King Island, Tasmania 2023: Bush Blitz expedition report

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Bush Blitz is coordinated by Parks Australia, which is part of the Australian Government Department of Climate Change, Energy, the Environment and Water. The program is a partnership between the Australian Government, BHP and Earthwatch Australia.

Research agencies involved in this Bush Blitz were the Tasmanian Museum and Art Gallery (including the Tasmanian Herbarium), the Royal Botanic Gardens Victoria and the University of New South Wales.

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From 23 to 30 October 2023, Bush Blitz led an expedition to King Island – a remote Tasmanian island located in Bass Strait, halfway between Victoria and Tasmania.

Surveys and collections filled knowledge gaps, provided important material for future taxonomic studies and extended the known ranges of hundreds of species.

At least 1,301 species were recorded during the Bush Blitz and 44 of those may be completely new to science (4 moths, a cave-cricket, 37 spiders, a harvestman and a lichen). Many unnamed or informal invertebrate taxa were collected. These may assist scientists to revise, compare and describe species in the future.

The Southern Hairy Red Snail (*Chloritobadistes victoriae*) and 2 of the plants recorded – Gristle Fern (*Blechnum cartilagineum*) and Wiry Mitrewort (*Phyllangium divergens*) – are listed as Vulnerable under the Tasmanian *Threatened Species Protection Act 1995*.

There were 25 introduced or pest animal species recorded, along with 45 introduced plant species.

Highlights of the expedition include:

- records that extend the known ranges of more than 350 species.
- recording hundreds of animal and plant species for the first time on King Island, some for the first time in Tasmania and 2 lichens for the first time in Australia.
- finding a particularly significant site for moths at Sea Elephant Bootlace ACCP – 54 species were recorded, including 5 rare species and a species that is considered new to science.
- revealing that the freshwater molluscs of King Island are more diverse than previously recognised and finding unique environments, such as Boggy Creek, which had up to 4 *Austropyrgus* species.
- the collection of *Setocoris* mspBBKI_001 – the first record of this undescribed sundew bug from King Island.
- the collection of the weevil *Phloeoglymma mixtum*, which was described from a King Island specimen in 1908 and appears not to have been recorded again on the island until now.
- the collection of 37 spider species that are likely new to science and a wolf spider that has only been found before on another Bass Strait island.
- finding the threatened Southern Hairy Red Snail at 4 sites, including one site that had no previous records of the snail.
- the collection of lichen specimens that have allowed 2 previously unnamed species to be described – *Coenogonium flavoinspersum* and *Inoderma applanatum.*
- the collection of 156 seaweed specimens, which are valuable additions to the Tasmanian Herbarium collection.

Introduction

About Bush Blitz

The Bush Blitz program documents plants and animals in selected properties across Australia to support the discovery of species new to science, complement and complete existing collections, and provide information to support land management and conservation.

Bush Blitz is an initiative of the Australian Government, through Parks Australia, in partnership with BHP and Earthwatch Australia. This innovative partnership harnesses the expertise of many of Australia's top scientists from museums, herbaria, universities, and other institutions and organisations across the country.

An estimated 580,000 to 680,000 species are found in Australia (Chapman 2009), but three-quarters of this biodiversity is yet to be identified. Around 45% of continental Australia and over 90% of our marine area have never been comprehensively surveyed by scientists. Increasing our understanding of Australia's biodiversity is critical for conservation, biosecurity, agriculture, human and animal health and many other activities.

Since the Bush Blitz program began in 2010, more than 2,000 species have been discovered during Bush Blitz expeditions across Australia.

In addition to species discovery, Bush Blitz objectives include raising public awareness of biodiversity, and improving environmental, social and educational outcomes for local and Indigenous communities. While some of these objectives are met during expeditions – through Bush Blitz TeachLive, teacher workshops and community days – they are out of scope for this report.

About this report

This report summarises the initial scientific findings of an expedition to King Island in Tasmania. Information in this report has been extracted from the scientific reports provided by expedition members. Locational data for all flora and fauna records have been provided to land managers. Unless these data are considered sensitive, they will be publicly available through the Atlas of Living Australia (ALA).

King Island Bush Blitz

Bush Blitz led an expedition to King Island from 23 to 30 October 2023, to collect and record plants and animals living in terrestrial, freshwater and coastal environments.

King Island is a remote island located at the western entrance to Bass Strait, halfway between Victoria and Tasmania. It is approximately 140 km from both Cape Otway on the coast of Victoria and Cape Grim on the north-west tip of Tasmania. The island is approximately 65 km long and 26 km wide (Threatened Species Section 2012).

King Island has forest and woodland communities, scrub, grasslands, heathlands, wetlands, spray zone coastal complexes and salt marsh. Since permanent European settlement in 1888, approximately 70% of the native vegetation has been cleared for agriculture. However, there are

remnants of native vegetation scattered across the landscape, forming islands where the native biodiversity may still be found.

The expedition focused on Crown Land managed by the Tasmania Parks and Wildlife Service (TPWS), including conservation areas (CA), nature reserves (NR) and state reserves (SR). The largest reserve, Lavinia SR (7,860 ha), is one of the few largely unaltered areas of native vegetation remaining on King Island. It is a RAMSAR Wetland of International Significance and listed as an Important Bird and Biodiversity Area. The reserve has a diverse ecosystem and contains one of the rarest lagoon and wetland systems. The major wetlands in the reserve are the Sea Elephant River estuary area, Lake Martha Lavinia, Pennys Lagoon, and the Nook Swamps. It also supports some important ecological communities that represent a transitional zone between the Australian mainland and north-west Tasmania.

The expedition also visited Pegarah State Forest, which is Crown Land managed by Sustainable Timber Tasmania (formerly Forestry Tasmania), private land protected under a conservation covenant (ACCP) and Pegarah Reserve, which is owned by King Island Council and managed by the King Island Field Naturalists Club. The club's main aim is to observe and list the fauna, flora and geology of King Island and promote an interest in nature and the environment. Members undertake a number of activities on the reserve, including revegetating and improving vegetation communities and educating the local community about the environment.

Until around 12,000 years ago, King Island was part of the land bridge between Tasmania and the Australian mainland. King Island has always been of great interest to the scientific community because the flora and fauna contain elements of both Victoria and Tasmania. However, there are logistical challenges to conducting scientific surveys on King Island, including access, the weather and environment. The prevailing westerly winds often reach 100 km per hour and the weather can change dramatically and quickly. Stormy weather and below-average temperatures during the expedition particularly impacted the collection of terrestrial invertebrates and seaweed, which was partly sampled by snorkelling.

Previous surveys and pre-trip expectations

Tasmania's insect fauna is increasingly well documented, but coverage is patchy, both taxonomically and geographically. In particular, there are important geographic gaps in areas like King Island that are away from the main population centres. Early interest in the island's insects was seemingly not followed through in the next century, despite recognition that the island's isolation is a driver of local endemism for other groups, such as birds. Zoologists from Queen Victoria Museum and Art Gallery (QVMAG) visited King Island in May 2019 and added many insect species to the island's list, mainly beetles.

Moths and butterflies (Lepidoptera) are one of the 4 most advanced and mega-diverse insect orders. Australia's Lepidoptera are estimated at 10,000 described species and at least that number again are undescribed. Tasmania's fauna is estimated at around 1,000 species but this number is likely to be significantly higher. King Island has not been systematically surveyed for Lepidoptera. However, approximately 80 species from 16 families had been recorded from King Island on the ALA prior to this expedition. This expedition was expected to add many new moth records for King Island, as well as rare species and species new to science. These taxa are important bio-indicators for monitoring environmental effects such as climate change, which may alter vegetation communities. As each Lepidoptera species is closely affiliated with usually

one host plant species, the diversity of Lepidoptera can be used to estimate the biodiversity of a geographical region.

Before this expedition, few freshwater invertebrates had been recorded from King Island and there appear to have been no comprehensive surveys for any specific group. As a result of clearing, most of the island's catchments have been compromised to varying degrees and retain only remnant riparian vegetation cover. Given the scale of landscape-level changes, expectations of finding a diverse aquatic invertebrate fauna were low, especially as the few earlier surveys contributed only a handful of records to databases.

There are more than 2,500 species of true bugs (Heteroptera) in Australia and a significant portion of these have been described in the past 20 years alone. There are likely to be many more undescribed true bugs, particularly plant bugs (Miridae) and lace bugs (Tingidae), which feed on a broad range of host plants.

The island had not been surveyed extensively for spiders before, except for a field trip conducted by QVMAG in January 2019 when 76 specimens were collected. This gave some indication of the range of species found on the island and the Bush Blitz expedition allowed a more thorough search for specimens that had not been collected previously.

In contrast, King Island has been very well surveyed for land snails – Kevin Bonham has made 7 previous visits. King Island is interesting because its snail fauna is much more similar to that of Victoria than mainland Tasmania, and because of the presence of Southern Hairy Red Snail (*Chloritobadistes victoriae*), which is listed on the Tasmanian *Threatened Species Protection Act 1995* (TSPA). Prior to the Bush Blitz, 24 native snail species had been recorded from the island. It was expected that nearly all of these would be rerecorded but that there would be few, if any, new species recorded for the island.

The proximity of King Island to both Victoria and the Tasmanian mainland is reflected in its flora, with examples of species shared with one landmass but not the other. This makes King Island an important refuge for the flora of both regions. This expedition provided an opportunity to record the plant biodiversity of an area of Tasmania that has had limited specimen-based biological sampling.

The seaweeds (marine macroalgae) of King Island include species commonly found along Victorian coastlines, as well as those more commonly associated with the 'cold' waters that surround Tasmania. In general, King Island has not been thoroughly surveyed for seaweeds and there are few vouchered specimens held in Australian herbaria. The aim of the seaweed surveys was to record the biodiversity and secure a voucher collection.

Study area

Base camp was located in the small town of Grassy on the southeast coast of King Island, approximately 20 minutes' drive from the main town of Currie, on the west coast. From base camp, the team accessed survey sites using 4WD vehicles.

Map 1 shows the towns of Currie and Grassy, the village of Naracoopa, Stokes Point (the southernmost point of King Island), Cape Wickham (the northernmost point of King Island) and many of the protected areas visited during the expedition – Disappointment Bay SR, Lavinia SR, Counsel Hill CA, Sea Elephant Bootlace ACCP, Reekara Road #2 ACCP, Sea Elephant CA, Eldorado

CA, Pegarah SF, Pegarah Reserve, Kentford Forest NR, Kentford Forest CA, Gentle Annie CA, Red Hut Point CA, Colliers Swamp CA, Stokes Point CA, Seal Rocks SR, Seal Rocks CA, Cataraqui Point CA and Muddy Lagoon NR.

Map 1 Locations visited, 23 to 30 October 2023

Note: For a map of collection sites see Appendix B.

Expedition team

Logistics

Bush Blitz provided the logistical coordination and overall leadership for the expedition. The Bush Blitz team consisted of Kate Gillespie (team lead), Helen Cross and Jo Harding.

Scientific

The Tasmanian Museum and Art Gallery (TMAG), which includes the Tasmanian Herbarium, was the host institution for this Bush Blitz, providing the core group of personnel and accessioning the specimens into its collections. Experts from the Royal Botanic Gardens Victoria (RBGV) and University of New South Wales (UNSW) also conducted field and laboratory work and are included in Table 1.

Field assistants

Sandra McCullough and Jesse Holden (Earthwatch Australia) coordinated 5 teachers and 2 BHP employees who assisted scientists in the field.

Bush Blitz TeachLive is a collaborative program between the Bush Blitz partners, with communication and recruitment support from the Australian Science Teachers Association. The teachers were Emma Dukker (Torquay College, Vic.), Lee Hribar (Telopea Park School, ACT) Liang-Yu Chen (Knox Grammar, NSW), Samuel Winckel (King Island District High School, Tasmania) and Terry Ann Currie (Dunoon Public School, NSW). They worked alongside scientists, reinvigorated their love for science, generated new ideas and learned new skills to take back to their schools. Teachers also taught 'live' to their classrooms via the TeachLive website and videoconferencing, taking their students on a virtual expedition and inspiring the next generation.

BHP environmental specialists were Freya Carkeek and Steve Barley. They worked alongside the scientific team to share knowledge and improve linkages between botanical and zoological experts and BHP.

Members of the King Island Field Naturalists Club worked with Bush Blitz to establish a standard survey site at Pegarah Reserve. They accompanied scientists and assisted with setting up the site and collections. Teachers and students from King Island High School helped collect aquatic invertebrate samples from Big Lake. Staff from TPWS also assisted teams in the field.

Figure 1 Some members of the expedition team

Photograph: © Copyright, Earthwatch.

Methods

Taxonomic groups studied and personnel

A number of taxonomic groups were selected as targets for study. Table 1 lists the groups surveyed and the personnel who undertook the fieldwork, made identifications and reported on the findings.

Table 1 Taxonomic groups surveyed and personnel

Group	Common name	Personnel and affiliation
Aquatic invertebrates	Aquatic invertebrates	Karen Richards (TMAG)
Insecta	Insects	Simon Grove (TMAG)
Lepidoptera	Moths	Catherine Byrne (TMAG)
Heteroptera	True bugs	Zoe McCarthy (UNSW)
Gastropoda	Slugs and snails	Kevin Bonham (TMAG)
Araneae	Spiders	John Douglas (TMAG)
Vascular plants	Flowering plants	Miguel de Salas (TMAG) Matthew Baker (TMAG) Zoe Lawrence (TMAG) David Cantrill (RBGV)
Bryophytes	Mosses and liverworts	Lyn Cave (TMAG)
Lichen	Lichen	Gintaras Kantvilas (TMAG)
Marine macroalgae and seagrasses	Seaweeds and seagrasses	Fiona Scott (TMAG)

Kirrily Moore and Nicole Zehntner (TMAG) also took part in the expedition, providing invaluable technical support across the TMAG invertebrate teams. Experienced divers Matt Rose (a marine biologist) and Mark Wischnat (King Island Council) helped collect seaweeds and seagrasses.

Other personnel, including but not limited to Gerry Cassis (UNSW), assisted with making identifications and reporting. Volunteers at TMAG also spent many hours processing and databasing specimens. These personnel and their roles are mentioned in the scientific reports.

Additional taxa were collected or recorded opportunistically. There was also a collaborative approach to collecting. For example, spider specimens found in leaf litter collected for snails or beetles were passed on to John Douglas.

Site selection and collection methods

Scientific teams surveyed 3 standard survey sites. The use of standard survey sites provides a unique opportunity to examine broad-spectrum biodiversity. Among other benefits, it allows land managers to use these sites for ongoing monitoring and generates a national dataset that can be used to underpin conservation and land management decisions.

Following consultation with rangers, botanists and the King Island Field Naturalists Club, the standard survey sites (SSS) were selected to represent different vegetation types and be easily accessible. SSS1 was established at Pegarah Reserve, to contribute to a species list for the

reserve, SSS2 was established in King Island scrub complex at Lavinia SR and SSS3 was at Collier Swamp. Each standard survey site was centred on a point (permanently marked), but the actual area surveyed varied between taxa. Standard methodologies were used to sample these sites.

Apart from standard survey sites, site selection and collection methods were left to the discretion of the individual scientists, with guidance from TPWS staff. When selecting sites, they usually prioritised areas that were under-surveyed and had high potential for new or significant discoveries. Other considerations included the suitability of the site based on access, geography, habitat and vegetation type, condition of habitat and the presence of flowering plants.

Figure 2 Malaise trap for capturing insects

Photograph: Simon Grove © Copyright, TMAG.

Site locations were recorded using global positioning systems. Specific details about site selection and collection methods can be found in the scientific reports.

Identification and curation

The specimens taken were identified using the holdings of museums and herbaria and available literature (references are provided in the scientific reports).

Fauna specimens were lodged in the TMAG collections, except Heteroptera specimens, which were deposited in the UNSW entomology collection. Vascular plants were accessioned into the Tasmanian Herbarium and the National Herbarium of Victoria.

Results

Summary of records

Preliminary results indicate that at least 1,301 species were recorded during the Bush Blitz, including approximately 44 putative new species – these await formal identification. One threatened animal species, 2 threatened plant species, 25 introduced or pest animal species and 45 weed species were also recorded.

Table 2 provides a summary of the flora and fauna records made on the expedition.

Table 2 Summary of flora and fauna records

Group	Common name	Total species recorded	Putative new species	Threatened species	Introduced and pest species
Hymenoptera	Ants	8	0	0	0
	Bees	9	0	0	1
	Wasps	14	0	0	0
	Sawflies	1	0	0	0
Lepidoptera	Moths and butterflies	180	4	0	11
Odonata	Damselflies and dragonflies	6	0	0	0
Trichoptera	Caddisflies	23	0	0	0
Plecoptera	Stoneflies	5	0	0	0
Ephemeroptera	Mayflies	7	0	0	0
Neuroptera	Lacewings and allies	5	0	0	0
Diptera	Flies	86	0	0	0
Coleoptera	Beetles	143	0	0	0
Heteroptera	True bugs	44	0	0	1
Blattodea	Cockroaches	3	0	0	0
Dermaptera	Earwigs	2	0	0	0
Mecoptera	Scorpionflies	1	0	0	0
Orthoptera	Grasshoppers and crickets	5	1	0	0
Arachnida	Spiders	117	37	0	0
	Harvestmen	2	1	0	0
	Mites	3	0	0	0
	Scorpions	1	0	0	0
	Pseudoscorpions	3	0	0	0
Crustacea	Crabs, crayfish, seed shrimp, water fleas	10	0	0	1
Mollusca	Slugs and snails	50	0	1	11
	Pea shells/pea clams	3	0	0	0
Annelida	Segmented worms	3	0	0	0
Porifera	Sponges	1	0	0	0

Group	Common name	Total species recorded	Putative new species	Threatened species	Introduced and pest species
Vascular flora	Flowering plants	212	0	2	43
Bryophytes	Mosses	58	0	0	2
	Liverworts	19	0	0	0
Lichens	Lichens	164	1	0	0
Algae	Green algae	12	0	0	0
	Brown algae	36	0	0	0
	Red algae	64	0	0	0
	Blue-green algae	1	0	0	0
Total		**1,301**	**44**	**3**	**70**

Note: Threatened species include those listed as threatened under the Commonwealth EPBC Act or an equivalent listing under the *Threatened Species Protection Act 1995* (Tasmania). Introduced and pest species may include species that are native to Australia.

