

THE FLORA OF SAWPIT CREEK REVISITED – CONWAY FLAT

*An updated checklist and discussion of the special interest flora of Sawpit Creek,
Conway Flat, North Canterbury*

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In *Canterbury Botanical Society Journal* 13, September 1979, Brian Molloy and Howard Lintott described the vegetation patterns and flora of Sawpit Creek, and provided an extensive checklist of their observations. Over 40 years have elapsed since their early 1970s fieldwork, providing ample opportunity for the vegetation to have changed.

At the same time, farming practices have also evolved, and the Conway Flat community have now collectively protected over 377 ha of local vegetation by way of 16 registered QEII covenants. A further 35 ha of native vegetation in 7 covenants is protected nearby in Claverley, most being on similar landforms. This protection of ecological values is often done because of a love or respect for the local vegetation, but sometimes also for pragmatic reasons, due largely to the nature of the landform thereabouts. The Conway Flat coastal terraces are derived from uplifted marine deposits, laid down from river-worn material carried offshore and then raised by tectonic forces. The degree of the uplift is surprising. Seams of pea-gravel and larger stones that have been rounded by the waves of former beaches are evident in small terraces up to 350 m above the current sea level. As the coastal terraces got pushed higher and sea levels changed, the various streams on the eastern flanks of what is now the Hawkswood Range cut deep channels, resulting in a series of steep-sided canyons. Some now have broad bottoms with meandering streams still carving through the unconsolidated deposits. Others have reached greywacke and tend to be more slot-like. These deep canyons can be difficult to farm, thus their fencing and retirement from farming allows landowners to concentrate on the more productive terrace tops and gentler hill-slopes.

Whilst they generally share superficially similar geological origins, there are enough differences to bring about distinctive features in each catchment. However, it is the largest, most rugged and historically least-disturbed catchments that now support the greatest diversity. Sawpit Creek appears to support the most extensive flora (Fig. 1, p. 50), though Ploughman Creek, Big Bush Gully, Dawn Creek, Fern Flat Stream and Inverness Stream are somewhat similar, albeit each retaining their individual character.

The lower reaches of Sawpit Creek were covenanted and protected by the same landowners that farmed the property when Brian Molloy and Howard Lintott visited in the early 1970s. There have been changes in ownership since

then, and virtually the entire catchment is now protected by a series of covenants stretching from near the sea up to the skyline at 620 m.



Figure 1 A mosaic of vegetation types in the middle section of Sawpit Creek.

The checklist accompanying the 1979 article has provided a wonderful motivation for QEII and Sawpit Creek's owners to justify the considerable expenses involved. There are now over 11 km of fences directly contributing to the protection of the 185 ha of semi-coastal podocarp-hardwood forest and scrub. Like all checklists, there will always be additions to be made, both from areas that have not yet been closely scrutinised, and by the recruitment of additional or previously inconspicuous species.

The most impressive section of the updated checklist (perhaps depending on one's particular field of interest) is that listing ferns and fern allies. The 1970s list included 34 native species plus 3 hybrids. This has now grown to 50 native species and 5 hybrids, plus a couple of exotic imposters. Direct comparison is somewhat complicated by intervening name changes and by the splitting of older species. For instance, it is assumed that the 1970s record of *Polystichum richardii* referred to the currently recognised taxa *Polystichum neozelandicum* ssp. *zerophyllum* and *Polystichum oculatum*, both of which are present.

There are several fern species of particular interest. The 1970s list records jointed fern *Arthropteris tenella*, one of the few records for Canterbury. Despite searches in likely habitats, this species has not (yet) been relocated. Apart from a tiny outlier patch on Banks Peninsula, the Sawpit Creek record represents a southern distributional limit for the South Island. Some Botanical

Society members might recall *Arthropteris tenella* being referred to as (a friendlier sounding) 'Arthur', a floral and vernacular companion for 'Anna', *Anarthropteris lanceolata*. A recent change in the name for the latter to *Loxogramme dictyopteris* rather spoils this, but somehow one still hopes to find 'Anna' and 'Arthur' living close to each other. Sawpit Creek has not disappointed, with a sizeable population of lance fern *Loxogramme dictyopteris* first being recorded during a QEII botanical assessment in 2010 (Fig. 2). Despite potentially suitable habitats, neither fern has been recorded in adjacent catchments.



