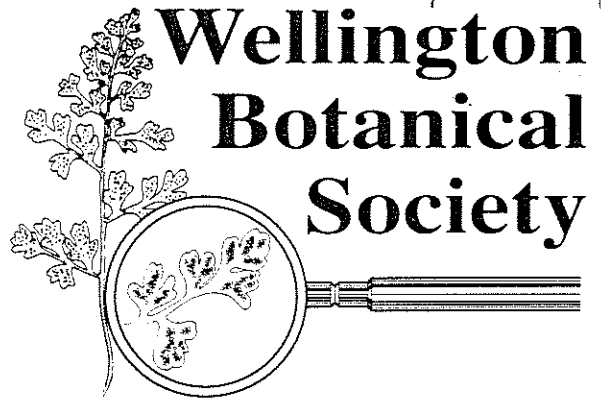


On bible
GOS/173
Orchid
on dibos



Wellington Botanical Society

Wellington Botanical Society Inc.
Box 10412
WELLINGTON.

Michael Gee
Secretary, Whitireia Park Board
C/o Wellington Conservancy
Department of Conservation
Box 5086
WELLINGTON.

23-11-95

R26 660 105 Cook.

Dear Michael,

THE BOTANICAL/ECOLOGICAL VALUES OF WHITIREIA PARK.

Thank you for the invitation to submit material on the botanical/ecological values of Whitireia Park, for consideration at the Board meeting on 5 December.

BACKGROUND

The Wellington Botanical Society was founded in 1939 and has a membership of approximately 350, including professional and amateur botanists. Copies of our brochure are enclosed. We aim:

- To encourage the study of Botany in all its branches and the N.Z. flora in particular;*
- To create an interest in and foster an appreciation of N.Z. native plants, especially in the field;*
- To collect and disseminate knowledge and encourage the cultivation of native plants;*
- To advocate the protection of scenic reserves, National Parks, sanctuaries and similar reserves in their native state;*

As stated in our submission last November on the proposal to extend the Whitireia Park golf course, we consider the peninsula an important, accessible public amenity ideally suited to its present purpose as expressed in the Management Objectives.

Our members are familiar with the peninsula's ecosystems, having botanised the area over many years, the last time only three weeks ago when we looked in vain for new occurrences of the endangered clifftop daisy *Leptinella nana*. For your information, our updated species list is appended to this letter. Plants which are designated rare vulnerable or susceptible are highlighted.

COASTAL FOREST REMNANT

In botanising the tiny, indigenous forest remnant in Onehunga Bay, we were pleased to see considerable regeneration. Pasture grass between the trees is gradually being shaded out, and this will allow an understorey of ferns, sedges and herbs to develop. However, for the forest to be self-sustaining, we recommend the fence be extended to include the whole catchment. If this is not possible at once, perhaps it could be done in stages. Areas of vegetation under a hectare in area are subject to what is called the "edge" effect, whereby wind damage and subsequent dehydration can eventually mean the death of the plants. Considerable ecosystem decline has already occurred in this remnant. For instance we found only one specimen of the large-leaved milk-tree, *Streblus banksii*, and epiphytes, particularly some common epiphytic orchids, were few. With appropriate management strategies however, this remnant, already an important seed source, could become an outstandingly valuable, local example of Wellington's coastal forest.

Such an important natural resource must not be allowed to deteriorate further. We believe that under the Resource Management Act, the Board has a duty to take every feasible action to protect and conserve it for posterity. A pest-eradication programme (installing and regular maintenance of bait stations) would improve the survival chances of the remaining, battered kohekohe trees, whose flowers and fruit are preferentially devoured by possums.

CLIFF VEGETATION

In general, cliffs are refuges for indigenous plants, and it is still possible that some of Wellington's rare species survive undiscovered on Whitireia's cliffs. While botanising there we noted that the indigenous vegetation is in steady decline as a result of fires and the subsequent invasion of exotic species. This decline is unlikely to be reversed unless barriers are erected to prevent people from dumping car wrecks such as those which at present litter the site.

