

VASCULAR PLANT LIST FOR MAKARA ESTUARY AND FORESHORE

Native Trees and Shrubs

- Cassinia leptophylla*, tauhinu; abundant on hill slopes
Coprosma propinqua; occasional in paddocks, abundant on hill slopes
Coprosma repens, taupata; occasional on banks of Makara Stream, and around Foreshore reserve
Corynocarpus laevigatus, karaka; grove of slender diameter stems just beyond old shed
Leptospermum scoparium, manuka; abundant on hill slopes
Melicytus ramiflorus, mahoe; occasional along creek bank and in hillside gullies
Myoporum laetum, ngaio; occasional on esplanade reserve
Olearia solandri, Solander's tree daisy; occasional on hill slopes and on creek banks
Pimelea prostrata, Strathmore weed; occasional on coarse sand in Foreshore Reserve
Pittosporum crassifolium, karo; occasional on creek banks, widely planted around houses
Plagianthus divaricatus, shore ribbonwood; dominant shrub of salt marsh

Adventive Trees and Shrubs

- Cupressus macrocarpa*, macrocarpa; planted in paddocks and on island
Elaeagnus x reflexa, elaeagnus; uncommon around old shed
Lavatera arborea, tree mallow; present alongside road at the foreshore
Lupinus arboreus, tree lupin; alongside road and with marram in Foreshore Reserve
Sambucus nigra, elder; uncommon alongside creek

Native Climbing Plants

- Calystegia soldanella*, shore convolvulus; common in sand and gravels of Foreshore Reserve
Muehlenbeckia complexa, pohuehue; common climbing through shrubs and sedges

Adventive Climbers

- Calystegia silvatica*, convolvulus; common in freshwater swamp
Fumaria muralis, fumitory; on sandy bank between Foreshore Reserve and Makara Stream
Galium aparine, cleavers; amongst marram and introduced shrubs on sandy bank above Makara Stream
Senecio angulata, Cape ivy; uncommon on sandy bank above Makara Stream
Vicia sativa, vetch; occasional climbing through freshwater swamp

Native Grasses

Cortaderia toetoe, toetoe; occasional alongside freshwater creeks

Spinifex sericeus, spinifex; common in sand along foreshore

Introduced Grasses

Agrostis stolonifera, common in pasture and on marsh

Ammophila arenaria, marram; common to dominant on sands of Foreshore Reserve and on sandy bank above Makara Stream

Anthoxanthum odoratum, sweet vernal, common in pasture

Bromus catharticus, prairie grass; occasional on sandy bank above Makara Stream

Bromus diandrus, rigput brome; occasional on sandy bank above Makara Stream

Dactylis glomerata, cocksfoot, common in pasture

Festuca arundinacea, tall fescue; dominant on island, and freshwater swampy sites

Holcus lanatus, Yorkshire fog; common alongside creek and on pasture

Hordeum marinum, sea barley; occasional on sandy bank above stream

Lagarus ovatus, hare's tail grass; common on sand in Foreshore Reserve

Lolium perenne, perennial rye; common in pasture, uncommon on Foreshore Reserve

Parapholis incurva, sickle grass; uncommon on sand in Foreshore Reserve

Poa annua, annual grass; common in pasture

Stenotaphrum secundatum, buffalo grass; present on sand in Foreshore Reserve

Native sedges and rushes

Carex flagellifera; occasional alongside Makara Stream

Carex secta; uncommon in freshwater swamp next to Makara Road

Carex spinorostri; recorded by Mitcalfe & Horne (1992) on high marsh

Carex unnamed sp. ("giant geminata"); common in freshwater swamp

Cyperus ustulatus; occasional alongside stream

Desmoschoenus spiralis, pingao; common on foreshore sands in reserve

Isolepis nodosa, noded sedge; occasional on pasture, and on Foreshore Reserve where it is browsed by rabbits

Isolepis cernuus; common on low salt meadow

Juncus distegus; occasional on pasture

Juncus maritimus var. *australiensis*, sea rush; dominant on high marsh

Juncus sarophorus; common rush of pasture

Leptocarpus similis, oi oi, jointed sedge; abundant on high marsh with sea rush

Schoenoplectus pungens, three-square; small area on northern bank of Makara Stream

Introduced rush

Juncus bufonis, uncommon on muds on creek bank adjacent to high marsh

Other native monocot herbs

- Phormium cookianum*, coastal flax; common to dominant on cliffs above Makara Stream mouth
Phormium tenax, swamp flax; alongside creek bank and in freshwater swamp next to Makara Road
Triglochin striatum; common on low salt meadow
Typha orientalis, raupo; common in freshwater swamp next to Makara Road