Species lists

Lists of all species recorded during the expedition (Appendix A) were compiled using data from participating institutions. Additional species will be present in unprocessed material, which includes over 100 moth specimens.

Some malaise traps were left at standard survey sites until the end of the season. King Island residents maintained the traps and returned samples to Simon Grove, who identified additional insect species which are not included in this report.

Some specimens were only able to be identified to family or genus level. This is partly because identification of specimens is very time-consuming, with detailed microscopic examination needed in many cases. Some groups are also 'orphans' – currently no experts are working on them or are available to work on them and the taxonomic literature is out of date. Species-level identification is therefore not possible for these groups.

Unidentified Bush Blitz specimens are held in institutional collections where they are available for future study. Collections hold many such specimens, among them species not yet described (unnamed species) as well as described species that have not yet been identified. A key component of Bush Blitz is the funding of taxonomic work on specimens collected during Bush Blitz expeditions.

Some specimens have been reidentified since the scientific reports were submitted, so the species names in this report may not exactly match the species names in individual reports. For example, the leaf beetle *Arsipoda* sp. TMAG_F143147 has since been identified as an undescribed species of Alticini. Also, true bugs were collected by several institutions and, until all specimens have been formally identified, the number of true bug species recorded is an estimate.

Nomenclature and taxonomic concepts used in this report are consistent with the Australian National Species List, except in a few cases where the following were used: Algaebase, *A census of the vascular plants of Tasmania, including Macquarie Island* (de Salas and Baker 2024) and the World Spider Catalog.

Discussion

Putative new species

Here we use the term 'putative new species' to mean an unnamed species that, as far as can be ascertained, was identified as a species new to science as a direct result of this Bush Blitz. A putative new species is confirmed as new once it is named and its description is published.

Approximately 44 putative new species were discovered during the expedition. Further research may reveal additional species new to science in the material collected. Taxonomic information on many invertebrates is so incomplete that it is often not possible to determine whether an unidentified species is undescribed or a putative new species. The insect report alone lists 50 species that may turn out to be new to science.

Moths

There were 4 moth species collected that are believed to be new to science. No similar specimens could be found in either the Australian National Insect Collection or TMAG collections. Of these, the xyloryctid *Catoryctis* nr *tricrena* sp. TMAG_F149166, shown in Figure 3, is particularly notable, as it is a moderately large, striking moth. There were 3 specimens of this species collected from 2 coastal sites.

Figure 3 Male of putative new species *Catoryctis* nr *tricrena* sp. TMAG_F149166

Photograph: Cathy Byrne © Copyright, TMAG.

Grasshoppers and crickets

A putative new species of cave-cricket was found by Kevin Bonham under a log at Pennys Lagoon. It has been identified by expert Perry Beasley-Hall as a species of *Speleotettix* that is

new to science and probably endemic to King Island. The genus *Speleotettix* does not otherwise occur in Tasmania, though it is present in Victoria and New South Wales. Although a specimen collected in 1998 is likely to be the same taxon, the species was not recognised as new to science until this new specimen was collected on this Bush Blitz expedition.

Spiders and a harvestman

The 264 arachnid specimens collected during the expedition are thought to include 38 putative new species – 37 spiders and one harvestman.

The putative new spiders include 7 comb-footed spiders (Theridiidae), 6 money spiders (Linyphiidae), 10 jumping spiders (Salticidae), 6 wolf spiders (Lycosidae) and one each from the families of crab spiders (Thomisidae), orb-weaving spiders (Araneidae), lace-web spiders (Desidae), white-tailed spiders (Lamponidae) and trapdoor spiders (Pycnothelidae). There are also 3 taxa that have not yet been identified to family.

Figure 4 shows the trapdoor spider (*Stanwellia* sp.) which differs from others found in north-west Tasmania and on Flinders Island.

Figure 4 Putative new species of trapdoor spider *Stanwellia* sp.

Photograph: John Douglas © Copyright, TMAG.

Lichens

One of the lichens collected on this expedition has been recognised as new to science. Currently known as *Micarea* sp. (G.Kantvilas 328/23), a paper describing and naming the species is awaiting publication.

Threatened species

Approximately 92% of Australian plants, 87% of mammals, 93% of reptiles and 45% of birds are endemic (Chapman 2009). Changes to the landscape resulting from human activity have put many of these unique species at risk. Over the last 200 years, many species have gone extinct; many others are considered to be threatened – that is, at risk of extinction.

Fauna

One threatened fauna species was recorded during the expedition – the Southern Hairy Red Snail. It was recorded at 4 sites, including one site with no previous records.

Table 3 Threatened fauna species – land snails

Family	Species	Common name	Status	Comments
Camaenidae	*Chloritobadistes victoriae*	Southern Hairy Red Snail	Vulnerable (TSPA)	Recorded at Pennys Lagoon (2 sites), Counsel Hill CA and Fraser River

The Southern Hairy Red Snail is the only invertebrate known to occur on King Island that is currently listed under the Tasmanian *Threatened Species Protection Act 1995* (TSPA). Until 1996, it was considered extinct in Tasmania. Today it is known from the northeastern coast on King Island and from southern Victoria. While the species is common and secure in southern Victoria, the Tasmanian population is listed as vulnerable because of past habitat loss and large-scale fire events in Lavinia State Reserve.

There are large populations of Southern Hairy Red Snail near Pennys Lagoon and Lake Martha, and generally small and localised populations scattered across the eastern half of the island. There was significant recovery at 2 sites that burnt in 2007 – several live adults were found, showing that the species can repopulate after fires, if some survive the fire and the forest habitat is not permanently destroyed. However, numbers at the Pennys Lagoon fire-affected site were well down on pre-fire levels. At one site, 6 live specimens were found along with 25 dead shells and an estimated 53 eggs. This is the largest number of eggs seen at one site in a survey for this species. A live specimen and eggs are shown in Figure 5. At Fraser River, only 3 dead snails were found and the snails were more difficult to find than in 1996.

Figure 5 Southern Hairy Red Snail – adult and eggs

Photographs: Karen Richards © Copyright, TMAG.

Vascular plants

Table 4 shows the 2 plant species recorded during the expedition that are listed as vulnerable under the TSPA.

Table 4 Threatened flora species

Family	Species	Common name	Status	Comments
Blechnaceae	*Blechnum cartilagineum*	Gristle Fern	Vulnerable (TSPA)	Pegarah SF; occasional
Loganiaceae	*Phyllangium divergens*	Wiry Mitrewort	Vulnerable (TSPA)	Lavinia SR; rare

In addition, 7 of the plants recorded are listed as rare under the TSPA – Blueberry Ash (*Elaeocarpus reticulatus*), Lance Beard-heath (*Leucopogon affinis*, *Styphelia affinis*), Pink Bladderwort (*Utricularia tenella*), Native Mulberry (*Hedycarya angustifolia*), Beauglehole's Trigger-plant (*Stylidium beaugleholei*), Small Triggerplant (*Stylidium despectum*) and Native Pellitory (*Parietaria debilis*).

Figure 6 The rare Blueberry Ash

Photograph: Matthew Baker © Copyright, TMAG.

Introduced and pest species

Conservation reserves help to protect Australia's rare and threatened ecosystems and provide refuge for species at risk. Invasive species can have a major impact on already vulnerable species and ecosystems, as well as economic, environmental and social impacts. The inclusion of introduced and pest species records as part of this report is designed to provide land managers with baseline information to assist with further pest management programs.

Invertebrates

Table 5 lists a bee, 11 moths, a true bug, a crustacean and 11 slugs and snails that were recorded during the expedition and are either pest species or introduced to King Island.

Table 5 Introduced and pest invertebrate species – bees, moths, true bugs, crustaceans, slugs and snails

Group	Family	Species	Common name	Comments
Bees	Apidae	*Apis mellifera*	European Honey Bee	Observed widely; common; domesticated but also widespread as a feral species
Moths	Geometridae	*Chloroclystis approximata*	Cherry Looper	Seal Rocks SR; only one specimen collected; this native insect is not considered to be a major pest; native host is *Acacia*
	Geometridae	*Pasiphilodes testulata*	Pome Looper	Multiple sites; high abundance; this native insect is known to attack apples; although abundant it's unlikely to be a serious problem; native host is *Acacia*
	Noctuidae	*Agrotis infusa*	Bogong Moth	Widespread; moderately high abundance; native pest on a wide variety of agricultural crops; known to infest crops in Tas.
	Noctuidae	*Agrotis munda*	Brown Cutworm, Pink Cutworm	Widespread; moderate abundance; native pest on a variety of crops; known to infest crops in Tas.
	Noctuidae	*Agrotis porphyricollis*	Variable Cutworm	2 specimens both from the Sea Elephant Bootlace ACCP; rare; native pest in Tas. on sugar beet and potato
	Noctuidae	*Helicoverpa punctigera*	Native Budworm	3 specimens from Pennys Lagoon and Seal Rock Reserve; uncommon; native agricultural pest feeding on the foliage of many crops and garden flowers
	Noctuidae	*Neumichtis saliaris*	Green Cutworm	1 specimen from the Gentle Annie CA; rare; in Tas. this native species is a pest on turnips, sugar beet, clover and potato
	Noctuidae	*Persectania ewingii*	Southern Armyworm	Widespread; very high abundance; in Tas. this native species is a pest of crops and pasture; often migrates in large numbers to King Island and mainland Tas. in spring
	Plutellidae	*Plutella xylostella*	Diamondback Moth	6 specimens, 5 from Pegarah SF and 1 from Seal Rocks SR; uncommon; exotic species but well-established in most parts of Australia; a serious pest of brassicas
	Pyralidae	*Etiella behrii*	Lucerne Seed Web Moth	7 specimens collected from 4 different sites; uncommon; a native agricultural pest, feeding inside the developing seedpods of various members of Fabaceae

Group	Family	Species	Common name	Comments
	Tortricidae	*Epiphyas xylodes*	na	1 specimen collected from coastal vegetation; rare; a native moth that is an occasional orchard pest in Tas.
True bugs	Lygaeidae	*Nysius vinitor*	Rutherglen Bug	Native; widespread throughout Australia and very common in Tasmania; causes damage to grain, sunflower and sorghum
Crustaceans	Parasticidae	*Cherax destructor*	Common Yabby	Claw provided by owner of private property at Currie
Slugs and snails	Agriolimacidae	*Deroceras invadens*	Chestnut Slug	Pegarah Reserve (common) and Yellow Rock River (1 only); new record for King Island
	Agriolimacidae	*Deroceras reticulatum*	Grey Field Slug	Lake Flannigan; a few seen
	Arionidae	*Arion intermedius*	Hedgehog Slug	Grassy River; 1 only found
	Helicidae	*Cornu aspersum*	Common Garden Snail	Yellow Rock River, Boggy Creek; common
	Helicidae	*Theba pisana*	White Italian Snail	Many coastal sites; abundant
	Hygromiidae	*Candidula intersecta*	Wrinkled Snail	Big Lake; uncommon; has quarantine pest status in Tas. because it was thought to be absent from the state, though it is actually widespread
	Hygromiidae	*Cochlicella barbara*	Small Pointed Snail	Many coastal sites; very common
	Limacidae	*Ambigolimax valentianus*	Three-band Slug	Only confirmed to species level (by dissection) from Counsel Hill CA and Grassy; fairly common; specimens of *Ambigolimax* not identifiable to species were collected from many sites and are probably also *A. valentianus*
	Limacidae	*Limax maximus*	Leopard Slug	Pegarah Reserve (2 seen) and Fraser River near Naracoopa (common)
	Tateidae	*Potamopyrgus antipodarum*	New Zealand Mudsnail	Several locations; the dominant species in Porky Creek, significant numbers, with few native species in low densities; lowest numbers recorded were at Big Lake, where it occurs with a number of native mollusc species
	Zonitidae	*Oxychilus alliarius*	Garlic Snail	Pegarah Reserve; 1 found

na Not available.

The 11 moth species are considered pests because of the damage their larvae can do to crops. Only one of them is not a native species – Diamondback Moth (*Plutella xylostella*) is now naturalised and widespread in Australia. All of the pest moths occurred in low numbers except for Southern Armyworm (*Persectania ewingii*), which was extremely abundant and widespread. Southern Armyworm is found everywhere in Tasmania and its abundance came as no surprise. Although widespread during the expedition, and considered an agricultural pest in some parts of Tasmania, Bogong Moth (*Agrotis infusa*) populations have dramatically declined in recent years

and the species is listed as Endangered on the International Union for Conservation of Nature (IUCN) Red List of Threatened Species. The geometrid *Pasiphilodes testulata* was observed in large numbers but was less widespread. The *Helicoverpa*, *Agrotis* and *Persectania* species are known spring migrants to Tasmania, including King Island. Fall Armyworm (*Spodoptera frugiperda*) was not detected – this highly damaging and invasive agricultural pest invaded northern Australia in 2020 and has been recorded as far south as Victoria.

There were 2 exotic freshwater species recorded. The New Zealand freshwater snail *Potamopyrgus antipodarum* has successfully colonised waterways around the world. Outside New Zealand, the populations are typically purely female, individuals reproducing clonally, each capable of producing many thousands of live offspring in a lifetime. Difficult to control, given its method of reproduction, fertility, and tolerance to drying out, this species is often found in abundance. It uses a variety of microhabitats and outcompetes the native freshwater snail fauna, many of which are habitat selective.

The other exotic freshwater species recorded was the Common Yabby (*Cherax destructor*). This freshwater crayfish is native to eastern mainland Australia, where it is currently listed as Vulnerable on the IUCN Red List. Its size and relative ease of capture make it a good food source so they are often taken to new locations. The species is not native to Tasmania but now inhabits many locations across both mainland Tasmania and King Island. It aggressively colonises new locations and outcompetes the native crayfish fauna for available habitat.

Exotic snails and slugs are common on King Island because of the extent of human impact on the environment. In addition to the freshwater snail, 5 exotic land snails and 5 exotic slugs were recorded. Chestnut Slug (*Deroceras invadens*) was a new record for King Island, though it has probably been present and common but overlooked for some time.

Flora

The botanists recorded 43 vascular plant and 2 moss species not native to King Island. Table 6 lists the 3 plants that are declared weeds under the Tasmanian *Weed Management Act 1999*.

Table 6 Gazetted weeds

Family	Species	Common name	Comments
Asparagaceae	*Asparagus scandens*	Asparagus Fern	Kentford Forest NR; common and abundant in *Melaleuca* forest; environmental weed
Asteraceae	*Carduus pycnocephalus*	Slender Thistle	Stokes Point, Stokes Point CA; occasional; weed of agriculture and waste places
Fabaceae	*Ulex europaeus*	Gorse	Kentford Forest NR; occasional and localised; weed of agriculture and the environment

The remaining weeds recorded during the expedition are listed in Table 7.