VEHICLES

We see a need for a Park policy on vehicles off-road, so that indigenous vegetation in sensitive areas such as the foreshore, is given an opportunity to recover from fires, litter, and vehicle damage. Ideally there should be barriers here as well, and a requirement to use the existing carpark.

SUPERVISION/VANDALISM/STOCK DAMAGE

There appears to be inadequate supervision of the Park, resulting in vandalism (for instance the toilet block has been vandalised recently). Increased supervision and strategically-placed, educative notices might help to raise public awareness and reduce the thoughtless and destructive behaviour which at present mars the Park's undoubted scenic and conservation values.

Stock damage to the track system has been extensive in places. This inconveniences walkers, is bad publicity for the Park, and causes siltation of the Onepoto inlet, with resultant damage to the estuarine ecosystems. Estuaries are among the most endangered ecosystems nationwide, and this estuary is one of very few left in the Wellington region. We ask that when the stocking lease comes up for renewal, the Board consider reducing the stocking levels to allow the ecosystems to recover.

ONEPOTO STREAM CATCHMENT

The upper reaches of the Onepoto Stream support small populations of indigenous grasses, sedges and rushes, surviving among the pasture grass. The lower reaches contain remnant coastal scrub and wetland species which should be fenced to allow for regeneration. In the True Left tributary there is a large, male Totara, (*Podocarpus totara*) which the Board wisely fenced some years ago. This sole survivor is a unique genetic resource. Perhaps the Board would consider planting near it, seedling totara from the nearest true-wild source, to provide the nucleus of a totara restoration programme. The resultant trees could be planted out in e.g. the Onepoto remnant, and/or in some of the already-fenced clusters of trees, eventually replacing the planted karo, which are not native to this region.

WEEDS

Massive invasions of weed species in the Park such as boneseed and boxthorn are of concern to us, as is the pampas outside the toilet block, (probably planted in error, having been mistaken for toetoe, *Cortaderia* sp.): it should be immediately removed.

CONCLUSION

The Society would like to see better protection of the existing indigenous ecosystems and a vigorous programme of propagation, planting and protection of appropriately-sourced indigenous species. Park usage for casual, unstructured recreation should continue but should not be allowed to further degrade or compromise the outstanding natural values of Whitireia Park.

Yours sincerely,



Barbara Mitcalfe, Vice-pres., Wellington Botanical Society Inc.

Aciphylla	squarrosa				
Adiantum	cunninghamii				
Asplenium	flaccidum x terrestre				
Asplenium	obtusatum				
Asplenium	terrestre	ssp maritima			
Asplenium	oblongifolium				
Asplenium	flabellifolium				
Asplenium	hookerianum				
Asplenium	colensoi				
Asplenium	polyodon				
Asplenium	gracillimum				
Atriplex	sp				
Australina	pusilla				
Azolla	rubra				
Blechnum	"lowland"				
Blechnum	filifolium				
Brachyglottis	repanda				
Beilchmiedia	tawa				
Calystegia	tuguriorum				
Calystegia	soldanella				
Cardamine	sp				
Carex	breviculmis				
Carex	coriacea				
Carex	flagellifera				
Carex	lessoniana				
Carex	pumila				
Carex	virgata				
Carmichaelia	arborea var				
Cassinia	leptophylla				
Centella	uniflora				
Clematis	forsteri				
Colobanthus	muelleri				
Convolvulus	sp				
Coprosma	areolata				
Coprosma	crassifolia				
Coprosma	propinqua	ssp propinqua			
Coprosma	propinqua x robusta				
Coprosma	repens	ssp repens			
Coprosma	rhamnoides				
Cortaderia	toetoe				
Corynocarpus	laevigatus				
Craspedia	uniflora	var maritima			
Crassula	sieberiana				
Cyathea	dealbata				
Cyathodes	juniperina				
Cyperus	ustulatus				
Dichelachne	crinata				
Dichondra	repens				
Dichondra	brevifolia				
Disphyma	australe				
Drymoanthus	adversus				
Dysoxylum	spectabile				

