

Australian Alps 2023 Bush Blitz ***Mosses, Liverworts and Vascular Plants***

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Nomenclature and taxonomy used in this report is consistent with:

The Australian Plant Census (APC)

<http://www.anbg.gov.au/chah/apc/about-APC.html>

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(accessed on: 13 Jul. 2023).

AusMoss

<http://data.rbq.vic.gov.au/cat/mosscatalogue>

The Catalogue of Australian Liverworts and Hornworts

http://www.anbg.gov.au/abrs/liverwortlist/liverworts_intro.html

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List of contributors to this report.			
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Abstract

598 collections were made during botanical surveys of the Alpine National Park, Willis and Suggan Buggan over a nine-day period. These collections included 240 angiosperm, 1 gymnosperm, 5 fern, 1 lycopod, 70 bryophyte, 4 species of lichen, and 1 smut fungus. Fifty-nine of these species are State listed as threatened, with one Environment Protection and Biodiversity Conservation (EPBC) listed species (*Zieria citriodora*). Twenty-two weed species were collected. Specimens of two undescribed *Lachnagrostis* species were collected from Davies Plain, Emu Plain Swamp, Forlorn Hope Plain, and Rocky Plain. Specimens of *Dianella* sp. aff. *tasmanica* (Snowfields) and *Muehlenbeckia declina* subsp. *Gippsland* (R.O.Makinson 1007) were also collected. *Carex buxbaumii* (a species of uncertain origin status) was collected from Rocky Plain, which was the last known site for the species in Victoria, where last collected in the 1949. Two bryophyte species (i.e., *Bryostreimannia turgida*, and *Kurzia pallescens*) were recorded for the first time in Victoria. Images taken of many vascular plants and bryophytes will be added to the online Victorian flora, VicFlora. The *Entorrhiza* sp. (on *Isolepis* sp.) specimen was collected incidentally, and the genus was unrepresented in the MEL (National Herbarium of Victoria) collection.

1. Introduction

The Victorian aspect of the Alpine Bushblitz expedition was focussed on general documentation of the flora in areas within the alpine zone that have proven difficult to access. Areas such as Davies Plain, Forlorn Hope Plain to Willis have limited botanical survey effort. The logistic support and helicopter access was critical but unfortunately suitable landing sites or permissions were not achieved from some key areas such as the Cobberas peak 1 and 2, and Mount Gibbo.

The team was also interested in areas that had been impacted by the 2019/20 fires (e.g., Forlorn Hope Plain) and were of interest to document recovery of vegetation. The team included botanists with expertise in bryophytes, ferns, seed plants and lichens. We were particularly interested in the bryophyte flora as we are currently developing an online component to VicFlora for this group.

2. Methods

2.1 Site selection

Sites were chosen from Davies Plain, Forlorn Hope Plain to Willis and Suggan Buggan. This broad sampling range enabled collection from across most of the section of the park and botanically interesting areas outside of the park was the focus of this BushBlitz. In this range a variety of vegetation types were sampled from (e.g., subalpine bogs, subalpine grassland, riparian vegetation, *Eucalyptus pauciflora* woodland, tall open forest, rocky plain, limestone escarpment, and disturbed roadsides). Collecting from across most of the designated survey area in all vegetation types was expected to be the most effective way to uncover the maximum amount of diversity that could be encountered in the park in the time period available.

Some sites were chosen to survey known occurrences of rarely collected or threatened taxa (e.g., *Racomitrium pruinosum*, and *Carex buxbaumii*, both at Rocky Plain). Other sites were visited as there were known occurrences of plant species that have not been photographed for the BushBlitz funded online Victorian Flora, VicFlora.

Areas near the New South Wales/Victorian border were also targeted. Such areas were expected to be the most likely places to find new Victorian records or range extensions.



Fig. 1. Rocky Plain, with waterfall below the outcrop (see Fig.3.).



Fig. 2. Rocky Plain, showing wetland dominated by *Baloskion australe* and *Carex gaudichaudiana*. This is the site where *Carex buxbaumii* was collected.



Fig. 3. Waterfall on the Rocky Plains Creek. Riparian area dominated by *Leptospermum grandifolium*.



Fig. 4. Forlorn Hope Plain



Fig. 5. Davies Plain: showing creek and extensive *Poa*-dominated grassland.



Fig. 6. Suggan Buggan: dry open woodland dominated by *Eucalyptus albens* and *Callitris* sp., with understorey dominated by *Austrostipa* sp.



Fig. 7. Willis: weedy flats on the Snowy River.



Fig. 8. Willis, *Bolboschoenus medianus* stand along the Snowy River.



Fig 9. Cobberas, near Moscow Peak.



Fig. 10. Cobberas, near Moscow Peak, showing *Eucalyptus pauciflora*-dominated woodland.

2.2 Survey techniques

Collections were made of individuals bearing fertile structures (buds, flowers, fruits, sporangia, apothecia). Specimens were photographed in situ to record key features and habitat and to contribute to the online Victorian flora, VicFlora. Gatherings were made either of one or more entire individuals (small herbaceous plants) or portions of stems bearing representative foliage, flowers etc. Where possible, sufficient material was collected to prepare duplicate specimens to be sent to other herbaria. Bryophytes were collected by removing a portion of substrate including the specimen. Plant specimens and pathogenic fungi were dried in plant presses. To preserve 3-D structure of flowers, specimens of some groups (Orchidaceae) were preserved in alcohol (70% Ethanol with 5% Glycerol). When plants of phylogenetic interest were collected for research, portions of vegetative material were placed in silica gel to rapidly dry this tissue, increasing the likelihood of DNA being preserved.

2.2.1 Methods used at standard survey sites

This section is not applicable as botanical surveys of the standard survey sites were undertaken by NSW botanists.

2.3 Identifying the collections

Specimens were identified using botanical and mycological literature – monographs, taxonomic revisions and flora treatments containing keys and descriptions for the groups collected - especially VicFlora. Identifications were confirmed by comparing collected specimens with reference specimens in the State Botanical Collection in the National Herbarium of Victoria (MEL). Some grass specimens were identified with assistance from Dr. Austin Brown (Honorary Associate, RBGV) who is as an authority on *Lachnagrostis* and related genera.

3. Results and Discussion

Appendix 1 lists all Mosses, Liverworts and Vascular Plants recorded during the Bush Blitz. Collections made during this Bush Blitz will result in 598 specimens being added to public collections and 598 records being added to publicly accessible databases.

