## **Ngā kūrae me ngā paripari takutai** Coastal headlands, cliffs and escarpments

Steep faces along the Wellington coastline are home to a surprising range of hardy plants. Often called coastal or grey scrub, these plant communities are dominated by clumps of wharariki, interspersed with broad-leafed poa and taupata or tauhinu. Orchids, ferns and herbs nestle amongst the larger shrubs and cling to craggy rock faces. These plants are adapted to survive blustering salt-laden winds and very little water. They provide habitat to several unique species including the Hutton's speargrass weevil and geometrid moth.

One of Wellington's important plant communities grey scrub, is found from Oruaiti around to Whitirea on the coastal escarpments and across the harbour. Grey scrub includes climbers like pohuehue and woody shrubs with fine, right-angled branches that grow in tangled mats. The nationally endangered shrub tororaro and regionally threatened matagouri both naturally grow amongst grey scrub.



Restoring these areas is slow going and requires hardy plants and hardy humans to look after them! They are often overrun with thick gorse and other equally tough weeds. The aim of planting projects at these sites is to plant natives between or within the gorse bushes, rocks and natural outcrops. The gorse acts as a shelter for young seedlings and the site is not opened up to the wind.

## Tips for planting on and around headlands, cliffs and escarpments

Saftey first! Watch out for loose rocks.

Ensure all seedlings to be planted are hardened off to salt spray and wind before planting them. Do this by slowly introducing them to the conditions, salt spray and wind, before planting them.

One of the biggest threats to young plants in these areas is browsing from rabbits and hares. Carry out rabbit control before planting and monitor animal damage throughout your project.

Shelter is key to establishing plants in these areas. Plant young plants firmly in the shelter of existing vegetation and rock formations, where there are gullies between landforms, plant taller shrubs and trees.

If there is gorse present, clear small areas between the bushes and plant into them. The gorse will act as a shelter while the young plants establish. Keep the cleared areas small so wind can't funnel through the site between young seedlings.







(Above) Coastal cliffs and scree slope with pockets of sand, tussock, flax and scab weed, Te Kopahau, South Coast.

(Middle) Silver tussock establishing well in the lower quarried areas of Te Hape Stream.

(Below) The nationally endangered tororaro, South coast, growing amongst grey scrub.

## Plant list for coastal headlands, cliffs, escarpments & gullies

oastal headlands, liffs & escarpments L		Life form	Plant preferences & tolerances				Abundance	
Māori/ Common name	Botanical name		Soil moisture needs	Light levels	Frost tolerant	Wind tolerant	Early stage / initial planting	Later stage / shelter established
Akiraho / Golden akeake	Olearia paniculata	Dense shrub, 4m	Dry to semi-moist	Sun	<b>~</b>	<b>~</b>	+ +	
Blue wheat grass	Anthosachne solandri	Grass	Dry to semi-moist	Sun to semi shade	Moderate	<b>~</b>		+
Coastal tree daisy	Olearia solandri	Bushy shrub 3m	Dry to semi- moist	Sun	<b>~</b>	<b>~</b>	++	
Common broom	Carmichaelia australis	Shrub 3m	Semi-moist	Sun	<b>~</b>	<b>~</b>		+ +
Cook Strait kõwhai	Sophora molloyi	Shrub up to 3m	Dry to semi-moist	Sun	Moderate	<b>~</b>		+ +
Cook Strait melicytus	Melicytus orarius	Shrub	Semi-moist	Sun	Frost tender	<b>~</b>		+
Tree Hebe	Veronica parviflora	Bushy shrub 2-4m	Semi-moist	Sun	<b>~</b>	<b>~</b>	+++	
Horokaka, NZ ice plant	Disphyma australe	Ground cover	Semi-moist to dry	Sun	Frost tender	<b>~</b>	++	
Karamū, shining karamu	Coprosma lucida	Shrub 3m	Semi-moist to dry	Sun to semi shade	<b>~</b>	<b>~</b>		++
Kōkihi, NZ spinach	Tetragonia implexicoma	Herb	Semi-moist to dry	Sun	Frost tender	<b>~</b>	++	
Koromiko	Veronica stricta	Shrub, up to 4m	Semi-moist	Sun	<b>~</b>	<b>~</b>	+ +	
Matagouri	Discaria toumatou	Shrub	Semi-moist to dry	Sun	Moderate	<b>~</b>		+
Mingimingi	Coprosma propinqua	Shrub	Semi-moist	Sun	<b>~</b>	<b>~</b>	+++	
Лīkoikoi / NZ iris	Libertia ixioides	Flax-like shrub, 0.7m	Dry to semi-moist	Sun to semi-shade	~	~		+
Pinātora/ NZ daphne	Pimelea prostrata	Herb	Semi-moist	Sun	Moderate	~		+

<sup>+</sup> use sparingly ++ use commonly +++ use plentifully ✓ yes • categorised

Note: In the table above a 'herb' is a plant that is not woody and a 'shrub' has a hard woody stem with branches but no defined trunk.

## Plant list for coastal headlands, cliffs, escarpments & gullies (cont.)

oastal headlands, liffs & escarpments		Life form	Plant preferences & tolerances				Abundance	
Māori/ Common name	Botanical name		Soil moisture needs	Light levels	Frost tolerant	Wind tolerant	Early stage/ initial planting	Later stage shelter established
Poa/ Broadleaved poa	Poa anceps	Grass	Semi-moist	Sun to semi-shade	~	~	++	
Puawānanga/ Small white clematis	Clematis forsteri	Climber	Semi-moist	Sun	~	Moderate		++
Rangiora	Brachyglottis repanda	Shrub 3m	Semi-moist to dry	Sun to semi shade	Moderate	<b>~</b>		++
Scab weed	Raoulia hookeri subsp. hookeri	Herb	Semi-moist to dry	Sun	Moderate	~		+
Silver tussock	Poa cita	Grass	Semi-moist to dry	Sun	~	<b>~</b>	+++	
Small leaved põhuehue	Muehlenbeckia complexa	Scrambler	Semi-moist to dry	Sun	~	~	+++	
Taramea	Aciphylla squarrosa var. squarrosa	Herb	Semi-moist	Sun	~	~		+++
Tauhinu	Ozothamnus leptophyllus	Shrub 1-2m	Semi-moist to dry	Sun	When Mature	~	++	
Taupata	Coprosma repens	Shrub / small tree up to 4-6m	Semi-moist	Sun	When Mature	~	+++	
Thick leaved māhoe	Melicytus crassifolius	Shrub	Semi-moist	Sun	Moderate	~		++
Ti kõuka/ Cabbage tree	Cordyline australis	Tree up to 20m	Moist	Sun to semi-shade	When Mature	~		+
Toetoe	Austroderia toetoe	Grass	Semi-moist	Sun	<b>~</b>	~	+ +	
Tororaro	Muehlenbeckia astonii	Shrub up to 4m	Dry to semi-moist	Sun	<b>~</b>	<b>~</b>		+
Vharariki / Mountain flax	Phormium cookianum subsp. hookeri	Flax up to 1.5m	Dry to semi-moist	Sun	<b>~</b>	<b>~</b>	+++	

<sup>17</sup>