

Plants of Symonds Street Cemetery and Grafton Gully, Auckland

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Symonds Street Cemetery is one of Auckland's most historic and special public reserves (Fig. 1). It is Auckland City's oldest cemetery and one of New Zealand's oldest urban cemeteries. It was established in 1841, the year that Auckland became the capital of the colony. Located on the Symonds Street Ridge, in an area that was at that time removed from the town, the cemetery was enlarged in 1842 and divided into sections for different religious denominations. It was Auckland's main burial ground from 1842 until 1886 when Waikumete Cemetery was opened (Cameron et al. 2008). The cemetery is a significant cultural landscape that incorporates a wide range of heritage components including monuments, in-ground remains, landscape features such as fences, walls, paths, steps, earthworks, historic plantings as well as buildings and sculpture and significant views and vistas (Auckland Council 2019).

Bishop Selwyn was largely responsible for instigating and overseeing the early development (Adam 2016). The cemetery is in two separate sections, East and West, bisected by Symonds Street. It is registered as Category I by the New Zealand Historic Places Trust (Register No. 7753) and vested in Auckland Council as a local purpose (cemetery) reserve under the reserves Act 1977 and the council is the landowner (Auckland Council 2019).

The botanical visitor will immediately become aware that this is a woodland cemetery – an inner city forested sanctuary with pleasant paths for walking and exploring the flora (Fig. 2).

Plant records mentioned in the text and/or listed fully in the Appendix are based on the author's own observations, on previous accounts or lists of the plants (Cranwell 1937; Wall & Cranwell 1943; Millener 1979; Gardner 1981; Cameron et al. 2008; Wilcox 2012; Wildland Consultants 2019), and on herbarium records of the Auckland Museum.

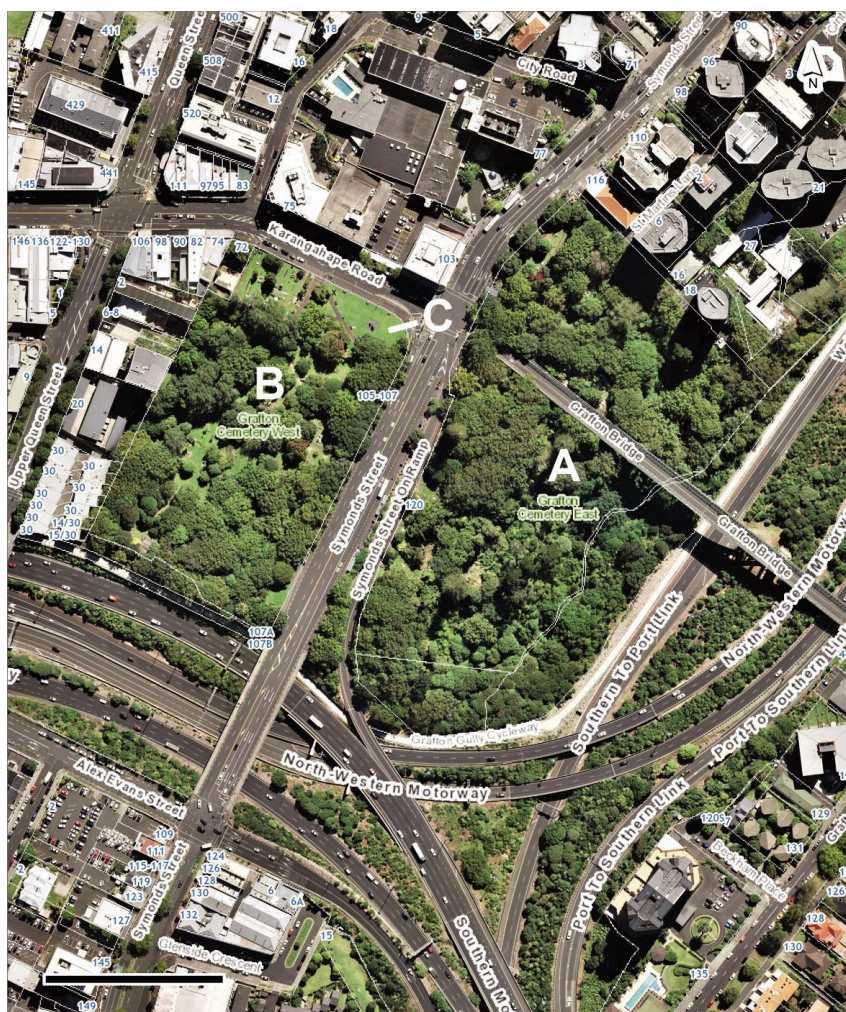


Fig. 1. Symonds St Cemetery. A. East part. B. West part. C. Pigeon Park. (Auckland Council GeoMaps). Scalebar = 100 m.

Forest plants

The main dendrological feature in the cemetery itself is a planted woodland (Auckland Council 1) predominantly of 150 year old pedunculate oak (*Quercus robur*) under which are the old tombstones surrounded by grasses, sedges, wildflowers and shrubs. These oaks are mostly 15–20 m tall, but one huge specimen is considerably taller. Other introduced trees present include Mediterranean cypress (*Cupressus sempervirens* var. *horizontalis*), McNab cypress (*Cupressus macnabiana*) (Fig. 3), Monterey cypress (*Cupressus macrocarpa*), oriental arborvitae (*Platycladus orientalis*), Norfolk Island pine (*Araucaria heterophylla*), Monterey pine (*Pinus radiata*), coast redwood (*Sequoia sempervirens*), European beech (*Fagus sylvatica*), keyaki (*Zelkova serrata*), sweet gum (*Liquidambar styraciflua*), trident maple (*Acer buergerianum*), sycamore (*Acer pseudoplatanus*), lime (*Tilia × europaea*), cottonwood (*Populus deltoides*), black cottonwood (*P. trichocarpa*), Yunnan poplar (*P. yunnanensis*),

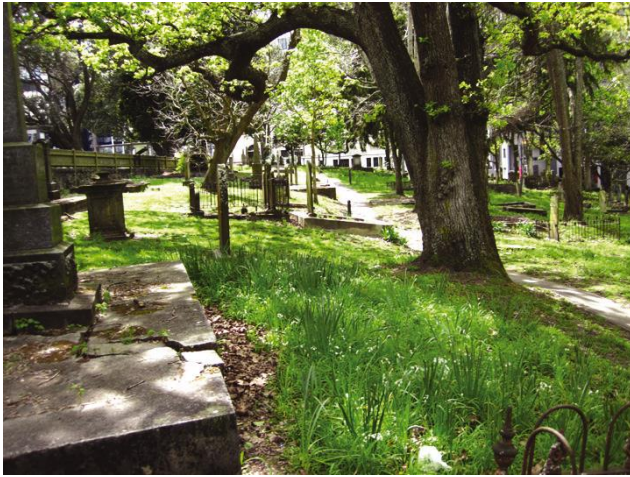


Fig. 2. Symonds St Cemetery East, with oak woodland, 23 Sep 2019; all photos are by the author.



Fig. 3. *Cupressus macnabiana*, Symonds St Cemetery West, 2 Sep 2013.



Fig. 4. *Meryta denhamii*, Symonds St Cemetery West, 5 April 2011.

wonder tree (*Idesia polycarpa*), evergreen magnolia (*Magnolia grandiflora*), Moreton Bay fig (*Ficus macrophylla*), holm oak (*Quercus ilex*), scarlet oak (*Q. coccinea*), pin oak (*Q. palustris*), black oak (*Q. velutina*), cork oak (*Q. suber*), *Meryta denhamii* (Fig. 4), avocado (*Persea americana*), Canary Islands laurel (*Laurus novocanariensis*) (Fig. 5), brush box (*Lophostemon confertus*), blue gum (*Eucalyptus globulus*), coast sheoak (*Casuarina glauca*), river sheoak (*C. cunninghamiana*), and phoenix palm (*Phoenix canariensis*). Some Dutch elms (*Ulmus* × *hollandica*) were removed in March–April 2018 because they were suffering from Dutch elm disease, though several remain. The most attractive flowering tree is a red horse chestnut (*Aesculus* × *carnea*) in the West Cemetery.

Planted native trees to the fore in the cemetery include several tītoki (*Alectryon excelsus*), numerous tōtara (*Podocarpus totara*), kānuka (*Kunzea robusta*), pohūtukawa (*Metrosideros excelsa*), pūriri (*Vitex lucens*) and karaka (*Corynocarpus laevigatus*).

There is still a patch of native bush in Grafton Gully, with a surprisingly rich native flora (Fig. 6). Some of it is fully natural but there are sections that have been infiltrated with plantings. Wall & Cranwell (1943) mention the big forest trees here: pūriri, tītoki, kohekohe (*Dysoxylum spectabile*), karaka, and rewarewa (*Knightia excelsa*), with many tree ferns – largely destroyed in 1966 for motorway construction (Millener 1979). The bush track through here is now known as the Waipāruru Nature Trail. Native trees and shrubs include pūriri (Fig. 7), pigeonwood (*Hedycarya arborea*), rewarewa, houhere (*Hoheria populnea*), kohekohe, māhoe (*Melictyus ramiflorus*), kawakawa (*Piper excelsum*), tītoki, karaka, pate (*Schefflera digitata*), kanono (*Coprosma grandifolia*), coastal karamu (*C. macrocarpa* subsp. *minor*), hangehange (*Geniostoma ligustrifolium*) and māpou (*Myrsine australis*). There is bush lawyer (*Rubus cissoides*), kiekie (*Freyinetia banksii*) *Carex dissita*, *Microlaena avenacea*, *Oplismenus hirtellus*, and numerous ferns: *Asplenium lamprophyllum*, *Blechnum membranaceum*, *Cyathea dealbata*, *C. medullaris*, *Diplazium australe*, *Microsorium scandens*, *Parapolystichum glabellum*, *Pneumatopteris pennigera*, *Pteris macilentia* and *Pteris tremula*. The luxuriant patches of *Asplenium lamprophyllum* and *Parapolystichum glabellum* are a nice feature of this bush. Some of the more prominent weeds here are ivy (*Hedera helix*) on the ground, wandering Jew (*Tradescantia fluminensis*), mist flower (*Ageratina riparia*), African clubmoss (*Selaginella kraussiana*), onion weed (*Allium triquetrum*), arum lily (*Zantedeschia aethiopica*), stinking iris (*Iris foetidissima*), periwinkle (*Vinca major*) and African cornflag (*Chasmanthe bicolor*).