Figure 2 Lance fern (*Loxogramme dictyopteris*), a regional rarity.

The tree ferns mamaku (*Cyathea medullaris*) and wheki-ponga (*Dicksonia fibrosa*) have only been recorded as a handful of plants in Sawpit Creek. *Dicksonia fibrosa* always seems to be rare and scattered in the locality, yet somehow *Cyathea medullaris* is downright abundant in just one smaller neighbouring catchment. Presumably some quirk of nature or a difference in past land-use must have provided some defining opportunity there, but not in Sawpit Creek itself.

The altitudinal sequence provides further opportunities: shining spleenwort (*Asplenium oblongifolium*), kiokio (*Blechnum triangularifolium*) and mokimoki (*Microsorium scandens*) occur at warmer lower altitudes, while hardier species like *Pellaea calidirupium* and rock fern (*Cheilanthes sieberi* subspecies *sieberi*) cope with exposed rocky outcrops and higher altitude sites. The inclusion of

Pellaea falcata in the earlier list is intriguing. This species is most unlikely to occur in Sawpit Creek and would be of significant interest if confirmed, but probably refers to the taxon subsequently named *P. calidirupium*.

Surprisingly, no filmy fern species of the *Hymenophyllum* genus have been recorded yet. This is probably due to a lack of field exploration, as several species have been recorded during botanising nearby, and suitable habitats would seem to be present.

Not all the fern finds are positive. Male fern (*Dryopteris filix-mas*) occurs sporadically, but possibly of greater concern is common polypody (*Polypodium vulgare*), which has recently been observed in Sawpit Creek plus several other covenanted catchments nearby, with a well-established spore source known nearby in the Hundalee Hills. This tough and adaptable exotic species has the potential to compete with native species in a variety of habitats, from exposed rock outcrops to shaded understorey sites.

The woody plants also include a few noteworthy species. A strong population of puka (*Griselinia lucida*) occurs in a rugged little north-facing gully, clinging onto spurs and exposed greywacke outcrops (Fig. 3). Not far downslope a few patches of kiekie (*Freycinetia banksii*) ramble over rocky knolls under a sparse hardwood canopy (Fig. 4, p. 53). Neither species occurs in any abundance on the east coast further to the south, though the former does make it all the way down to a few warm corners of Banks Peninsula.



Figure 3 Puka (*Griselinia lucida*), clinging to warm rock outcrops.



Figure 4 Kiekie (*Freycinetia banksii*), approaching its southern distributional limit.

Hinau (*Elaeocarpus dentatus*) and akeake (*Dodonaea viscosa*) are locally rare, the latter more common on warm faces and even occurring at higher altitude. The undescribed local variant of porcupine bush known as *Melicytus* 'Waipapa' can be found in more open or disturbed sites, its copious fruit reputedly providing food for skinks and geckos. The scrambling white-flowered rata (*Metrosideros perforata*) clings to tree trunks near the coast, approaching its southern east coast distributional limit. Old creeping stems of the native passionfruit, kohia (*Passiflora tetrandra*) ramble over the forest floor near the coast, some over 20 cm diameter. Fierce lancewood (*Pseudopanax ferox*; At Risk – Naturally Uncommon) occurs in a few sites, with abundant seedlings apparent after only a few years of covenant fencing and de-stocking (Fig. 5. P. 54).



Figure 5 Fierce lancewood (*Pseudopanax ferox*), another regional rarity.