Table 7 Non-gazetted weeds

Family	Species	Common name	Comments
Amaryllidaceae	*Narcissus tazetta*	Jonquil	Colliers Swamp CA; occasional; environmental weed

Family	Species	Common name	Comments
Araceae	*Arum italicum*	Italian Lily, Cuckoo Pint, Aaron's Rod	Kentford Forest CA; localised and abundant as a naturalised species at this site; environmental weed
Araceae	*Zantedeschia aethiopica*	Arum Lily	Colliers Swamp CA; localised; environmental weed
Asteraceae	*Hypochaeris radicata*	Catsear, Flatweed	Nine Mile Beach, Lavinia SR, common; weed of agriculture and waste places
Asteraceae	*Leontodon saxatilis*	Hairy Hawkbit, Lesser Hawkbit	Colliers Swamp CA; common; weed of agriculture and waste places
Asteraceae	*Sonchus asper*	Prickly Sowthistle	Kentford Forest NR; common; weed of agriculture and waste places
Asteraceae	*Taraxacum officinale*	Dandelion	Nook Swamps, Lavinia SR; common; weed of agriculture and waste places
Boraginaceae	*Myosotis sylvatica*	Woodland Forget-me-not	Pegarah Reserve; common and abundant; weed of agriculture and waste places
Brachytheciaceae	*Eurhynchium praelongum*	na	Kentford Forest CA; a moss
Brachytheciaceae	*Pseudoscleropodium purum*	na	Pegarah Reserve; a moss
Brassicaceae	*Cakile maritima* subsp. *maritima*	European Sea Rocket	Nine Mile Beach, Lavinia SR; common beach weed on King Island; weed of coastal sand
Brassicaceae	*Cardamine flexuosa*	Wood Bittercress	Kentford Forest CA; uncommon; weed of agriculture and waste places
Brassicaceae	*Cardamine hirsuta*	Hairy Bittercress, Common Bittercress	Kentford Forest CA; uncommon; weed of agriculture and waste places
Brassicaceae	*Erophila verna* subsp. *praecox*	Whitlow Grass	Calcified Forest, Seal Rocks SR; occasional; weed of agriculture and waste places
Caprifoliaceae	*Lonicera japonica*	Japanese Honeysuckle	Pegarah Reserve; localised; environmental weed
Caprifoliaceae	*Lonicera periclymenum*	European Honeysuckle	Pegarah Reserve; localised; environmental weed
Caryophyllaceae	*Cerastium glomeratum*	na	Sea Elephant River, Lavinia SR; occasional; weed of agriculture and waste places
Caryophyllaceae	*Cerastium* sp.	na	SSS1; occasional
Caryophyllaceae	*Cerastium vulgare*	na	Kentford Forest CA; occasional; weed of agriculture and waste places
Caryophyllaceae	*Minuartia mediterranea*	na	Colliers Swamp CA; common; weed of agriculture and waste places
Caryophyllaceae	*Sagina maritima*	Sea Pearlwort	Seal Rocks SR; uncommon; weed of agriculture and waste places
Euphorbiaceae	*Euphorbia paralias*	Sea Spurge	Nine Mile Beach, Lavinia SR; common beach weed on King Island; weed of coastal sand
Euphorbiaceae	*Euphorbia peplus*	Petty Spurge, Radium Plant	Pegarah Reserve; occasional; weed of agriculture and waste places
Gentianaceae	*Centaurium erythraea*	Common Centaury	Nine Mile Beach, Lavinia SR; occasional; weed of agriculture and waste places

Family	Species	Common name	Comments
Geraniaceae	*Geranium molle*	Cranesbill Geranium	Colliers Swamp CA; uncommon; weed of agriculture and waste places
Iridaceae	*Sisyrinchium micranthum*	Blue Pigroot, Striped Rush-leaf	Nook Swamps Track; localised; weed of agriculture and waste places
Juncaceae	*Juncus capitatus*	Dwarf Rush	Nine Mile Beach, Lavinia SR; uncommon; weed of agriculture and waste places
Myrsinaceae	*Lysimachia arvensis*	Scarlet Pimpernel, Blue Pimpernel	Lavinia SR; common; weed of agriculture and waste places
Plantaginaceae	*Plantago coronopus* subsp. *coronopus*	Buckhorn Plantain	Stokes Point CA; common on coastal soil; weed of agriculture and waste places
Poaceae	*Aira elegantissima*	Delicate Hairgrass	Colliers Swamp CA; common but inconspicuous due to its very small height; weed of agriculture and waste places
Poaceae	*Aira* sp.	na	Common at SSS3
Poaceae	*Briza minor*	Shivery Grass, Lesser Quaking Grass	Nine Mile Beach, Lavinia SR; occasional; weed of agriculture and waste places
Poaceae	*Bromus diandrus*	Great Brome	Colliers Beach, Red Hut Point CA; occasional; weed of agriculture and waste places
Poaceae	*Festuca arundinacea*	Tall Fescue	Colliers Swamp CA; abundant; weed of agriculture and waste places
Poaceae	*Holcus lanatus*	Yorkshire Fog, Common Velvet Grass	Pegarah Reserve; common; weed of agriculture and waste places
Poaceae	*Parapholis incurva*	Curly Rye Grass, Coast Barb Grass	Cataraqui Point CA; uncommon; weed of agriculture and waste places
Poaceae	*Poa compressa*	Flattened Meadow Grass	Red Hut Point CA; localised; weed of agriculture and waste places
Poaceae	*Vulpia fasciculata*	Sand Fescue, Silver Grass	Nine Mile Beach, Lavinia SR; occasional; weed of agriculture and waste places
Polygonaceae	*Muehlenbeckia complexa*	Maidenhair Creeper, Wire Vine	Naracoopa Esplanade; localised; environmental weed
Rosaceae	*Rubus* sp.	na	Pegarah Reserve; localised; weed of agriculture and waste places
Rubiaceae	*Coprosma repens*	Mirror Bush	Kentford Forest NR, Kentford Forest CA and Cataraqui Point CA; a shrub native to New Zealand that has become naturalised in coastal areas of Australia, particularly Vic., NSW, SA, WA and Tasmania
Solanaceae	*Solanum pseudocapsicum*	Madeira Winter Cherry, Jerusalem Cherry	Kentford Forest CA; localised; environmental weed

na Not available.

Nearly every reserve visited had serious weed infestations. This was not surprising, given the island's history of agriculture and widescale land clearing. Large tracts of the island consist of improved pasture and, consequently, contain many species of agricultural weeds. Most of these taxa are annual and perennial herbs and grasses.

A few extremely aggressive weeds were encountered – some of these formed nearly 100% coverage in some areas. The standout of these was Asparagus Fern (*Asparagus scandens*), which completely smothered large sections of the understorey vegetation at Kentford Forest NR (Figure 7). Mirror Bush (*Coprosma repens*) was widespread in most areas of the island and seemed to be successfully competing for canopy space with the native Swamp Paperbark (*Melaleuca ericifolia*). Madeira Winter Cherry (*Solanum pseudocapsicum*) was a dominant component of the floodplain vegetation of the Seal River at Kentford Forest CA. This species is bird dispersed and is likely to spread from this infestation into similar nearby habitats. As in much of coastal Tasmania, Sea Spurge (*Euphorbia paralias*) was extremely common along the top of the beaches and on frontal dunes.

Figure 7 Declared weed Asparagus Fern (*Asparagus scandens*)

Photograph: Matthew Baker © Copyright, TMAG.

Range extensions

The known ranges of more than 350 species were extended. There were many new records for King Island and a few new records for Tasmania and Australia. Details of range extensions can be found in the scientific reports and only a few of the more significant ones are mentioned in this summary.

Fauna

A high proportion of the invertebrate species collected and identified are considered new records for King Island, reflecting the lack of previous survey effort. At the time of reporting, it was also thought the picture-winged fly *Cooronga mcalpinei* and the colletid bee genus

Chrysocolletes did not occur in other parts of Tasmania. However, both have since been found to exist on the Tasmanian mainland.

Of the 43 aquatic invertebrates considered range extensions, most represent new records for King Island or Tasmania. Further range extensions are likely once the remaining samples are processed and identified. Some of the new records for King Island represent range extensions for widespread Tamanian or mainland species, while others infill knowledge gaps of species present on both mainlands, but not previously recorded on King Island.

Moths in many parts of Tasmania are poorly surveyed, so it is not surprising that the majority of species recorded, and 9 of the families, are new records for King Island. There were also 2 new records for Tasmania – concealer moths *Arachnographa micrastrella* and *Philobota erebodes* – and 21 large range extensions for rare species, with several only known from historical records.

The range extensions reported for spiders included a 875 km range extension for sac spider *Clubiona australiaca*, previously only known from New South Wales, and a 295 km range extension for wolf spider *Artoriopsis murphyi*, previously only found on Deal Island in Bass Strait.

Flora

New records for King Island included 64 seaweeds, 21 vascular plants, 16 mosses and a lichen. There were also several new records for Tasmania and 2 of the lichens collected have recently been identified as *Amandinea nitrophila* and *Porina emiscens*, which are new records for Australia.

Many King Island seaweed species were shown to have a range that includes the southern coasts of mainland Australia and/or mainland Tasmania. As a result, most of the new records represent infill of known distributions rather than range extensions. However, large range extensions were recorded for some species. For example, 4 red algae species were recorded more than 650 km from the nearest records, including *Trematocarpus affinis*, which is shown in Figure 8.

Figure 8 *Trematocarpus affinis*, a 651 km range extension from South Australia

Photograph: © Copyright, TMAG.

The record of the ground-fern *Dennstaedtia davallioides* at Kentford Forest CA represents a new record of this species for Tasmania. The species is widespread on the east coast of mainland Australia, where it grows on the margins of rainforest and in stream bank habitats and humid gullies in open forest. The closest known populations occur approximately 140 km away at Cape Otway, Victoria.

Other significant findings

The expedition provided an opportunity for scientists to collect other data and materials important for future research.

Moths

Despite weather conditions that usually impact the nocturnal activity of moths, the expedition significantly increased knowledge of moth biodiversity on King Island. As moths are highly seasonal, there is no doubt that further surveys will discover more unrecorded biodiversity, including rare species and some new to science.

The most speciose family collected was the loopers (Geometridae), which is no surprise as this family is recognised as one of the most diverse families of macro-moths in Tasmania. The micromoth family Oecophoridae ranked second highest at 43 taxa. Although this family is the most diverse in Australia, it is poorly known, which is why a number of species have only been identified to subfamily. The majority of specimens still to be identified are also from this family.

The highest moth diversity was found in coastal heathland and coastal vegetation complexes. Sea Elephant Bootlace ACCP was a particularly significant site – 54 species were recorded, including 5 rare species, and one of the putative new species (*Opostega* sp.) was only collected from this site. The rare species included 2 species that have not been collected for 35 and 60 years. This highlights the importance of these covenanted reserves for the conservation of biodiversity on the island.

Freshwater invertebrates

The expedition has contributed greatly to knowledge of the freshwater invertebrates of King Island, increasing the lists of species, genera and families known from the island. The additional species recorded include widespread, as well as more localised Tasmanian species, and some not otherwise known from Tasmania but occurring on the Australian mainland.

Spongeflies are unusual lacewings that have aquatic larvae associated with freshwater sponges. Identification of larvae collected suggests at least 2 species of spongefly were recorded. A specimen of *Sisyra nigrescens* (originally identified as *S. rufistigma*) was found on the southern shore of Lake Flannigan. This species was described in 2014 and is only known from Tasmania. Another species of spongefly was found at Sea Elephant River where freshwater sponge was found on the surfaces of submerged rocks (Figure 9). These appear to be the first records of freshwater sponges and spongefly from King Island. Further investigation of both the sponges and spongeflies is needed.

Figure 9 Freshwater sponge found at Sea Elephant River

Photograph: Karen Richards, © Copyright, TMAG.

The expedition revealed that the freshwater molluscs of King Island are more diverse than previously known. The diversity appears to be a combination of mainland and northwest Tasmania species, but also includes some un-named species that may be endemic to King Island.

Streams within Pegarah State Forest were the least diverse of those sampled, containing a single species of bivalve, while Boggy Creek had up to 4 *Austropyrgus* species and Lake Flannigan had several other *Austropyrgus* species. The *Austropyrgus* collected still need to be identified to species but will certainly include more than the 2 species previously recorded from King Island. Once the specimens are more closely examined, it is likely that several putative new species will be identified.

Despite extensive landscape-level vegetation clearing, the streams and wetlands support diverse freshwater communities, the composition of invertebrates differing with site and geographic location. Catchments in the southeast retain patches of intact riparian vegetation, contributing substantially to in-stream aquatic habitat and supporting more diversity in caddisfly, mayfly and fly taxa. Of the wetlands surveyed, Lake Flannigan hosts the greatest array of mollusc fauna, some of which may be new to science. However, of all the sites visited, Boggy Creek and its nearby tufa, with their mineral-rich waters, present a unique environment and are worthy of further investigation.

True bugs

The low diversity of true bugs recorded on the expedition was likely a result of the weather and short sampling period but may also reflect the extent of historical land clearance on King Island.

A highlight was the collection of *Setocoris* mspBBKI_001, shown in Figure 10 – the first record of this undescribed sundew bug from King Island. Sundews are carnivorous plants that trap invertebrates using sticky hairs on their leaves. Sundew bugs are kleptoparasites – they live on sundews and feed by stealing the plant's prey. They have a large protective covering on their claws and try to avoid walking on the sticky hairs so they are not captured themselves.

Figure 10 Sundew bug *Setocoris* mspBBKI_001 on a sundew plant

Photograph: © Copyright, Earthwatch.

Other insects and spiders

One interesting find was the small weevil *Phloeoglymma mixtum*, which was described from a King Island specimen in 1908. It appears not to have been recorded on the island between then and this 2023 expedition. There are 6 Victorian records in the ALA, all dating from the 1920s or 1930s.

The expedition added many other insect species, genera and families to the list of taxa known to occur on King Island. Some of the unidentified taxa may represent undescribed species that are unique to King Island. The identified taxa include many widespread Tasmanian species, but also some with more restricted distributions within the state, and a couple of taxa that are only known from the Australian mainland. This new information will help scientists see patterns that explain the distribution of species – for example, the places where a species exists may have similar climates or vegetation types.

Similarly, the expedition extended our knowledge of the spiders living on King Island and their relationship with the spiders found on the Tasmanian mainland, other islands and the Australian mainland.

This increase in knowledge was achieved despite the poor weather and strongly suggests that further surveys in better conditions would fill in many more knowledge gaps.

Land snails

Nearly all of the native land snails known to exist on King Island were rerecorded on this survey. Two of the species not found had been previously recorded at a location that was not visited during this expedition. A third has been recorded from several sites on the island, but is usually found in intact scrub along rocky shorelines and the only rocky shoreline site sampled (Boggy Creek) was degraded by cattle grazing.

Leaf litter sampling from microhabitats in trees at Yarra Creek was highly successful. A single small bag of leaf litter contained many specimens of 8 different species. These included 18 live specimens of *Scelidoropa* sp. “Ridges Road”, a species that is usually found in only small numbers by hand collecting.

Flora

Some of the lichen specimens collected on this expedition were used to describe 2 species. Although *Coenogonium flavoinspersum* and *Inoderma applanatum* had been collected before, the specimens from this expedition, along with Bush Blitz research funding, enabled these species to be described.

Overgrazing by native marsupials appeared to be having an impact on herbaceous flowering plants. Some orchid populations, such as Pink Fairy Orchid (*Caladenia latifolia*) at Nine Mile Beach, had few or no flowering individuals that had not been grazed down to the ground.

The mosaic of low heathland, scrub and forest at Counsel Hill had a range of drainages, aspects, and time since the last fire. This site was a vascular plant biodiversity hotspot and 2 of the 9 conservation-listed plants recorded were found there.

The 156 specimens of seaweed collected are valuable additions to the Tasmanian Herbarium collection.

Appendix A: Species lists

Table A1 List of fauna species recorded

Group	Family	Species	Common name
Ants	Formicidae	*Amblyopone australis*	na
	Formicidae	*Anonychomyrma nitidiceps*	na
	Formicidae	*Hypoponera scitula*	na
	Formicidae	*Iridomyrmex unplaced*	na
	Formicidae	*Myrmecia forficata*	na
	Formicidae	*Myrmecia pilosula*	na
	Formicidae	*Pheidole tasmaniensis*	na
	Formicidae	*Prolasius abruptus*	na
Bees	Apidae	*Apis mellifera* [b]	European Honey Bee
	Colletidae	*Chrysocolletes* unplaced	na
	Colletidae	*Euhesma* unplaced	na
	Colletidae	*Euryglossula* unplaced	na
	Colletidae	*Hylaeus* unplaced	na
	Colletidae	*Leioproctus* unplaced	na
	Halictidae	*Homalictus* unplaced	na
	Halictidae	*Lasioglossum* unplaced	na
	Halictidae	*Lipotriches* unplaced	na
Wasps	Coelocybidae	*Coelocyba* unplaced	na
	Crabronidae	*Podagritus* unplaced	na
	Crabronidae	*Rhopalum* unplaced	na
	Eulophidae	Eulophidae unplaced	na
	Evaniidae	*Szepligetiella* unplaced	na
	Gasteruptiidae	*Gasteruption* unplaced	na
	Mutillidae	*Ephutomorpha lateralis*	na
	Mutillidae	*Ephutomorpha soluta*	na
	Mutillidae	*Ephutomorpha* sp. TMAG_F105605	na
	Pompilidae	*Sphictostethus connectens*	na
	Pteromalidae	Pteromalidae unplaced	na
	Tiphiidae	*Catocheilus apterus*	na
	Tiphiidae	*Diamma bicolor*	na
	Tiphiidae	*Thynnoides mesopleuralis*	na
Sawflies	Tenthredinidae	Tenthredinidae unplaced	na
Moths and butterflies	[ORDER] Lepidoptera	Lepidoptera sp.	na
	Anthelidae	*Anthela ocellata*	Eyespot Anthelid Moth
	Anthelidae	*Anthela repleta*	na

Group	Family	Species	Common name
	Anthelidae	*Munychryia senicula*	Grey Anthelid
	Crambidae	Crambinae sp. TMAG_F149362	na
	Crambidae	*Eudonia cleodoralis*	na
	Crambidae	*Musotima nitidalis*	Grass Moth, Golden-brown Fern Moth
	Crambidae	*Ptochostola microphaeellus*	na
	Crambidae	*Scoparia axiolecta*	na
	Crambidae	*Scoparia ochrophara*	na
	Depressariidae	*Thudaca crypsidesma*	na
	Eperminiidae	*Gnathifera aphronesa*	na
	Erebidae	*Acyphas semiochrea*	Omnivorous Tussock Moth
	Erebidae	*Ardices glatignyi*	Black and White Tiger Moth
	Erebidae	*Artigisa lignicolaria*	Wood-grain Artigisa
	Erebidae	*Crioa hades*	na
	Erebidae	*Damias procrena*	na
	Erebidae	*Euproctis* sp. TMAG_F141269	na
	Erebidae	*Halone sejuncta*	na
	Erebidae	nr *Philenora* sp. TMAG. F102002	na
	Erebidae	*Pantydia diemeni*	na
	Erebidae	*Philenora aspectalella*	na
	Erebidae	*Praxis edwardsii*	Edwards' Praxis
	Erebidae	*Praxis porphyretica*	na
	Erebidae	*Trigonistis demonias*	na
	Gelechiidae	*Aristotelia furtiva*	na
	Geometridae	*Acodia pauper*	na
	Geometridae	*Adeixis inostentata*	na
	Geometridae	*Anachloris subochraria*	Golden Grass Carpet
	Geometridae	*Anachloris uncinata*	Hook-winged Carpet
	Geometridae	*Apodasmia rufonigraria*	na
	Geometridae	*Bradyctena trychnoptila*	na
	Geometridae	*Capusa senilis*	Black-banded Wedge-moth
	Geometridae	*Chlenias banksiaria*	na
	Geometridae	*Chloroclystis approximata* [b]	Cherry Looper
	Geometridae	*Chloroclystis filata*	Australian Pug Moth, Filata Moth
	Geometridae	*Chlorocoma* sp. TMAG_F147053	na
	Geometridae	*Chlorocoma* sp. TMAG_F147061	na
	Geometridae	*Chlorocoma* sp. TMAG_F147066	na

