

1. Grassland.
2. Shrublands - principally *kanuka*.
3. Seral forest - principally five finger and mahoe.
4. Terminal forest - *kohekohe*, *tawa* and *karaka*.
5. Coastal cliffs.
6. Okupe Lagoon.



Kapiti Island Nature Reserve

N.B. Map based on Esler (1965)

Area: 1965 ha



KAPITI ISLAND NATURE RESERVE				GRID REF NZMS 1 N 156 and Pt N 157 460 750																																																																																																																																								
for: scenery ☒ bush ☒ scrub ☒ herb etc ☒ wetland ☒ plants ☒ animals ☒ geology/soil ☒ history/prehistory ☒ water supply ☒				AREA ha/acre 1965																																																																																																																																								
LOCATION A large off-shore island separated from the mainland by Rauoterangi Channel. 5 1/2 km northwest of Paraparaumu Beach.				L.D. No.																																																																																																																																								
ACCESS Boat access by permit only. Permit issued by Department of Lands and Survey, District Office, Wellington.				STATUS Nature Reserve RES sub-Ctree																																																																																																																																								
OUTLINE & TOPO Kapiti Island is approximately 9 km long and 2.3 km wide at its widest point. The exposed western slopes rise 150 to 300 metres to a high ridge which runs the length of the island. The land drops gradually from this ridge away to the east. The eastern slopes are hilly, and dissected by many streams and gullies.				CONTROL CCL Wellington																																																																																																																																								
SURROUNDINGS Cook Strait. Rauoterangi Channel.				GAZETTED 1973 p. 1381 RESERVED Declared a reserve in 1897 under the Kapiti Island Public Reserve Act. HISTORY																																																																																																																																								
GEOLOGY Kapiti Island is believed to be a remnant of a block which was uplifted and tilted between two faults. Base rock is predominantly argillite and greywacke sandstone. There is a zone of phyllonite on the western side indicating the line of the Wairua Fault.				AIR PHOTO 5034 A 1 & 2 date																																																																																																																																								
SPM Sandstone, grit and conglomerate alternating with semi-schistose argillites. Localised loess deposits and wind-borne sands.				nearby town 5 1/2 km Paraparaumu Beach nearest reserve 6 km Waikanae Estuary public road SEA (km) 0 km Cook Strait																																																																																																																																								
SDIL Mainly moderately leached yellow brown earths.				ALTITUDE m/ft 0-521 metres																																																																																																																																								
DRAINAGE Good.				ASPECT Predominantly East RAIN mm/year 1050 (approx) NAT FERTILITY Medium																																																																																																																																								
<table border="1"> <thead> <tr> <th colspan="4">RES NOT</th> <th colspan="4">MAIN HABITATS and FEATURES</th> <th>% area</th> <th>area ha</th> <th>native</th> <th>ex</th> <th>reg</th> <th>NAT</th> <th>trend</th> <th>exotics</th> </tr> <tr> <th>LD</th> <th>NZ</th> <th>LD</th> <th>NZ</th> <th colspan="4"></th> <th></th> <th></th> <th>1°</th> <th>2°</th> <th>ind</th> <th></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td colspan="4">1. Grassland</td> <td>9.7</td> <td>190</td> <td></td> <td></td> <td></td> <td>✓</td> <td>H</td> <td>M</td> <td>I H</td> </tr> <tr> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td colspan="4">2. Shrubland</td> <td>30.9</td> <td>607</td> <td></td> <td>✓</td> <td></td> <td></td> <td>H</td> <td>M</td> <td>I M</td> </tr> <tr> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td colspan="4">3. Seral forest</td> <td>26.3</td> <td>517</td> <td></td> <td>✓</td> <td></td> <td></td> <td>H</td> <td>H</td> <td>I L</td> </tr> <tr> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td colspan="4">4. Terminal forest</td> <td>18.6</td> <td>365</td> <td></td> <td>✓</td> <td></td> <td></td> <td>H</td> <td>H</td> <td>I L</td> </tr> <tr> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td colspan="4">5. Coastal cliffs</td> <td>14.1</td> <td>277</td> <td></td> <td>✓</td> <td>✓</td> <td></td> <td>M</td> <td>H</td> <td>I M</td> </tr> <tr> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td colspan="4">6. Okupe Lagoon</td> <td>0.4</td> <td>7.9</td> <td></td> <td></td> <td></td> <td></td> <td>M</td> <td>M</td> <td>S L</td> </tr> </tbody> </table>						RES NOT				MAIN HABITATS and FEATURES				% area	area ha	native	ex	reg	NAT	trend	exotics	LD	NZ	LD	NZ							1°	2°	ind					✓	✓	✓	✓	1. Grassland				9.7	190				✓	H	M	I H	✓	✓	✓	✓	2. Shrubland				30.9	607		✓			H	M	I M	✓	✓	✓	✓	3. Seral forest				26.3	517		✓			H	H	I L	✓	✓	✓	✓	4. Terminal forest				18.6	365		✓			H	H	I L	✓	✓	✓	✓	5. Coastal cliffs				14.1	277		✓	✓		M	H	I M	✓	✓	✓	✓	6. Okupe Lagoon				0.4	7.9					M	M	S L
RES NOT				MAIN HABITATS and FEATURES				% area	area ha	native	ex	reg	NAT	trend	exotics																																																																																																																													
LD	NZ	LD	NZ							1°	2°	ind																																																																																																																																
✓	✓	✓	✓	1. Grassland				9.7	190				✓	H	M	I H																																																																																																																												
✓	✓	✓	✓	2. Shrubland				30.9	607		✓			H	M	I M																																																																																																																												
✓	✓	✓	✓	3. Seral forest				26.3	517		✓			H	H	I L																																																																																																																												