3.1 Un-named or not formalised taxa

Taxon	Comment
<i>Dianella</i> sp. aff. <i>tasmanica</i> (Snowfields)	A distinctly green-fruited taxon affiliated with <i>Dianella tasmanica</i> was collected from Nunniong Plateau during this survey. This is a known undescribed taxon.
<i>Lachnagrostis</i> . sp. (Gow Plain)	This unnamed species was recorded at Forlorn Hope Plain, Emu Plain and Rocky Plain. It was previously only known from the Dargo area in Victoria.
<i>Muehlenbeckia diclina</i> subsp. Gippsland (R.O.Makinson 1007)	Two subspecies are recognised in VicFlora within <i>Muehlenbeckia diclina</i> but both currently lack names.
<i>Lachnagrostis</i> . sp. (Thredbo)	Unpublished species. Collected from Cowombat Flat track in open heathland (Cobberas Wilderness Zone)

3.2 Putative new species (new to science)

In this report, 'putative new species' means an unnamed species that, as far as can be ascertained, was identified as a new species as a direct result of this Bush Blitz.

None identified.

3.3 Exotic and pest species

Exotic/pest species	Location sighted/observed	Indication of abundance	Comments
<i>Lotus uliginosus</i>	Limestone Rd, at crossing of Little River.	Localised	A relatively widespread weed throughout south-eastern Australia, occurring near margins of water bodies.

<i>Linaria arvensis</i>	Alpine National Park, northern foot of large granite torr c. 400 m W of Moscow Peak.	1 plant	An uncommon weed in south-eastern Australia, typically associated with disturbance (e.g. along roads and railway lines). Unusual to observe in intact vegetation.
<i>Calliergonella cuspidata</i>	Limestone Creek Track and Forlorn Hope Creek	Restricted to inundated depressions and on sandy banks of flowing creek and occasional in bog along Forlorn Hope Creek.	First record in the Victorian high country. Weed of lower altitude pastures and grassy areas. Collected in wet inundated areas disturbed by horses. Possibly introduced to Native Dog Flat in hay brought in for horse feed.
<i>Brachythecium mildeanum</i>	Native Dog Flat and Emu Plain	On trunk of <i>Hakea macrocarpa</i> . Abundant and the most common moss species at Emu Plain.	First record in the Victorian high country. Weed of lower altitude pastures and grassy areas. Collected in wet inundated areas disturbed by horses. Possibly introduced to Native Dog Flat in hay brought in for horse feed. In Victoria, this species tends to favour wetlands and damp sites, where it can form extensive carpets to the exclusion of smaller ground flora (V. Stajsic pers.obs.).
<i>Kindbergia praelonga</i>	Native Dog Flat	Restricted to and sparse around campground.	Typically found in disturbed urban areas (e.g., lawns, roadsides etc.).
<i>Acetosella vulgaris</i>	Davies Plain	Common.	In areas degraded by horses.
<i>Alternanthera pungens</i>	Willis	Ca. 10 plants.	Uncommon weed in Victoria. Typically, degraded roadsides.
<i>Carex buxbaumii</i>	Rocky Plain	Occasional.	Based on MEL specimen holdings, last collected in Victoria 1949. Origin status uncertain.
<i>Eschscholzia californica</i>	Willis	Scattered along roadside, and riverbed.	Locally common along sandy banks of the Snowy River near the

			New South Wales border and (probably) downstream to its mouth at Marlo, occasional near Omeo and Corryong, and formerly recorded from the Bendigo-Castlemaine area but possibly not persisting there.
<i>Heliotropium amplexicaule</i>	Willis	Common.	Known in Victoria from a 1973 collection from a farm paddock in the north-east near Yackandandah, and recent collections from the upper Snowy River in the far east, and near the You Yangs.
<i>Myosotis laxa</i> subsp. <i>caespitosa</i>	On west-facing embankment of Limestone Creek, 90 metres north of Limestone Creek Track, 2.2 km from its intersection with Limestone Road.	Common.	Uncommon weed in Victoria. A weed of stream banks and other moist places.
<i>Ranunculus sardous</i>	Native Dog Flat	Several patches to 2 metres x 2 metres.	No previous records from this part of Victoria. Seasonally abundant in irrigated and/or swampy lowlands mainly in the east (e.g., Foster, Maffra, Orbost districts).
<i>Rubus leucostachys</i>	On west-facing bank of Limestone Creek, 90 metres north of Limestone Creek Track, 2.2 km from its intersection with Limestone Road.	Common.	The species has noticeably spread since we were last at this location in 2018. This site is high conservation significance, with several endangered or uncommon species of plants, including <i>Muehlenbeckia axillaris</i> , <i>Aspenium trichomanes</i> , <i>Tortula dakinii</i> , <i>Pimelea pauciflora</i> . Priority weed for eradication at this location. If no control measures are implemented the above species are

			likely to disappear from this location.
<i>Sedum album</i>	Willis	One patch, ca. 50 x 50 cm.	Naturalised in Victoria at Ballarat, Barwon Heads, Mt Eliza, Orford, and Willis.
<i>Solanum chenopodioides</i>	Willis	One plant.	Found in a few scattered Victorian localities, mainly in disturbed sites in more mesic areas (e.g., riverbanks, winter-wet ditches). No previous collections from this part of Victoria.
<i>Solanum sisymbriifolium</i>	Willis	One plant.	Previously known only from Mortlake in western Victoria.
<i>Tragopogon dubius</i>	Suggan Buggan. Along Yellow Waterhole Creek, at the SE corner of a cleared paddock, ca. 300 metres SW (straight line) from Helipad Road, and 1.3 km SE (straight line) from intersection of Helipad Road and B.S. Link Track.	Scattered plants.	Naturalised in north-east Victoria on a roadside near Suggan Buggan, limestone outcrops at Limestone Creek and in a tree plantation near the Delegates River.
<i>Trifolium repens</i> var. <i>repens</i>	Davies Plain. Adjacent to creek (on north side), 1.33 km E (straight line) of Davies Plain Track, and 2.34 km NE (straight line) from intersection of Davies Plain Track and Kings Plain Track.	Widely scattered, common.	Highly likely spread by horses.
<i>Verbascum thapsus</i> subsp. <i>thapsus</i>	Suggan Buggan. Along Yellow Waterhole Creek, at the SE corner of a cleared paddock, ca. 300 metres SW (straight line) from Helipad Road, and 1.3 km SE (straight line) from intersection of Helipad Road and B.S. Link Track.	Common.	No previous collections from this part of Victoria.
<i>Calliergonella cuspidatum</i>	Northern edge of Limestone Creek Track, 2.2 km from its		