Fig. 5. *Laurus novocanariensis*, Symonds St Cemetery East, 6 Dec 2019.

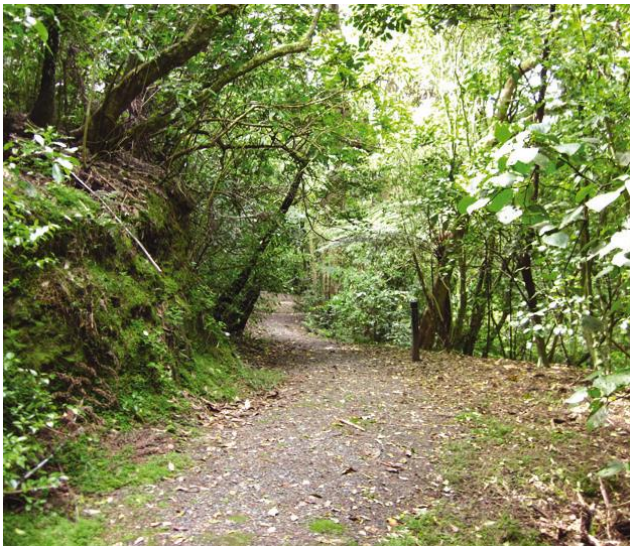


Fig. 6. Bush Walk, Symonds St Cemetery East, 23 Sep 2019.

Wildland Consultants (2019) recently described the vegetation and flora of Grafton Gully and a plan for restoring the native vegetation alongside the Waipāruru Stream. Wetland sedges such as *Carex lessoniana* and *C. virgata* occur there, together with a patch of kānuka and several exotic plants of damp places: water celery (*Apium nodiflorum*), water cress (*Nasturtium officinale*), starwort (*Callitriche stagnalis*), and soft rush (*Juncus effusus*). Wandering Jew is a major problem but is hoped it can eventually be eliminated and replaced with parataniwha (*Elatostema rugosum*).

Native regeneration copses

A feature of the cemetery vegetation is the natural regeneration of several native trees and shrubs in clumps (copses) among the tombs. These seem to have arisen from bird-dispersed seed from the Grafton Gully bush or possibly from more distant sites. The dominant shrub is coastal karamu (Fig. 8), often with karaka and kawakawa. In places there has

also been abundant colonisation of whau (*Entelea arborescens*) in openings, the seed having come from trees planted in revegetation areas on the cemetery boundaries.

Lawns and grave surrounds

Old rose cultivars are a botanical highlight of the West Cemetery, where a special Rose Trail has been developed (Auckland Council 2). There are lawns amongst the graves and in more open places which are regularly mown, and plants grow on some of the graves themselves. The prominent plants vary according to the season. Abundant ones are lawn daisy (*Bellis perennis*), creeping buttercup (*Ranunculus repens*), white clover (*Trifolium repens*), narrow-leaved plantain (*Plantago lanceolata*), broad-leaved plantain (*Plantago major*), catsear (*Hypochaeris radicata*), dandelion (*Taraxacum officinale*), penny royal (*Mentha pulegium*), selfheal (*Prunella vulgaris*), violet (*Viola odorata*), dove's foot cranesbill (*Geranium molle*), annual poa (*Poa annua*), rough-stalked meadow grass (*Poa trivialis*), kikuyu grass (*Cenchrus clandestinum*), carpet grass (*Axonopus fissifolius*), grey sedge (*Carex divulsa*) and onion weed. More locally or seasonally may be found native hydrocotyle (*Hydrocotyle moschata*), Australian hydrocotyle (*H. tripartita*), Indian strawberry (*Potentilla indica*), Onehunga weed (*Soliva sessilis*) and toad rush (*Juncus bufonius*).



Fig. 7. Puriri (*Vitex lucens*), Grafton Gully, Symonds St Cemetery East, 10 Jan 2020.



Fig. 8. Coastal karamu (*Coprosma macrocarpa* subsp. *minor*) regenerating, Symonds St Cemetery, 23 Sep 2019.



Fig. 9. Encroachment of regenerating vegetation on graves, Symonds St Cemetery East, 6 Dec 2019.

As well as native shrubs, neglected graves become overgrown with an assortment of weeds (Fig. 9), prominent of which are *Cyperus eragrostis*, creeping bent (*Agrostis stolonifera*), grey sedge, nipplewort (*Lapsana communis*), ox tongue (*Helminthotheca echinoides*), cocksfoot (*Dactylis glomerata*), broadleaved plantain, sow thistle (*Sonchus asper*), broadleaved fleabane (*Erigeron sumatrensis*), small herb Robert (*Geranium purpureum*), black nightshade (*Solanum nigra*), lotus major (*Lotus pedunculatus*), milkweed (*Euphorbia peplus*), black medick (*Medicago lupulina*), selfheal, Indian strawberry, slender bedstraw (*Galium divaricatum*) and shaking brake (*Pteris tremula*). One plant has been found of the native willow herb *Epilobium billardieranum* subsp. *cinereum*.

Flora of stone walls

The substantial basalt stone walls bordering the cemetery either side of Symonds Street and alongside St Martin's Lane have a distinctive flora (Wilcox & Rogan 1999). Vascular plants recorded from these walls are: Delta maidenhair fern (*Adiantum raddianum*), hanging spleenwort (*Asplenium flaccidum*), necklace fern (*Asplenium*

flabellifolium) – (Jones 1983, 1996), butterfly bush (*Buddleja davidii*), great bindweed (*Calystegia silvatica* subsp. *disjuncta*), ivy-leaved toadflax, (*Cymbalaria muralis*), native willow herb, Mexican daisy (*Erigeron karvinskianus*), broad fleabane, fig (*Ficus carica*), Port Jackson fig (*Ficus rubiginosa*), slender bedstraw (*Galium divaricatum*), small herb Robert, Canary ivy (*Hedera canariensis*), ox-eye daisy (*Leucanthemum vulgare*), Japanese honeysuckle (*Lonicera japonica*), pohutukawa, hound's tongue fern (*Microsorium pustulatum*), pōhuehue (*Muehlenbeckia complexa*), Boston ivy (*Parthenocissus tricuspidata*) abundant (Fig. 10), kawakawa, ribwort (*Plantago lanceolata*), Polypogon fugax, Indian strawberry, shaking brake (*Pteris tremula*), leather-leaf fern (*Pyrrosia elaeagnifolia*), wallaby grass (*Rytidosperma racemosum*), procumbent pearlwort (*Sagina procumbens*), fireweed (*Senecio hispidulus*), gravel groundsel (*Senecio skirrhodon*), vulpia hair grass (*Vulpia myuros*) and throatwort (*Trachelium caeruleum*) – this last an attractive herb in the family Campanulaceae with small blue flowers in rounded heads from November to February and hailing from the Mediterranean region (Fig. 11). Bryophytes



Fig. 10. Boston ivy (*Parthenocissus tricuspidata*) and a liverwort, *Chiloscyphus subporosus*, Symonds St Cemetery West, on basalt stone wall. 4 Dec 2019.



Fig. 11. Throatwort (*Trachelium caeruleum*), Symonds St Cemetery West, on basalt stone wall, 4 Dec 2019.

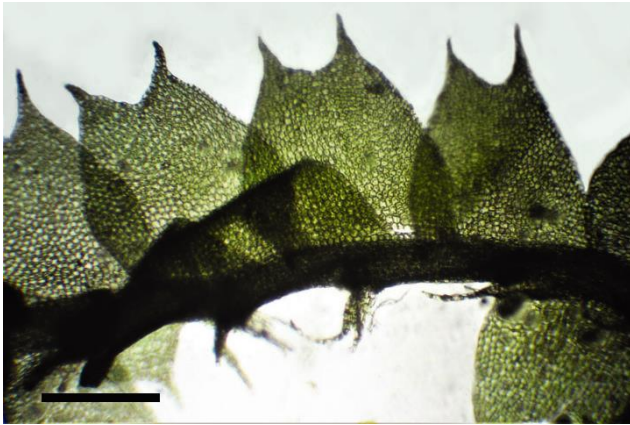


Fig. 12. Liverwort *Chiloscyphus subporosus*, Symonds St Cemetery West, wall by Pigeon Park, 21 Nov 2019. Scalebar = 500 μ m.

abound on the walls. Mosses found here are *Barbula unguiculata*, *Hypopterygium tamarisci*, *Racopilum cuspidigerum* var. *convolutaceum*, *Rosulabryum campylothecium* and *Thuidiopsis sparsa*. A locally common liverwort is *Chiloscyphus subporosus* var. *subporosus* forming bright green mats on the shaded side of the wall bordering Pigeon Park (Figs. 10, 12), and *Frullania pentapleura* sometimes shares the same habitat.