A few smaller plants are also noteworthy. Sun hebe (*Heliohebe hulkeana*) shares a liking for the warmer sites, its mauve flowers putting on eye-catching seasonal displays. On the other hand, the diminutive dwarf mistletoe (*Korthalsella salicornioides*; At risk – Naturally Uncommon) is remarkably difficult to find, hosted on kanuka (*Kunzea robusta*) but is seemingly limited to sites on rocky terrain where its host grows slowly. A most attractive brown-leaved groundsel believed to be an undescribed variant of *Senecio dunedinensis* (itself Threatened – Nationally Vulnerable) occurs predominantly under kanuka-dominated canopies, although this entity is widespread (though never common) in Canterbury and seems likely to warrant a lower threat ranking (Fig. 6, p. 55).

Direct comparison between the early and recent lists is potentially problematic. Not only have there been some confusing name changes, but it is likely that the areas covered in each assessment were a little different. It seems probable that the earlier exploration did not cover as much of the upper catchment or rocky bluffs where several interesting species have recently been recorded. Similarly, the recent visits have not included forays near the sea shore. Much of the area was still subject to browsing livestock during the earlier visit, while the vegetation has not been constrained by such strong herbivory during later visits. The later list also includes observations from a range of seasons, and thus includes a number of seasonally inconspicuous species such as orchids. And of course, some plants will have been present at either time but simply did not get noticed or recognised and written down.



Figure 6 An attractive undescribed groundsel, *Senecio* aff. *dunedinensis*.

Comparison of the lists does, however, indicate that weeds are still spreading. Conspicuous species, including elderberry (*Sambucus nigra*), Himalayan honeysuckle (*Leycesteria formosa*), sweet cherry (*Prunus avium*), banana passionfruit (*Passiflora tripartita* var. *mollissima*), and blackberry (*Rubus fruticosus* agg.), have recently been recorded in areas that the earlier exploration is likely to have covered, reflecting the ongoing and insidious spread of these and other invasive species.

Much of Sawpit Creek remains relatively unexplored and doubtless more species will be found. However, the following lists do provide representative snapshots of the species confirmed to be present in the early 1970s, and more recently.

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References

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Table 1 Checklists of the flora of Sawpit Creek, Wadi Nimrin, Conway Flat, recorded in the early 1970s and in 2017. The 1970s list (with field work probably from 1973) was compiled by B P J Molloy & H Lintott (relative abundances were not recorded). The 2017 list (including abundances) was compiled progressively between 2006 and 2017 by M and G Giller with occasional assistance from various sources. Where there have been well accepted changes, older names have generally been updated to more recent names.

Key Y: present, D: Dominant, A: Abundant, F: Frequent, O: Occasional, R: Rare, *: Exotic or non-endemic.

| | 1970s | 2017 |
|---------------------------------|-------|------|
| GYMNOSPERMS | | |
| <i>Dacrycarpus dacrydioides</i> | Y | R |
| <i>Pinus nigra</i> * | | R |
| <i>Pinus radiata</i> * | Y | R |
| <i>Podocarpus totara</i> | Y | R |
| <i>Prumnopitys taxifolia</i> | Y | O |
| <i>Pseudotsuga menziesii</i> * | | R |
| ANGIOSPERMS | | |
| DICOTS | | |
| <i>Acacia dealbata</i> * | Y | |
| <i>Acaena agnipila</i> * | Y | R |
| <i>Acaena anserinifolia</i> | Y | F |
| <i>Acaena juvenca</i> | | O |
| <i>Acaena novae-zelandiae</i> | | R |
| <i>Achillea millefolium</i> * | Y | O |

