SOME INDIGENOUS VASCULAR PLANTS OF NORTHERN SECTION OF KOHANGAPIRIPIRI WETLAND, PART SNA SITE 28, CENTRED ON NZMS 260 R27,R28, G.R. 654815; LIST COMPILED ON 23-6-97 BY B.J. MITCALFE AND J.C. HORNE.

Note: This site was briefly surveyed, not fully botanised.

BOTANICAL NAME	MAAORI NAME	COMMON NAME
MONOCOT TREES		
Cordyline australis	tii koouka	cabbage tree
DICOT TREES AND SHRUBS		
Coprosma areolata		
Coprosma propinqua	mingimingi	
Coprosma rhamnoides		
Kunzea ericoides	kaanuka	kanuka
Leptospermum scoparium	maanuka	manuka
Ozothamnus leptophyllus	tauhinu	tauhinu
FERNS		
Blechnum minus	kiokio	swamp kiokio
Blechnum sp ("lowland")	kiokio	kiokio
GRASSES		
Cortaderia toetoe	toetoe	toetoe
SEDGES		
Carex flagellifera	maanaia	Glen Murray tussock
Carex geminata	rautahi	
Carex secta	puurei	
Carex virgata		
Cyperus ustulatus	upoko tangata	giant umbrella sedge
Uncinia uncinata	matau a Maaui	hooked sedge
RUSHES		
Juncus sarophorus	wii	leafless rush
Juncus sp.	"	
MONOCOT HERBS		
Phormium tenax	harakeke	swamp flax
DICOT HERBS		
Hydrocotyle elongata		
Hydrocotyle sp.		
Nertera depressa		
Ranunculus reflexus	maaruuruu	hairy buttercup

INDIGENOUS BIRDS SEEN/HEARD

kakariki	NZ parakeet
korimako	bellbird
miromiro	greywarbler
tauhou	waxeye

NOTES ON THE NORTHERN SECTION OF KOHANGAPIRIPIRI WETLAND, PART S.N.A. SITE 28. (Site 28e in Biological Resources Survey, 1984.)

FOR THE REASONS OUTLINED BELOW, THIS SITE IS CONSIDERED ECOLOGICALLY SIGNIFICANT UNDER THE TERMS OF THE RESOURCE MANAGEMENT ACT 1991.

BOUNDARY

Because of the small scale of the S.N.R. maps in the District Plan, it is not clear whether the lower sections of the tributaries on the True Right of the wetland are included in the existing boundary.

If the existing boundary <u>includes</u> the lower sections of the tributary wetlands on the True Right, (see vegetation map), it should remain, otherwise it should be revised to include those sections, since they are ecologically continuous with the main wetland.

HISTORY

The geological history is as for Kohangatera wetland, i.e. a drowned river valley following tectonic uplift.

FLORA AND FAUNA

The site, "one of two remaining examples of wetland plant succession in the region, shows earlier stages of vegetation succession than others..." (East Harbour Park Management Plan", 1995). The comparison is with e.g. Plimmerton Swamp.

Clelland, 1984, "Unprotected Natural Areas of the Wellington Region" states that Kohangapiripiri wetland contains "representative, early-stage, wetland vegetation" and mentions its significance in providing homes and breeding habitat for many species of waterfowl, some of which are regionally uncommon.

Virtually weedfree, the vegetation comprises associations in varying proportions, of ti kouka, toetoe flax, toetoe and raupo. Sedges and rushes form a mosaic throughout. Manuka, kanuka and *Coprosma propinqua* with an understorey of ferns and *Coprosma rhamnoides,* fringe the sedge-rushland.

The Kohangapiripiri wetland, of which Site 28 is the northern portion, is listed on the DoC inventory as a wetland, of ecological and representative importance, containing significant populations of native fish and eels.