	<p>intersection with Limestone Road.</p> <p>Alpine National Park, 10 metres east of Forlorn Hope Creek, around 1.3 km upstream of its eastern most point on Forlorn Hope Plateau and around 420 metres south of Forlorn Hope Track.</p>		
<i>Cerastium glomeratum</i>	<p>Alpine National Park, 5 km south of Davies Plain Hut and circa 1 km south of Rough Creek.</p>		
<i>Prunella vulgaris</i>	<p>Alpine National Park, Davies Plain c. 500 m NE of Davies Plain Hut.</p>		

3.4 Threatened species

Species	Listing status and level (EBPC, State/Territory)	Location sighted/observed	Indication of abundance
<i>Aciphylla simplicifolia</i>	EN (Victoria)	Cowombat Flat Tk, Forlorn Hope Plain, and Davies Plain.	Locally common at Cowombat Flat Track, occasional/rare at Forlorn Hope Plain and Davies Plain.
<i>Acrothamnus montanus</i>	EN (Victoria)	Davies Plain	Uncommon
<i>Acrotriche leucocarpa</i>	EN (Victoria)	Mt Stradbroke	Rare
<i>Agrostis australiensis</i>	EN (Victoria)	Forlorn Hope Plain	Rare.
<i>Agrostis bettyae</i>	K (Victoria)	Forlorn Hope; Emu Plain Swamp	Localised
<i>Agrostis propinqua</i>	K (Victoria)	In swamp, ca. 115 metres NNE (straight line) from the intersection of Rams Horn Track and Limestone Road.	Localised.
<i>Almaleea capitata</i>	EN (Victoria)	Davies Plain	Uncommon

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<i>Astrotricha ledifolia</i>	VU (Victoria)	Limestone Creek	<10 plants
<i>Austrostipa nivicola</i>	EN (Victoria)	Davies Plain	Localised
<i>Banksia canei</i>	CR (Victoria)	Limestone Creek, Forlorn Hope Creek	Localised
<i>Botrychium australe</i>	CR (Victoria)	Forlorn Hope Plain	1 plant.
<i>Calotis lappulacea</i>	VU (Victoria)	Suggan Buggan. On slope above Yellow Waterhole Creek.	Rare, 10 plants.
<i>Cardamine papillata</i>	EN (Victoria)	Rams Horn Tk	Rare
<i>Carex blakei</i>	EN (Victoria)	Davies Plain	Common
<i>Carex capillacea</i>	EN (Victoria)	Davies Plain	Rare
<i>Craspedia aurantia</i> var. <i>aurantia</i>	EN (Victoria)	Moscow Peak.	Rare.
<i>Craspedia canens</i>	CR (Victoria)	James Creek, N of Limestone Rd.	Scattered
<i>Craspedia crocata</i>	EN (Victoria)	Davies Plain	Scattered
<i>Dampiera fusca</i>	CR (Victoria)	Reedy Tk	Abundant
<i>Eucalyptus forresterae</i>	EN (Victoria)	Reedy Tk	Localised
<i>Eucalyptus glaucescens</i>	VU (Victoria)	Reedy Tk	Rare
<i>Epacris celata</i>	EN (Victoria)	Cowombat Flat Tk	Locally common
<i>Eucalyptus perriniana</i> subsp. <i>familiaris</i>	EN (Victoria)	Nunniong Plateau, 2.20 km SW (by road) from the intersection with Forlorn Hope Track.	Localised.
<i>Euphrasia caudata</i>	EN (Victoria)	Forlorn Hope Plain.	Rare.
<i>Gingidia harveyana</i>	EN (Victoria)	Davies Plain.	Very rare.
<i>Grevillea brevifolia</i>	EN (Victoria)	Forlorn Hope	Rare
<i>Hydrocotyle rivularis</i>	K (Victoria)	Forlorn Hope	Common. Known site.
<i>Isolepis gaudichaudiana</i>	VU (Victoria)	Rocky Plain.	Rare.
<i>Juncus phaeanthus</i>	EN (Victoria)	Rocky Plain; Forlorn Hope Plain	Rare/occasional.
<i>Lachnagrostis meionectes</i>	EN (Victoria)	Davies Plain	Rare.
<i>Leptorhynchus elongatus</i>	EN (Victoria)	Cowombat Flat Tk	Rare
<i>Muehlenbeckia axillaris</i>	VU (Victoria)	On west-facing embankment of Limestone Creek, 90 metres north of Limestone Creek Track, 2.2 km from its intersection with Limestone Road.	Only one diffuse patch 1 metres x 1 metre present.

<i>Muehlenbeckia diclina</i> subsp. Gippsland (R.O.Makinson 1007)	VU (Victoria)	Mt Stradbroke	Rare
<i>Myriophyllum lophatum</i>	K (Victoria)	Davies Plain, Rocky Plain	Rare.
<i>Olearia aglossa</i>	K (Victoria)	Mt Stradbroke	Common
<i>Olearia phlogopappa</i> subsp. <i>flavescens</i>	EN (Victoria)	Davies Plain, Moscow Peak	Common
<i>Oschatzia cuneifolia</i>	EN (Victoria)	Davies Plain, Native Dog Flat	Common; Rare at Native Dog Flat.
<i>Pimelea pauciflora</i>	EN (Victoria)	Limestone Creek	Occasional along creek
<i>Pimelea ligustrina</i> subsp. <i>ciliata</i>	EN (Victoria)	Davies Plain	Localised
<i>Plantago alpestris</i>	VU (Victoria)	Davies Plain	Rare
<i>Poa hookeri</i>	EN (Victoria)	Mt Stradbroke	Localised
<i>Poa petrophila</i>	EN (Victoria)	Forlorn Hope; Ricky Plain	Locally common; rare at Rocky Plain
<i>Podolepis laciniata</i>	EN (Victoria)	Cowombat Flat Tk; Limestone Road	Common and widespread
<i>Poranthera oreophila</i>	EN (Victoria)	Davies Plain	Occasional.
<i>Prostanthera phyllicifolia</i>	EN (Victoria)	Mt Stradbroke	Localised
<i>Pultenaea fasciculata</i>	EN (Victoria)	In swamp, ca. 115 metres NNE (straight line) from the intersection of Rams Horn Track and Limestone Road.	Localised, ca. 50 plants.
<i>Rhytidosporum inconspicuum</i>	EN (Victoria)	Davies Plain	Common.
<i>Rytidosperma oreophilum</i>	EN (Victoria)	Mt Stradbroke; Davies Plain; Rocky Plain; Forlorn Hope Plain; Moscow Peak	Localised
<i>Scleranthus diander</i>	EN (Victoria)	Mt Stradbroke	Common
<i>Scleranthus fasciculatus</i>	EN (Victoria)	Davies Plain; Forlorn Hope Plain	Rare/Occasional.
<i>Senecio extensus</i>	EN (Victoria)	Forlorn Hope; Davies Plain	Rare
<i>Senecio interpositus</i>	EN (Victoria)	Cowombat Flat Tk	Uncommon
<i>Senecio lageniformis</i>	EN (Victoria)	Forlorn Hope; Davies Plain	Rare
<i>Senecio niveoplanus</i>	EN (Victoria)	Davies Plain Creek	5 plants
<i>Stylidium montanum</i>	EN (Victoria)	Davies Plain	Common
<i>Viola fuscoviolacea</i>	EN (Victoria)	Davies Plain	Locally common