| | | |
|-------------------------------------|---|---|
| <i>Alectryon excelsus</i> | Y | F |
| <i>Anagallis arvensis</i> * | Y | O |
| <i>Apium australe</i> | Y | |
| <i>Aristotelia serrata</i> | Y | O |
| <i>Atriplex hastata</i> * | Y | |
| <i>Australina pusilla</i> | Y | O |
| <i>Bellis perennis</i> * | Y | |
| <i>Buddleja davidii</i> * | | R |
| <i>Callitriche stagnalis</i> * | Y | O |
| <i>Calystegia tuguriorum</i> | Y | O |
| <i>Capsella bursa-pastoris</i> * | Y | O |
| <i>Cardamine debilis</i> agg. | Y | R |
| <i>Cardamine hirsuta</i> * | | R |
| <i>Carduus pycnocephalus</i> * | Y | R |
| <i>Carmichaelia australis</i> | Y | F |
| <i>Carpodetus serratus</i> | Y | O |
| <i>Celmisia gracilenta</i> | | O |
| <i>Centella uniflora</i> | | R |
| <i>Cerastium fontanum</i> * | Y | |
| <i>Chenopodium album</i> * | Y | R |
| <i>Chrysanthemum leucanthemum</i> * | Y | |
| <i>Chrysanthemum parthenium</i> * | Y | |
| <i>Cirsium arvense</i> * | Y | O |
| <i>Cirsium vulgare</i> * | Y | R |
| <i>Clematis afoliata</i> | | O |
| <i>Clematis foetida</i> | | O |
| <i>Clematis petriei</i> | R | |
| <i>Conyza bilbaoana</i> * | | O |
| <i>Coprosma areolata</i> | Y | O |
| <i>Coprosma crassifolia</i> | Y | A |
| <i>Coprosma dumosa</i> | | R |
| <i>Coprosma lucida</i> | | R |
| <i>Coprosma propinqua</i> | Y | F |
| <i>Coprosma repens</i> * | Y | R |
| <i>Coprosma rhamnoides</i> | Y | A |
| <i>Coprosma robusta</i> | Y | O |
| <i>Coprosma rotundifolia</i> | Y | O |
| <i>Coprosma x cunninghamii</i> | Y | R |

| | | |
|-----------------------------------|---|---|
| <i>Coriaria arborea</i> | Y | O |
| <i>Coriaria sarmentosa</i> | Y | |
| <i>Corokia cotoneaster</i> | Y | O |
| <i>Coronopus didymus*</i> | Y | |
| <i>Corynocarpus laevigatus*</i> | | R |
| <i>Cotoneaster glaucophyllus*</i> | | R |
| <i>Cotula australis</i> | | R |
| <i>Cotula coronopifolia</i> | Y | |
| <i>Crassula sieberiana</i> | | R |
| <i>Crepis capillaris*</i> | Y | O |
| <i>Cytisus scoparius*</i> | Y | F |
| <i>Dichondra repens</i> | Y | F |
| <i>Digitalis purpurea*</i> | Y | O |
| <i>Discaria toumatou</i> | Y | O |
| <i>Dodonaea viscosa</i> | Y | R |
| <i>Echium vulgare*</i> | Y | R |
| <i>Elaeocarpus dentatus</i> | Y | O |
| <i>Elaeocarpus hookerianus</i> | Y | R |
| <i>Epilobium ciliatum</i> | Y | |
| <i>Epilobium nummularifolium</i> | Y | R |
| <i>Epilobium rotundifolium</i> | Y | O |
| <i>Erigeron sp.*</i> | Y | |
| <i>Erodium cicutarium*</i> | Y | R |
| <i>Euchiton sp.</i> | | R |
| <i>Euphorbia peplus*</i> | Y | O |
| <i>Foeniculum vulgare*</i> | Y | |
| <i>Fragaria vesca*</i> | | R |
| <i>Fuchsia excorticata</i> | Y | O |
| <i>Fuchsia perscandens</i> | | R |
| <i>Fuchsia x colensoi</i> | | R |
| <i>Galium aparine*</i> | Y | F |
| <i>Galium propinquum</i> | Y | O |
| <i>Gaultheria antipoda</i> | | O |
| <i>Geranium molle*</i> | Y | O |
| <i>Geranium aff. microphyllum</i> | | O |
| <i>Gingidia montana</i> | | R |
| <i>Gnaphalium sp.</i> | Y | |
| <i>Griselinia littoralis</i> | Y | O |