The presence of kakariki, a protected native parrot, is also significant. The vegetation is obviously of particular significance to all the native birds in the vicinity, but to take kakariki for

example, its diet "...includes seeds of many kinds (particularly flax, beech, sedges, grasses, tussocks, Mariscus and Muehlenbeckia), fruits (particularly Coprosma, ngaio, and Solanum..." ("Field Guide to the Birds of New Zealand", B. Heather and H. Robertson, 1996). All of these species are present in the wetland and its vicinity, surviving amidst the relative sterility of the surrounding pasture. (Note: The plant referred to in the above quote as Mariscus is now *Cyperus ustulatus*, listed as such in the accompanying species list).

REPRESENTATIVENESS
Site 28 has representative, indigenous, lowland, early-stage, freshwater wetland vegetation. It grades naturally into the semi-swamp forest of Site 6. This ecotone is itself representative and uncommon, providing a small sample of what the valley must have looked like before development.

RARITY/DIVERSITY
The site is described in the DoC ecological site inventory as having "moderate - high" wildlife interest. Sixteen species of regionally-endangered or uncommon plants and 6 species of native fish are known from Kohangapiripiri.

Kakariki (indigenous parakeet) and korimako (bellbird) were heard in the vicinity. Both species of kakariki are listed as vulnerable on the mainland and as medium-high priority in the Wellington Conservancy.

Site 28 offers considerable habitat diversity. A north-south gradation of freshwater habitat from drier to wetter, and more saline to less saline, supports a range of ecological communities. Clelland (1984) lists 107 indigenous vascular plants for the lower sections of Kohangatera and Kohangapiripiri together. A botanical survey would establish a wider range of plants and in different proportions, for Site 28, than the brief species list recorded on the reconnaissance of 23-6-97. Among the uncommon plants Clelland lists for Kohangapiripiri, *Elatine gratioloides* and *Lepilaena bilocularis* are not found in Kohangatera. While it is not known at this point how many rare plant species are present specifically in this northern part of the Kohangapiripiri wetland, *this association of indigenous, wetland plants* is uncommon in the Wellington region because of the rarity of wetlands themselves.

The Kohangapiripiri and Kohangatera wetlands are the only large areas of their type in the Tararua Ecological Region. They are regionally significant landscapes. Kohangapiripiri is at a later stage of succession from estuarine to freshwater communities, than Kohangatera. Like Kohangatera, it has features which indicate that it was once a salt marsh.

Clelland records three rare/uncommon animals: Spotless crake, pukeko and Giant kokopu in Kohangapiripiri.

DISTINCTIVENESS
Site 28 has intact, dense populations of indigenous, wetland plant species and is virtually weedfree. One of its strongest natural features is the ecotone where the swamp vegetation grades into Site 6's black beech/podocarp/broadleaf forest, forming an uninterrupted ecological sequence.

CONTINUITY/LANDSCAPE/CULTURAL VALUES
The Pencarrow wetlands, of which Site 28 is part, form a coherent, landscape and ecological

unit, the two catchments being separated from each other by a low ridge.

The site has high aesthetic and landscape values because of its indigenous, typically-NZ character (see slide). To quote from the Draft Wellington Regional Landscape Plan, "Landscapes with a high degree of natural character are widely appreciated by people and also have intrinsic values....Scientific and educational opportunities to further people's understanding of the natural systems of the landscape are also valued."

SUSTAINABILITY/ECOLOGICAL RESTORATION

Freedom from fires, stock, pest animals and invasion/planting of exotic species in the vicinity would ensure the continued natural succession of this ecosystem. However, to quote again from the East Harbour Regional Park Management Plan, "There will be no successional changes in the wetlands associated with the Pencarrow Lakes while stock have unhindered access to the area. If stock were to be removed and forests allowed to regenerate, a semi-swamp vegetation of black beech, kahikatea, pukatea, and swamp maire would untimately form along the wetland margins."

The relative isolation of this site and Site 6, cradled between encircling ridges, would make restoration easier.

OTHER CONSERVATION BENEFITS

The Pencarrow wetlands are of high scientific and educational interest because of their geological/ecological values and are therefore of importance as scientific study sites.

THREATS

The major threats are fire, planting of exotic species, e.g. forestry; stock, pest animals, alteration of watertable.

The cumulative effects of land-use need to be considered as well as the immediate effects.