Algae, lichens and bryophytes growing on graves

The green alga *Trentepohlia jolithus* (Fig. 13) is one of the most conspicuous plants growing on vertical headstones. It is bright orange-red in colour and can liberally cover headstones in a furry coating. Lichens observed on graves are *Flavoparmelia haysomii*, *Heterodermia speciosa* (Fig. 14), *Xanthoparmelia scabrosa* and *Xanthoria parietina*, the commonest being *Heterodermia speciosa*. Galloway (2012) lists over 100 species of lichen recorded from New Zealand cemeteries, so it is very likely many more will be found in Symonds St Cemetery. Aptroot & James (2002) provide a detailed account of cemeteries as a habitat for lichens. Six mosses have

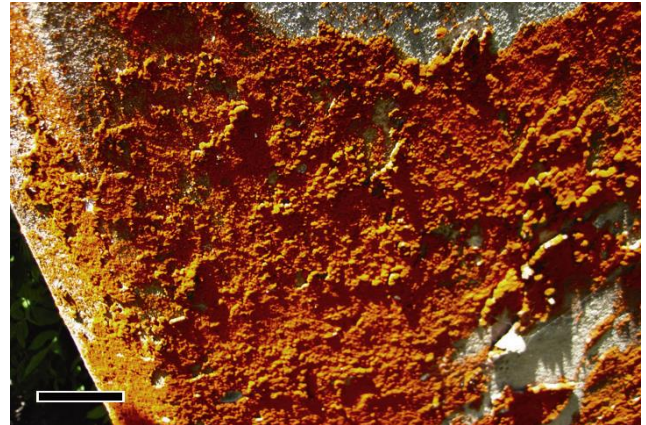


Fig. 13. Alga *Trentepohlia jolithus*, Symonds St Cemetery West on headstone, 14 Nov 2019. Scalebar = 1 cm.

been found on graves: *Ceratodon purpureus*, *Grimmia pulvinata* (Fig. 15), *Hypnum cupressiforme*, *Rhyncostegium tenuifolium*, *Tortula marginata* and *Tortula muralis*.

Lichens and bryophytes on tree branches and trunks

Bark of the many exotic and native trees here provide a rich habitat for lichens and bryophytes. The most conspicuous tree-trunk lichen is *Parmotrema reticulatum*, and others include some crustose species such as *Pertusaria thiosida* and *Graphis elegans* (Fig. 16). Liverworts are particularly prominent, with the commonest species being *Frullania pentapleura* (Figs. 17, 18), *Chiloscyphus semiteres* var. *semiteres* and *Metzgeria furcata* – often growing together in creeping mats on a wide variety of hosts. Other epiphytic liverworts recorded are *Chiloscyphus subporosus* var. *subporosus*, *Heteroscyphus supinus*, *Plagiochila trispicata*, *Porella elegantula* and *Siphonolejeunea nudipes*. Mosses are much less common as tree epiphytes here, but three of note are *Fabronia australis* (in liverwort mats) (Fig. 19), *Rhaphidorrhynchium amoenum* and *Wijkia extenuata*.



Fig. 14. Lichen *Heterodermia speciosa* on granite gravestone, Symonds St Cemetery West, 4 Jan 2020. Scalebar = 1 cm.

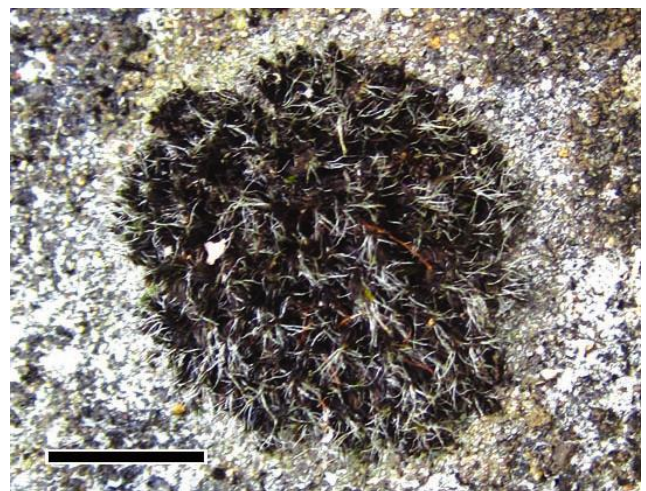
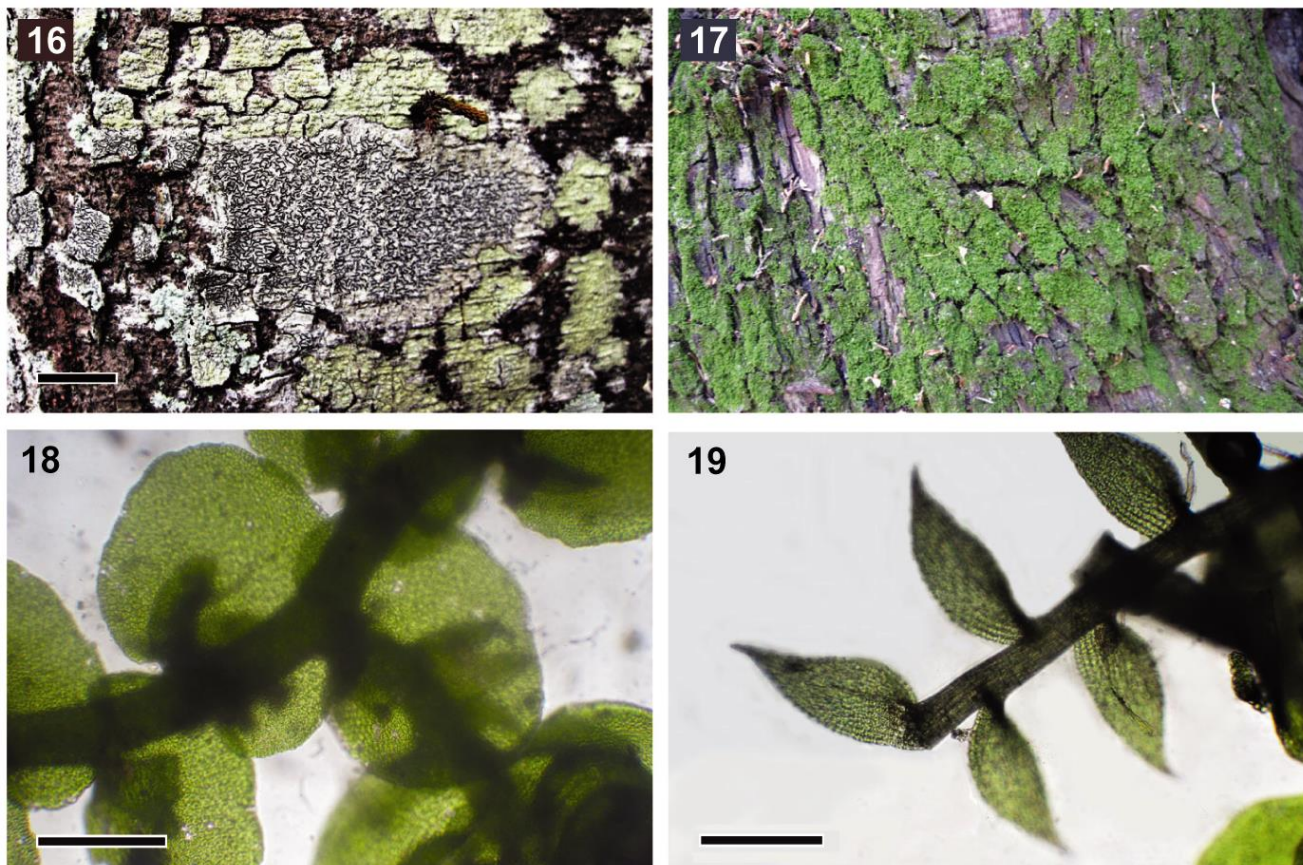


Fig. 15. Moss *Grimmia pulvinata*, Symonds St Cemetery East, 6 Dec 2019.



16. Lichens *Pertusaria thiopsida* and *Graphis elegans* (centre) on kahikatea trunk, Symonds St Cemetery West, 4 Jan 2020. Scalebar = 1 cm. **17.** Liverwort *Frullania pentapleura*, Symonds St Cemetery West, on *Cupressus macrocarpa*, 6 Dec 2019. **18.** Liverwort *Frullania pentapleura*, Symonds St Cemetery West, on *Cupressus macrocarpa*, 6 Dec 2019. Scalebar = 250 mm. **19.** Moss *Fabronia australis*, mixed with the liverwort *Frullania pentapleura*, on *Acer buergerianum*, Symonds St Cemetery West, 4 Jan 2020. Scalebar = 1 mm.

Acknowledgements

John Braggins kindly helped with identification of some of the liverworts. John Adam located historic records regarding the planting of *Cupressus macnabiana*. Nick Goldwater is thanked for helpful

comments and for permission to include Wildland Consultants (2019) plant records from the Waipāpuru Stream; AK herbarium records were accessed from the Auckland Museum online database.

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Appendix. List of plants and fungi found in Symonds Street Cemetery and Grafton Gully, Auckland

Sources of records:

Observations from 13 field visits by MDW between 28 Jan 1999 and 10 Jan 2020. Unless stated otherwise, all listed species have been observed by MDW between 1999 and 2020; dates for some observations are noted. M.D. Wilcox records ending in (AK) indicate that specimen was collected and will be accessioned at the Auckland Museum. Other M.D. Wilcox records refer to field observations only.