| | | |
|---|---|---|
| <i>Griselinia lucida</i> | | O |
| <i>Haloragis erecta</i> | Y | F |
| <i>Hebe salicifolia</i> | Y | O |
| <i>Hebe stricta</i> var. <i>atkinsonii</i> | | O |
| <i>Hebe traversii</i> | Y | R |
| <i>Hedycarya arborea</i> | Y | O |
| <i>Helichrysum filicaule</i> | Y | O |
| <i>Helichrysum lanceolatum</i> | Y | A |
| <i>Heliohebe hulkeana</i> | Y | O |
| <i>Hieracium pilosella</i> * | | R |
| <i>Hieracium pollichiae</i> * | | O |
| <i>Hoheria angustifolia</i> | Y | F |
| <i>Hydrocotyle heteromeria</i> | Y | O |
| <i>Hydrocotyle moschata</i> | Y | O |
| <i>Hydrocotyle novae-zelandiae</i> | Y | |
| <i>Hypochaeris radicata</i> * | | O |
| <i>Ileostylus micranthus</i> (on at least 11 hosts) | Y | O |
| <i>Korthalsella lindsayi</i> (on <i>C. areolata</i> , <i>L. obcordata</i>) | | R |
| <i>Korthalsella salicornioides</i> (on <i>K. robusta</i>) | | R |
| <i>Kunzea robusta</i> | Y | D |
| <i>Lagenophora</i> sp. | | F |
| <i>Leontodon taraxacoides</i> * | Y | |
| <i>Lepidium ruderae</i> * | Y | R |
| <i>Leptecophylla juniperina</i> | Y | R |
| <i>Leptinella dioica</i> | Y | O |
| <i>Leptinella pusilla</i> | Y | R |
| <i>Leptospermum scoparium</i> | Y | R |
| <i>Leucopogon fasciculatus</i> | Y | R |
| <i>Leycesteria formosa</i> * | | R |
| <i>Linum bienne</i> * | Y | R |
| <i>Linum monogynum</i> | | R |
| <i>Lophomyrtus obcordata</i> | Y | O |
| <i>Lupinus arboreus</i> * | Y | |
| <i>Macropiper excelsum</i> | Y | F |
| <i>Malva neglecta</i> * | Y | |
| <i>Marrubium vulgare</i> * | Y | R |
| <i>Medicago arabica</i> * | Y | |
| <i>Medicago sativa</i> * | Y | |

| | | |
|---|---|---|
| <i>Melicope simplex</i> | Y | O |
| <i>Melicytus ramiflorus</i> | Y | D |
| <i>Melicytus</i> 'Waipapa' | Y | O |
| <i>Metrosideros diffusa</i> | Y | F |
| <i>Metrosideros perforata</i> | Y | O |
| <i>Mimulus moschatus</i> * | | O |
| <i>Muehlenbeckia australis</i> | Y | F |
| <i>Muehlenbeckia complexa</i> | Y | F |
| <i>Mycelis muralis</i> * | Y | A |
| <i>Myoporum laetum</i> | Y | F |
| <i>Myosotis laxa</i> ssp. <i>caespitosa</i> * | Y | |
| <i>Myrsine australis</i> | Y | O |
| <i>Nasturtium officinale</i> * | Y | R |
| <i>Nepeta cataria</i> * | Y | |
| <i>Nertera depressa</i> | Y | |
| <i>Olearia paniculata</i> | Y | O |
| <i>Orobanche minor</i> * | Y | R |
| <i>Oxalis corniculata</i> * | | R |
| <i>Oxalis exilis</i> | Y | O |
| <i>Ozothamnus leptophyllus</i> | Y | O |
| <i>Ozothamnus vauvilliersii</i> | | R |
| <i>Parsonsia capsularis</i> | Y | O |
| <i>Parsonsia heterophylla</i> | Y | F |
| <i>Passiflora tetrandra</i> | | R |
| <i>Passiflora tripartita</i> var. <i>mollissima</i> * | | R |
| <i>Pelargonium inodorum</i> | | R |
| <i>Pennantia corymbosa</i> | Y | F |
| <i>Phytolacca octandra</i> * | Y | O |
| <i>Pittosporum eugenoides</i> | Y | O |
| <i>Pittosporum tenuifolium</i> | Y | O |
| <i>Plantago lanceolata</i> * | Y | O |
| <i>Plantago major</i> * | Y | O |
| <i>Plantago raoulii</i> | | R |
| <i>Polycarpon tetraphyllum</i> * | Y | O |
| <i>Polygonum aviculare</i> * | Y | R |
| <i>Polygonum hydropiper</i> * | Y | |
| <i>Prunella vulgaris</i> * | Y | F |
| <i>Prunus avium</i> * | | R |