Group	Family	Species	Common name
	Geometridae	*Chrysolarentia insulsata*	na
	Geometridae	*Chrysolarentia leucophanes*	na
	Geometridae	*Chrysolarentia mecynata*	na
	Geometridae	*Chrysolarentia trygodes*	na
	Geometridae	*Cymatophora* ms. ANIC sp. 01	na
	Geometridae	*Dichromodes ainaria*	Common Heath Moth
	Geometridae	*Dichromodes confluaria*	na
	Geometridae	*Dichromodes euscia*	Omega Heath Moth
	Geometridae	*Dichromodes stilbiata*	White-barred Heath Moth
	Geometridae	*Didymoctenia exsuperata*	Thick-lined Bark Moth
	Geometridae	*Ectropis calida*	Tawny Bark Moth
	Geometridae	*Ectropis fractaria*	Ringed Bark Moth
	Geometridae	*Epyaxa subidaria*	Subidaria Moth
	Geometridae	*Euloxia leucochorda*	na
	Geometridae	*Euphronarcha luxaria*	na
	Geometridae	Hydriomenini unplaced *severata*	na
	Geometridae	*Idiodes apicata*	Bracken Moth
	Geometridae	*Idiodes siculoides*	Straight-winged Bracken Moth
	Geometridae	*Melitulias graphicata*	na
	Geometridae	*Microdes leptobrya*	na
	Geometridae	*Microdes oriochares*	na
	Geometridae	*Microdes villosata*	na
	Geometridae	*Nearcha curtaria*	na
	Geometridae	*Neoteristis paraphanes*	na
	Geometridae	*Nisista* sp. 4 Hewish et al. (2014)	na
	Geometridae	*Pasiphilodes testulata* [b]	Pome Looper
	Geometridae	*Phrissogonus laticostata*	Apple Looper Moth
	Geometridae	*Poecilasthena anthodes*	na
	Geometridae	*Poecilasthena fragilis*	na
	Geometridae	*Poecilasthena pulchraria*	Australian Cranberry Moth
	Geometridae	*Poecilasthena urarcha*	na
	Geometridae	*Psilosticha attacta*	na
	Geometridae	*Psilosticha mactaria*	na
	Geometridae	*Rhynchopsota delogramma*	na
	Geometridae	*Scopula perlata*	Cream Wave
	Geometridae	*Syneora cheleuta*	na
	Geometridae	*Syneora mundifera*	na
	Geometridae	*Syneora silicaria*	na

Group	Family	Species	Common name
	Geometridae	*Thalaina selenaea*	Oranged-rimmed Satin Moth
	Gracillariidae	*Conopomorpha heliopla*	na
	Gracillariidae	*Polysoma eumetalla*	na
	Lasiocampidae	*Aglaosoma periblepta*	na
	Lasiocampidae	*Pararguda nasuta*	Wattle Snout Moth
	Noctuidae	*Agrotis infusa* [b]	Bogong Moth
	Noctuidae	*Agrotis munda* [b]	Brown Cutworm, Pink Cutworm
	Noctuidae	*Agrotis porphyricollis* [b]	Variable Cutworm
	Noctuidae	*Agrotis* TFIC sp. 01	na
	Noctuidae	*Bathytricha* sp. TMAG_107988	na
	Noctuidae	*Bathytricha truncata*	Maned Moth, Sugarcane Stem Borer
	Noctuidae	*Cosmodes elegans*	Green Blotched Moth
	Noctuidae	*Diarsia intermixta*	Chevron Cutworm Moth, Orange Peel Moth
	Noctuidae	*Ectopatria* sp. TMAG_F140283	na
	Noctuidae	*Ectopatria* sp. TMAG_F141291	na
	Noctuidae	*Ectopatria* sp. TMAG_F146948	na
	Noctuidae	Hadenini unplaced species inquirenda *eugrapha*	na
	Noctuidae	Hadenini unplaced species inquirenda *ligniplena*	na
	Noctuidae	Hadenini unplaced species inquirenda sp. TMAG_F141348	na
	Noctuidae	Hadenini unplaced species inquirenda sp. TMAG_F146962	na
	Noctuidae	Hadenini unplaced species inquirenda sp. TMAG_F147039	na
	Noctuidae	*Helicoverpa punctigera* [b]	Native Budworm
	Noctuidae	*Leucania exarans*	na
	Noctuidae	*Neumichtis saliaris* [b]	Green Cutworm
	Noctuidae	*Persectania ewingii* [b]	Southern Armyworm
	Noctuidae	*Proteuxoa* sp. TMAG_F141364	na
	Noctuidae	*Thoracolopha* sp. nr *flexirena* TMAG_F058033	na
	Noctuidae	*Thoracolopha* sp. TMAG_F146917	na
	Nolidae	*Nola cycota*	Cycota Tuft-moth
	Notodontidae	*Gallaba eugraphes*	na
	Notodontidae	*Scythrophanes stenoptera*	na
	Nymphalidae	*Argynnina hobartia hobartia*	Hobart Brown
	Oecophoridae	*Arachnographa mesophthora*	na
	Oecophoridae	*Arachnographa micrastrella*	na

Group	Family	Species	Common name
	Oecophoridae	*Atheropla psammodes*	na
	Oecophoridae	*Chezala* nr *cataxera* sp. TMAG_F149171	na
	Oecophoridae	*Eochrois callianassa*	na
	Oecophoridae	*Euchaetis rhizobola*	na
	Oecophoridae	*Eulechria* sp. TMAG_F149161	na
	Oecophoridae	*Eulechria* sp. TMAG_F149164	na
	Oecophoridae	*Eulechria xeropterella*	na
	Oecophoridae	*Euthictis marmaraspis*	na
	Oecophoridae	*Hadrognatha* sp. TMAG_149173	na
	Oecophoridae	*Haplodyta thoracta*	na
	Oecophoridae	*Hoplostega ochroma*	na
	Oecophoridae	*Lepidotarsa aclea*	na
	Oecophoridae	*Locheutis desmophora*	na
	Oecophoridae	Oecophorinae sp. TMAG_F149346	na
	Oecophoridae	Oecophorinae sp. TMAG_F149365	na
	Oecophoridae	Oecophorinae sp. TMAG_F149367	na
	Oecophoridae	Oecophorinae sp. TMAG_F149368	na
	Oecophoridae	Oecophorinae sp. TMAG_F149369	na
	Oecophoridae	Oecophorinae sp. TMAG_F149370	na
	Oecophoridae	Oecophorinae sp. TMAG_F149371	na
	Oecophoridae	Oecophorinae sp. TMAG_F149372	na
	Oecophoridae	Oecophorinae sp. TMAG_F149373	na
	Oecophoridae	Oecophorinae sp. TMAG_F149374	na
	Oecophoridae	Oecophorinae sp. TMAG_F149375	na
	Oecophoridae	Oecophorinae sp. TMAG_F149376	na
	Oecophoridae	Oecophorinae sp. TMAG_F149377	na
	Oecophoridae	Oecophorinae sp. TMAG_F149378	na
	Oecophoridae	Oecophorinae sp. TMAG_F149379	na
	Oecophoridae	Oecophorinae sp.	na

Group	Family	Species	Common name
		TMAG_F149381	
	Oecophoridae	Oecophorinae sp. TMAG_F149382	na
	Oecophoridae	Oecophorinae sp. TMAG_F149384	na
	Oecophoridae	*Palimmeces hemiphanes*	na
	Oecophoridae	*Pellopsis aerodes*	na
	Oecophoridae	*Philobota erebodes*	na
	Oecophoridae	*Philobota moestella*	na
	Oecophoridae	*Philobota* sp. TMAG_F149358	na
	Oecophoridae	*Phloeocetis* sp. TMAG_F149168	na
	Oecophoridae	*Thema* sp. TMAG_F149163	na
	Oecophoridae	*Wingia hesperidella*	na
	Opostegidae	*Opostega* sp. TMAG_F149210 [a]	na
	Plutellidae	*Plutella xylostella* [b]	Diamondback Moth
	Psychidae	*Lepidoscia* sp. TMAG_F149348	na
	Psychidae	*Lepidoscia* sp. TMAG_F149349	na
	Pterophoridae	*Stenoptilia zophodactylus*	Dowdy Plum Moth
	Pyralidae	*Endotricha ignealis*	na
	Pyralidae	*Etiella behrii* [b]	Lucerne Seed Web Moth
	Roeslerstammiidae	*Thereutis tanyceros*	na
	Saturniidae	*Opodiphthera helena*	Helena Gum Moth
	Stathmopodidae	*Stathmopoda melanochroa*	na
	Tineidae	*Monopis ethelella*	Dead Sheep's Moth
	Tineidae	*Timaea bivittatella*	na
	Tineidae	*Tinea corynephora*	na
	Torticidae	*Anisogona mediana*	na
	Torticidae	*Arotrophora anemarcha*	na
	Torticidae	*Arotrophora arcuatalis*	Banksia Boring Moth
	Tortricidae	*Epiphyas epichorda*	na
	Tortricidae	*Epiphyas eucyrta*	na
	Tortricidae	*Epiphyas* nr *balioptera* sp. TMAG_F149118	na
	Tortricidae	*Epiphyas* nr *hyperacria* sp. TMAG_F149117 [a]	na
	Tortricidae	*Epiphyas xylodes* [b]	na
	Tortricidae	*Hermenias* sp. TMAG_F147416	na
	Tortricidae	*Holocola triangulana*	na
	Tortricidae	*Meritastis* sp. TMAG_F147417 [a]	na
	Tortricidae	Olethreutinae sp. TMAG_F149363	na
	Tortricidae	*Tarachota dryina*	na

Group	Family	Species	Common name
	Xyloryctidae	*Bida radiosella*	na
	Xyloryctidae	*Catoryctis* nr *tricrena* sp. TMAG_F149166 [a]	na
	Xyloryctidae	*Xylorycta micracma*	na
	Xyloryctidae	*Xylorycta parabolella*	na
Damselflies and dragonflies	Aeshnidae	*Anax papuensis*	Australian Emperor Dragonfly
	Coenagrionidae	*Ischnura aurora*	Aurora Bluetail
	Coenagrionidae	*Ischnura heterosticta*	Australian Bluetail
	Corduliidae	*Hemicordulia tau*	Tau Emerald
	Lestidae	*Austrolestes analis*	Slender Ringtail
	Lestidae	*Austrolestes annulosus*	Blue Ringtail
Caddisflies	Atriplectididae	*Atriplectides dubius*	na
	Calocidae	Calocidae unplaced	na
	Conoesucidae	Conoesucidae unplaced	na
	Conoesucidae	*Lingora aurata*	na
	Helicophidae	*Alloecella grisea*	na
	Hydrobiosidae	*Taschorema evansi*	na
	Hydrobiosidae	*Taschorema* unplaced	na
	Hydroptilidae	*Hellyethira simplex*	na
	Hydroptilidae	*Hellyethira* unplaced	na
	Leptoceridae	*Lectrides varians*	na
	Leptoceridae	*Notalina fulva/bifaria* complex	na
	Leptoceridae	*Notalina* sp. AV 2	na
	Leptoceridae	*Notoperata sparsa*	na
	Leptoceridae	*Oecetis* unplaced	na
	Leptoceridae	*Symphitoneuria* unplaced	na
	Leptoceridae	*Triplectides australis*	na
	Leptoceridae	*Triplectides ciuskus*	na
	Leptoceridae	*Triplectides truncatus*	na
	Leptoceridae	*Triplectides* unplaced	na
	Leptoceridae	*Triplectidina nigricornis*	na
	Plectrotarsidae	*Plectrotarsus tasmanicus*	na
	Tasimiidae	*Tasimia* sp. AV1 group	na
	Tasimiidae	*Tasimia* unplaced	na
Stoneflies	Gripopterygidae	*Dinotoperla serricauda*	na
	Gripopterygidae	*Illiesoperla mayi*	na
	Gripopterygidae	*Riekoperla triloba triloba*	na
	Notonemouridae	Notonemouridae unplaced	na
	Notonemouridae	*Tasmanocerca bifasciata*	na
Mayflies	Caenidae	*Tasmanocoenis tillyardi*	na

Group	Family	Species	Common name
	Leptophlebiidae	*Austrophlebioides* unplaced	na
	Leptophlebiidae	*Koorrnonga* sp. AV1/sp. 3	na
	Leptophlebiidae	*Nousia* sp. AV6	na
	Leptophlebiidae	*Nousia* sp. AV7	na
	Leptophlebiidae	*Nousia* sp.	na
	Leptophlebiidae	*Ulmerophlebia* sp. AV2	na
Lacewings and allies	Chrysopidae	*Apertochrysa edwardsi*	na
	Chrysopidae	*Mallada signatus*	na
	Hemerobiidae	*Micromus tasmaniae*	na
	Sisyridae	*Sisyra nigrescens*	na
	Sisyridae	*Sisyra* unplaced	na
Flies	Anisopodidae	*Sylvicola* unplaced	na
	Asilidae	*Cerdistus* sp. TMAG_F128822	na
	Austroleptidae	*Austroleptis rhyphoides*	na
	Bibionidae	*Dilophus* unplaced	na
	Bombyliidae	*Aleucosia calophthalma*	na
	Bombyliidae	*Meomyia fasciculata*	na
	Brachystomatidae	*Ceratomerus albistylus*	na
	Calliphoridae	*Calliphora hilli*	na
	Calliphoridae	*Calliphora nigrithorax*	na
	Ceratopogonidae	Ceratopogonidae unplaced	na
	Ceratopogonidae	Dasyheleinae unplaced	na
	Ceratopogonidae	Forcipomyiinae unplaced	na
	Chironomidae	Chironomidae sp.	na
	Chironomidae	Chironominae sp.	na
	Chironomidae	Chironominae unplaced	na
	Chironomidae	Tanypodinae sp.	na
	Chloropidae	*Apotropina ornatipennis*	na
	Chloropidae	*Batrachomyia* sp. TMAG_F97691	na
	Coelopidae	*This canus*	na
	Dolichopodidae	*Chrysotimus* unplaced	na
	Dolichopodidae	*Heteropsilopus cingulipes*	na
	Dolichopodidae	*Hydrophorus praecox*	na
	Dolichopodidae	*Sympycnus* unplaced	na
	Dolichopodidae	*Thrypticus australis*	na
	Dolicopodidae	Dolichopodidae unplaced	na
	Empididae	*Chelipoda* unplaced	na
	Empididae	Empididae sp.	na
	Empididae	Empididae unplaced	na

Group	Family	Species	Common name
	Empididae	*Empis* sp. TMAG_F145457	na
	Empididae	*Empis* sp. TMAG_F145503	na
	Empididae	*Hilara* sp. TMAG_F31514	na
	Empididae	*Hilarempis* sp. TMAG_F143212	na
	Empididae	*Hilarempis* sp. TMAG_F143565	na
	Empididae	*Sphicosa* unplaced	na
	Ephydridae	Ephydridae unplaced	na
	Ephydridae	*Hydrellia tritici*	na
	Ephydridae	*Hydrellia victoria*	na
	Ephydridae	*Scatella albilutea*	na
	Helosciomyzidae	*Helosciomyza australica*	na
	Heteromyzidae	*Diplogeomyza diaphora*	na
	Heteromyzidae	*Diplogeomyza maculipennis*	na
	Heteromyzidae	*Tapeigaster nigricornis*	na
	Heteromyzidae	*Tapeigaster paramonovi*	na
	Hybotidae	Hybotidae unplaced	na
	Lauxaniidae	*Ceratolauxania* sp. TMAG_F113917	na
	Lauxaniidae	*Poecilohetaerus aquilus*	na
	Lauxaniidae	*Sapromyza brunneovittata*	na
	Lauxaniidae	*Sapromyza magnifica*	na
	Lauxaniidae	*Sapromyza mallochiana*	na
	Lauxaniidae	*Sapromyza metallica*	na
	Limoniidae	*Gynoplistia bella*	na
	Limoniidae	*Gynoplistia* sp. TMAG_F95911	na
	Muscidae	*Coenosia* unplaced	na
	Muscidae	*Helina* unplaced	na
	Muscidae	*Pygophora apicalis*	na
	Paraleucopidae	Paraleucopidae unplaced	na
	Periscelididae	Periscelididae unplaced sp. TMAG_F143669	na
	Platypezidae	*Lindneromyia* unplaced	na
	Platystomatidae	*Rivellia* unplaced	na
	Pscodidae	Psychodidae unplaced	na
	Psychodidae	Psychodidae unplaced sp. TMAG_F143524	na
	Rhagionidae	*Chrysopilus* unplaced	na
	Scatopsidae	Scatopsidae unplaced	na
	Sciomyzidae	*Dichetophora australis*	na
	Sciomyzidae	*Pherbellia juxtajavana*	na
	Simulidae	Simuliidae sp.	na

Group	Family	Species	Common name
	Sphaeroceridae	Sphaeroceridae unplaced	na
	Stratiomyidae	*Australoactina incisuralis*	na
	Stratiomyidae	*Exaireta spinigera*	na
	Stratiomyidae	*Inopus* sp. TMAG_F98540	na
	Stratiomyidae	*Odontomyia decipiens*	na
	Stratiomyidae	*Odontomyia* sp. TMAG_F143516	na
	Stratiomyidae	Stratiomyidae unplaced	na
	Syrphidae	*Austalis pulchella*	na
	Syrphidae	*Eristalinus punctulatus*	na
	Syrphidae	*Melangyna viridiceps*	na
	Tabanidae	Tabanidae unplaced	na
	Tephritidae	*Austrotephritis* cf HARDY & DREW sp. A	na
	Tephritidae	*Austrotephritis poenia*	na
	Tephritidae	*Cooronga mcalpinei*	na
	Tephritidae	*Sphenella ruficeps*	na
	Therevidae	*Anabarhynchus pallidus*	na
	Therevidae	*Ectinorhynchus* unplaced	na
	Therevidae	*Neodialineura nitens*	na
	Tipulidae	*Ischnotoma rubriventris*	na
	Tipulidae	Tipulidae unplaced	na
Beetles	Cantharidae	*Chauliognathus lugubris*	na
	Cantharidae	*Heteromastix nigripes*	na
	Cantharidae	*Heteromastix pauxillus*	na
	Cantharidae	*Heteromastix* sp. TMAG_F143857	na
	Carabidae	*Acallistus tasmanicus*	na
	Carabidae	*Agonocheila curtula*	na
	Carabidae	*Agonocheila* sp. TMAG_F143186	na
	Carabidae	*Bembidion proprium*	na
	Carabidae	*Hypharpax peronii*	na
	Carabidae	*Mecyclothorax ambiguus*	na
	Carabidae	*Notiobia viridipennis*	na
	Carabidae	*Notonomus chalybaeus*	na
	Carabidae	*Promecoderus* unplaced	na
	Carabidae	*Prosopogmus chalybeipennis*	na
	Carabidae	*Prosopogmus* sp. TMAG_F143292	na
	Carabidae	*Sarothrocrepis corticalis*	na