Other introduced monocot herbs

- Agapanthus orientalis*; planted in Esplanade Reserve
Allium triquetrum, onion weed; occasional along stream bank and on sandy bank above Makara Stream
Aloe saponaria; planted on sandy bank above Makara Stream
Tradescantia fluminensis, wandering willy; small rooted fragments in washed up litter on high marsh
Zantedeschia aethiopica, arum lily; present amongst plantings on roadside bank opposite island

Native dicot herbs

- Apium prostratum*, shore celery; common amongst rushes of high marsh
Centella uniflora; occasional amongst base of rushes near turfey depressions
Colobanthus muelleri; occasional on coarse sand in Foreshore Reserve
Cotula coronopifolia, bachelor's buttons; common on low marsh
Disphyma australe, iceplant; common on sands and fine gravels on Foreshore Reserve
Haloragis erecta; occasional along creek bank
Hydrocotyle pterocarpa; occasional amongst creekside plants
Leptinella membranacea; occasional amongst creekside sedges and rushes
Leptinella squalida ssp. *squalida*; common on hillside pasture
Leptinella taxon; common amongst rushes on high marsh
Lilaeopsis novae-zelandiae.; common on creekside muds and on low marsh
Limosella lineata, mudwort; common on mud of streambank
Mazus pumilio; present up fresh water creek beyond karaka stand (Tom Moss pers. comm.)
Mimulus repens; present in saline depressions in pasture
Parateria debilis; occasional on sandy bank above stream
Samolus repens, maakoako, sea primrose; dominant in low marsh
Sarcocornia quinqueflora, glasswort; dominant on low marsh at estuary entrance
Selliera radicans, remuremu; dominant in low marsh and in saline depressions in pasture
Senecio lautus; occasional in Foreshore Reserve and on sandy bank

Introduced dicot herbs

- Anagallis arvensis, scarlet pimpernal; occasional on sandy bank above Makara Stream
- Arctotheca calendula, Cape weed; common in mown grassland by side of Makara Road
- Argyranthemum frutescens, marguerite; common on sandy bank above stream
- Atriplex hastatum; present among glasswort on low marsh
- Bellis perennis; common in mown grassland on side of road
- Carduus tenuiflorus, winged thistle; present along farm road
- Cerastium fontanum ssp. triviale, mouse-ear chickweed; occasional on sandy bank above stream
- Cirsium arvense, Californian thistle; uncommon in pasture
- Cirsium vulgare, Scotch thistle; uncommon in salt marsh
- Conium maculatum, hemlock; uncommon on sandy bank
- Coronopus didymus, twin cress; present on sandy bank
- Digitalis purpurea, foxglove; uncommon on sandy bank
- Drosanthemum floribundum; planted on sandy bank above Makara stream
- Galium aparine, cleavers; common growing through sedges and grasses on stream bank
- Gazania rigens; uncommon in Foreshore Reserve
- Leontodon taraxacoides, hawkbit; common in Foreshore Reserve
- Lotus pedunculatus; common in Foreshore Reserve
- Medicago polymorpha, bur medick; common on Foreshore Reserve
- Mentha spicata ssp. spicata, winter mint; uncommon in freshwater swamp
- Mimulus guttatus, monkey musk; uncommon along stream bank
- Oxalis articulata, sourgrass; present along roadside near foreshore
- Plantago coronopus, buck's horn plantain; abundant in low marsh and extensive mats on sand and gravel in Foreshore Reserve
- Plantago lanceolata, plantain; occasional in mown grassland
- Polycarpon tetraphyllum, allseed; common along roadsides and compacted ground
- Ranunculus repens, creeping buttercup; common along stream bank
- Rumex obtusifolius, broad-leaved dock; occasional along stream bank
- Senecio elegans, purple groundsel; occasional in Foreshore Reserve and on sandy bank
- Silene gallica, catchfly; occasional on sandy bank
- Sisymbrium officinale, hedge mustard; occasional on sandy bank
- Spergularia sp., spurrey; common on compacted ground around Foreshore Reserve
- Stellaria media, chickweed; uncommon on sandy bank
- Trifolium dubium, suckling clover; occasional in Foreshore Reserve
- Trifolium repens, white clover; uncommon in Foreshore Reserve

Native Ferns

- Blechnum minus, swamp kiokio; growing alongside stream bank and in freshwater swamp
- Hypolepis tenuifolia; occasional alongside stream bank
- Pteridium esculentum, bracken; patch in freshwater swamp

VEGETATION SURVEY OF MAKARA ESTUARY AND FORESHORE

by

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