Other sources: Herbarium specimens at Auckland Museum (AK); Cranwell (1937); Wall & Cranwell (1943); Gardner (1981); Wildland Consultants (2019) (field observations, 4 Dec 2018); Symonds Street Cemetery Nature Trails by Auckland Council (Auckland Council 1, 2, 3)

* = exotic plants; cult. = cultivated plants

FUNGI

<i>Auricularia cornea</i>	wood ear fungus. On dead wood of <i>Hoheria populnea</i> , West Cemetery, M.D. Wilcox, 18 Nov 2019
<i>Cyclomyces tabacinus</i>	brown soft bracket fungus, on oak. (Auckland Council 3)
<i>Trametes versicolor</i>	rainbow bracket fungus, on oak. (Auckland Council 3)
<i>Stereum hirsutum</i>	hairy curtain crust, on oak. (Auckland Council 3)

ALGAE

<i>Trentepohlia jolithus</i>	red furry coating on old headstones, West Cemetery, M.D. Wilcox 6251, 14 Nov 2019 (AK)
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LICHENS

<i>Chrysothrix xanthina</i>	yellow powder lichen, on <i>Quercus robur</i> trunk; on totara trunk
<i>Flavoparmelia haysomii</i>	On granite headstones in the Jewish section, West Cemetery, M.D. Wilcox, 4 Jan 2020
<i>Graphis elegans</i>	On bark of kahikatea tree, West Cemetery, M.D. Wilcox, 4 Jan 2020 (AK); on bark of kowhai tree, East Cemetery, M.D. Wilcox, 10 Jan 2020
<i>Heterodermia speciosa</i>	Abundant on granite tombstone, West Cemetery, M.D. Wilcox, 4 Jan 2020 (AK); on iron railings, West Cemetery, M.D. Wilcox, 4 Jan 2020 (AK); on titoki trunk, West Cemetery, M.D. Wilcox, 4 Jan 2020 (AK)
<i>Parmotrema reticulatum</i>	On bark of <i>Quercus velutina</i> , West Cemetery, M.D. Wilcox, 4 Dec 2019; on bark of titoki. West Cemetery, M.D. Wilcox, 4 Jan 2020 (AK)
<i>Pertusaria thiopsidea</i>	On bark of kahikatea tree, West Cemetery, M.D. Wilcox, 4 Jan 2020 (AK)
<i>Punctelia subrudecta</i>	On dead wood of a flowering cherry, West Cemetery, M.D. Wilcox, 4 Dec 2019 (AK)
<i>Ramalina celastri</i>	On dead bark of <i>Prunus serrulata</i> cultivar, West Cemetery, M.D. Wilcox, 4 Dec 2019 (AK)
<i>Usnea pusilla</i>	On trunk of a titoki tree, West Cemetery, M.D. Wilcox, 4 Jan 2020 (AK)
<i>Xanthoparmelia scabrosa</i>	Top of rock wall, St Martins Lane; graves, West Cemetery, M.D. Wilcox, 4 Jan 2020
<i>Xanthoria parietina</i>	On a gravestone, West Cemetery, M.D. Wilcox, 4 Jan 2020

LIVERWORTS

<i>Chiloscyphus semiteres</i> var. <i>semiteres</i>	On banks and tree trunks; on large <i>Quercus robur</i> , branch crotch, West Cemetery, M.D. Wilcox, 4 Dec 2019
<i>Chiloscyphus subporosus</i> var. <i>subporosus</i>	On shaded basalt wall, West Cemetery, M.D. Wilcox, 21 Nov 2019 (AK), 4 Dec 2019 (AK). On large <i>Quercus robur</i> , branch crotch, West Cemetery, M.D. Wilcox, 4 Dec 2019
<i>Frullania pentapleura</i>	On wall; on large <i>Quercus robur</i> , branch crotch, West Cemetery, M.D. Wilcox, 4 Dec 2019; on bark of <i>Quercus velutina</i> , West Cemetery, M.D. Wilcox, 4 Dec 2019; on bark of <i>Cupressus macrocarpa</i> , West Cemetery, M.D. Wilcox, 6 Dec 2019 (AK); bark of <i>Acer buergerianum</i> , West Cemetery, M.D. Wilcox, 4 Jan 2020 (AK); on karaka trunk, West Cemetery, M.D. Wilcox, 4 Jan 2020 (AK)
<i>Heteroscyphus coalitus</i> var. <i>coalitus</i>	On banks, Grafton Gully
<i>Heteroscyphus supinus</i>	On <i>Prunus</i> trunk, West Cemetery, M.D. Wilcox, 4 Dec 2019 (AK)
<i>Lunularia cruciata</i> *	crescent cup liverwort. On soil
<i>Metzgeria furcata</i>	On large <i>Quercus robur</i> , branch crotch, West Cemetery, M.D. Wilcox, 4 Dec 2019; on <i>Acer buergerianum</i> trunk, with <i>Frullania pentapleura</i> , West Cemetery, M.D. Wilcox, 4 Jan 2020
<i>Plagiochila trispicata</i>	On shaded lower trunk of a large oak tree, East Cemetery. M.D. Wilcox, 10 Jan 2020 (AK)

<i>Porella elegantula</i>	On large <i>Quercus robur</i> , branch crotch, West Cemetery, <i>M.D. Wilcox</i> , 6 Dec 2019 (AK)
<i>Siphonolejeunea nudipes</i>	On bark of <i>Acer buergerianum</i> , West Cemetery, with <i>Frullania pentapleura</i> , <i>Fabronia australis</i> , and <i>Metzgeria furcata</i> , M.D. Wilcox, 4 Jan 2020

MOSESSES

<i>Barbula unguiculata</i>	On stone wall, East Cemetery, <i>M.D. Wilcox</i> , 18 Nov 2019 (AK)
<i>Ceratodon purpureus</i>	Symonds St by Grafton Bridge, on concrete, <i>J.K. Bartlett</i> , 20 Jul 1979, AK 186729; Grafton Gully, on compacted clay in open, <i>E.K. Cameron</i> , 12 Sep 1982, AK 323356; dark low bushy mats on graves (sandstone) East Cemetery, <i>M.D. Wilcox</i> , 23 Sep 2019 (AK); 10 Jan 2020 (AK)
<i>Fabronia australis</i>	On oak tree, East Cemetery/Grafton Gully, <i>J.K. Bartlett</i> , 14 Jul 1979, AK 187770; on bark of <i>Acer buergerianum</i> , mixed with <i>Frullania pentapleura</i> and <i>Metzgeria furcata</i> , West Cemetery, <i>M.D. Wilcox</i> , 4 Jan 2020 (AK)
<i>Fissidens taxifolius</i> *	On clay bank in bush, <i>E.K. Cameron</i> , 21 May 1997, AK 232148; on ground, East Cemetery, <i>M.D. Wilcox</i> , 6 Dec 2019 (AK)
<i>Grimmia pulvinata</i>	On concrete gravestone, East Cemetery, <i>M.D. Wilcox</i> , 6 Dec 2019 (AK)
<i>Hypnum cupressiforme</i>	On grave, East Cemetery, <i>M.D. Wilcox</i> , 10 Jan 2020 (AK)
<i>Hypopterygium tamarisci</i>	On stone wall, East Cemetery, <i>M.D. Wilcox</i> , 18 Nov 2019 (AK)
<i>Racopilum cuspidigerum</i> var. <i>convolutaceum</i>	On stone wall, East Cemetery, <i>M.D. Wilcox</i> , 18 Nov 2019 (AK)
<i>Rhaphidorrhynchium amoenum</i>	On kanuka trunk, West Cemetery, <i>M.D. Wilcox</i> , 4 Dec 2019 (AK)
<i>Rhyncostegium tenuifolium</i>	On old gravestones, West Cemetery, southern end, <i>M.D. Wilcox</i> , 4 Dec 2019 (AK)
<i>Rosulabryum campylotheicum</i>	On stone wall, East Cemetery, <i>M.D. Wilcox</i> , 18 Nov 2019 (AK)
<i>Thuidiopsis sparsa</i>	On stone wall, East Cemetery, <i>M.D. Wilcox</i> , 18 Nov 2019 (AK)
<i>Tortula marginata</i> *	On grave, <i>J.E. Beever</i> , 3 Apr 2013, AK 339415-16; first collected in the cemetery by <i>J.K. Bartlett</i> , 7 Mar 1980, AK 189199
<i>Tortula muralis</i>	On grave, East Cemetery, <i>M.D. Wilcox</i> , 6 Dec 2019 (AK)
<i>Trachyloma diversinerve</i>	Symonds Street, <i>J.K. Bartlett</i> , 10 July 1979, AK 189209
<i>Wijkia extenuata</i>	On lower trunk of a pohutukawa tree near Pigeon Park, <i>M.D. Wilcox</i> , 21 Nov 2019 (AK)

LYCOPHYTES

<i>Selaginella kraussiana</i> *	African clubmoss
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FERNS

<i>Adiantum cunninghamii</i>	maidenhair fern. <i>A.E. Wright</i> , 29 Nov 1971, AK 129351	<i>Asplenium oblongifolium</i>	shining spleenwort. Gardner (1981); Grafton Gully (Wildland Consultants 2019)
<i>Adiantum hispidulum</i>	rosy maidenhair fern. Gardner (1981); Grafton Gully, M. D. Wilcox	<i>Austroblechnum membranaceum</i>	<i>J.H. Goulding</i> , 21 May 1971, AK 128506
<i>Adiantum raddianum</i> *	delta maidenhair fern. On banks and walls, M.D. Wilcox	<i>Austroblechnum lanceolatum</i>	lance fern. Gardner (1981)
<i>Asplenium bulbiferum</i>	hen-and-chickens fern. <i>J.H. Wadham</i> , 13 Sep 1946, AK 142034; Gardner (1981)	<i>Cyathea dealbata</i>	ponga, silver fern. Gardner (1981)
<i>Asplenium bulbiferum</i> × <i>A. flaccidum</i> (cult.)	By Hobson's grave, M.D. Wilcox, 23 Sep 2019	<i>Cyathea medullaris</i>	mamaku, black tree fern. Gardner (1981)
<i>Asplenium flabellifolium</i>	Jones 1983, 1996	<i>Dicksonia squarrosa</i>	wheki. Grafton Gully (Wildland Consultants 2019). No previous records
<i>Asplenium flaccidum</i>	hanging spleenwort. Not listed by Gardner (1981). Stone walls, M.D. Wilcox	<i>Diplazium australe</i>	Waipāruru Stream bank, M.D. Wilcox, 21 Nov 2019
<i>Asplenium lamprophyllum</i>	<i>A.E. Wright</i> , 21 Nov 1971, AK 129352; Gardner (1981); Wildland Consultants (2019)	<i>Doodia australis</i>	rasp fern. Grafton Gully, M.D. Wilcox; Gardner (1981)
<i>Asplenium</i> × <i>lucrosum</i> (<i>A. dimorphum</i> × <i>A. bulbiferum</i>) (cult.)	West cemetery, M.D. Wilcox, 14 Nov 2019	<i>Microsorium pustulatum</i>	hound's tongue. Gardner 1981; Grafton Gully (Wildland Consultants 2019)