✓	✓	✓	✓	4. Terminal forest				18.6	365		✓			H	H	I L																																																																																																																												
✓	✓	✓	✓	5. Coastal cliffs				14.1	277		✓	✓		M	H	I M																																																																																																																												
✓	✓	✓	✓	6. Okupe Lagoon				0.4	7.9					M	M	S L																																																																																																																												
(Due to time constraints we did not re-survey Kapiti Island. These descriptions are based on Esler, 1965). 1. This grassland category includes fern dominated grassland, swamp vegetation and areas of mountain flax. At the turn of the century about 50% of the island was in grassland with tauhinu common and this has largely been replaced by shrubland (see 2 below). The two main features of the grassland are the floristic diversity and the variation in species composition from place to place. Examples include: Kukukohatu - dominance of drought tolerant grasses such as ripgut brome, vulpia hair grass, <i>Microlaena stipoides</i> and clover species with <i>Muehlenbeckia complexa</i> and <i>Coprosma propinqua</i> on coarser shingle. Wetter areas have <i>Cyperus ustulatus</i> and toetoe. Rangitira Flat - mostly grassy but <i>Scirpus nodosus</i> and <i>Coprosma propinqua</i> also present. Of 88 herbaceous species 64 are adventive. Between South Head and West Point - silver tussock (<i>Poa laevis</i>) forms a semi-natural grassland with occasional flax. Taepiro Clearing - cocksfoot, tall oat grass, sweet vernal, <i>Poa pratensis</i> and <i>P. anceps</i> have formed a turf which resists invasion by shrubs. Ta Mingi Stream - grassland bordering stream has ryegrass, plume grass, prairie grass, sweet vernal, <i>Poa pratensis</i>, vetch and <i>Muehlenbeckia complexa</i>. 2. The shrublands consist principally of kanuka (up to 15 m. tall - but taller in gullies) and some stands of manuka (mainly on ridges). Also present are shrublands of tauhinu, <i>Pseudopanax axoniale</i>, and <i>Coprosma propinqua</i>. The 1965 study recorded three major trends in development of the shrublands: (i) the replacement of grassland by shrubland (ii) a reduction of tauhinu (iii) an increasing predominance of kanuka. Although most shrubland is kanuka earlier successional stages exist with tauhinu followed by manuka, kanuka or early seral species such as five finger. 3. In these successional forests five finger is the major component often also with mahoe. Late seral forest includes a large number of tree and shrub species, some transient (e.g. heketara and rewarewa) and some maintaining a place in the terminal forest (e.g. hinau, toro and mahoe). At low altitudes kohekohe and karaka occur beneath the five finger-mahoe canopy and at higher altitudes rewarewa, toro, tawa, hinau, nikau and treeferns are (Continued.)																																																																																																																																												
CONDITION Due to the intensive possum trapping programme of recent years, regeneration has improved considerably and should continue to improve.																																																																																																																																												
FENCING N.A.																																																																																																																																												
PRIORITY N.A.																																																																																																																																												
RATING D-10																																																																																																																																												
SCIENTIFIC ... 9 Wildlife sanctuary, contains unique vegetation types, extensively used for scientific research.																																																																																																																																												
SCENIC ... 8																																																																																																																																												
RECREATION ... 8																																																																																																																																												
CONCLUSIONS and RECOMMENDATIONS																																																																																																																																												
Kapiti Island Nature Reserve is a reserve of considerable scientific and educational value. With the exception of some Chatham Island reserves it is the only nature reserve in the Wellington Land District.																																																																																																																																												
The primary function of Kapiti Island is that of a bird sanctuary, however, with the lack of grazing animals and the probable extermination of possums on the island, the vegetation should improve to an extent unequalled by forests on the mainland. Kapiti Island also carries unique and uncommon vegetation types such as the coastal escarpment shrublands on the western cliffs and the areas of karaka forest.																																																																																																																																												
The island is intensively managed and has been the subject of considerable scientific interest and research.																																																																																																																																												
hours conditions SAF, DJC																																																																																																																																												

MAIN HABITATS AND FEATURES (Continued)

common within the five finger-mahoe canopy. Kanuka frequently persists into late seral forest. *Olearia paniculata*, mapou, heketara and puka are important understorey species. The transition stage from early seral forest to late seral forest takes place under a kanuka canopy.