<i>Viola improcera</i>	K (Victoria)	Reedy Tk	Localised
<i>Vittadinia sulcata</i>	K (Victoria)	Suggan Buggan. On slope above Yellow Waterhole Creek	Rare. Third collection for Victoria, previously known from this region.
<i>Zieria citriodora</i>	VU (EPBC)	Limestone Creek	Localised. Previously known from a collection from this site.
<i>Meesia muelleri</i>	EN (Victoria)	Forlorn Hope	Reasonably common where collected in bogs.

3.5 Range extensions

Species	Location sighted/observed	Distance from nearest known record (km)	Comments
<i>Lachnagrostis</i> sp. (Gow Plain)	Forlorn Hope Plain;	c. 80 km	Previously only known from the Dargo High Plains area (A.J. Brown <i>Pers. Comm.</i>). Rare at Forlorn Hope Plain and at Davies Plain.
<i>Kurzia pallescens</i>	Davies Plain	c. 400 km	First record of this species in Victoria, and only the third record on Mainland Australia (others being in central and northern NSW). This species is otherwise only known from Tasmania and NZ.
<i>Bryostreimannia turgida</i>	Davies Plain	c. 70 km	This is the first record of this genus in Victoria.
<i>Tortella dakinii</i>	Limestone Creek Track	c. 130 km	Sixth record of this species in Victoria, with all other records being in and west of Melbourne.
<i>Trichocolea rigida</i>	Davies Plain	c. 80 km	Third record of this species in Victoria. Previously known from Dargo High Plains.

<i>Calliergonella cuspidata</i>	Limestone Creek Track	c. 120 km	First record in the Victorian high country. Weed of lower altitude pastures and grassy areas. Collected in wet inundated areas disturbed by horses. Possibly introduced to this site in hay brought in for horse feed.
<i>Brachythecium mildeanum</i>	Native Dog Flat	c. 90 km	First record in the Victorian high country. Weed of lower altitude pastures and grassy areas. Collected in wet inundated areas disturbed by horses. Possibly introduced to this site in hay brought in for horse feed.
<i>Phebalium squamulosum</i> subsp. <i>squamulosum</i>	Davies Plain	ca. 120 km (based on Victorian herbarium collections).	No previous records of this subsp. From this region of Victoria. A small-leaved form, which occurs across the border in NSW.
<i>Sedum album</i>	Willis	ca. 320 km	Introduced species, with records from Ballarat, Barwon Heads, Mt Eliza, Orford.
<i>Solanum sisymbriifolium</i>	Willis	ca. 510 km	In Victoria, previously known from a single collection from Mortlake.

3.6 Genetic information

Leaf samples were taken for DNA extraction from a limited number of collections. These were restricted to taxa currently under taxonomic revision (e.g., *Aciphylla*), rare plants that may be of use in future taxonomic studies (e.g., *Olearia aglossa*, *Botrychium australe*) population genetic studies to assist with species conservation (e.g., *Banksia canei*, *Xerochyrsum palustre*). The *Botrychium australe* sample is being included in a worldwide phylogenomic project.

4. Information on species lists

The National Herbarium of Victoria collections database (MELISR) is the primary source of data used to compile the species list that accompanies this report. The threat status accorded to taxa is taken from the *Flora and Fauna Guarantee Act 1988 - Threatened List* (DEECA, May 2023). No species lists were provided prior to the survey.

5. Information for land managers

Habitat damage inflicted by horses and pigs was observed at many sites, including sites with State listed threatened plant species (e.g., *Botrychium australe*, *Prasophyllum niphopedium*, *Myriophyllum lophatum*, *Ranunculus millanii*, see Fig. 11). Horses were observed throughout the study area, while pig damage appears to be restricted to wet boggy sites. Culling of these feral animals would help to eradicate such damage. The horses also appear to be responsible for dispersing weeds in many areas.

Overall, most sites are largely free of weed cover, apart from widespread weeds such as *Trifolium repens*. However, some sites such as a site along Limestone Creek have noticeably deteriorated in the last few years (since 2018, when last visited), with *Rubus leucostachys* population having expanded in area of occupancy, smothering the limestone escarpment (see Figs. 12 & 13). This site is high conservation significance, with several endangered or uncommon species of plants, including *Muehlenbeckia axillaris*, *Aspenium trichomanes*, *Tortula dakinii*, *Pimelea pauciflora*. If no control measures are implemented soon to curtail the spread of the *Rubus leucostachys* many of the threatened native plants species at the site are likely to disappear from this location.

Damage by four-wheel drive vehicles to the delicate *Sphagnum* bogs was evident at Native Dog Flat, in the area near the horse camping site. The endangered *Oschatzia cuneifolia* was close to this area. Additional fencing would be beneficial to keep out vehicles and horse riders.



Fig. 11. Wetland heavily trampled by horses. The poorly known and rarely collected species *Myriophyllum lophatum*, and the endangered *Ranunculus millanii* were both collected from this wetland.



Fig. 12. Limestone Creek: botanically significant limestone escarpment being invaded by *Rubus leucostachys*, note presence of *Asplenium trichomanes* subsp. *quadrivalens* on the right side of image.



Fig. 13. Limestone Creek: botanically significant limestone escarpment being invaded by *Rubus leucostachys*.

6. Other significant findings

Olearia aglossa was collected from Mt Stradbroke during this survey. This species was previously only thought to be known from Victoria from a collection by Mueller in 1850's and a specimen from 1991 with vague location details that required verification. The collection during the Bushblitz expedition resulted in a review of this species in Victoria which was published in May this year (Messina 2023).