| | | |
|---|---|---|
| <i>Prunus cerasifera</i> * | Y | R |
| <i>Pseudognaphalium luteoalbum</i> | Y | R |
| <i>Pseudopanax arboreus</i> | Y | A |
| <i>Pseudopanax crassifolius</i> | Y | F |
| <i>Pseudopanax ferox</i> | | O |
| <i>Ranunculus reflexus</i> | Y | O |
| <i>Ranunculus repens</i> * | Y | O |
| <i>Ranunculus rivularis</i> * | Y | |
| <i>Ranunculus sceleratus</i> * | Y | |
| <i>Raoulia tenuicaulis</i> | | R |
| <i>Raphanus raphanistrum</i> * | Y | |
| <i>Ribes sanguineum</i> * | | R |
| <i>Rosa rubiginosa</i> * | Y | R |
| <i>Rubus australis</i> | Y | |
| <i>Rubus cissoides</i> | Y | O |
| <i>Rubus fruticosus</i> agg.* | | R |
| <i>Rubus schmidelioides</i> | Y | O |
| <i>Rubus squarrosus</i> | Y | O |
| <i>Rumex acetosella</i> * | Y | O |
| <i>Rumex crispus</i> * | Y | |
| <i>Rumex obtusifolius</i> * | | R |
| <i>Sagina procumbens</i> * | Y | O |
| <i>Salix fragilis</i> * | Y | R |
| <i>Sambucus nigra</i> * | | R |
| <i>Samolus repens</i> | Y | |
| <i>Schefflera digitata</i> | Y | O |
| <i>Scleranthus</i> sp. | | R |
| <i>Senecio</i> aff. <i>dunedinensis</i> | | R |
| <i>Senecio glomeratus</i> | Y | R |
| <i>Senecio hispidulus</i> | | O |
| <i>Senecio jacobaea</i> * | Y | R |
| <i>Senecio minimus</i> | Y | O |
| <i>Senecio quadridentatus</i> | Y | O |
| <i>Senecio vulgaris</i> * | Y | R |
| <i>Sherardia arvensis</i> * | | R |
| <i>Silene gallica</i> * | Y | R |
| <i>Silybum marianum</i> * | Y | R |
| <i>Sisymbrium officinale</i> * | Y | O |