Einadia	triandra				
Elymus	rectisetus				
Epilobium	nummularifolium				
Festuca	multinodis				
Galium	propinquum				
Geniostoma	rupestre	var. ligustrifolium			
Geranium	sessiliflorum				
Gnaphalium	audax				
Gnaphalium	luteo-album agg				
Gnaphalium	limosum				
Gnaphalium	gymnocephalum				
Gonocarpus	aggregatus				
Griselinia	lucida				
Haloragis	erecta				
Hebe	elliptica	var crassifolia			
Hebe	stricta	var macrourea			
Hedycarya	arborea				
Helichrysum	aggregatum				
Histiopteris	incisa				
Hydrocotele	heteromeria				
Hydrocotyle	moschata				
Hydrocotyle	sp (H. novae-zelandiae var montana)				
Hypolepis	lactea				
Isolepis	cernua				
Isolepis	nodosa				
Isolepis	prolifer				
Juncus	australis				
Juncus	distegus				
Juncus	gregiflorus				
Juncus	maritimus	var australiensis			
Juncus	planifolius				
Juncus	pallidus				
Kunzea	ericoides				
Lastareopsis	glabella				
Lastraeopsis	velutina				
Lagenifera	pumila				
Leptinella	dioica	ssp monoica			
Leptinella	dioica	ssp monoi x Leptinella squalida ssp squalida			
Leptinella	dispersa	ssp dispersa			
Leptinella	nana				
Leptinella	squalida	ssp squalida			
Leptinella	tenella				
Leptocarpus	similis				
Leptospermum	scoparium				
Leucopogon	fraseri				
Lilaeopsis	sp				
Linum	monogynum				
Lobelia	anceps				

Lophomyrtus	bullata				
Lophomyrtus	obcordata				
Luzula	banksiana	var banksiana			
Macropiper	excelsum				
Melicope	ternata				
Melicytus	ramiflorus				
Melicytus	obovatus	"cook strait"			
Metrosideros	perforata				
Metrosideros	diffusa				
Microtis	unifolia				
Muehlenbeckia	complexa				
Muehlenbeckia	australis				
Myoporum	laetum				
Myrsine	australis				
Nertera	setulosa				
Olearia	paniculata				
Olearia	solandri				
Ophiglossum	coriaceum				
Oxalis	exilis				
Paesia	scaberula				
Parsonsia	heterophylla				
Pellaea	rotundifolia				
Pennantia	corymbosa				
Peperomia	urvilleana				
Phormium	cookianum				
Phymatosorus	pustulatus				
Phymatosorus	scandens				
Pittosporum	tenuifolium				
Plagianthus	divaricatus				
Plantago	raoulii				
Poa	cita				
Podocarpus	totara				
Polystichum	richardii				
Pseudopanax	crassifolius				
Pseudopanax	arboreus x crassifolius				
Pterostylis	banksii				
Pteridium	esculentum				
Pteris	macilenta				
Puccinellia	stricta	var suborbicularis			
Pyrrosia	eleagnifolia				
Ranunculus	acaulis				
Ranunculus	reflexus				
Raoulia	sp (unnamed)				
Rubus	cissoides				
Rubus	schmidelioides				
Rytidosperma	unarede				
Sarcocornia	quinqueflora				
Schoenoplectus	validus				
Scleranthus	biflorus				
Selliera	radicans				

Senecio	minimus					
Senecio	lautus					
Sonchus	kirkii					
Spergularia	media					
Stellaria	parviflora					
Stellaria	dissipiens					
Streblus	banksii					
Tetragonia	trigyna					
Thelymitra	longifolia					
Triglochin	striata					
Trisetum	antarcticum					
Typha	orientalis					
Wahlenbergia	colensoi					
Wahlenbergia	gracilis					
Zoysia	minima					