This appears to have been on the first botanical surveys of the Davies Plain area. Many rare (but unsurprising) species were recorded here for the first time e.g., *Gingidia harveyana*, *Myriophyllum lophatum*, *Senecio niveoplanus*, *Scleranthus fasciculatus*, *Viola fuscoviolacea*, *Rhytidosporum inconspicuum*, *Austrostipa nivicola*, *Poranthera oreophila*, and *Almaleea capitata*. Many of these species occur near-by at either Mt Kosciuszko or Nunniong Plateau.

Carex buxbaumii was collected at Rocky Plain, where it was last collected in 1949, which was the last collection (based on specimens held at MEL) of the species in Victoria.

While identifying an *Isolepis* collection, it was noticed that one of the specimens had inflorescences that were infected with a smut fungus. The only genus of smut fungi known to infect *Isolepis* spp is *Entorrhiza*. This genus of smut fungi was unrepresented in MEL's collection.

7. Conclusions

Results were consistent with expectations based on botanical exploration of the area. Groups that are collected far less frequently such as bryophytes yielded new records to Victoria. Amongst the species previously known to occur in the area, several State threatened species were found. 598 collections were made during the survey improving our understanding of the distribution and habitat of the collected species. These collections included 240 angiosperm, 1 gymnosperm, 5 fern, 1 lycopod, 70 bryophyte, 4 species of lichen, and 1 smut fungus. These collections have been added to the State Botanical Collection at the National Herbarium of Victoria (with numerous duplicates to be forwarded to other herbaria) and records are now visible on Australia's Virtual Herbarium. Photographs of many of the vascular plant species and most of the bryophytes were taken and are a valuable contribution towards the online flora, particularly the bryophytes, where images of many species were lacking.

Acknowledgements

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Appendix 1. List of mosses, liverworts and vascular plants recorded during the Australian Alps Bush Blitz					
Family	Species	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic/ pest
Mosses/hornworts/liverworts					
Adelanthaceae	Syzygiella sonderi	No	No	No	No
Amblystegiaceae	Bryostreimannia turgida	No	No	No	No
Amblystegiaceae	Cratoneuropsis relaxa	No	No	No	No
Amblystegiaceae	Drepanocladus aduncus	No	No	No	No
Amblystegiaceae	Sanionia uncinata	No	No	No	No
Andreaeaceae	Andreaea amblyophylla	No	No	No	No
Andreaeaceae	Andreaea mutabilis	No	No	No	No
Andreaeaceae	Andreaea nitida	No	No	No	No
Aulacomniaceae	Aulacomnium palustre	No	No	No	No
Aulacomniaceae	Hymenodontopsis mnioides	No	No	No	No
Bartramiaceae	Bartramia robusta	No	No	No	No
Bartramiaceae	Bartramia robusta	No	No	No	No
Bartramiaceae	Batramia mossmanniana	No	No	No	No
Bartramiaceae	Breutelia pendula	No	No	No	No
Bartramiaceae	Conostomum pusillum var. pusillum	No	No	No	No
Bartramiaceae	Philonotis scabrifolia	No	No	No	No
Bartramiaceae	Philonotis tenuis	No	No	No	No
Brachytheciaceae	Brachytheciastrum paradoxum	No	No	No	No
Brachytheciaceae	Brachythecium mildeanum	No	No	No	Yes
Brachytheciaceae	Brachythecium rutabulum	No	No	No	No
Brachytheciaceae	Brachythecium salebrosum	No	No	No	No
Brachytheciaceae	Kindbergia praelonga	No	No	No	Yes
Bryaceae	Ochiobryum blandum	No	No	No	No
Bryaceae	Ptychostomum creberrimum	No	No	No	No
Catagoniaceae	Catagonium nitens	No	No	No	No
Dicranaceae	Dicranoloma robustum	No	No	No	No
Ditrichaceae	Ceratodon purpureus	No	No	No	No
Ditrichaceae	Ditrichum difficile	No	No	No	No

Family	Species	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic/ pest
Fissidentaceae	Fissidens asplenioides	No	No	No	No
Frullaniaceae	Frullania falciloba	No	No	No	No
Frullaniaceae	Frullania probosciphora	No	No	No	No
Funariaceae	Funaria hygrometrica	No	No	No	No
Grimmiaceae	Grimmia laevigata	No	No	No	No
Grimmiaceae	Grimmia macroperichaetialis	No	No	No	No
Grimmiaceae	Grimmia pulvinata var. africana	No	No	No	No
Grimmiaceae	Racomitrium crispulum	No	No	No	No
Grimmiaceae	Racomitrium pruinosum	No	No	No	No
Hedwigiaceae	Braunia imberbis	No	No	No	No
Hedwigiaceae	Hedwigia ciliata	No	No	No	No
Hypnaceae	Calliergonella cuspidata	No	No	No	Yes
Hypnaceae	Hypnum cupressiforme var. cupressiforme	No	No	No	No
Hypnaceae	Hypnum cupressiforme var. lacunosum	No	No	No	No
Lejeuniaceae	Lejeunea subelobata	No	No	No	No
Lembophyllaceae	Lembophyllum divulgum	No	No	No	No
Lepidoziaceae	Ceramanus centipes	No	No	No	No
Lepidoziaceae	Kurzia pallescens	No	No	No	No
Lepidoziaceae	Lepidozia laevifolia	No	No	No	No
Leucobryaceae	Campylopus introflexus	No	No	No	No
Lophocoleaceae	Chiloscyphus semiteres	No	No	No	No
Lophocoleaceae	Chiloscyphus subporosus	No	No	No	No
Lophocoleaceae	Heteroscyphus coalitus	No	No	No	No
Lophocoleaceae	Heteroscyphus fissistipus	No	No	No	No
Marchantiaceae	Marchantia berteriana	No	No	No	No
Meesiaceae	Meesia muelleri	No	No	EN	No
Metzgeriaceae	Metzgeria furcata	No	No	No	No
Notothyladaceae	Phaeoceros inflatus	No	No	No	No
Orthodontiaceae	Leptotheca gaudichaudii var. gaudichaudii	No	No	No	No
Orthotrichaceae	Lewinskya rupestris	No	No	No	No