Group	Family	Species	Common name
	Carabidae	*Trechimorphus diemenensis*	na
	Chrysomelidae	*Altica gravida*	na
	Chrysomelidae	Alticini unplaced sp. TMAG_F75546	na
	Chrysomelidae	*Chaetocnema propinqua*	na
	Chrysomelidae	*Ditropidus semicrudus*	na
	Chrysomelidae	*Eboo villosa*	na
	Chrysomelidae	*Eboo viridula*	na
	Chrysomelidae	*Geloptera jugularis*	na
	Chrysomelidae	*Monolepta* sp. TMAG_F143135	na
	Chrysomelidae	*Paropsis porosa*	na
	Chrysomelidae	*Paropsisterna obliterata*	na
	Chrysomelidae	*Peltoschema* DE LITTLE sp. 02	na
	Chrysomelidae	*Platycolaspis* sp. TMAG_F143146	na
	Cleridae	*Blackburniella intricata*	na
	Cleridae	*Lemidia cicatricosa*	na
	Cleridae	*Lemidia nigrovaria*	na
	Cleridae	*Lemidia* sp. TMAG_F142417	na
	Cleridae	*Lemidia subaenea*	na
	Coccinellidae	*Cleobora mellyi*	na
	Coccinellidae	*Diomus* sp. TMAG_F143397	na
	Coccinellidae	*Rhyzobius alphabeticus*	na
	Coccinellidae	*Rhyzobius forestieri*	na
	Coccinellidae	*Rhyzobius nigrovarius*	na
	Coccinellidae	*Rhyzobius pulchellus*	na
	Curculionidae	*Ancyttalia oleariae*	na
	Curculionidae	*Asceparnodes* sp. TMAG_F143627	na
	Curculionidae	*Baeosomus* BELL sp. 01	na
	Curculionidae	*Baris vagans*	na
	Curculionidae	Cossoninae unplaced TFIC sp. 09	na
	Curculionidae	*Decilaus acerosus*	na
	Curculionidae	*Dyschoenium minutissimum*	na
	Curculionidae	*Elleschodes* sp TMAG_F143155	na
	Curculionidae	*Emplesis* TFIC sp. 05	na
	Curculionidae	*Encosmia* sp. TMAG_F115794	na
	Curculionidae	*Mandalotus* sp. TMAG_F143182	na
	Curculionidae	*Misophrice* unplaced	na

Group	Family	Species	Common name
	Curculionidae	*Neolaemosaccus querulus*	na
	Curculionidae	*Orthorhinus* TFIC sp. 01	na
	Curculionidae	*Pantoreites illuminatus*	na
	Curculionidae	*Perperus conloni*	na
	Curculionidae	*Phloeoglymma mixtum*	na
	Curculionidae	*Poropterus conifer*	na
	Curculionidae	*Poropterus succisus*	na
	Curculionidae	*Pseudotimareta subterranea*	na
	Curculionidae	*Storeus albosignatus*	na
	Curculionidae	*Uroleptops* sp. TMAG_F143613	na
	Dytiscidae	Bidessini unplaced	na
	Dytiscidae	*Chostonectes gigas*	na
	Dytiscidae	Dytiscidae unplaced	na
	Dytiscidae	*Gibbidessus chipi*	na
	Dytiscidae	*Hyphydrus elegans*	na
	Dytiscidae	*Lancetes lanceolatus*	na
	Dytiscidae	*Limbodessus* unplaced	na
	Dytiscidae	*Liodessus* unplaced	na
	Dytiscidae	*Megaporus hamatus*	na
	Dytiscidae	*Megaporus* unplaced	na
	Dytiscidae	*Necterosoma penicillatum*	na
	Dytiscidae	*Rhantus suturalis*	na
	Dytiscidae	*Sternopriscus meadfootii*	na
	Dytiscidae	*Sternopriscus tasmanicus*	na
	Dytiscidae	*Sternopriscus wehnckei*	na
	Elateridae	*Agrypnus impressicollis*	na
	Elateridae	*Agrypnus pictipennis*	na
	Elateridae	*Austrocardiophorus litoralis*	na
	Elateridae	*Austrocardiophorus* sp. TMAG_F95158	na
	Elateridae	*Crepidomenus decoratus*	na
	Elateridae	*Crepidomenus taeniatus*	na
	Elateridae	Elateridae unplaced sp. TMAG_F143449	na
	Elateridae	*Elatichrosis trisulcatus*	na
	Elateridae	*Enischnelater specularis*	na
	Elateridae	*Monocrepidus basalis*	na
	Elateridae	*Monocrepidus tabidus*	na
	Elmidae	*Austrolimnius* unplaced	na
	Elmidae	*Notriolus galstonius*	na

Group	Family	Species	Common name
	Elmidae	*Notriolus quadriplagiata*	na
	Elmidae	*Notriolus simsoni*	na
	Elmidae	*Notriolus* unplaced	na
	Elmidae	*Notriolus victoriae*	na
	Histeridae	*Acritus tasmaniae*	na
	Histeridae	*Saprinus laetus*	na
	Hydraenidae	*Gymnochthebius setosus*	na
	Hydraenidae	*Hydraena* unplaced	na
	Hydrochidae	*Hydrochus* unplaced	na
	Hydrophilidae	*Anacaena* unplaced	na
	Hydrophilidae	*Enochrus* sp. TMAG_F101078	na
	Hydrophilidae	*Enochrus* unplaced	na
	Hydrophilidae	Hydrophilidae unplaced	na
	Hydrophilidae	*Limnoxenus zealandicus*	na
	Hydrophilidae	*Paracymus* cf *pygmaeus*	na
	Hydrophilidae	*Paracymus pygmaeus*	na
	Kateretidae	*Notobrachypterus* TFIC sp. 01	na
	Latridiidae	*Cartodere minor*	na
	Latridiidae	*Cortinicara* sp. TMAG_F143395	na
	Leiodidae	*Zeadolopus* TFIC sp. 02	na
	Melandryidae	*Orchesia* sp. TMAG_F143194	na
	Meloidae	*Palaestra* sp. TMAG_F96240	na
	Nitidulidae	Meligethinae unplaced sp. TMAG_F98025	na
	Oedemeridae	Oedemeridae unplaced sp. TMAG_F145429	na
	Phalacridae	*Litochrus brunneus*	na
	Phalacridae	*Phalacrus uniformis*	na
	Phycosecidae	*Phycosecis litoralis*	na
	Ptiliidae	*Acrotrichis* TFIC sp. 01	na
	Ptinidae	*Dryophilodes* sp. TMAG_F143423	na
	Scarabaeidae	*Cheiroplatys latipes*	na
	Scarabaeidae	*Onthophagus fuliginosus*	na
	Scarabaeidae	*Onthophagus pronus*	na
	Scarabaeidae	*Saprosites mendax*	na
	Scirtidae	Scirtidae unplaced	na
	Staphylinidae	*Anotylus* sp. TMAG_F143299	na
	Staphylinidae	*Anotylus* sp. TMAG_F47308	na
	Staphylinidae	*Horaeomorphus* TFIC sp. 01	na
	Staphylinidae	*Quedius stenocephalus*	na

Group	Family	Species	Common name
	Staphylinidae	*Quedius tepperi*	na
	Staphylinidae	*Scaphisoma instabile*	na
	Staphylinidae	*Sepedophilus* TFIC sp. 08	na
	Staphylinidae	*Tetrabothrus claviger*	na
	Tenebrionidae	*Adelium brevicorne*	na
	Tenebrionidae	*Adelium similatum*	na
	Tenebrionidae	*Adelium* sp. TMAG_F143289	na
	Tenebrionidae	*Adelium tenebroides*	na
	Tenebrionidae	*Caediomorpha heteromera*	na
	Tenebrionidae	*Celibe infelix*	na
	Tenebrionidae	*Hyocis bakewelli*	na
	Tenebrionidae	*Isopteron triviale*	na
	Tenebrionidae	*Meneristes australis*	na
	Tenebrionidae	*Seirotrana elongata*	na
	Tenebrionidae	*Sphargeris physodes*	na
True bugs	Acanthosomatidae	Acanthosomatidae_Gn001 mspBBKI_001	na
	Acanthosomatidae	*Elasmostethus* sp. TMAG_F98349	na
	Acanthosomatidae	*Eupolemus* mspBBKI_001	na
	Acanthosomatidae	*Eupolemus* sp. TMAG_F96017	na
	Acanthosomatidae	*Eupolemus tasmanicus*	na
	Acanthosomatidae	*Stauralia* mspBBKI_001	na
	Achilidae	*Argeleusa* unplaced	na
	Alydidae	*Mutusca brevicornis*	na
	Aphalaridae	*Acizzia conspicua*	na
	Artheneidae	*Dilompus robustus*	na
	Cercopidae	*Bathyllus albicinctus*	na
	Cercopidae	*Tonnoiria tasmaniae*	na
	Cicadellidae	*Austrolopa brunensis*	na
	Corixidae	*Sigara unplaced*	na
	Cryptorhamphidae	*Cryptorhamphus orbus*	na
	Cydnidae	*Adrisa* sp. TMAG_F12862	na
	Enicocephalidae	*Oncylocotis tasmanicus*	na
	Gelastocoridae	*Nerthra suberosa*	na
	Lygaeidae	*Nysius vinitor* [b]	Rutherglen Bug
	Membracidae	*Acanthuchus trispinifer*	na
	Miridae	*Ausejanus albisignatus*	na
	Miridae	*Austromiris* mspBBKI_001	na
	Miridae	*Austromiris nigronasutus*	na

Group	Family	Species	Common name
	Miridae	*Campylomma* mspBBKI_001	na
	Miridae	*Coridromius monotocopsis*	na
	Miridae	*Diomocoris* mspBBBKI_001	na
	Miridae	*Pseudopantilius australis*	na
	Miridae	*Setocoris* mspBBKI_001	na
	Nabidae	*Nabis kinbergii*	na
	Nabidae	*Nabis* sp. TMAG_F143737	na
	Naucoridae	*Naucoris congrex*	na
	Notonectidae	*Anisops thienemanni*	na
	Notonectidae	*Anisops* unplaced	na
	Pentatomidae	*Cermatulus nasalis*	na
	Pentatomidae	*Cuspicona strenuella*	na
	Pentatomidae	*Ocirrhoe lutescens*	na
	Pentatomidae	*Ocirrhoe unimaculata*	na
	Pleidae	*Paraplea halei*	na
	Rhyparochromidae	*Austroxestus australiensis*	na
	Rhyparochromidae	*Brentiscerus putoni*?	na
	Rhyparochromidae	*Myocara acuminatum*	na
	Triozidae	Triozidae unplaced	na
	Veliidae	*Drepanovelia dubia*	na
	Veliidae	*Nesidovelia peramoena*	na
Cockroaches	Blaberidae	*Calolampra irrorata*	na
	Blattidae	*Platyzosteria melanaria*	na
	Pseudophyllodromiidae	*Balta* unplaced	na
Earwigs	Anisolabididae	*Gonolabis* unplaced	na
	Labiduridae	*Labidura riparia*	Common Brown Earwig
Scorpionflies	Nannochoristidae	*Nannochorista* unplaced	na
Grasshoppers and crickets	Gryllacrididae	*Kinemania ambulans*	na
	Rhaphidophoridae	*Speleotettix* sp. TMAG_F143322 [a]	na
	Tetrigidae	*Paratettix argillaceus*	na
	Tettigoniidae	*Coptaspis lateralis*	na
	Trigonidiidae	*Bobilla* unplaced	na
Spiders	[ORDER] Araneae	Araneae sp. 1 [a]	na
	[ORDER] Araneae	Araneae sp. 2 [a]	na
	[ORDER] Araneae	Araneae sp. 3 [a]	na
	Amaurobiidae	*Tasmabrochus montanus*	Tasmanian Forest Hunter
	Araneidae	Araneidae sp. [a]	na
	Araneidae	*Araneus circulissparsus*	Speckled Orbweaver
	Araneidae	*Austracantha minax*	Christmas Spider, Jewel Spider

Group	Family	Species	Common name
	Araneidae	*Backobourkia brounii*	Broun's Marbled Orb-weaver
	Araneidae	*Cyclosa* sp.	na
	Araneidae	*Dolophones conifera*	Wrap-around Spider
	Araneidae	*Kangaraneus farhani*	na
	Araneidae	*Plebs bradleyi*	Enamelled Spider
	Araneidae	*Plebs eburnus*	Eastern Bush Orb-weaver
	Araneidae	*Salsa fuliginata*	Sooty Orb-weaver
	Araneidae	*Salsa rueda*	na
	Araneidae	*Socca eugeni*	Valentina's Twig Spider
	Arkyidae	*Arkys walckenaeri*	Walckenaer's Studded Triangular Spider
	Clubionidae	*Clubiona australiaca*	na
	Clubionidae	*Clubiona* sp. 1	na
	Clubionidae	*Clubiona* sp. 2	na
	Clubionidae	*Clubiona* sp. 3	na
	Clubionidae	*Clubiona* sp. 4	na
	Clubionidae	*Clubiona* sp. 5	na
	Clubionidae	*Clubiona* sp. 6	na
	Corinnidae	*Nyssus coloripes*	Spotted Ground Swift Spider
	Desidae	*Badumna longinqua*	Grey House Spider
	Desidae	Desidae sp. 1 [a]	na
	Desidae	Desidae sp. 2	na
	Desidae	*Paramatachia tubicola*	Twig Spider
	Gnaphosidae	*Intruda signata*	Ground Spider
	Hahniidae	*Scotospilus ampullarius*	na
	Lamponidae	*Lampona cylindrata*	Common White-tail Spider
	Lamponidae	*Lampona* sp. [a]	na
	Linyphiidae	*Laperousea blattifera*	na
	Linyphiidae	*Laperousea quindecimpunctata*	na
	Linyphiidae	Linyphiidae sp. 1 [a]	na
	Linyphiidae	Linyphiidae sp. 2 [a]	na
	Linyphiidae	Linyphiidae sp. 3 [a]	na
	Linyphiidae	Linyphiidae sp. 4 [a]	na
	Linyphiidae	Linyphiidae sp. 5 [a]	na
	Linyphiidae	Linyphiidae sp. 6 [a]	na
	Lycosidae	*Artoria aculeata*	na
	Lycosidae	*Artoria albopilata*	na
	Lycosidae	*Artoria impedita*	na
	Lycosidae	*Artoria munmorah*	na
	Lycosidae	*Artoria* sp. 1 [a]	na

Group	Family	Species	Common name
	Lycosidae	*Artoria* sp. 2 [a]	na
	Lycosidae	*Artoria* sp. 3 [a]	na
	Lycosidae	*Artoria* sp. 4 [a]	na
	Lycosidae	*Artoria* sp. 5 [a]	na
	Lycosidae	*Artoria victoriensis*	na
	Lycosidae	*Artoria wilkiei*	Wilkie's Coastal Runner
	Lycosidae	*Artoriopsis murphyi*	na
	Lycosidae	*Kangarosa tasmaniensis*	na
	Lycosidae	Lycosidae sp. [a]	na
	Lycosidae	*Tetralycosa oraria*	Tasmanian Beach Wolf Spider
	Lycosidae	*Venator judyrainbirdae*	na
	Lycosidae	*Venatrix pseudospeciosa*	na
	Miturgidae	*Argoctenus* sp.	na
	Miturgidae	*Hestimodema* sp.	na
	Miturgidae	*Miturga agelenina*	Southern Prowling Spider
	Nicodamidae	*Ambicodamus sororius*	Red and Black Spider
	Pycnothelidae	*Stanwellia* sp. [a]	na
	Salticidae	*Helpis minitabunda*	Threatening Jumping Spider
	Salticidae	*Jotus* sp. [a]	na
	Salticidae	*Maratus pavonis*	na
	Salticidae	*Maratus proszynskii*	Proszynshki's Peacock Spider
	Salticidae	*Maratus tasmanicus*	Tasmanian Peacock Spider
	Salticidae	*Opisthoncus* sp. 1	na
	Salticidae	*Opisthoncus* sp. 2	na
	Salticidae	*Opisthoncus* sp. 3	na
	Salticidae	*Prostheclina amplior*	na
	Salticidae	*Prostheclina basilonesa*	na
	Salticidae	*Prostheclina* sp.	na
	Salticidae	Salticidae sp. 1 [a]	na
	Salticidae	Salticidae sp. 2 [a]	na
	Salticidae	Salticidae sp. 3 [a]	na
	Salticidae	Salticidae sp. 4 [a]	na
	Salticidae	Salticidae sp. 5 [a]	na
	Salticidae	Salticidae sp. 6 [a]	na
	Salticidae	Salticidae sp. 7 [a]	na
	Salticidae	Salticidae sp. 8 [a]	na
	Salticidae	*Simaethula* sp. 1	na
	Salticidae	*Simaethula* sp. 2 [a]	na
	Sparassidae	*Delena spenceri*	na
	Sparassidae	*Neosparassus patellatus*	Football Spider