<i>Microsorium scandens</i>	fragrant fern. Gardner 1981; On rock wall, West Cemetery, M.D. Wilcox; Grafton Gully (Wildland Consultants 2019). Not listed by Gardner (1981)
<i>Nephrolepis cordifolia</i> *	tuber ladder fern. East Cemetery, M.D. Wilcox, 23 Sep 2019
<i>Paesia scaberula</i>	pig fern. Gardner (1981)
<i>Parablechnum novaezealandiae</i>	kiokio. Grafton Gully (Wildland Consultants 2019)
<i>Parapolystichum glabellum</i>	East Cemetery, Grafton Gully

<i>Parapolystichum microsorium</i>	Gardner (1981)
<i>Pneumatopteris pennigera</i>	gully fern. Gardner (1981)
<i>Pteridium esculentum</i>	bracken
<i>Pteris cretica</i> *	Cretan brake. East Cemetery, M.D. Wilcox
<i>Pteris macilentia</i>	Not listed by Gardner (1981)
<i>Pteris tremula</i>	shaking brake. Gardner (1981)
<i>Pyrrosia elaeagnifolia</i>	leather-leaf fern

CONIFERS

<i>Agathis australis</i> (cult.)	kauri. Few saplings, planted in West Cemetery and in East Cemetery
<i>Araucaria heterophylla</i> * (cult.)	Norfolk Island pine. East Cemetery, 3 large trees. Some regenerating seedlings
<i>Callitris rhomboidea</i> * (cult.)	cypress pine. <i>R.O. Gardner</i> , 1 Jan 1986, AK 174367; a well-grown tree, West Cemetery, M.D. Wilcox, 4 Dec 2019
<i>Chamaecyparis lawsoniana</i> * (cult.)	Lawson's cypress. East Cemetery, 6 trees
<i>Cupressus macnabiana</i> * (cult.)	McNab cypress. West Cemetery, Karangahape Rd frontage (Pigeon Park), first identified by John Adam from historical nursery records of Charles Wren, Mt Hobson Nursery, Remuera, 1877, supplied to the Anglican Church

<i>Cupressus macrocarpa</i> * (cult.)	Monterey cypress. A big tree, West Cemetery
<i>Cupressus sempervirens</i> var. <i>horizontalis</i> * (cult.)	Mediterranean cypress. Two big tall trees, East Cemetery; several smaller trees in West Cemetery
<i>Dacrycarpus dacrydioides</i> (cult.)	kahikatea. Cultivated in West Cemetery and along Waipāruru Stream in Grafton Gully.
<i>Pinus radiata</i> * (cult.)	Monterey pine. East Cemetery
<i>Pinus pinaster</i> * (cult.)	maritime pine. East Cemetery, J. Salter & F. Duff, 22 May 2020
<i>Platycladus orientalis</i> * (cult.)	Chinese arborvitae
<i>Podocarpus totara</i> (cult.)	tōtara. Cultivated in East & West Cemeteries
<i>Sequoia sempervirens</i> * (cult.)	coast redwood. East Cemetery

BASAL ANGIOSPERMS & MAGNOLIIDS

<i>Beilschmiedia tarairi</i>	taraire. Grafton Gully
<i>Beilschmiedia tawa</i>	tawa. Grafton Gully
<i>Hedycarya arborea</i>	pigeonwood. Grafton Gully
<i>Laurelia novaezealandiae</i> (cult.)	pukatea. On planting list for restoration plantings, Waipāruru Stream (Wildland Consultants 2019)
<i>Laurus novocanariensis</i> * (cult.)	Canary Islands laurel. East Cemetery, M.D. Wilcox, 4 Dec 2019 (AK)

<i>Laurus nobilis</i> * (cult.)	bay laurel
<i>Magnolia grandiflora</i> * (cult.)	evergreen magnolia. East Cemetery, two large old trees
<i>Persea americana</i> *	avocado. East Cemetery, Waipāruru Trail. Wild specimen, West Cemetery, <i>E.K. Cameron</i> , Nov 1990, AK 278598
<i>Piper excelsum</i>	kawakawa. East and West Cemeteries.

MONOCOTS

<i>Agapanthus orientalis</i> *	agapanthus. East and West Cemeteries,
<i>Agrostis stolonifera</i> *	creeping bent. East Cemetery, M.D. Wilcox, 18 Nov 2019 (AK)
<i>Amaryllis belladonna</i> *	naked ladies, belladonna lily. M.D. Wilcox, 18 Mar 2003
<i>Allium triquetrum</i> *	three-cornered garlic, onion weed
<i>Anthoxanthum odoratum</i> *	sweet vernal
<i>Archontophoenix cunninghamiana</i> *	bangalow palm. Seedlings, West Cemetery, M.D. Wilcox, 4 Dec 2019
<i>Arrhenatherum elatius</i> *	tall oat grass. East Cemetery

<i>Arthropodium bifurcatum</i> (cult.)	rengarenga lily 'Matapouri Bay'
<i>Arthropodium cirratum</i> (cult.)	rengarenga lily
<i>Asparagus scandens</i> *	climbing asparagus. (Wildland Consultants 2019)
<i>Astelia chathamica</i> (cult.)	West Cemetery, M.D. Wilcox, 14 Nov 2019
<i>Axonopus fissifolius</i> *	carpet grass
<i>Bromus catharticus</i> subsp. <i>catharticus</i> *	prairie grass

Monocots cont...

<i>Bromus catharticus</i> subsp. <i>elatus</i> * (<i>B. valdivianus</i>)	stripey brome. East Cemetery on disturbed open site, <i>M.D. Wilcox</i> , 6 Dec 2019 (AK)
<i>Carex comans</i> 'Frosted curls' (cult.)	New Zealand hair sedge. West Cemetery cycleway entrance, <i>M.D. Wilcox</i> , 4 Dec 2019
<i>Carex dissita</i>	Grafton Gully, <i>Cranwell</i> (1937); Grafton Gully bush, <i>M.D. Wilcox</i>
<i>Carex divulsa</i> *	grey sedge. Abundant in East and West Cemeteries, <i>M.D. Wilcox</i> , 6 Dec 2019
<i>Carex flagellifera</i>	trip-me-up. East Cemetery
<i>Carex inversa</i>	On grave, West Cemetery, <i>M.D. Wilcox</i> , 6 Dec 2019
<i>Carex lambertiana</i>	<i>W.F. Harris</i> , 1938, AK 129522; <i>J.H. Goulding</i> , 29 Nov 1971, AK 129338; West Cemetery, <i>M.D. Wilcox</i> , 4 Dec 2019 (AK); restoration plantings, Waipāruru Stream (Wildland Consultants 2019)
<i>Carex lessoniana</i>	Waipāruru Stream, <i>M.D. Wilcox</i> , 21 Nov 2019; restoration plantings, Waipāruru Stream (Wildland Consultants 2019)
<i>Carex longebrachiata</i> *	Australian sedge. Waipāruru Stream, <i>M.D. Wilcox</i> , 21 Nov 2019 (AK). Appears to be planted.
<i>Carex ochrosaccus</i>	Dry banks in forest remnant, <i>R.O. Gardner</i> , 14 Feb (1981), AK 153109; West Cemetery, <i>M.D. Wilcox</i> , 4 Dec 2019 (AK)
<i>Carex solandri</i>	<i>Gardner</i> (1981)
<i>Carex uncinata</i>	hook sedge. <i>Cranwell</i> (1937); <i>Gardner</i> (1981)
<i>Carex virgata</i>	West Cemetery, <i>M.D. Wilcox</i> , 14 Nov 2019. East Cemetery, Waipāruru Stream, <i>M.D. Wilcox</i> , 10 Jan 2020; restoration plantings, Waipāruru Stream (Wildland Consultants 2019)
<i>Chasmanthe bicolor</i> *	African cornflag
<i>Clivia miniata</i> * (cult.)	West Cemetery, <i>M.D. Wilcox</i> , 14 Nov 2019
<i>Cordyline australis</i>	tī ngahere, cabbage tree
<i>Cordyline banksii</i>	tī kouka, Banks's cabbage tree. (Auckland Council 3)
<i>Cordyline fruticosa</i> * (cult.)	tī pore. East Cemetery, <i>M.D. Wilcox</i> , 10 Jan 2020 (AK)
<i>Cordyline oblecta</i> (cult.)	Three Kings cabbage tree
<i>Cordyline pumilio</i>	dwarf cabbage tree. <i>Cranwell</i> (1937); <i>J.H. Goulding</i> , 29 Nov 1971, AK 129330; Grafton Gully, <i>M.D. Wilcox</i>
<i>Cortaderia jubata</i> *	purple pampas grass
<i>Cortaderia selloana</i> *	pampas grass
<i>Crocsmia</i> × <i>crocsmiiflora</i> *	montbretia
<i>Cynodon dactylon</i> *	Indian doab. West Cemetery, <i>M.D. Wilcox</i> , 14 Nov 2019
<i>Cyperus eragrostis</i> *	<i>J.H. Goulding</i> , 21 May 1971, AK 128513. Damp areas, and neglected graves, West Cemetery
<i>Cyperus brevifolius</i> *	Damp areas, West Cemetery