Family	Species	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic/ pest
Orthotrichaceae	Zygodon intermedius	No	No	No	No
Pallaviciniaceae	Symphyogyna podophylla	No	No	No	No
Plagiochilaceae	Plagiochila retrospectans	No	No	No	No
Polytrichaceae	Polytrichum commune	No	No	No	No
Pottiaceae	Gymnostomum calcareum	No	No	No	No
Pottiaceae	Tortella dakinii	No	No	No	No
Pylaisiaceae	Calliergonella cuspidatum	No	No	No	Yes
Racopilaceae	Racopilum cuspidigerum				
Sphagnaceae	Sphagnum cristatum	No	No	No	No
Splachnaceae	Tayloria octoblepharum	No	No	No	No
Thuidiaceae	Thuidiopsis sparsa	No	No	No	No
Trichocoleaceae	Trichocolea rigida	No	No	No	No
Ferns					
Aspleniaceae	Asplenium flabellifolium	No	No	No	No
Blechnaceae	Blechnum penna-marina	No	No	No	No
Ophioglossaceae	Botrychium australe	No	No	CR	No
Hymenophyllaceae	Hymenophyllum flabellatum	No	No	No	No
Dryopteridaceae	Polystichum proliferum	No	No	No	No
Lycopods					
Lycopodiaceae	Lycopodium fastigiatum				
Lichens					
Lobariaceae	Pseudocyphellaria sp.				
Parmeliaceae	Menegazzia sp.				
Parmeliaceae	Parmelia sp.				
Stereocaulaceae	Stereocaulon sp.				
Fungi					

Family	Species	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic/ pest
Entorrhizaceae	Entorrhiza sp.				
Conifers					
Podocarpaceae	Podocarpus lawrencei	No	No	No	No
Flowering Plants					
Amaranthaceae	Alternanthera pungens	No	No	No	Yes
Apiaceae	Aciphylla simplicifolia	No	No	EN	No
Apiaceae	Daucus glochidiatus	No	No	No	No
Apiaceae	Gingidia harveyana	No	No	EN	No
Apiaceae	Oreomyrrhis eriopoda	No	No	No	No
Apiaceae	Oschatzia cuneifolia	No	No	EN	No
Apiaceae	Platysace lanceolata	No	No	No	No
Araliaceae	Astrotricha ledifolia	No	No	VU	No
Araliaceae	Hydrocotyle laxiflora	No	No	No	No
Araliaceae	Hydrocotyle rivularis	No	No	K	No
Araliaceae	Polyscias sambucifolia subsp. 3	No	No	No	No
Araliaceae	Trachymene humilis subsp. humilis	No	No	No	No
Asparagaceae	Arthropodium milleflorum	No	No	No	No
Asparagaceae	Lomandra longifolia subsp. exilis	No	No	No	No
Asphodelaceae	Dianella sp. aff. tasmanica (Snowfields)	No	No	No	No
Asteraceae	Brachyscome aculeata	No	No	No	No
Asteraceae	Brachyscome decipiens	No	No	No	No
Asteraceae	Brachyscome diversifolia	No	No	No	No
Asteraceae	Brachyscome scapigera	No	No	No	No
Asteraceae	Brachyscome spathulata	No	No	No	No
Asteraceae	Calotis lappulacea	No	No	VU	No
Asteraceae	Cassinia longifolia	No	No	No	No
Asteraceae	Celmisia pugioniformis	No	No	No	No
Asteraceae	Coronidium monticola	No	No	No	No

Family	Species	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic/ pest
Asteraceae	<i>Craspedia aurantia</i> var. ? <i>aurantia</i>	No	No	EN	No
Asteraceae	<i>Craspedia aurantia</i> var. <i>jamesii</i>	No	No	No	No
Asteraceae	<i>Craspedia canens</i>	No	No	CR	No
Asteraceae	<i>Craspedia crocata</i>	No	No	EN	No
Asteraceae	<i>Craspedia gracilis</i>	No	No	No	No
Asteraceae	<i>Euchiton involucratus</i>	No	No	No	No
Asteraceae	<i>Euchiton japonicus</i>	No	No	No	No
Asteraceae	<i>Euchiton sphaericus</i>	No	No	No	No
Asteraceae	<i>Euchiton umbricola</i>	No	No	No	No
Asteraceae	<i>Leptinella filicula</i>	No	No	No	No
Asteraceae	<i>Leptorhynchos elongatus</i>	No	No	EN	No
Asteraceae	<i>Leptorhynchos squamatus</i>	No	No	No	No
Asteraceae	<i>Microseris lanceolata</i>	No	No	No	No
Asteraceae	<i>Olearia aglossa</i>	No	No	K	No
Asteraceae	<i>Olearia alpicola</i>	No	No	No	No
Asteraceae	<i>Olearia floribunda</i>	No	No	No	No
Asteraceae	<i>Olearia megalophylla</i>	No	No	No	No
Asteraceae	<i>Olearia myrsinoides</i>	No	No	No	No
Asteraceae	<i>Olearia phlogopappa</i> subsp. <i>flavescens</i>	No	No	EN	No
Asteraceae	<i>Olearia phlogopappa</i> subsp. <i>serrata</i>	No	No	No	No
Asteraceae	<i>Ozothamnus obcordatus</i>	No	No	No	No
Asteraceae	<i>Ozothamnus secundiflorus</i>	No	No	No	No
Asteraceae	<i>Pappochroma bellidioides</i>	No	No	No	No
Asteraceae	<i>Picris angustifolia</i> subsp. <i>merxmulleri</i>	No	No	No	No
Asteraceae	<i>Podolepis decipiens</i>	No	No	No	No
Asteraceae	<i>Podolepis laciniata</i>	No	No	EN	No
Asteraceae	<i>Podolepis robusta</i>	No	No	No	No
Asteraceae	<i>Senecio extensus</i>	No	No	EN	No
Asteraceae	<i>Senecio interpositus</i>	No	No	EN	No
Asteraceae	<i>Senecio lageniformis</i>	No	No	EN	No