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|--|---|---|
| <i>Solanum aviculare</i> | Y | O |
| <i>Solanum chenopodioides</i> * | | O |
| <i>Solanum nigrum</i> * | Y | O |
| <i>Sonchus asper</i> * | Y | R |
| <i>Sonchus oleraceus</i> * | Y | |
| <i>Sophora microphylla</i> | Y | A |
| <i>Sophora prostrata</i> | | R |
| <i>Stellaria media</i> * | Y | O |
| <i>Stellaria parviflora</i> | Y | F |
| <i>Streblus heterophyllus</i> | Y | O |
| <i>Taraxacum officinale</i> * | Y | R |
| <i>Torilis nodosa</i> * | | F |
| <i>Trifolium dubium</i> * | Y | |
| <i>Trifolium pratense</i> * | Y | O |
| <i>Trifolium repens</i> * | Y | O |
| <i>Trifolium striatum</i> * | Y | |
| <i>Trifolium subterraneum</i> * | Y | O |
| <i>Tupeia antarctica</i> (on <i>P. arboreus</i> , <i>C. serratus</i>) | Y | O |
| <i>Ulex europaeus</i> * | Y | R |
| <i>Urtica ferox</i> | Y | O |
| <i>Urtica sykesii</i> | Y | O |
| <i>Verbascum thapsus</i> * | Y | O |
| <i>Verbascum virgatum</i> * | Y | |
| <i>Veronica persica</i> * | Y | |
| <i>Vicia angustifolia</i> * | Y | |
| <i>Vicia hirsuta</i> * | Y | R |
| <i>Vicia sativa</i> * | Y | O |
| <i>Vittadinia australis</i> | | O |
| <i>Wahlenbergia violacea</i> | Y | R |
| MONOCOTS | | |
| <i>Agrostis capillaris</i> * | Y | A |
| <i>Aira caryophyllea</i> * | | O |
| <i>Anthosachne</i> sp. | | R |
| <i>Anthoxanthum odoratum</i> * | Y | F |
| <i>Arthropodium candidum</i> | | O |
| <i>Astelia fragrans</i> | Y | O |
| <i>Bromus diandrus</i> * | | R |

| | | |
|--|---|---|
| <i>Bromus hordeaceus*</i> | | R |
| <i>Bromus willdenowii*</i> | Y | R |
| <i>Carex breviculmis</i> | | O |
| <i>Carex cyanea (Uncinia leptostachya)</i> | Y | F |
| <i>Carex secta</i> | Y | O |
| <i>Carex solandri</i> | | O |
| <i>Carex sp. (broad lfs)</i> | | R |
| <i>Carex sp. (flagellifera?)</i> | | R |
| <i>Carex uncinata (Uncinia uncinata)</i> | Y | O |
| <i>Carex virgata</i> | Y | R |
| <i>Cordyline australis</i> | Y | O |
| <i>Critesion murinum ssp. murinum*</i> | Y | O |
| <i>Cynosurus cristatus*</i> | Y | O |
| <i>Cynosurus echinatus*</i> | | R |
| <i>Dactylis glomerata*</i> | Y | F |
| <i>Dichelachne crinita</i> | Y | R |
| <i>Echinopogon ovatus</i> | Y | O |
| <i>Elytrigia repens*</i> | Y | |
| <i>Festuca novae-zelandiae</i> | | O |
| <i>Freycinetia banksii</i> | Y | R |
| <i>Hierochloe redolens</i> | | R |
| <i>Holcus lanatus*</i> | Y | O |
| <i>Isolepis nodosa</i> | Y | R |
| <i>Juncus articulatus*</i> | Y | O |
| <i>Juncus bufonius*</i> | Y | |
| <i>Juncus edgariae</i> | Y | O |
| <i>Lemna sp.</i> | Y | O |
| <i>Libertia ixioides</i> | Y | O |
| <i>Lolium perenne*</i> | Y | O |
| <i>Microlaena avenacea</i> | | R |
| <i>Microlaena stipoides</i> | Y | A |
| <i>Phleum pratense*</i> | Y | R |
| <i>Phormium cookianum</i> | | R |
| <i>Phormium tenax</i> | Y | R |
| <i>Poa anceps</i> | | R |
| <i>Poa annua*</i> | Y | |
| <i>Poa breviglumis</i> | Y | |
| <i>Poa cita</i> | | O |