<i>Dactylis glomerata</i> *	cocksfoot
<i>Dianella nigra</i>	tūrutu, NZ blueberry. <i>Gardner</i> (1981)
<i>Earina mucronata</i>	On large oak, East Cemetery, <i>J. Salter & F. Duff</i> , 22 May 2020
<i>Ehrharta erecta</i> *	veldt grass. West Cemetery, <i>M.D. Wilcox</i> , 14 Nov 2019
<i>Freycinetia banksii</i>	kiekie
<i>Gahnia lacera</i>	Waipāruru Nature Trail, <i>M.D. Wilcox</i> ; <i>Gardner</i> (1981)
<i>Gahnia setifolia</i>	<i>L.M. Cranwell</i> , 3 Nov 1936, AK 109627
<i>Galanthus nivalis</i> *	snowdrop
<i>Holcus lanatus</i> *	Yorkshire fog
<i>Hyacinthoides non-scripta</i> *	bluebell
<i>Iris foetidissima</i> *	stinking iris
<i>Isolepis inundata</i>	Grafton Gully, excavated area, <i>P. Hynes & J. Goulding</i> , 21 May 1971, AK 128517
<i>Isolepis reticularis</i>	<i>Cranwell</i> (1937); <i>Gardner</i> (1981)
<i>Juncus bufonius</i> *	toad rush. West Cemetery, <i>M.D. Wilcox</i> , 4 Dec 2019
<i>Juncus continuus</i> *	Grafton Gully, <i>R.O. Gardner</i> , 14 Feb (1981), AK 153675
<i>Juncus effusus</i> *	soft rush. West Cemetery, <i>M.D. Wilcox</i> , 4 Dec 2019; Waipāruru Stream (Wildland Consultants 2019)
<i>Juncus sarophorus</i>	<i>J.H. Goulding</i> , 21 Nov 1971, AK 129335
<i>Juncus tenuis</i> *	track rush. West Cemetery, <i>M.D. Wilcox</i> , 14 Nov 2019
<i>Juncus usitatus</i>	<i>R.O. Gardner</i> , 22 Oct 1983, AK 165257; West Cemetery, <i>M.D. Wilcox</i> , 4 Jan 2020 (AK)
<i>Lachnagrostis filiformis</i>	New Zealand wind grass. West Cemetery, <i>M.D. Wilcox</i> , 14 Nov 2019, 4 Dec 2019
<i>Libertia peregrinans</i> (cult.)	mikoikoi
<i>Lolium perenne</i> *	perennial ryegrass. West Cemetery, <i>M.D. Wilcox</i> , 14 Nov 2019
<i>Microlaena avenacea</i>	bush rice grass. <i>D. Petrie</i> , Nov 1914, AK 152707. Waipāruru Nature Trail, <i>M.D. Wilcox</i> ,
<i>Microlaena stipoides</i>	pātiti. West Cemetery, <i>M.D. Wilcox</i> , 4 Dec 2019
<i>Narcissus pseudonarcissus</i> * (cult.)	daffodil
<i>Oplismenus hirtellus</i>	Grafton Gully. <i>Gardner</i> (1981)
<i>Phalaris aquatica</i> *	phalaris. East Cemetery. <i>M.D. Wilcox</i>
<i>Phoenix canariensis</i> *	Canary Island palm. West Cemetery
<i>Phoenix reclinata</i> * (cult.)	Senegal date palm. West Cemetery
<i>Phormium tenax</i> (cult.)	flax, harakeke. West Cemetery, southern margin, <i>M.D. Wilcox</i> , 4 Dec 2019
<i>Piptatherum miliaceum</i> *	smilo grass. Abundant in East Cemetery, <i>M.D. Wilcox</i> , 10 Jan 2020 (AK)

<i>Poa anceps</i>	Grafton Gully, trackside bank, M.D. Wilcox, 21 Nov 2019; Gardner (1981)
<i>Poa annua</i> *	annual poa
<i>Poa cita</i> (cult.)	silver tussock. West Cemetery cycleway entrance
<i>Poa trivialis</i> *	rough-stalked meadow grass. West Cemetery, M.D. Wilcox, 14 Nov 2019
<i>Polypogon fugax</i> *	West Cemetery, M.D. Wilcox, 14 Nov 2019; stone wall, East Cemetery, M.D. Wilcox, 18 Nov 2019
<i>Polypogon viridis</i> *	water bent. West Cemetery, M.D. Wilcox, 14 Nov 2019
<i>Pterostylis banksii</i>	Grafton Gully (Wall & Cranwell, 1943; Wadham, 1946, AK 140605)
<i>Rhopalostylis sapida</i>	nikau palm
<i>Rytidosperma racemosum</i> *	wallaby grass. East Cemetery, M.D. Wilcox, 10 Jan 2020 (AK)
<i>Sparaxis bulbifera</i> *	harlequin flower. Photo, M.D. Wilcox, 23 Sep 2019
<i>Sparaxis tricolor</i> *	harlequin flower. Photo, Cameron et al. 2008, p. 198

<i>Tradescantia fluminensis</i> *	wandering Jew. Mentioned by Wall & Cranwell (1943) as "having a stranglehold on the forest floor" in Grafton Gully; mainly along Waipāruru Stream (Wildland Consultants 2019).
<i>Tulbaghia violacea</i> *	wild garlic. Locally common in a small grassy area., flowers mauve, plant smelling strongly of onion, E.K. Cameron, 26 Nov 1982, AK 163086
<i>Vulpia bromoides</i> *	vulpia hair grass. West Cemetery, M.D. Wilcox, 14 Nov 2019
<i>Vulpia myuros</i> *	vulpia hair grass. Stone wall, East Cemetery, M.D. Wilcox, 18 Nov 2019
<i>Watsonia marginata</i> *	broad-leaf watsonia, bugle flower. West Cemetery, M.D. Wilcox, 4 Dec 2019 (AK)
<i>Watsonia meriana</i> 'Bulbillifera'	bulbil watsonia. West Cemetery, M.D. Wilcox, 4 Dec 2019
<i>Zantedeschia aethiopica</i> *	arum lily

EUDICOT TREES, SHRUBS AND CLIMBERS

<i>Acacia longifolia</i> *	Sydney golden wattle. East and West Cemeteries
<i>Acer buergerianum</i> * (cult.)	trident maple. West Cemetery, L. Goffart-Hall, 12 Nov 1996, AK 230795; West Cemetery, M.D. Wilcox, 18 Mar 2003 (AK) & M.D. Wilcox, 4 Jan 2020 (AK)
<i>Acer monspessulanum</i> * (cult.)	Montpellier maple. NE corner, R.O. Gardner, 1 Jan 1986, AK 178647; M.D. Wilcox, 18 Mar 2003 (AK)
<i>Acer pseudoplatanus</i> * (cult. & wild)	sycamore. East Cemetery
<i>Aesculus × carnea</i> * (cult.)	red horse chestnut. West Cemetery, M.D. Wilcox, 14 Nov 2019
<i>Aesculus hippocastanum</i> *(cult.)	horse chestnut
<i>Ailanthus altissima</i> *	tree of heaven. Removed (Auckland Council 1)
<i>Alectryon excelsum</i>	tītoki. West cemetery, planted. Grafton Gully
<i>Araujia hortorum</i> *	moth plant. East Cemetery, M.D. Wilcox, 6 Dec 2010. West Cemetery, M.D. Wilcox, 4 Jan 2020
<i>Betula pendula</i> * (cult.)	silver birch
<i>Brachyglottis repanda</i>	rangiora
<i>Buddleja davidii</i> *	butterfly bush
<i>Buxus sempervirens</i> * (cult.)	box. East Cemetery
<i>Calystegia silvatica</i> subsp. <i>disjuncta</i>	great bindweed. Grafton Gully (Wildland Consultants 2019)
<i>Camellia japonica</i> *(cult.)	(Auckland Council 1)
<i>Carmichaelia australis</i>	native broom. Grafton Gully. Gardner (1981)
<i>Carpodetus serratus</i> (cult.)	putaputāwētā. Waipāruru Stream, planted (Wildland Consultants 2019). Recorded in Grafton Gully bush by Wall & Cranwell (1943)

<i>Casuarina cunninghamiana</i> * (cult.)	river sheoak. West Cemetery, M.D. Wilcox, 4 Dec 2019
<i>Casuarina glauca</i> * (cult.)	swamp sheoak. West Cemetery. R.O. Gardner, 30 Mar 1986, AK 174383; West Cemetery, M.D. Wilcox, 18 Mar 2003 (AK); West Cemetery, M.D. Wilcox, 6 Dec 2019 (AK)
<i>Cestrum elegans</i> *	red cestrum
<i>Cestrum nocturnum</i> *	queen of the night. West Cemetery, M.D. Wilcox, 14 Nov 2019
<i>Chrysanthemoides monolifera</i> *	boneseed. J.H. Goulding, 29 Nov 1971, AK 129339
<i>Coprosma grandifolia</i>	kanono. East Cemetery and Grafton Gully, M.D. Wilcox
<i>Coprosma lucida</i>	shining karamū. Gardner (1981)
<i>Coprosma macrocarpa</i> subsp. <i>minor</i>	coastal karamū. Abundant in thickets, M.D. Wilcox
<i>Coprosma propinqua</i>	source unrecorded
<i>Coprosma repens</i>	taupata. J.H. Goulding, 29 Nov 1971, AK 129361
<i>Coprosma robusta</i>	karamū
<i>Corokia × cheesemanii</i> (cult.)	Cultivated in borders
<i>Corynocarpus laevigatus</i>	karaka
<i>Crataegus monogyna</i> *	hawthorn
<i>Dysoxylum spectabile</i>	kohekohe
<i>Entelea arborescens</i>	whau
<i>Eucalyptus globulus</i> * (cult.)	blue gum. East Cemetery
<i>Fagus sylvatica</i> * (cult.)	European beech. East Cemetery
<i>Ficus carica</i> *	fig. West Cemetery, M.D. Wilcox, 18 Mar 2003 (AK)
<i>Ficus macrophylla</i> * (cult.)	Moreton Bay fig. East Cemetery

Eudicot trees, shrubs etc. cont...