Group	Family	Species	Common name
	Stiphidiidae	*Stiphidion facetum*	Crinoline Spider
	Tetragnathidae	*Tetragnatha caudifera*	na
	Tetragnathidae	*Tetragnatha demissa*	Crouching Long-jawed Spider
	Tetragnathidae	*Tetragnatha* sp.	na
	Tetragnathidae	*Tetragnatha valida*	Long-jawed Orb Weaver Spider
	Theridiidae	?*Achaearanea* sp. [a]	comb-footed spider
	Theridiidae	*Cryptachaea* sp. 1	na
	Theridiidae	*Cryptachaea* sp. 2 [a]	na
	Theridiidae	*Cryptachaea veruculata*	Tangle-web Spider, Diamond Comb-footed Spider
	Theridiidae	*Euryopis* sp.	na
	Theridiidae	*Hadrotarsus* sp.	na
	Theridiidae	*Moneta* sp.	na
	Theridiidae	*Phoroncidia* sp. [a]	na
	Theridiidae	*Steatoda livens*	na
	Theridiidae	Theridiidae sp. 1 [a]	na
	Theridiidae	Theridiidae sp. 2 [a]	na
	Theridiidae	Theridiidae sp. 3 [a]	na
	Theridiidae	Theridiidae sp. 4 [a]	na
	Theridiidae	*Theridion* sp.	na
	Thomisidae	*Australomisidia inornata*	na
	Thomisidae	*Australomisidia pilula*	Lozenge-shaped Crab Spider
	Thomisidae	*Australomisidia rosea*	Rosy Flower Spider
	Thomisidae	*Australomisidia* sp. 1	na
	Thomisidae	*Australomisidia* sp. 2	na
	Thomisidae	*Australomisidia* sp. 3 [a]	na
	Thomisidae	*Cetratus rubropunctatus*	Long Green Crab Spider
	Thomisidae	*Hedana valida*	na
	Thomisidae	*Isala cambridgei*	Blunt-headed Crab Spider
	Thomisidae	*Sidymella* sp.	na
	Zodariidae	*Habronestes* sp.	na
	Zodariidae	*Neostorena* sp.	na
Harvestmen	[ORDER] Opiliones	Opiliones sp. 1	na
	[ORDER] Opiliones	Opiliones sp. 2 [a]	na
Mites	[SUBCLASS] Acari	Acari sp. 1	na
	[SUBCLASS] Acari	Acari sp. 2	na
	[SUBCLASS] Acari	Acari sp. 3	na
Scorpions	Bothriuridae	*Cercophonius squama*	Wood Scorpion
Pseudoscorpions	Chernetidae	*Conicochernes* sp.	na
	Garypidae	*Synsphyronus hansenii*	na

Group	Family	Species	Common name
	Garypinidae	*Aldabrinus* sp.	na
Crustaceans	[Class] Branchiopoda	Cladocera sp.	na
	[Class] Copepoda	Copepoda sp.	na
	[Class] Ostracoda	Ostracoda sp.	na
	[Order] Amphipoda	Amphipoda sp.	na
	Hymenosomatidae	*Amarinus lacustris*	na
	Janiridae	*Heterias* unplaced	na
	Koonungidae	*Koonunga* unplaced	na
	Parasticidae	*Cherax destructor*	Common Yabby
	Parasticidae	*Engaeus cunicularius*	na
	Parasticidae	*Geocharax tasmanicus*	na
Snails and slugs	Agriolimacidae	*Deroceras invadens*	Chestnut Slug
	Agriolimacidae	*Deroceras reticulatum*	Grey Field Slug
	Arionidae	*Arion intermedius*	Hedgehog Slug
	Camaenidae	*Chloritobadistes victoriae*	Southern Hairy Red Snail
	Charopidae	*Bonhamaropa tarravillensis*	Tarraville Pinwheel Snail
	Charopidae	*Flammulops* sp. "Gentle Annie"	na
	Charopidae	*Meredithena dandenongensis*	Dandenong Ranges Pinwheel Snail
	Charopidae	*Scelidoropa officeri*	Circular Head Pinwheel Snail
	Charopidae	*Scelidoropa* sp. "Ridges Road"	na
	Charopidae	*Scelidoropa tamarensis*	Tamar River Pinwheel Snail
	Cystopeltidae	*Cystopelta* sp. "King"	na
	Helicarionidae	*Helicarion cuvieri*	na
	Helicidae	*Cornu aspersum*	Common Garden Snail
	Helicidae	*Theba pisana*	White Italian Snail
	Hygromiidae	*Candidula intersecta*	Wrinkled Snail
	Hygromiidae	*Prietocella barbara*	Small Pointed Snail
	Limacidae	*Ambigolimax valentianus*	Three-band Slug
	Limacidae	*Limax maximus*	Leopard Slug
	Physidae	*Physa acuta*	Acute Bladder Snail
	Planorbidae	*Glyptophysa novaehollandica*	Pouched Snail
	Pseudococcidae	*Ferrissia tasmanicus*	Broad Freshwater Limpet
	Punctidae	*Gratilaoma halli*	na
	Punctidae	*Gratilaoma* sp. "Knocklofty"	na
	Punctidae	*Laomavix collisi*	Collis' Pinhead Snail
	Punctidae	*Magilaoma penolensis*	Penola Pinhead Snail
	Punctidae	*Magilaoma* sp. "Tasmania"	na
	Punctidae	*Miselaoma sinistra*	Sinistral Pinhead Snail
	Punctidae	*Paralaoma hobarti*	na
	Punctidae	*Paralaoma mucoides*	na

Group	Family	Species	Common name
	Punctidae	*Punctidae* sp. "Micro Cripps"	na
	Rhytididae	*Austrorhytida* sp. "Rafferty"	na
	Rhytididae	*Prolesophanta dyeri*	Dyer's Carnivorous Snail
	Succineidae	*Succinea australis*	na
	Tateidae	*Ascorhis tasmanica*	na
	Tateidae	*Austropyrgus* BC sp. 1	na
	Tateidae	*Austropyrgus* BC sp. 2	na
	Tateidae	*Austropyrgus* BC sp. 3	na
	Tateidae	*Austropyrgus* BC sp. 4	na
	Tateidae	*Austropyrgus* BL sp. 1	na
	Tateidae	*Austropyrgus* Eldorado sp. 2	na
	Tateidae	*Austropyrgus* Eldorado sp. 3	na
	Tateidae	*Austropyrgus goliathus*	na
	Tateidae	*Austropyrgus nitidus*	na
	Tateidae	*Austropyrgus* SE sp. 1	na
	Tateidae	*Austropyrgus* sp. nr *goliathus*	na
	Tateidae	*Austropyrgus* sp. nr *nitidus*	na
	Tateidae	*Austropyrgus* sp.	na
	Tateidae	*Potamopyrgus antipodarum*	New Zealand Mudsnail
	Tateidae	*Tatea rufilabris*	na
	Zonitidae	*Oxychilus alliarius*	Garlic Snail
Pea shells/pea clams	Sphaeriidae	*Pisidium etheridgei*	na
	Sphaeriidae	*Pisidium tasmanicum*	na
	Sphaeriidae	Sphaeriidae sp.	na
Segmented worms	[Infraclass] Euhirudinea	Euhirudinea sp.	na
	[Subclass] Oligochaeta	Oligochaeta sp.	na
	Naididae	*Pristina* unplaced	na
Sponges	Spongillidae?	Spongillidae? sp.	na

a Putative new species. **b** Introduced and/or pest species. **c** Listed as threatened under the *Threatened Species Protection Act 1995* (Tasmania). **na** Not available.

Table A2 List of flora species recorded

Group	Family	Species	Common name
Vascular plants	Aizoaceae	*Carpobrotus rossii*	Karkalla, Pigface
	Aizoaceae	*Disphyma crassifolium* subsp. *clavellatum*	Round-leaved Pigface
	Aizoaceae	*Tetragonia implexicoma*	Bower Spinach
	Aizoaceae	*Tetragonia tetragonoides*	New Zealand Spinach, Warrigal Greens
	Amaranthaceae	*Atriplex cinerea*	Grey Saltbush, Coastal Saltbush
	Amaranthaceae	*Tecticornia arbuscula*	Shrubby Glasswort
	Amaryllidaceae	*Narcissus tazetta* [b]	Jonquil
	Apiaceae	*Apium prostratum* var. *filiforme*	Sea Celery
	Apiaceae	*Daucus glochidiatus*	Native Carrot
	Apocynaceae	*Alyxia buxifolia*	Sea Box
	Apocynaceae	*Vinca major*	Blue Periwinkle, Greater Periwinkle
	Araceae	*Arum italicum* [b]	Italian Lily, Cuckoo Pint, Aaron's Rod
	Araceae	*Lemna disperma*	Common Duckweed
	Araceae	*Lemna trisulca*	Ivy-leaf Duckweed
	Araceae	*Zantedeschia aethiopica* [b]	Arum Lily
	Araliaceae	*Hydrocotyle capillaris*	Thread Pennywort
	Araliaceae	*Hydrocotyle hirta*	Hairy Pennywort
	Asparagaceae	*Asparagus scandens* [b]	Asparagus Fern
	Asteraceae	*Actites megalocarpus*	Dune Thistle
	Asteraceae	*Brachyscome diversifolia*	Large-headed Daisy
	Asteraceae	*Carduus pycnocephalus* [b]	Slender Thistle
	Asteraceae	*Euchiton involucratus*	Star Cudweed, Common Cudweed
	Asteraceae	*Helichrysum luteoalbum*	Jersey Cudweed
	Asteraceae	*Hypochaeris radicata* [b]	Catsear, Flatweed
	Asteraceae	*Lagenophora stipitata*	Blue Bottle-daisy
	Asteraceae	*Leontodon saxatilis* [b]	Hairy Hawkbit, Lesser Hawkbit
	Asteraceae	*Leucophyta brownii*	Cushion Bush
	Asteraceae	*Nablonium calyceroides*	na
	Asteraceae	*Olearia lepidophylla*	Club-moss Daisy-bush
	Asteraceae	*Olearia phlogopappa*	Dusty Daisy-bush
	Asteraceae	*Ozothamnus turbinatus*	Coast Everlasting
	Asteraceae	*Senecio biserratus*	Jagged Fireweed
	Asteraceae	*Senecio pinnatifolius* var. *maritimus*	na
	Asteraceae	*Senecio spathulatus* var. *spathulatus*	na
	Asteraceae	*Sonchus asper* [b]	Prickly Sowthistle

Group	Family	Species	Common name
	Asteraceae	*Taraxacum officinale* [b]	Dandelion
	Azollaceae	*Azolla rubra*	Red Azolla
	Blechnaceae	*Blechnum cartilagineum* [c]	Gristle Fern
	Blechnaceae	*Blechnum wattsii*	Hard Water-fern
	Boraginaceae	*Myosotis australis* subsp. *australis*	Australian Forget-me-not
	Boraginaceae	*Myosotis sylvatica* [b]	Woodland Forget-me-not
	Brassicaceae	*Cakile maritima* subsp. *maritima* [b]	European Sea Rocket
	Brassicaceae	*Cardamine flexuosa* [b]	Wood Bittercress
	Brassicaceae	*Cardamine hirsuta* [b]	Hairy Bittercress, Common Bittercress
	Brassicaceae	*Cardamine paucijuga*	Annual Bittercress
	Brassicaceae	*Erophila verna* subsp. *praecox* [b]	Whitlow Grass
	Campanulaceae	*Lobelia irrigua*	Salt Pratia
	Campanulaceae	*Lobelia pedunculata*	Matted Pratia
	Campanulaceae	*Wahlenbergia gracilenta*	Annual Bluebell
	Caprifoliaceae	*Lonicera japonica* [b]	Japanese Honeysuckle
	Caprifoliaceae	*Lonicera periclymenum* [b]	European Honeysuckle
	Caryophyllaceae	*Cerastium glomeratum* [b]	na
	Caryophyllaceae	*Cerastium* sp. [b]	na
	Caryophyllaceae	*Cerastium vulgare* [b]	na
	Caryophyllaceae	*Colobanthus apetalus* var. *apetalus*	na
	Caryophyllaceae	*Minuartia mediterranea* [b]	na
	Caryophyllaceae	*Sagina maritima* [b]	Sea Pearlwort
	Caryophyllaceae	*Scleranthus biflorus*	Knawel
	Casuarinaceae	*Allocasuarina littoralis*	Black Sheoak
	Casuarinaceae	*Allocasuarina monilifera*	Necklace Sheoak
	Casuarinaceae	*Allocasuarina zephyrea*	Western Sheoak
	Celastraceae	*Stackhousia monogyna*	Creamy Candles
	Celastraceae	*Stackhousia spathulata*	Coast Stackhousia
	Centrolepidaceae	*Centrolepis aristata*	Pointed Centrolepis
	Centrolepidaceae	*Centrolepis fascicularis*	Tufted Centrolepis
	Centrolepidaceae	*Centrolepis strigosa* subsp. *strigosa*	Hairy Centrolepis
	Crassulaceae	*Crassula peduncularis*	Purple Stonecrop
	Crassulaceae	*Crassula sieberiana*	Australian Stonecrop
	Cunoniaceae	*Bauera rubioides*	Dog Rose, River Rose
	Cyatheaceae	*Cyathea australis* subsp. *australis*	Rough Tree Fern
	Cymodoceaceae	*Amphibolis antarctica*	Sea Nymph, Wire Weed
	Cyperaceae	*Carex appressa*	Tall Sedge
	Cyperaceae	*Carex pumila*	Strand Sedge

Group	Family	Species	Common name
	Cyperaceae	*Eleocharis acuta*	Common Spike-rush
	Cyperaceae	*Ficinia nodosa*	Knobby Club-rush
	Cyperaceae	*Gahnia sieberiana*	Red-fruit Saw-sedge
	Cyperaceae	*Isolepis marginata*	Coarse Club-rush
	Cyperaceae	*Isolepis subtilissima*	Mountain Club-sedge, Dwarf Club-sedge
	Cyperaceae	*Lepidosperma concavum*	Sandhill Sword-sedge
	Cyperaceae	*Lepidosperma filiforme*	Common Rapier-sedge
	Cyperaceae	*Lepidosperma gladiatum*	Coast Sword-sedge
	Cyperaceae	*Machaerina acuta*	Pale Twig-rush
	Dennstaedtiaceae	*Dennstaedtia davallioides*	Lacy Ground-fern
	Dennstaedtiaceae	*Histiopteris incisa*	Bat's Wing Fern
	Dennstaedtiaceae	*Hypolepis glandulifera*	Sticky Ground Fern
	Dennstaedtiaceae	*Hypolepis rugosula*	Ruddy Ground-fern
	Dennstaedtiaceae	*Pteridium esculentum* subsp. *esculentum*	Bracken Fern, Austral Bracken
	Dicksoniaceae	*Dicksonia antarctica*	Soft Tree Fern
	Dilleniaceae	*Hibbertia procumbens*	Spreading Guinea Flower
	Dilleniaceae	*Hibbertia* sp.	na
	Droseraceae	*Drosera auriculata*	Tall Sundew
	Droseraceae	*Drosera pygmaea*	Pygmy Sundew, Tiny Sundew
	Elaeocarpaceae	*Elaeocarpus reticulatus*	Blueberry Ash
	Ericaceae	*Epacris impressa*	Common Heath
	Ericaceae	*Epacris obtusifolia*	Blunt-leaf Heath
	Ericaceae	*Leptecophylla oxycedrus*	Crimson Berry
	Ericaceae	*Leucopogon affinis* (*Styphelia affinis*)	Lance Beard-heath
	Ericaceae	*Leucopogon parviflorus*	Coast Beard-heath, Native Currant
	Ericaceae	*Monotoca elliptica*	Tree Broom-heath
	Ericaceae	*Sprengelia incarnata*	Pink Swamp-heath
	Ericaceae	*Styphelia ericoides*	Pink Beard-heath
	Euphorbiaceae	*Amperea xiphoclada* var. *xiphoclada*	Broom Spurge
	Euphorbiaceae	*Euphorbia paralias* [b]	Sea Spurge
	Euphorbiaceae	*Euphorbia peplus* [b]	Petty Spurge, Radium Plant
	Fabaceae	*Acacia longifolia* subsp. *longifolia*	Sydney Golden Wattle
	Fabaceae	*Acacia longifolia* subsp. *sophorae*	Coastal Wattle
	Fabaceae	*Acacia melanoxylon*	Australian Blackwood
	Fabaceae	*Acacia mucronata* subsp. *dependens*	Narrow-leaf Wattle
	Fabaceae	*Acacia suaveolens*	Sweet Wattle

