis
P. heterophylla
Passiflora tetrandra
Ripogonum scandens
Rubus cissoides

Grasses and like plants

Cortaderia toetoe
Microlaena avenacea
Uncinia banksii
U. uncinata

Herbs

Astelia solandri
Dendrobium cunninghamii
Dianella nigra
Hydrocotyle moschata
Phormium tenax
Pterostylus banksii

Ferns

Adiantum cunninghamii
Asplenium bulbiferum
A. flaccidum
A. oblongifolium
A. polyodon
Blechnum capense
B. chambersii
B. discolor
B. filiforme
B. fluviatile
Cyathea cunninghamii
C. dealbata
C. medullaris
Dicksonia squarrosa
Histiopteris incisa
Hymenophyllum demissum
Lastreopsis glabella
L. hispida

Leptopteris hymenophylloides
Paesia scaberula
Phymatosorus diversifolius
P. scandens
Pneumatopteris pennigera
Polystichum richardii
P. vestitum
Pteridium esculentum
Pyrrosia serpens

* Planted native species or species outside their natural range

Common Adventive Plants Found in the Native Forest Communities

SCIENTIFIC NAME	COMMON NAME
<i>Allium triquetrum</i>	onion weed
<i>Berberis darwinii</i>	barberry
<i>Clematis vitalba</i>	Old Man's Beard
<i>Cytisus scoparius</i>	yellow flowered broom
<i>Digitalis purpurea</i>	foxglove
<i>Rubus fruticosus</i>	blackberry
<i>Selaginella</i> sp.	
<i>Tradescantia fluminensis</i>	wandering jew
<i>Ulex europaeus</i>	gorse