<i>Ficus rubiginosa</i> * (cult. & wild)	Port Jackson fig. East Cemetery; wild record, <i>R.O. Gardner</i> , 24 Jul 1983, AK 166241
<i>Fraxinus excelsior</i> * (cult.)	English ash. East and West Cemeteries
<i>Fuchsia excorticata</i>	tree fuchsia, kōtukutuku. Wall & Cranwell (1943), "surprisingly large specimens". Not seen by MDW
<i>Geniostoma ligustrifolium</i>	hangehange
<i>Gomphocarpus fruticosus</i> *	swan plant. West Cemetery, M.D. Wilcox, 14 Nov 2019
<i>Griselinia littoralis</i> (cult.)	broadleaf, pāpāuma
<i>Griselinia lucida</i> (cult.)	puka. West Cemetery, M.D. Wilcox, 14 Nov 2019
<i>Hedera canariensis</i> *	Canary ivy
<i>Hedera helix</i> *	ivy
<i>Hoheria populnea</i>	lacebark, houhere
<i>Idesia polycarpa</i> *(cult.)	wonder tree. East Cemetery
<i>Ipomoea indica</i> *	blue morning glory. Wildland Consultants 2019
<i>Kennedia rubicunda</i> *	By cycleway. <i>M. Stewart</i> , 27 Mar 2015, AK 357193
<i>Knightia excelsa</i>	rewarewa
<i>Kunzea robusta</i> (cult. & natural)	kānuka. A small patch of 6 m high trees in the Waipāruru Stream catchment (Wildland Consultants 2019)
<i>Ligustrum lucidum</i> *	tree privet
<i>Ligustrum sinense</i> *	Chinese privet
<i>Liquidambar styraciflua</i> * (cult.)	sweet gum. East and West Cemeteries. West Cemetery, <i>M.D. Wilcox</i> , 4 Jan 2020 (AK)
<i>Lonicera japonica</i> *	Japanese honeysuckle. <i>J.H. Goulding</i> , 21 May 1971, AK 128519
<i>Lophostemon confertus</i> * (cult.)	brush box. West Cemetery
<i>Macadamia ternifolia</i> * (cult.)	macadamia nut tree
<i>Malvaviscus arboreus</i> *	Turks cap. <i>C. Inglis</i> , 30 Aug 2004, AK 288090
<i>Meliccytus ramiflorus</i>	māhoe
<i>Meryta denhamii</i> * (cult.)	New Caledonian meryta. West Cemetery
<i>Metrosideros excelsa</i> (cult. & wild)	pohutukawa
<i>Muehlenbeckia australis</i>	pohuehue. Gardner (1981)
<i>Muehlenbeckia complexa</i>	pohuehue. West Cemetery, M.D. Wilcox
<i>Myoporum laetum</i> (cult.)	ngaio. West Cemetery, M.D. Wilcox
<i>Myoporum laetum</i> × <i>M. insulare</i> (cult.)	hybrid ngaio
<i>Myrsine australis</i>	māpou. Gardner (1981)
<i>Nerium oleander</i> *	oleander. East Cemetery, M.D. Wilcox, 10 Jan 2020
<i>Olearia albida</i> (cult.)	tanguru. West Cemetery, M.D. Wilcox, 14 Nov 2019
<i>Olearia lineata</i> 'Dartonii' (cult.)	twiggy tree daisy

<i>Olearia paniculata</i> (cult.)	akiraho, golden akeake
<i>Olearia rani</i>	heketara. Wall & Cranwell (1943)
<i>Paraserianthes lophantha</i> *	brush wattle. East Cemetery, seedlings only, M.D. Wilcox, 10 Jan 2020
<i>Parsonsia heterophylla</i>	kaikū, NZ jasmine. Wall & Cranwell (1943)
<i>Parthenocissus tricuspidata</i> *	Boston ivy. Wall, West Cemetery
<i>Passiflora tarminiana</i> *	banana passion fruit. <i>E.K. Cameron</i> , 24 Jan 1995, AK 221519
<i>Pittosporum crassifolium</i>	karo
<i>Pittosporum eugenioides</i> (cult.)	lemonwood. West Cemetery cycleway entrance
<i>Pittosporum tenuifolium</i>	kōhūhū. Wall & Cranwell (1943)
<i>Plectranthus ciliatus</i> *	plectranthus. <i>J.H. Goulding</i> , 21 May 1971, AK 128502
<i>Populus deltoides</i> * (cult.)	eastern cottonwood. East Cemetery. Probably subsp. <i>monilifera</i> 'Frimley', a female clone
<i>Populus trichocarpa</i> * (cult.)	black cottonwood, western balsam poplar. East Cemetery. Grafton Gully, <i>M.D. Wilcox</i> , 10 Jan 2020 (AK). As <i>Populus balsamifera</i> (Waipāruru Stream, Wildland Consultants 2019). Probably cultivar 'PMC 471', a male clone released in New Zealand in 1978
<i>Populus yunnanensis</i> * (cult.)	Yunnan poplar. West Cemetery
<i>Pseudopanax crassifolius</i>	lancewood
<i>Pseudopanax lessonii</i>	houpara
<i>Quercus canariensis</i> * (cult.)	Algerian oak. West Cemetery, M.D. Wilcox, 14 Nov 2019
<i>Quercus coccinea</i> * (cult.)	scarlet oak. West Cemetery, M.D. Wilcox, 14 Nov 2019
<i>Quercus ilex</i> * (cult.)	holm oak, holly oak. East Cemetery and Pigeon Park
<i>Quercus palustris</i> * (cult.)	pin oak. East and West Cemeteries
<i>Quercus robur</i> * (cult.)	pedunculate oak. East and West Cemeteries. Dominant tree
<i>Quercus suber</i> * (cult.)	cork oak. West Cemetery, M.D. Wilcox, 14 Nov 2019, trees stunted and sickly
<i>Quercus velutina</i> * (cult.)	black oak. Large tree, West Cemetery, SW corner, <i>M.D. Wilcox</i> , 4 Dec 2019 (AK)
<i>Raphiolepis umbellata</i> *	sexton's bride. West Cemetery, M.D. Wilcox
<i>Rosa canina</i> *	dog rose
<i>Rosa × centifolia</i> * (cult.)	moss rose. Cultivar 'William Lobb' (mauve) (Auckland Council 2); <i>R.O. Gardner</i> , 1 Jan 1986, AK 178622-23
<i>Rosa gallica</i> * (cult.)	French rose. Old varieties: 'Charles de Mills' (mauve), 'Anais Segelas' (mauve) (Auckland Council 2)
<i>Rosa × hybrida</i> * (cult.)	hybrid tea rose, 'Irish Elegance' (orange-pink) (Auckland Council 2)
<i>Rosa multiflora</i> cultivar * (cult.)	<i>R.O. Gardner</i> , 15 Nov 1986, AK 178605. A form with double pink flowers, possibly a hybrid.

<i>Rosa ×noisettiana</i> * (cult.)	<i>J.H. Goulding</i> , 29 Nov 1971, AK 129331
<i>Rosa sempervirens</i> hybrid * (cult.)	'Adelaide d'Orleans' (white), a rambler (Auckland Council 2)
<i>Rubus cissoides</i>	bush lawyer. <i>J.H. Goulding</i> , 21 May 1971, AK 128528
<i>Rubus ulmifolius</i> (<i>R. fruticosus</i> agg.) *	blackberry
<i>Schefflera digitata</i>	patē. Grafton Gully, M.D. Wilcox
<i>Senecio angulatus</i> *	Cape ivy. <i>J.H. Goulding</i> , 26 May 1971, AK 128522
<i>Solanum betaceum</i> *	tamarillo. Grafton Gully (Wildland Consultants 2019)
<i>Solanum mauritianum</i> *	tobacco weed, woolly nightshade (Wildland Consultants 2019)
<i>Sophora microphylla</i>	kōwhai
<i>Stenocarpus sinuatus</i> * (cult.)	firewheel tree
<i>Styphelia fasciculatus</i> (<i>Leucopogon fasciculata</i>)	mingimingi. Grafton Gully, Gardner (1981)
<i>Syzygium smithii</i> * (cult.)	lilli pilli, monkey apple. West Cemetery

<i>Taxandria juniperina</i> * (cult.)	juniper myrtle
<i>Tilia ×europaea</i> * (cult.)	lime. West Cemetery edge on Symonds St,
<i>Trachelospermum jasminoides</i> * (cult.)	star jasmine. West Cemetery, western boundary
<i>Ulex europaeus</i> *	gorse
<i>Ulmus ×hollandica</i> * (cult.)	Dutch elm. West Cemetery. East Cemetery
<i>Viburnum odoratissima</i> * (cult.)	sweet viburnum. West Cemetery, <i>R.O. Gardner</i> , 28 Oct 1984, AK 168388; West Cemetery, <i>M.D. Wilcox</i> , 6 Dec 2019 (AK)
<i>Vinca major</i> *	periwinkle. East Cemetery, M.D. Wilcox
<i>Vitex lucens</i>	pūriri. Natural and cultivated
<i>Weinmannia silvicola</i>	tōwai. Recorded from Grafton Gully Bush by Wall & Cranwell (1943). Not seen by other observers
<i>Zelkova serrata</i> * (cult.)	keyaki. East Cemetery. One large tree. A seedling 40 m away, <i>M.D. Wilcox</i> , 4 Dec 2019 (AK)