4. These are forests which will persist well into the future without major floristic changes amongst the dominant species. Three main types are present on Kapiti:
 - kohekohe forest
 - tawa forest
 - karaka forest.
5. The western cliffs were not mapped in 1965 and little information is available. The growth is stunted, 1-2m. high, with considerable kowhai, mahoe, tauhinu, lupin, flax and grasses.
6. Okupe Lagoon - no information was given in the 1965 survey either of plant life in the lagoon or on the margins.

Esler, A.E., 1967: The Vegetation of Kapiti Island. N.Z. Journal of Botany, Vol. 5, September 1967, pp. 353-393.

Other references are to be found in Department of Lands and Survey, 1981. Management Plan. Kapiti Island Nature Reserve.

REFERENCES

No area	SUMMARY	HABITATS														ORGANISMS									
		WATER/SHORE														INFER									
		a - adjoins reserve														N L M H initials									
		large	small	swamp	littoral/shrub	grey-hang	emergent	he-tar	cliff	rock	stony	single	mud	organic	littoral	pollution	access	boat	car	higher native plants	lower plants	exotic plants	bush	scrub	grass
45	tall conifer ¹ forest/trees																								
	conifer ² forest/trees																								
	bush forest/trees																								
45	PL ³ forest/trees																								
45	scrub/shrubs < 6m																								
	tall tussocks/grassland																								
	short tussocks/grassland																								
	grassland/grasses																								
	sedge/land/sedges																								
	rushland/rushes/sedge																								
	herbland/herbs																								
	"tussock" herbland ⁴																								
	fernland/ferns																								
	"moss" land																								
	bracken																								
3.7	exotic grassland ⁵																								
	exotic herbland/woodland																								
	exotic scrub/shrubs																								
	exotic forest/trees																								
	introduced "native" cover																								
	bog/swamp/pakihi																								
	marsh sw/iv																								
	mudflat sw/iv																								
	bluff/rocks																								
	bluffs/rocks in bush																								
	waterfall																								
	cave/gorge																								
	gravel habitat/scree																								
	dune/sand																								
	limestone																								
	ultrabasics																								
	geological site																								
0.3	lagoon																								
	breeding ground																								
	rare/interesting animals																								
	rare/interesting plants																								
	historic site																								
	historic building																								
	prehistoric site																								
	camp (middens/pits)																								
	terraces/earthworks																								
	burial/tapu																								
100																									

¹ tall conifer: kahikatea, kauri, matai, miro, rimu, totara

² remaining 11 tree-sized spp

³ broadleaved

⁴ e.g. flax

⁵ incl. rough grassland, pasture etc

PLANT SPECIES LIST

Stephen Fuller has recently completed a detailed vegetation survey of Kapiti Island. A complete vascular plant species list is available in his report to the Wellington District Office, Department of Lands and Survey: S.J. Fuller, 1985: Report on a Vegetation Survey of Kapiti Island 1984-1985. Unpublished report, Lands and Survey, Wellington District Office.

See also:

Ester, A.E. (1967)

Cockayne, L. 1907: Report on a Botanical Survey of Kapiti Island. N.Z. Parliament House of Representatives. Appendix to the Journals, 1907, C-8.

BIRDS

Native species

The list includes only species known to breed on the island, and the regular visitors which are likely to be seen there. Not listed are accidental visitors, or species introduced in the past and not since recorded. Seabirds, unless they nest on the island are also omitted.

banded dotterel	little spotted kiwi	North Island saddleback
bellbird	(5 birds liberated 1912)	shining cuckoo
black-backed gull	long-tailed cuckoo	silveryeye
black shag	morepork	sooty shearwater
blue penguin	native pigeon	stitchbird
brown kaka	North Island robin	tui
fantail	pieb still	weka
grey duck	pieb tit	welcome swallow (visitor)
(Other native ducks are	pukoko	white-faced heron
irregular visitors)	pipit	white-fronted tern
greywarbler	reef heron	whitehead
harrier	red-billed gull	yellow-crowned parakeet
kingfisher	red-crowned parakeet	

Liberated native species that have failed to establish

brown teal	North Island kiwi	takahe
kakapo	South Island brown kiwi	

Naturalised exotic species

black swan	redpoll	blackbird
mallard	goldfinch	hedge sparrow
Californian quail	house sparrow	skylark
greenfinch	yellowhammer	starling
chaffinch	song thrush	Australia white-backed magpie