Family	Species	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic/ pest
Asteraceae	<i>Senecio linearifolius</i> var. <i>denticulatus</i>	No	No	No	No
Asteraceae	<i>Senecio linearifolius</i> var. <i>latifolius</i>	No	No	No	No
Asteraceae	<i>Senecio niveoplanus</i>	No	No	EN	No
Asteraceae	<i>Sigesbeckia australiensis</i>	No	No	No	No
Asteraceae	<i>Solenogyne gunnii</i>	No	No	No	No
Asteraceae	<i>Tragopogon dubius</i>	No	No	No	Yes
Asteraceae	<i>Vittadinia cervicalis</i>	No	No	No	No
Asteraceae	<i>Vittadinia sulcata</i>	No	No	K	No
Asteraceae	<i>Xerochrysum andrewiae</i>	No	No	No	No
Asteraceae	<i>Xerochrysum subundulatum</i>	No	No	No	No
Boraginaceae	<i>Heliotropium amplexicaule</i>	No	No	No	Yes
Boraginaceae	<i>Myosotis laxa</i> subsp. <i>Cespitosa</i>	No	No	No	Yes
Brassicaceae	<i>Cardamine papillata</i>	No	No	EN	No
Campanulaceae	<i>Lobelia pedunculata</i>	No	No	No	No
Campanulaceae	<i>Lobelia simplicicaulis</i>	No	No	No	No
Campanulaceae	<i>Lobelia surrepens</i>	No	No	No	No
Campanulaceae	<i>Wahlenbergia ceracea</i>	No	No	No	No
Campanulaceae	<i>Wahlenbergia gloriosa</i>	No	No	No	No
Caryophyllaceae	<i>Cerastium glomeratum</i>	No	No	No	Yes
Caryophyllaceae	<i>Scleranthus biflorus</i>	No	No	No	No
Caryophyllaceae	<i>Scleranthus diander</i>	No	No	EN	No
Caryophyllaceae	<i>Scleranthus fasciculatus</i>	No	No	EN	No
Caryophyllaceae	<i>Stellaria angustifolia</i> subsp. <i>angustifolia</i>	No	No	No	No
Caryophyllaceae	<i>Stellaria pungens</i>	No	No	No	No
Celastraceae	<i>Stackhousia monogyna</i>	No	No	No	No
Crassulaceae	<i>Crassula helmsii</i>	No	No	No	No
Crassulaceae	<i>Crassula sieberiana</i>	No	No	No	No
Crassulaceae	<i>Sedum album</i>	No	No	No	Yes
Cunoniaceae	<i>Bauera rubioides</i>	No	No	No	No
Cyperaceae	<i>Bolboschoenus medianus</i>	No	No	No	No

Family	Species	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic/ pest
Cyperaceae	Carex blakei	No	No	EN	No
Cyperaceae	Carex buxbaumii subsp. buxbaumii	No	No	No	Yes
Cyperaceae	Carex capillacea	No	No	EN	No
Cyperaceae	Eleocharis acuta	No	No	No	No
Cyperaceae	Gahnia sieberiana	No	No	No	No
Cyperaceae	Isolepis crassiuscula	No	No	No	No
Cyperaceae	Isolepis gaudichaudiana	No	No	EN	No
Dilleniaceae	Hibbertia ericifolia subsp. ericifolia	No	No	No	No
Dilleniaceae	Hibbertia obtusifolia	No	No	No	No
Ericaceae	Acrothamnus hookeri	No	No	No	No
Ericaceae	Acrothamnus montanus	No	No	EN	No
Ericaceae	Acrotriche leucocarpa	No	No	EN	No
Ericaceae	Dracophyllum continentis	No	No	No	No
Ericaceae	Epacris celata	No	No	EN	No
Ericaceae	Epacris impressa	No	No	No	No
Ericaceae	Epacris paludosa	No	No	No	No
Fabaceae	Almaleea capitata	No	No	EN	No
Fabaceae	Bossiaea distichoclada	No	No	No	No
Fabaceae	Cullen microcephalum	No	No	No	No
Fabaceae	Dillwynia phyllicoides	No	No	No	No
Fabaceae	Glycine clandestina	No	No	No	No
Fabaceae	Hovea asperifolia subsp. asperifolia	No	No	No	No
Fabaceae	Lotus uliginosus	No	No	No	Yes
Fabaceae	Oxylobium arborescens	No	No	No	No
Fabaceae	Podolobium alpestre	No	No	No	No
Fabaceae	Pultenaea fasciculata	No	No	EN	No
Fabaceae	Pultenaea forsythiana	No	No	No	No
Fabaceae	Trifolium repens	No	No	No	Yes
Geraniaceae	Geranium antrorsum	No	No	No	No
Geraniaceae	Geranium gardneri	No	No	No	No

Family	Species	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic/ pest
Geraniaceae	Geranium potentilloides	No	No	No	No
Geraniaceae	Pelargonium australe	No	No	No	No
Goodeniaceae	Dampiera fusca	No	No	CR	No
Goodeniaceae	Goodenia hederacea subsp. alpestris	No	No	No	No
Goodeniaceae	Goodenia montana	No	No	No	No
Haloragaceae	Gonocarpus montanus	No	No	No	No
Haloragaceae	Myriophyllum lophatum	No	No	K	No
Haloragaceae	Myriophyllum variifolium	No	No	No	No
Hypoxidaceae	Hypoxis hygrometrica	No	No	No	No
Juncaceae	Juncus ? australis	No	No	No	No
Juncaceae	Juncus falcatus subsp. falcatus	No	No	No	No
Juncaceae	Juncus phaeanthus	No	No	EN	No
Juncaceae	Luzula meridionalis	No	No	No	No
Juncaceae	Luzula modesta	No	No	No	No
Lamiaceae	Prostanthera cuneata	No	No	No	No
Lamiaceae	Prostanthera phyllicifolia	No	No	EN	No
Lamiaceae	Prunella vulgaris	no	no	no	yes
Lentibulariaceae	Utricularia dichotoma	No	No	No	No
Montiaceae	Montia australasica	No	No	No	No
Myrtaceae	Baeckea gunniana	No	No	No	No
Myrtaceae	Baeckea utilis	No	No	No	No
Myrtaceae	Callistemon pityoides	No	No	No	No
Myrtaceae	Eucalyptus dalrympleana	No	No	No	No
Myrtaceae	Eucalyptus forresterae	No	No	EN	No
Myrtaceae	Eucalyptus glaucescens	No	No	VU	No
Myrtaceae	Eucalyptus kybeanensis	No	No	No	No
Myrtaceae	Eucalyptus perriniana subsp. Familiaris	No	No	EN	No
Myrtaceae	Kunzea peduncularis	No	No	No	No
Myrtaceae	Leptospermum grandifolium	No	No	No	No
Myrtaceae	Leptospermum lanigerum	No	No	No	No