EUDICOT HERBS

<i>Ageratina riparia</i> *	mist flower
<i>Anemone ×hybrida</i> *	Japanese anemone. M.D. Wilcox, 18 Mar 2003 (AK)
<i>Apium nodiflorum</i> *	water celery. Waipāruru Stream (Wildland Consultants 2019)
<i>Bellis perennis</i> *	lawn daisy
<i>Callitriche stagnalis</i> *	starwort. Waipāruru Stream (Wildland Consultants 2019)
<i>Cardamine hirsuta</i> *	bitter cress
<i>Centaureum erythraea</i> *	centaury. Hobsons Trail, M.D. Wilcox, 21 Nov 2019
<i>Cerastium glomeratum</i> *	mouse-eared chickweed
<i>Cirsium vulgare</i> *	Scotch thistle. East Cemetery, open disturbed places, M.D. Wilcox, 6 Dec 2019
<i>Cotula australis</i>	button weed. M.D. Wilcox, West Cemetery
<i>Crepis capillaris</i> *	hawksbeard. East Cemetery, open disturbed area, M.D. Wilcox, 6 Dec 2019
<i>Cymbalaria muralis</i> *	ivy-leaved toad flax. Stone walls.
<i>Dichondra repens</i>	Mercury Bay weed. East Cemetery, M.D. Wilcox, 10 Jan 2020
<i>Elatostema rugosum</i> (cult.)	parataniwha. Proposed for restoration plantings in wandering Jew area, Waipāruru Stream (Wildland Consultants 2019). It was recorded from Grafton Gully by Cranwell (1937).
<i>Epilobium billardieranum</i> subsp. <i>cinereum</i>	East Cemetery wall. M.D. Wilcox, 21 Nov 2019
<i>Epilobium ciliatum</i> *	willow-herb. West Cemetery, M.D. Wilcox, 14 Nov 2019
<i>Erigeron karvinskianus</i> *	Mexican daisy
<i>Erigeron sumatrensis</i> *	broad-leaved fleabane

<i>Erodium cicutarium</i> *	storksbill
<i>Euphorbia peplus</i> *	milkweed. West Cemetery, M.D. Wilcox, 14 Nov 2019
<i>Galium aparine</i> *	cleavers
<i>Fallopia japonica</i> *	Japanese knotweed. Recorded by Wildland Consultants (2019)
<i>Galium divaricatum</i> *	slender bedstraw
<i>Galium propinquum</i>	native bedstraw. Damp open grassy area, West Cemetery, <i>M.D. Wilcox</i> , 4 Dec 2019 (AK)
<i>Gamochaeta coarctatum</i> *	purple cudweed. West Cemetery, M.D. Wilcox, 14 Nov 2019
<i>Geranium gardneri</i> *	Gardner's geranium, West Cemetery, M.D. Wilcox, 4 Dec 2019
<i>Geranium homeanum</i>	East Cemetery, open disturbed area, M.D. Wilcox, 6 Dec 2019
<i>Geranium molle</i> *	dove's foot cranesbill
<i>Geranium purpureum</i> *	small herb Robert
<i>Geranium yeoi</i> (syn. <i>G. rubescens</i>) *	greater herb Robert
<i>Haloragis erecta</i>	Grafton Gully (Wildland Consultants 2019)
<i>Helminthotheca echioides</i> *	ox tongue
<i>Hydrocotyle moschata</i>	West Cemetery, M.D. Wilcox, 4 Dec 2019
<i>Hydrocotyle tripartita</i> *	Australian hydrocotyle. West Cemetery, M.D. Wilcox, 14 Nov 2019; Waipāruru Stream (Wildland Consultants 2019)
<i>Hypochaeris radicata</i> *	catsear
<i>Lamium purpureum</i> *	red dead-nettle
<i>Lapsana communis</i> *	nippelwort. West Cemetery, M.D. Wilcox, 14 Nov 2019
<i>Lepidium didymum</i> *	twin cress. West Cemetery, M.D. Wilcox, 14 Nov 2019

Eudicot herbs cont...		<i>Securigera varia</i> * (syn. <i>Coronilla varia</i>)	crown vetch. <i>A.E. Esler</i> , Dec 1980, AK 363715
<i>Leucanthemum vulgare</i> *	ox-eye daisy. West Cemetery, M.D. Wilcox, 14 Nov 2019	<i>Senecio esleri</i>	hairy legs. West Cemetery, M.D. Wilcox, 14 Nov 2019
<i>Lotus pedunculatus</i> *	lotus	<i>Senecio hispidulus</i>	fireweed
<i>Malva nicaeensis</i> *	French mallow. <i>E.K. Cameron</i> , 24 Jul 1982, AK 271935	<i>Senecio minimus</i>	Gardner (1981)
<i>Medicago lupulina</i> *	black medick. West Cemetery, M.D. Wilcox, 14 Nov 2019	<i>Senecio skirrhodon</i> *	gravel groundsel. Wall, West Cemetery, <i>M.D. Wilcox</i> , 21 Nov 2019 (AK)
<i>Mentha pulegium</i> *	penny royal. West Cemetery, M.D. Wilcox, 4 Dec 2019	<i>Solanum chenopodioides</i> *	velvety nightshade. Grafton Gully (Wildland Consultants 2019)
<i>Modiola caroliniana</i> *	creeping mallow. West Cemetery, M.D. Wilcox, 14 Nov 2019	<i>Solanum nigrum</i> *	black nightshade
<i>Nasturtium officinale</i> *	water cress. Waipāruru Stream (Wildland Consultants 2019)	<i>Soliva sessilis</i> *	Onhunga weed. West Cemetery, Karangahape Rd frontage, M.D. Wilcox, 4 Dec 2019
<i>Oenanthe pimpinelloides</i> *	parsley dropwort. West Cemetery, M.D. Wilcox, 14 Nov 2019	<i>Sonchus asper</i> *	prickly sow thistle. West Cemetery, M.D. Wilcox, 4 Dec 2019
<i>Orobanche minor</i> *	broom rape	<i>Sonchus oleraceus</i> *	sow thistle, puwaha. West Cemetery, M.D. Wilcox, 14 Nov 2019
<i>Oxalis exilis</i>	West Cemetery, M.D. Wilcox	<i>Spergula arvensis</i> *	corn spurrey. Pigeon Park lawn, M.D. Wilcox, 21 Nov 2019
<i>Oxalis incarnata</i> *	lilac oxalis. Grafton Gully (Wildland Consultants 2019)	<i>Stellaria media</i> *	chickweed. Grafton Gully (Wildland Consultants 2019)
<i>Oxalis purpurea</i> *	large-flowered oxalis. Photo, 5 Oct 2013, Sconzaniblog.spot/2013/Symonds Street Cemetery	<i>Symphyotrichum subulatum</i> *	sea aster. West Cemetery, M.D. Wilcox, 14 Nov 2019
<i>Parentucellia viscosa</i> *	tar weed. Grafton Gully, clay in open, <i>E. K. Cameron</i> , 12 Sep 1982, AK 270817	<i>Taraxacum officinale</i> *	dandelion
<i>Pericallis × hybrida</i> *	cineraria. West Cemetery, M.D. Wilcox, 14 Nov 2019	<i>Trachelium caeruleum</i> *	throatwort. <i>A.E. Wright</i> , 15 Dec 1980, AK 269567
<i>Persicaria decipiens</i>	native willow weed. Gardner (1981)	<i>Trifolium dubium</i> *	suckling clover. West Cemetery, <i>M.D. Wilcox</i> , 14 Nov 2019 (AK)
<i>Physalis peruviana</i> *	Cape gooseberry. Grafton Gully (Wildland Consultants 2019)	<i>Trifolium pratense</i> *	red clover. West Cemetery, M.D. Wilcox, 14 Nov 2019
<i>Phytolacca octandra</i> *	inkweed	<i>Trifolium repens</i> *	white clover
<i>Plantago lanceolatum</i> *	narrow-leaved plantain	<i>Trifolium subterraneum</i> *	subterranean clover. Pigeon Park lawn, M.D. Wilcox, 21 Nov 2019
<i>Plantago major</i> *	broad-leaved plantain	<i>Tropaeolum majus</i> *	garden nasturtium. West Cemetery, M.D. Wilcox, 14 Nov 2019
<i>Potentilla indica</i> *	Indian strawberry	<i>Verbena bonariensis</i> *	purple top. Grafton Gully (Wildland Consultants 2019)
<i>Prunella vulgaris</i> *	selfheal	<i>Veronica persica</i> *	scrambling speedwell
<i>Ranunculus muricatus</i> *	spiny buttercup. West Cemetery, M.D. Wilcox, 14 Nov 2019	<i>Veronica serpyllifolia</i> *	turf speedwell. West Cemetery, M.D. Wilcox, 14 Nov 2019
<i>Ranunculus repens</i> *	creeping buttercup. West Cemetery, M.D. Wilcox, 14 Nov 2019	<i>Vicia disperma</i> *	small French tare. <i>J.H. Goulding</i> , 29 Nov 1971, AK 129333
<i>Ranunculus sardous</i> *	hairy buttercup. West Cemetery, M.D. Wilcox, 14 Nov 2019	<i>Vicia sativa</i> *	vetch. East Cemetery, open disturbed places, M.D. Wilcox, 6 Dec 2019
<i>Rumex conglomeratus</i> *	clustered dock. West Cemetery, M.D. Wilcox, 14 Nov 2019	<i>Viola odorata</i> *	violet
<i>Rumex crispus</i> *	curled dock. West Cemetery, M.D. Wilcox, 14 Nov 2019		
<i>Sagina procumbens</i> *	procumbent pearlwort. West Cemetery wall, M.D. Wilcox, 21 Nov 2019		