Group	Family	Species	Common name
	Fabaceae	*Acacia verticillata* subsp. *verticillata*	Prickly Moses
	Fabaceae	*Aotus ericoides*	Golden Pea
	Fabaceae	*Dillwynia glaberrima*	Smooth Parrot-pea
	Fabaceae	*Gompholobium huegelii*	Common Wedge Pea, Pale Wedge Pea
	Fabaceae	*Pultenaea juniperina*	Prickly Bush-pea
	Fabaceae	*Swainsona lessertiifolia*	Coast Swainson-pea
	Fabaceae	*Ulex europaeus* [b]	Gorse
	Gentianaceae	*Centaurium erythraea* [b]	Common Centaury
	Gentianaceae	*Sebaea albidiflora*	White Sebaea
	Gentianaceae	*Sebaea ovata*	Yellow Sebaea
	Geraniaceae	*Geranium molle* [b]	Cranesbill Geranium
	Geraniaceae	*Geranium solanderi*	Austral Cranesbill
	Geraniaceae	*Geranium* sp.	na
	Gleicheniaceae	*Gleichenia microphylla*	Scrambling Coral Fern
	Hemerocallidaceae	*Dianella tasmanica*	Tasman Flax-lily
	Hemerocallidaceae	*Thelionema caespitosum*	Tufted Blue Lily
	Iridaceae	*Patersonia fragilis*	Short Purple-flag, Swamp Iris
	Iridaceae	*Sisyrinchium micranthum* [b]	Blue Pigroot, Striped Rush-leaf
	Juncaceae	*Juncus caespiticius*	Grassy Rush
	Juncaceae	*Juncus capitatus* [b]	Dwarf Rush
	Juncaceae	*Juncus planifolius*	Broad-leaf Rush
	Juncaceae	*Juncus procerus*	Tall Rush
	Juncaceae	*Juncus* sp.	na
	Juncaceae	*Luzula meridionalis*	Common Woodrush
	Lauraceae	*Cassytha glabella* f. *glabella*	Slender Dodder-laurel
	Lauraceae	*Cassytha pubescens*	Devil's Twine, Downy Dodder-laurel
	Lentibulariaceae	*Utricularia lateriflora*	Small Bladderwort
	Lentibulariaceae	*Utricularia tenella*	Pink Bladderwort
	Lindsaeaceae	*Lindsaea linearis*	Screw Fern
	Loganiaceae	*Phyllangium divergens* [c]	Wiry Mitrewort
	Luzuriagaceae	*Drymophila cyanocarpa*	Turquoise Berry
	Lycopodiaceae	*Lycopodium deuterodensum*	Bushy Clubmoss
	Mazaceae	*Mazus pumilio*	Swamp Mazus
	Monimiaceae	*Hedycarya angustifolia*	Native Mulberry
	Myrsinaceae	*Lysimachia arvensis* [b]	Scarlet Pimpernel, Blue Pimpernel
	Myrtaceae	*Calytrix tetragona*	Common Fringe-myrtle

Group	Family	Species	Common name
	Myrtaceae	*Eucalyptus viminalis* subsp. *viminalis*	Manna Gum, Ribbon Gum, White Gum
	Myrtaceae	*Leptospermum laevigatum*	Coast Tea Tree
	Myrtaceae	*Leptospermum scoparium*	Manuka
	Myrtaceae	*Melaleuca ericifolia*	Swamp Paperbark
	Myrtaceae	*Melaleuca squarrosa*	Scented Paperbark
	Onagraceae	*Epilobium billardiereanum* subsp. *billardiereanum*	Robust Willow-herb
	Orchidaceae	*Caladenia latifolia*	Pink Fairy Orchid
	Orchidaceae	*Caladenia* sp.	na
	Orchidaceae	*Calochilus robertsonii*	Purple Beard Orchid
	Orchidaceae	*Pterostylis pedunculata*	Maroonhood
	Orchidaceae	*Pyrorchis nigricans*	Red-beak Orchid, Black Fire-orchid
	Oxalidaceae	*Oxalis radicosa*	Downy Native Sorrel
	Oxalidaceae	*Oxalis rubens*	Dune Wood-sorrel
	Phrymaceae	*Thyridia repens*	Creeping Monkey-flower
	Phyllanthaceae	*Phyllanthus gunnii*	Shrubby Spurge, Scrubby Spurge
	Phyllanthaceae	*Poranthera microphylla*	Small Poranthera
	Pittosporaceae	*Billardiera macrantha*	Purple Apple-berry
	Pittosporaceae	*Bursaria spinosa* subsp. *spinosa*	Australian Blackthorn, Sweet Bursaria
	Plantaginaceae	*Plantago bellidioides*	na
	Plantaginaceae	*Plantago coronopus* subsp. *coronopus* [b]	Buckhorn Plantain
	Poaceae	*Aira elegantissima* [b]	Delicate Hairgrass
	Poaceae	*Aira* sp. [b]	na
	Poaceae	*Austrostipa stipoides*	Prickly Spear-grass, Coast Spear-grass
	Poaceae	*Briza minor* [b]	Shivery Grass, Lesser Quaking Grass
	Poaceae	*Bromus diandrus* [b]	Great Brome
	Poaceae	*Festuca arundinacea* [b]	Tall Fescue
	Poaceae	*Holcus lanatus* [b]	Yorkshire Fog, Common Velvet Grass
	Poaceae	*Parapholis incurva* [b]	Curly Rye Grass, Coast Barb Grass
	Poaceae	*Poa billardierei*	Coast Fescue, Beach Fescue
	Poaceae	*Poa compressa* [b]	Flattened Meadow Grass
	Poaceae	*Spinifex sericeus*	Hairy Spinifex, Rolling Spinifex, Coastal Spinifex, Beach Spinifex
	Poaceae	*Vulpia fasciculata* [b]	Sand Fescue, Silver Grass

Group	Family	Species	Common name
	Polygalaceae	*Comesperma volubile*	Love Creeper
	Polygonaceae	*Muehlenbeckia complexa* [b]	Maidenhair Creeper, Wire Vine
	Potamogetonaceae	*Potamogeton drummondii*	Western Pondweed
	Primulaceae	*Samolus repens* var. *repens*	Creeping Brookweed
	Proteaceae	*Banksia marginata*	Silver Banksia
	Pteridaceae	*Pteris epaleata*	na
	Pteridaceae	*Pteris tremula*	Tender Brake, Shaking Brake
	Ranunculaceae	*Clematis aristata*	Australian Clematis, Goat's Beard
	Ranunculaceae	*Clematis decipiens*	Old Man's Beard
	Ranunculaceae	*Clematis microphylla*	Small-leaved Clematis
	Restionaceae	*Baloskion tetraphyllyum*	Tassel Rope-rush, Tassel Cord Rush, Plume Rush
	Restionaceae	*Empodisma minus*	Spreading Rope-rush, Wire Rush
	Rhamnaceae	*Pomaderris apetala*	Common Dogwood
	Rosaceae	*Acaena novae-zelandiae*	Bidgee-widgee
	Rosaceae	*Acaena pallida*	Piripiri, Pale Biddy-bid
	Rosaceae	*Rubus* sp. [b]	na
	Rubiaceae	*Coprosma repens* [b]	Mirror Bush
	Rutaceae	*Boronia parviflora*	Swamp Boronia
	Rutaceae	*Cyanothamnus anemonifolius* subsp. *variabilis*	Sticky Boronia, Narrow-leaved Boronia
	Rutaceae	*Nematolepis squamea* subsp. *squamea*	Satinwood
	Rutaceae	*Zieria arborescens* subsp. *arborescens*	Stinkwood
	Scrophulariaceae	*Myoporum insulare*	Boobialla, Common Boobialla, Water Bush, Native Juniper
	Selaginellaceae	*Selaginella uliginosa*	Swamp Selaginella, Swamp Clubmoss
	Solanaceae	*Solanum laciniatum*	Kangaroo Apple, Large Kangaroo Apple
	Solanaceae	*Solanum pseudocapsicum* [b]	Madeira Winter Cherry, Jerusalem Cherry
	Stylidiaceae	*Stylidium beaugleholei*	Beauglehole's Trigger-plant, Blushing Triggerplant
	Stylidiaceae	*Stylidium despectum*	Small Triggerplant, Dwarf Triggerplant
	Thymelaeaceae	*Pimelea drupacea*	Cherry Rice-flower
	Thymelaeaceae	*Pimelea linifolia*	Slender Rice-flower
	Thymelaeaceae	*Pimelea serpyllifolia*	Thyme Rice-flower
	Urticaceae	*Australina pusilla* subsp. *pusilla*	Small Shade-nettle

Group	Family	Species	Common name
	Urticaceae	*Parietaria debilis*	Native Pellitory
	Urticaceae	*Urtica incisa*	Scrub Nettle
	Violaceae	*Viola hederacea* subsp. *hederacea*	Native Violet, Ivy-leaf Violet
	Zosteraceae	*Heterozostera nigricaulis*	Australian Grass-Wrack
Mosses	Amblystegiaceae	*Amblystegium serpens*	na
	Amblystegiaceae	*Cratoneuropsis relaxa*	na
	Amblystegiaceae	*Drepanocladus* sp.	na
	Bartramiaceae	*Philonotis tenuis*	na
	Brachytheciaceae	*Brachythecium* sp.	na
	Brachytheciaceae	*Eurhynchium praelongum* [b]	na
	Brachytheciaceae	*Pseudoscleropodium purum* [b]	na
	Brachytheciaceae	*Rhynchostegium muriculatum*	na
	Brachytheciaceae	*Rhynchostegium tenuifolium*	na
	Bryaceae	*Bryum* sp.1	na
	Bryaceae	*Bryum* sp.2	na
	Bryaceae	*Bryum* sp.3	na
	Bryaceae	*Gemmabryum* sp.1	na
	Bryaceae	*Gemmabryum* sp.2	na
	Bryaceae	*Rosulabryum billarderii*	na
	Bryaceae	*Rosulabryum capillare*	na
	Bryaceae	*Rosulabryum subtomentosum*	na
	Daltoniaceae	*Achrophyllum dentatum*	na
	Daltoniaceae	*Calyptrochaeta apiculata*	na
	Dicranaceae	*Dicranoloma billarderii*	na
	Ditrichaceae	*Ceratodon purpureus*	na
	Fissidentaceae	*Fissidens leptocladus*	na
	Fissidentaceae	*Fissidens tenellus*	na
	Hypnaceae	*Austrohondaella limata*	na
	Hypnaceae	*Calliergonella cuspidata*	na
	Hypnaceae	*Hypnum cupressiforme*	na
	Lembophyllaceae	*Camptochaete arbuscula* var. *arbuscula*	na
	Lembophyllaceae	*Camptochaete deflexa*	na
	Lembophyllaceae	*Lembophyllum clandestinum*	na
	Lembophyllaceae	*Weymouthia mollis*	na
	Leucobryaceae	*Campylopus bicolor*	na
	Leucobryaceae	*Campylopus introflexus*	na
	Leucobryaceae	*Campylopus pallidus*	na
	Mniaceae	*Pohlia* sp.	na
	Orthotrichaceae	*Macrocoma tenuis* subsp. *tenuis*	na

Group	Family	Species	Common name
	Orthotrichaceae	*Zygodon menziesii*	na
	Polytrichaceae	*Polytrichum commune*	na
	Pottiaceae	*Barbula calycina*	na
	Pottiaceae	*Didymodon australasiae*	na
	Pottiaceae	*Phascopsis rubicunda*	na
	Pottiaceae	*Syntrichia antarctica*	na
	Pottiaceae	*Syntrichia papillosa*	na
	Pottiaceae	*Tortella cirrhata*	na
	Pottiaceae	*Tortella* sp.	na
	Pottiaceae	*Tortula muralis*	na
	Pottiaceae	*Trichostomum* sp.	na
	Pottiaceae	*Triquetrella papillata*	na
	Pottiaceae	*Triquetrella paradoxa*	na
	Ptychomniaceae	*Ptychomnion aciculare*	na
	Pylaisiadelphaceae	*Wijkia extenuata*	na
	Racopilaceae	*Racopilum cuspidigerum* var. *convolutaceum*	na
	Sematophyllaceae	*Rhaphidorrhynchium amoenum* var. *amoenum*	na
	Sematophyllaceae	*Sematophyllum homomallum*	na
	Sematophyllaceae	*Warburgiella leucocytus*	na
	Sphagnaceae	*Sphagnum novozelandicum*	na
	Splachnaceae	*Tayloria octoblephara*	na
	Thuidiaceae	*Thuidiopsis furfurosa*	na
	Thuidiaceae	*Thuidiopsis sparsa*	na
Liverworts	Frullaniaceae	*Frullania clavata*	na
	Frullaniaceae	*Frullania falciloba*	na
	Frullaniaceae	*Frullania probosciphora*	na
	Frullaniaceae	*Frullania rostrata*	na
	Lepidoziaceae	*Kurzia* sp.	na
	Lepidoziaceae	*Lepidozia* sp.	na
	Lophocoleaceae	*Chiloscyphus gippslandicus*	na
	Lophocoleaceae	*Chiloscyphus semiteres*	na
	Lophocoleaceae	*Chiloscyphus* sp.1	na
	Lophocoleaceae	*Chiloscyphus* sp.2	na
	Lophocoleaceae	*Chiloscyphus* sp.3	na
	Lophocoleaceae	*Heteroscyphus* sp.1	na
	Lophocoleaceae	*Heteroscyphus* sp.2	na
	Marchantiaceae	*Marchantia berteroana*	na
	Metzgeriaceae	*Metzgeria furcata*	na
	Metzgeriaceae	*Metzgeria rigida*	na

Group	Family	Species	Common name
	Plagiochilaceae	*Plagiochila fasciculata*	na
	Radulaceae	*Radula* sp.1	na
	Radulaceae	*Radula* sp.2	na
Lichens	Acarosporaceae	*Sarcogyne regularis*	na
	Arthoniaceae	*Arthonia ilicina*	na
	Arthoniaceae	*Arthonia* sp. 1	na
	Arthoniaceae	*Arthonia* sp. 2	na
	Arthoniaceae	*Arthothelium ampliatum*	na
	Arthoniaceae	*Arthothelium endoaurantiacum*	na
	Arthoniaceae	*Arthothelium* sp.	na
	Arthoniaceae	*Coniocarpon cinnabarinum*	na
	Arthoniaceae	*Inoderma applanatum*	na
	Biatorellaceae	cf. *Biatorella* sp.	na
	Caliciaceae	?*Calicium* sp.	na
	Candelariaceae	*Candelariella aurella*	na
	Candelariaceae	*Candelariella vitellina*	na
	Candelariaceae	*Candelariella xanthostigmoides*	na
	Catillariaceae	*Catillaria austrolittoralis*	na
	Chrysotrichaceae	*Chrysothrix sulphurella*	na
	Chrysotrichaceae	*Chrysothrix xanthina*	na
	Cladoniaceae	*Cladia aggregata*	na
	Cladoniaceae	*Cladia retipora*	na
	Cladoniaceae	*Cladia schizopora*	na
	Cladoniaceae	*Cladia sullivanii*	na
	Cladoniaceae	*Cladonia angustata*	na
	Cladoniaceae	*Cladonia capitellata* var. *squamatica*	na
	Cladoniaceae	*Cladonia confusa*	na
	Cladoniaceae	*Cladonia humilis* var. *humilis*	na
	Cladoniaceae	*Cladonia praetermissa* var. *modesta*	na
	Cladoniaceae	*Cladonia praetermissa* var. *praetermissa*	na
	Cladoniaceae	*Cladonia rigida* var. *rigida*	na
	Cladoniaceae	*Cladonia subradiata*	na
	Cladoniaceae	*Cladonia verticillata*	na
	Coenogoniaceae	*Coenogonium flavoinspersum*	na
	Coenogoniaceae	*Coenogonium implexum*	na
	Coenogoniaceae	*Coenogonium pineti*	na
	Collemataceae	*Collema glaucophthalmum* var. *glaucophthalmum*	na
	Collemataceae	*Collema glaucophthalmum* var. *implicatum*	na
	Collemataceae	*Leptogium crispatellum*	na

Group	Family	Species	Common name
	Fuscideaceae	*Fuscidea lightfootii*	na
	Fuscideaceae	*Maronea constans*	na
	Graphidaceae	*Graphis dracaenae*	na
	Graphidaceae	*Halegrapha mucronata*	na
	Graphidaceae	*Phaeographis lindigiana*	na
	Graphidaceae	*Thelotrema lepadinum*	na
	Haematommataceae	*Haematomma sorediatum*	na
	Lecanoraceae	*Lecanora flavopallida*	na
	Lecanoraceae	*Lecanora subcoarctata*	na
	Lecanoraceae	*Lecanora subtecta*	na
	Lecanoraceae	*Lecanora symmicta*	na
	Lecanoraceae	*Lecidella flavovirens*	na
	Lecanoraceae	*Ramboldia blastidiata*	na
	Lecanoraceae	*Ramboldia laeta*	na
	Lecideacae	*Paraporpidia leptocarpa*	na
	Lichinaceae	*Lichina intermedia*	na
	Megalariaceae	*Megalaria grossa*	na
	Megalariaceae	*Megalaria melaloma*	na
	Megalariaceae	*Megalaria melanotropa*	na
	Megalosporaceae	*Megaloblastenia sorediata*	na
	Monoblastiaceae	? *Anisomeridium* sp.	na
	Monoblastiaceae	*Anisomeridium disjunctum*	na
	Mycoblastaceae	*Tephromela atra*	na
	Ochrolechiaceae	*Ochrolechia africana*	na
	Ochrolechiaceae	*Ochrolechia apiculata*	na
	Ochrolechiaceae	*Ochrolechia gyrophorica*	na
	Pannariaceae	*Fuscopannaria decipiens*	na
	Pannariaceae	*Pannaria elixii*	na
	Parmeliaceae	*Austroparmelina conlabrosa*	na
	Parmeliaceae	*Austroparmelina pseudorelicina*	na
	Parmeliaceae	*Flavoparmelia haysomii*	na
	Parmeliaceae	*Flavoparmelia rutidota*	na
	Parmeliaceae	*Hypogymnia pulverata*	na
	Parmeliaceae	*Hypotrachyna revoluta*	na
	Parmeliaceae	*Menegazzia caesiopruinosa*	na
	Parmeliaceae	*Menegazzia subpertusa*	na
	Parmeliaceae	*Parmotrema neopustulatum*	na
	Parmeliaceae	*Parmotrema perlatum*	na
	Parmeliaceae	*Parmotrema reticulatum*	na
	Parmeliaceae	*Punctelia borreri*	na