Family	Species	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic/ pest
Myrtaceae	Leptospermum myrtifolium	No	No	No	No
Onagraceae	Epilobium billardioreanum	No	No	No	No
Onagraceae	Epilobium gunnianum	No	No	No	No
Orchidaceae	Gastrodia procera	No	No	No	No
Orchidaceae	Pterostylis falcata	No	No	No	No
Orobanchaceae	Euphrasia caudata	No	No	EN	No
Orobanchaceae	Euphrasia collina subsp. collina	No	No	No	No
Papaveraceae	Eschscholzia californica	No	No	No	Yes
Phyllanthaceae	Poranthera oreophila	No	No	EN	No
Pittosporaceae	Rhytidosporum inconspicuum	No	No	EN	No
Pittosporaceae	Rhytidosporum procumbens	No	No	No	No
Plantaginaceae	Linaria arvensis	No	No	No	Yes
Plantaginaceae	Plantago alpestris	No	No	VU	No
Plantaginaceae	Plantago euryphylla	No	No	No	No
Plantaginaceae	Veronica derwentiana subsp. derwentiana	No	No	No	No
Plantaginaceae	Veronica perfoliata	No	No	No	No
Plantaginaceae	Veronica subtilis	No	No	No	No
Poaceae	Agrostis australiensis	No	No	EN	No
Poaceae	Agrostis bettyae	No	No	K	No
Poaceae	Agrostis parviflora	No	No	No	No
Poaceae	Agrostis propinqua	No	No	K	No
Poaceae	Agrostis venusta	No	No	No	No
Poaceae	Anthosachne scabra	No	No	No	No
Poaceae	Austrostipa nivicola	No	No	EN	No
Poaceae	Cymbopogon refractus	No	No	No	No
Poaceae	Deyeuxia brachyathera	No	No	No	No
Poaceae	Deyeuxia gunniana	No	No	No	No
Poaceae	Deyeuxia monticola	No	No	No	No
Poaceae	Deyeuxia quadriseta	No	No	No	No
Poaceae	Dichelachne crinita	No	No	No	No

Family	Species	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic/ pest
Poaceae	Dichelachne inaequiglumis	No	No	No	No
Poaceae	Dichelachne rara	No	No	No	No
Poaceae	Hierochloe redolens	No	No	No	No
Poaceae	Hookerchloa hookeriana	No	No	No	No
Poaceae	Lachnagrostis aemula	No	No	No	No
Poaceae	Lchnagrostis filiformis	No	No	No	No
Poaceae	Lachnagrostis meionectes	No	No	EN	No
Poaceae	Lachnagrostis sp. (Gow Plain)	Yes	No	No	No
Poaceae	Lachnagrostis sp. (Thredbo)	Yes	No	No	No
Poaceae	Pentapogon quadrifidus	No	No	No	No
Poaceae	Poa costiniana	No	No	No	No
Poaceae	Poa ensiformis	No	No	No	No
Poaceae	Poa fawcettiae	No	No	No	No
Poaceae	Poa helmsii	No	No	No	No
Poaceae	Poa hookeri	No	No	EN	No
Poaceae	Poa petrophila	No	No	EN	No
Poaceae	Poa phillipsiana	No	No	No	No
Poaceae	Rytidosperma longifolium	No	No	No	No
Poaceae	Rytidosperma nudiflorum	No	No	No	No
Poaceae	Rytidosperma oreophilum	No	No	EN	No
Poaceae	Rytidosperma pallidum	No	No	No	No
Poaceae	Trisetum spicatum subsp. australiense	No	No	No	No
Polygalaceae	Comesperma retusum	No	No	No	No
Polygonaceae	Acetosella vulgaris	No	No	No	Yes
Polygonaceae	Muehlenbeckia axillaris	No	No	VU	No
Polygonaceae	Muehlenbeckia diclina subsp. Gippsland (R.O.Makinson 1007) Makinson	No	No	VU	No
Proteaceae	Banksia canei	No	No	CR	No
Proteaceae	Grevillea australis	No	No	No	No
Proteaceae	Grevillea brevifolia	No	No	EN	No
Proteaceae	Hakea microcarpa	No	No	No	No

Family	Species	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic/ pest
Proteaceae	<i>Persoonia chamaepeuce</i>	No	No	No	No
Proteaceae	<i>Persoonia confertiflora</i>	No	No	No	No
Ranunculaceae	<i>Ranunculus graniticola</i>	No	No	No	No
Ranunculaceae	<i>Ranunculus lappaceus</i>	No	No	No	No
Ranunculaceae	<i>Ranunculus millanii</i>	No	No	No	No
Ranunculaceae	<i>Ranunculus pimpinellifolius</i>	No	No	No	No
Ranunculaceae	<i>Ranunculus sardous</i>	No	No	No	Yes
Restionaceae	<i>Baloskion australe</i>	No	No	No	No
Rhamnaceae	<i>Pomaderris elachophylla</i>	No	No	No	No
Rosaceae	<i>Acaena echinata</i>	No	No	No	No
Rosaceae	<i>Acaena</i> × <i>ovina</i>	No	No	No	No
Rosaceae	<i>Geum urbanum</i> var. <i>strictum</i>	No	No	No	No
Rosaceae	<i>Rubus leucostachys</i>	No	No	No	Yes
Rosaceae	<i>Rubus parvifolius</i>	No	No	No	No
Rubiaceae	<i>Asperula pusilla</i>	No	No	No	No
Rubiaceae	<i>Coprosma hirtella</i>	No	No	No	No
Rutaceae	<i>Asterolasia trymalioides</i> subsp. <i>trymalioides</i>	No	No	No	No
Rutaceae	<i>Cyanothamnus anemonifolius</i> subsp. <i>anemonifolius</i>	No	No	No	No
Rutaceae	<i>Leionema phyllicifolium</i>	No	No	No	No
Rutaceae	<i>Phebalium squamulosum</i> subsp. <i>squamulosum</i>	No	No	No	No
Rutaceae	<i>Zieria citriodora</i>	No	VU	No	No
Santalaceae	<i>Choretrum pauciflorum</i>	No	No	No	No
Sapindaceae	<i>Dodonaea viscosa</i> subsp. <i>cuneata</i>	No	No	No	No
Scrophulariaceae	<i>Limosella australis</i>	No	No	No	No
Scrophulariaceae	<i>Verbascum thapsus</i> subsp. <i>thapsus</i>	No	No	No	Yes
Solanaceae	<i>Solanum chenopodioides</i>	No	No	No	Yes
Solanaceae	<i>Solanum sisymbriifolium</i>	No	No	No	Yes
Stylidiaceae	<i>Stylidium montanum</i>	No	No	EN	No
Thymelaeaceae	<i>Pimelea ligustrina</i> subsp. <i>ciliata</i>	No	No	EN	No
Thymelaeaceae	<i>Pimelea pauciflora</i>	No	No	EN	No

Family	Species	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic/ pest
Verbenaceae	Verbena officinalis var. africana	No	No	No	No
Violaceae	Melicytus angustifolius subsp. divaricatus	No	No	No	No
Violaceae	Viola betonicifolia	No	No	No	No
Violaceae	Viola fuscoviolacea	No	No	EN	No
Violaceae	Viola improcera	No	No	K	No
Winteraceae	Tasmania xerophila subsp. xerophila	No	No	No	No