| | | |
|--|---|---|
| <i>Poa colensoi</i> | | R |
| <i>Poa imbecilla</i> | Y | F |
| <i>Poa pratensis</i> * | | R |
| <i>Ripogonum scandens</i> | Y | F |
| <i>Rytidosperma clavatum</i> | Y | |
| <i>Rytidosperma racemosum</i> * | Y | |
| ORCHIDS | | |
| <i>Diplodium alobulum</i> | | R |
| <i>Earina autumnalis</i> | | R |
| <i>Microtis unifolia</i> | | O |
| <i>Pterostylis areolata</i> | | R |
| <i>Pterostylis</i> sp. (<i>graminea</i> ?) | | R |
| <i>Thelymitra</i> sp. | | O |
| FERNS & FERN ALLIES | | |
| <i>Adiantum cunninghamii</i> | Y | R |
| <i>Arthropteris tenella</i> | Y | |
| <i>Asplenium appendiculatum</i> | Y | O |
| <i>Asplenium appendiculatum</i> x <i>gracillimum</i> | | R |
| <i>Asplenium flabellifolium</i> | Y | A |
| <i>Asplenium flaccidum</i> | Y | F |
| <i>Asplenium gracillimum</i> | Y | F |
| <i>Asplenium hookerianum</i> | Y | O |
| <i>Asplenium hookerianum</i> x <i>gracillimum</i> | Y | |
| <i>Asplenium lyallii</i> | | R |
| <i>Asplenium oblongifolium</i> | Y | O |
| <i>Asplenium oblongifolium</i> x <i>gracillimum</i> | Y | |
| <i>Azolla rubra</i> | Y | R |
| <i>Blechnum chambersii</i> | Y | F |
| <i>Blechnum fluviatile</i> | Y | O |
| <i>Blechnum minus</i> | Y | O |
| <i>Blechnum novae-zelandiae</i> | | R |
| <i>Blechnum novae-zelandiae</i> x <i>triangularifolium</i> | Y | |
| <i>Blechnum penna-marina</i> | Y | R |
| <i>Blechnum procerum</i> | Y | O |
| <i>Blechnum triangularifolium</i> | | R |
| <i>Blechnum vulcanicum</i> | | R |

| | | |
|--|---|---|
| <i>Cheilanthes distans</i> | Y | R |
| <i>Cheilanthes sieberi</i> | | O |
| <i>Cyathea dealbata</i> | Y | F |
| <i>Cyathea medullaris</i> | | R |
| <i>Cyathea smithii</i> | | R |
| <i>Dicksonia fibrosa</i> | | R |
| <i>Dicksonia squarrosa</i> | Y | O |
| <i>Dryopteris filix-mas*</i> | | R |
| <i>Grammitis billardierei</i> | Y | R |
| <i>Histiopteris incisa</i> | Y | O |
| <i>Hypolepis ambigua</i> | Y | A |
| <i>Hypolepis millefolium</i> | | R |
| <i>Hypolepis rufobarbata</i> | Y | O |
| <i>Lastreopsis glabella</i> | Y | F |
| <i>Lastreopsis velutina</i> | Y | F |
| <i>Leptopteris hymenophylloides</i> | | R |
| <i>Loxogramme dictyopteris</i> | | R |
| <i>Lycopodium scariosum</i> | | R |
| <i>Lycopodium volubile</i> | | O |
| <i>Microsorium pustulatum</i> | Y | F |
| <i>Microsorium scandens</i> | Y | R |
| <i>Pellaea calidirupium</i> | | R |
| <i>Pellaea falcata</i> | Y | |
| <i>Pellaea rotundifolia</i> | Y | O |
| <i>Phlegmariurus varius</i> | | R |
| <i>Pneumatopteris pennigera</i> | Y | O |
| <i>Polypodium vulgare*</i> | | R |
| <i>Polystichum neozelandicum</i> ssp. <i>zerophyllum</i> | Y | F |
| <i>Polystichum oculatum</i> | Y | O |
| <i>Polystichum vestitum</i> | Y | R |
| <i>Polystichum vestitum</i> x <i>neozelandicum</i> ssp. <i>zerophyllum</i> | | R |
| <i>Pteridium esculentum</i> | Y | F |
| <i>Pteris tremula</i> | Y | O |
| <i>Pyrrosia eleagnifolia</i> | Y | O |
| <i>Trichomanes venosum</i> | | R |