Group	Family	Species	Common name
	Parmeliaceae	*Punctelia pseudocoralloidea*	na
	Parmeliaceae	*Usnea* cf. *dasaea*	na
	Parmeliaceae	*Usnea* cf. *inermis*	na
	Parmeliaceae	*Usnea cornuta*	na
	Parmeliaceae	*Usnea inermis*	na
	Parmeliaceae	*Usnea rubrotincta*	na
	Parmeliaceae	*Xanthoparmelia mougeotina*	na
	Parmeliaceae	*Xanthoparmelia neotinctina*	na
	Parmeliaceae	*Xanthoparmelia subprolixa*	na
	Pertusiaceae	*Pertusaria crassilabra*	na
	Pertusiaceae	*Pertusaria pertractata*	na
	Phyctidaceae	*Phlyctis subuncinata*	na
	Physciaceae	*Amandinea brunneola*	na
	Physciaceae	*Amandinea decedens*	na
	Physciaceae	*Amandinea nitrophila*	na
	Physciaceae	*Amandinea punctata*	na
	Physciaceae	*Buellia aeruginosa*	na
	Physciaceae	*Buellia stellulata* var. *stellulata*	na
	Physciaceae	*Diploicia canescens*	na
	Physciaceae	*Heterodermia spathulifera*	na
	Physciaceae	*Hyperphyscia adglutinata*	na
	Physciaceae	*Orcularia elixii*	na
	Physciaceae	*Physcia adscendens*	na
	Physciaceae	*Physcia neonubila*	na
	Physciaceae	*Physcia poncinsii*	na
	Physciaceae	*Rinodina blastidiata*	na
	Physciaceae	*Rinodina* cf. *obscura*	na
	Physciaceae	*Rinodina oleae*	na
	Pilocarpaceae	*Bapalmuia buchananii*	na
	Pilocarpaceae	*Leimonis erratica*	na
	Pilocarpaceae	*Micarea byssacea*	na
	Pilocarpaceae	*Micarea denigrata*	na
	Pilocarpaceae	*Micarea peliocarpa*	na
	Pilocarpaceae	*Micarea* sp. (G.Kantvilas 328/23) [a]	na
	Pilocarpaceae	*Micarea xanthonica*	na
	Porinaceae	*Porina corrugata*	na
	Porinaceae	*Porina emiscens*	na
	Porinaceae	*Porina leptalea*	na
	Ramalinaceae	*Bacidia laurocerasi*	na
	Ramalinaceae	*Bacidia septosior*	na

Group	Family	Species	Common name
	Ramalinaceae	*Bacidia* sp. 1	na
	Ramalinaceae	*Bacidia* sp. 2	na
	Ramalinaceae	*Bacidia* sp. 3	na
	Ramalinaceae	*Bacidia* sp. 4	na
	Ramalinaceae	*Bacidia* sp. 5	na
	Ramalinaceae	*Bacidia wellingtonii*	na
	Ramalinaceae	*Cliostomum griffithii*	na
	Ramalinaceae	*Cliostomum latisporum*	na
	Ramalinaceae	*Cliostomum verrucosum*	na
	Ramalinaceae	*Ramalina caespitella*	na
	Ramalinaceae	*Ramalina celastri*	na
	Ramalinaceae	*Ramalina fissa*	na
	Ramalinaceae	*Ramalina inflata*	na
	Rhizocarpaceae	*Rhizocarpon geographicum*	na
	Rhizocarpaceae	*Rhizocarpon reductum*	na
	Roccellaceae	*Angiactis banksiae*	na
	Roccellaceae	*Bactrospora metabola*	na
	Roccellaceae	*Enterographa divergens*	na
	Roccellaceae	*Enterographa* sp.	na
	Roccellaceae	*Opegrapha* sp. 1	na
	Roccellaceae	*Opegrapha* sp. 2	na
	Roccellaceae	*Opegrapha* sp. 3	na
	Roccellaceae	*Opegrapha* sp. 4	na
	Roccellaceae	*Opegrapha* sp. 5	na
	Roccellaceae	*Opegrapha* sp. 6	na
	Roccellaceae	*Opegrapha spodopolia*	na
	Roccellaceae	*Schismatomma occultum*	na
	Sarrameanaceae	*Sarrameana albidoplumbea*	na
	Stereocaulaceae	*Lepraria ? finkii*	na
	Teloschistaceae	*Caloplaca* cf. *lactea*	na
	Teloschistaceae	*Caloplaca gallowayi*	na
	Teloschistaceae	*Caloplaca gilfillaniorum*	na
	Teloschistaceae	*Caloplaca holocarpa*	na
	Teloschistaceae	*Caloplaca jackelixii*	na
	Teloschistaceae	*Caloplaca pulcherrima*	na
	Teloschistaceae	*Caloplaca* sp.	na
	Teloschistaceae	*Caloplaca sublobulata*	na
	Teloschistaceae	*Caloplaca subluteoalba*	na
	Teloschistaceae	*Caloplaca tomareeana*	na
	Teloschistaceae	*Caloplaca yorkensis*	na

Group	Family	Species	Common name
	Teloschistaceae	*Teloschistes chrysophthalmus*	na
	Teloschistaceae	*Teloschistes spinosus*	na
	Teloschistaceae	*Xanthoria ligulata*	na
	Teloschistaceae	*Xanthoria* sp.	na
	Thelenellaceae	*Thelenella tasmanica*	na
	Trapeliaceae	*Trapelia placodioides*	na
	Verrucariaceae	*Normandina pulchella*	na
	Verrucariaceae	*Verrucaria subdiscreta*	na
Green algae	Bryopsidaceae	*Bryopsis macraildii*	na
	Caulerpaceae	*Caulerpa brownii*	na
	Caulerpaceae	*Caulerpa flexilis*	na
	Caulerpaceae	*Caulerpa obscura*	na
	Caulerpaceae	*Caulerpa remotifolia*	na
	Cladophoraceae	*Chaetomorpha coliformis*	na
	Codiaceae	*Codium fragile*	na
	Codiaceae	*Codium pomoides*	na
	Ulavceae	*Gayralia oxysperma*	na
	Ulavceae	*Ulva* sp.	na
	Ulvaceae	*Ulva australis*	na
	Ulvaceae	*Ulva intestinalis*	na
Brown algae	Chordariaceae	*Cladosiphon filum*	na
	Chordariaceae	*Myriogloea sciurus*	na
	Cladostephaceae	*Cladostephus spongiosus*	na
	Dictyotaceae	*Dictyopteris muelleri*	na
	Dictyotaceae	*Dictyota furcellata*	na
	Dictyotaceae	*Dilophus fastigiatus*	na
	Dictyotaceae	*Lobospira bicuspidata*	na
	Dictyotaceae	*Zonaria spiralis*	na
	Durvillaeaceae	*Durvillaea potatorum*	na
	Ectocarpaceae	*Ectocarpus siliculosus*	na
	Hormosiraceae	*Hormosira banksii*	na
	Lessoniaceae	*Ecklonia radiata*	na
	Lessoniaceae	*Lessonia corrugata*	na
	Notheiaceae	*Notheia anomala*	na
	Sargassaceae	*Acrocarpia paniculata*	na
	Sargassaceae	*Carpoglossum confluens*	na
	Sargassaceae	*Caulocystis cephalornithos*	na
	Sargassaceae	*Cystophora brownii*	na
	Sargassaceae	*Cystophora monilifera*	na
	Sargassaceae	*Cystophora moniliformis*	na

Group	Family	Species	Common name
	Sargassaceae	*Cystophora pectinata*	na
	Sargassaceae	*Cystophora platylobium*	na
	Sargassaceae	*Cystophora siliquosa*	na
	Sargassaceae	*Cystophora torulosa*	na
	Sargassaceae	*Halopteris paniculata*	na
	Sargassaceae	*Myriodesma calophyllum*	na
	Sargassaceae	*Phyllospora comosa*	na
	Sargassaceae	*Sargassum fallax*	na
	Sargassaceae	*Sargassum lacerifolium*	na
	Scytosiphonaceae	*Colpomenia peregrina*	na
	Scytosiphonaceae	*Colpomenia sinuosa*	na
	Scytosiphonaceae	*Scytosiphon lomentaria*	na
	Seirococcaceae	*Seirococcus axillaris*	na
	Sporochnaceae	*Perithalia caudata*	na
	Sporochnaceae	*Sporochnus comosus*	na
	Xiphophoralea	*Xiphophora chondrophylla*	na
Red algae	Areshougiaceae	*Erythroclonium sonderi*	na
	Balliacae	*Ballia callitricha*	na
	Bangiaceae	unknown red membrane cf *Clymene* 6906	na
	Callithamniaceae	*Callithamnion caulescens*	na
	Callithamniaceae	*Ptilocladia vestita*	na
	Callithamniaceae	unknown cf *Crouania* 6932	na
	Callithamniaceae	unknown cf *Crouania* 6970	na
	Ceramiaceae	*Ceramium flaccidum*	na
	Ceramiaceae	*Ceramium* sp. 6901	na
	Ceramiaceae	*Macrothamnion secundum*	na
	Champiaceae	*Champia viridis*	na
	Champiaceae	*Champia zostericola*	na
	Corallinaceae	unknown cf *Jania* 6850, 6871, 6907	na
	Cystocloniaceae	*Hypnea ramentacea*	na
	Delesseriaceae	*Dasya ceramioides*	na
	Delesseriaceae	*Dasya cliftonii*	na
	Delesseriaceae	*Dasya villosa*	na
	Delesseriaceae	*Dasysiphonia clavigera*	na
	Delesseriaceae	*Nitophyllum crispum*	na
	Delesseriaceae	*Phitymophora amansioides*	na
	Delesseriaceae	*Platysiphonia delicata*	na
	Delesseriaceae	*Thuretia quercifolia*	na
	Delesseriaceae	unknown cf *Acrosorium* 6860	na
	Delesseriaceae	unknown cf *Dasya* 6859	na

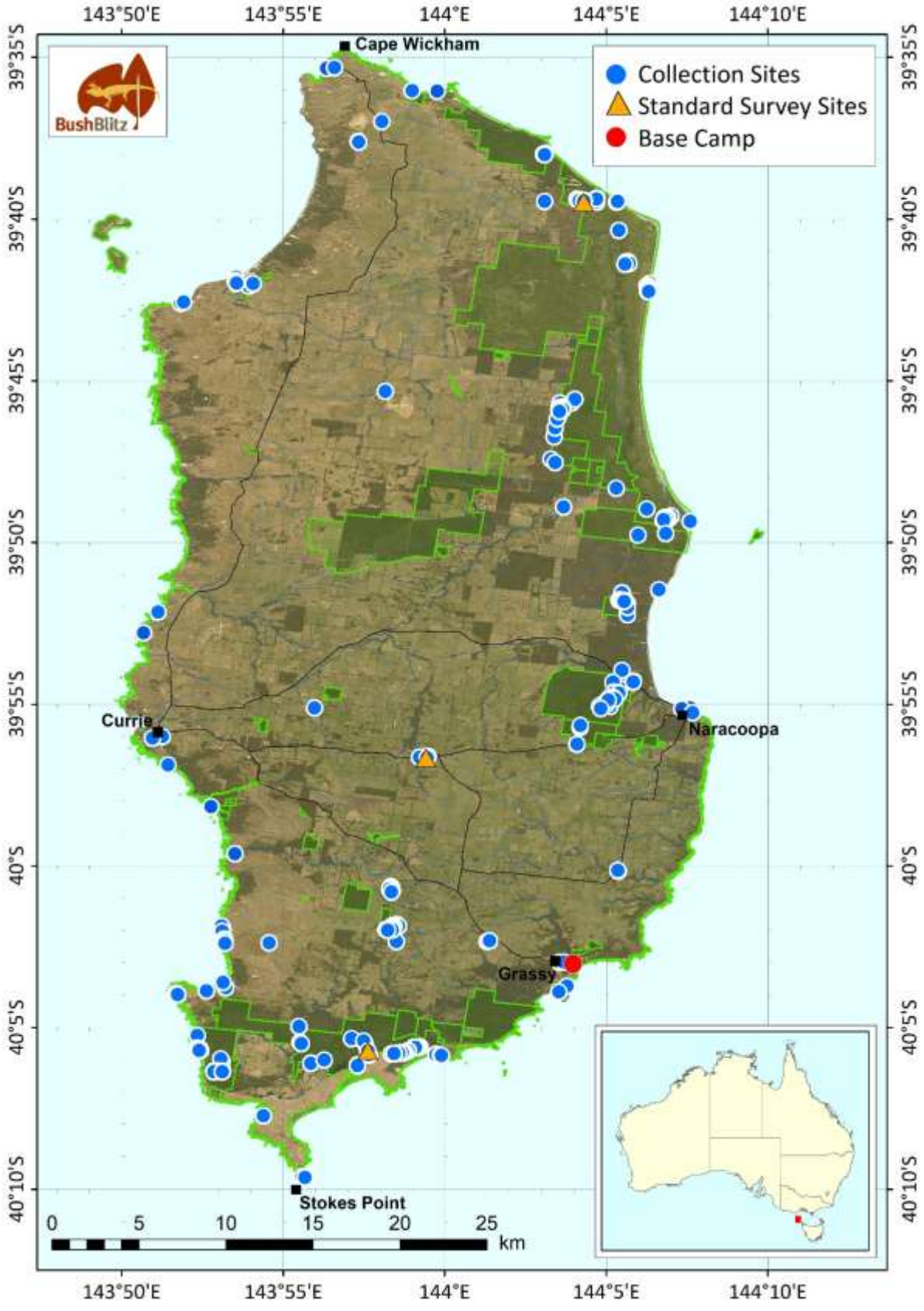
Group	Family	Species	Common name
	Delesseriaceae	unknown Delesseriaceae 6971	na
	Dicranematales	*Dicranema revolutum*	na
	Faucheaceae	*Webervanbossea splachnoides*	na
	Gelidiaceae	*Capreolia implexa*	na
	Gelidiaceae	*Gelidium pusillum*	na
	Geliellaceae	*Parviphycus antipae*	na
	Hapalidiaceae	*Synarthrophyton patena*	na
	Kallymeniaceae	*Callophyllis rangiferina*	na
	Phacelocarpaceae	*Phacelocarpus peperocarpos*	na
	Plocamiaceae	*Plocamium angustum*	na
	Plocamiaceae	*Plocamium mertensii*	na
	Plocamiaceae	*Plocamium patagiatum*	na
	Porolithaceae	*Metagoniolithon radiatum*	na
	Rhodomelaceae	*Chondria succulenta*	na
	Rhodomelaceae	*Dasyclonium incisum*	na
	Rhodomelaceae	*Dictyomenia harveyana*	na
	Rhodomelaceae	*Echinothamnion hookeri*	na
	Rhodomelaceae	*Echinothamnion hystrix*	na
	Rhodomelaceae	*Heterosiphonia wrangelioides*	na
	Rhodomelaceae	*Laurencia filiformis*	na
	Rhodomelaceae	*Laurencia majuscula*	na
	Rhodomelaceae	*Laurencia tasmanica*	na
	Rhodomelaceae	*Leptosiphonia brodiei*	na
	Rhodomelaceae	*Polysiphonia decipiens*	na
	Rhodomelaceae	*Polysiphonia subtilissima*	na
	Rhodomelaceae	*Tolypiocladia penningtonensis*	na
	Rhodomelaceae	unknown cf *Kuetzingia* 6872	na
	Rhodymeniaceae	unknown cf *Botryocladia* 6969	na
	Sarcodiaceae	*Trematocarpus affinis*	na
	Wrangeliaceae	*Anotrichium crinitum*	na
	Wrangeliaceae	*Anotrichium licmophorum*	na
	Wrangeliaceae	*Anotrichium subtile*	na
	Wrangeliaceae	*Griffithsia ovalis*	na
	Wrangeliaceae	*Haloplegma preissii*	na
	Wrangeliaceae	*Mazoyerella arachnoidea*	na
	Wrangeliaceae	*Wollastoniella mucronata*	na
	na	unknown cf green or red 6935	na
	na	unknown cf red 6862	na
	na	unknown cf red creeping epiphyte	na
	na	unknown cf red epiphyte 6933	na

Group	Family	Species	Common name
Blue-green algae	Coleofasiculaceae	*Symploca* sp.	na

a Putative new species. **b** Introduced and/or pest species. **c** Listed as threatened under the *Threatened Species Protection Act 1995* (Tasmania). **na** Not available.

Appendix B: Collection sites

Map B1 Map of collection sites



Glossary

Term	Definition
ACCP	Approved Conservation Covenant Program
ALA	Atlas of Living Australia
CA	Conservation Area
Endemic	Native to or limited to a certain region.
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth)
Genus (plural genera)	A taxonomic category that ranks between family and species, consisting of related species (e.g. *Acacia*).
Introduced	Not indigenous; not native to the area in which it now occurs.
Lineage	A sequence of species each of which is considered to have evolved from its predecessor.
NR	Nature Reserve
Pest species	A species that has the potential to have a negative environmental, social or economic impact.
Putative new species	An unnamed species that, as far as can be ascertained, was identified as a species new to science as a direct result of this Bush Blitz.
QVMAG	Queen Victoria Museum and Art Gallery
Range extension	Increase in the known distribution or area of occurrence of a species.
RBGV	Royal Botanic Gardens Victoria
SF	State Forest
SR	State Reserve
SSS	Standard survey site
Taxon (plural taxa)	A member of any particular taxonomic group (e.g. a species, genus, family).
Taxonomy	The categorisation and naming of species. The science of identifying and naming species, as well as grouping them based on their relatedness.
Threatened	Fauna or flora that are listed under Section 178 of the EPBC Act (or equivalent State legislation) in any one of the following categories – extinct, extinct in the wild, critically endangered, endangered, vulnerable, conservation dependent.
TMAG	Tasmanian Museum and Art Gallery
TPWS	Tasmania Parks and Wildlife Service
TSPA	*Threatened Species Protection Act 1995* (Tasmania)
Tufa	A soft, porous rock consisting of calcium carbonate deposited from springs rich in lime.
Undescribed taxon	A taxon (usually a species) that has not yet been formally described and named.
UNSW	University of New South Wales
Vascular plants	A lineage of plants that possess well-developed veins (vascular tissue) in their stems, roots and leaves. Vascular plants include the majority of familiar land plants: flowering plants, ferns, conifers, cycads and fern allies, but not mosses, liverworts or algae.
Vouchers (voucher specimens)	Any specimen, usually a dead animal or preserved plant sample, that serves as a basis of study and is retained as a reference.

References

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