

Stony Head Bush Blitz

Vascular Plants, Bryophytes and Lichens

15 March 2021 – 24 March 2021

Submitted: 14/09/2021

Matthew Baker, Gintaras Kantvilas, Lyn Cave and Miguel de Salas

Nomenclature and taxonomy used in this report is consistent with:

The Australian Plant Name Index (APNI)

<http://www.anbg.gov.au/databases/apni-about/index.html>

The Australian Plant Census (APC)

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

AusMoss

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

The Catalogue of Australian Liverworts and Hornworts

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

Checklist of the Lichens of Australia and its Island Territories.

<http://www.anbg.gov.au/abrs/lichenlist/introduction.html>

Contents

Contents.....	2
List of contributors	2
Abstract.....	3
1. Introduction.....	3
2. Methods	3
2.1 Site selection.....	3
2.2 Survey techniques.....	3
2.2.1 Methods used at standard survey sites.....	3
2.3 Identifying the collections	3
3. Results and Discussion	3
3.1 Un-named or not formalised taxa	4
3.2 Putative new species (new to science).....	4
3.3 Exotic and pest species.....	4
3.4 Threatened species.....	9
3.5 Range extensions	11
3.6 Genetic information	13
4. Information on species lists	13
5. Information for land managers	13
6. Other significant findings	13
7. Conclusions.....	13
Acknowledgements	14
References.....	15
Appendix 1.1. List of vascular plants recorded during the Stony Head Bush Blitz	16
Appendix 1.2. List of bryophytes recorded during the Stony Head Bush Blitz	25
Appendix 1.3. List of lichens recorded during the Stony Head Bush Blitz	28

List of contributors

List of contributors to this report.			
Name	Institution/affiliation	Qualifications/area of expertise	Level/form of contribution
<i>Matthew Baker*</i>	<i>Tasmanian Herbarium</i>	<i>Vascular Plants</i>	<i>survey participant and principal author</i>
<i>Miguel de Salas</i>	<i>Tasmanian Herbarium</i>	<i>Vascular Plants</i>	<i>survey participant and report author</i>
<i>Lyn Cave</i>	<i>Tasmanian Herbarium</i>	<i>Bryophytes</i>	<i>survey participant and report author</i>
<i>Gintaras Kantvilas</i>	<i>Tasmanian Herbarium</i>	<i>Lichens</i>	<i>survey participant and report author</i>

Abstract

A total of 566 taxa were recorded from the groups of vascular plants, bryophytes and lichens. Five lichens are considered un-named or not formalised taxa and four additional lichens are considered species new to science and were a direct result of this Bush Blitz. Sixty-eight exotic vascular plants and two introduced mosses were recorded. Of these, three are declared under the *Tasmanian Weed Management Act 1999*. Thirteen vascular plants listed under the *Tasmanian Threatened Species Protection Act 1995* were recorded. A single species listed under the EPBC was recorded. Significant range extensions were largely limited to the lichens and are represented by taxa that are first records for Tasmania, Australia or the Southern Hemisphere.

1. Introduction

The target groups of vascular plants, bryophytes and lichens were surveyed at Stony Head Military Training Area in the north of Tasmania. The survey was conducted over two periods: 2–4 November 2020 and 15–24 March 2021. Given the site's history as a military training base it has been largely off-limits for voucher based biological surveys. The wide range of habitats found on the property suggested a high diversity of plants was to be found.

2. Methods

2.1 Site selection

A preliminary site visit was made from 2–4 November 2020 to scope the area for survey sites and to collect spring-flowering vascular plants. The main survey window was 15–24 March 2021.

Sampling was based on a strategic selection of survey sites from the preliminary visit and represented the major vegetation types. Sampling was confined mostly to undisturbed and regenerating habitats. Each site was surveyed in detail to cover relevant habitats for target taxa.

2.2 Survey techniques

Specimens of vascular plants, bryophytes and lichens were collected and lodged in the Tasmanian Herbarium (HO), with limited duplicates distributed to other herbaria nationally and internationally under TMAG's formal specimen exchange programme. Several vascular plant taxa were recorded only by observation due to sampling difficulties (e.g. tall eucalypt trees) or lack of fertile material. All possible substrata for lichens and bryophytes, including rocks, soil, bark, wood and charcoal, were examined.

2.2.1 Methods used at standard survey sites

Standard survey sites were comprehensively surveyed for all vascular plants and bryophytes. Percentage cover for vascular plants was estimated for all species encountered.

2.3 Identifying the collections

Specimens were identified utilising standard equipment and techniques, with comparison to TMAG's reference collections when necessary. Lichens were identified in the laboratory using low-power and high-power microscopy of hand-cut sections of the thallus (vegetative tissue) and apothecia (reproductive structures), mounted in water, 10% KOH, 50% HNO₃, lactophenol cotton blue, ammoniacal erythrosin and Lugol's iodine. Routine chemical analyses using thin-layer chromatography followed standard methods (Orange et al. 2010).

3. Results and Discussion

Appendix 1 lists all vascular plants (appendix 1.1), bryophytes (appendix 1.2) and lichens (appendix 1.3) recorded during the Bush Blitz. Collections made during this Bush Blitz will result in 458 vascular plant specimens representing 288 taxa; 185 bryophyte specimens

representing 71 taxa; and 354 lichen specimens representing 207 taxa being added to public collections and to publicly accessible databases.

3.1 Un-named or not formalised taxa

Five lichen taxa recorded from the property are either significant range extensions of already known taxa or they are potentially new to science. Further investigation is required to understand the taxonomy of these. For details see table 1.

Table 1. Putatively un-named or not formalised taxa

Taxon	Comment
Lichens	
<i>Arthonia cf. anombrophila</i> .	Either a remarkable range extension of a temperate Northern Hemisphere species, or new to science (more likely the latter).
<i>Lecanora cf. intumescens</i> .	Possibly a significant range extension for a Western Australian rare endemic. Requires comparisons with the Type specimen.
<i>Micarea aff. deminuta</i> .	This genus was recently revised for Tasmania, and the particular taxon in question is highly unusual and possibly a new species. Further collections and study are required.
<i>Palicella</i> sp.	A genus previously unrecorded for the Southern Hemisphere. Further collections and study are required to properly circumscribe it and ascertain whether it is new to science.
? <i>Strangospora</i> sp.	Almost certainly new to science, but its generic relationships require further study.

3.2 Putative new species (new to science)

In this report, ‘putative new species’ means an unnamed species that, as far as can be ascertained, was identified as a new species as a direct result of this Bush Blitz. Four putative new species were identified as a direct result of this Bush Blitz. For details see table 2.

Table 2. Putative new species (new to science)

Species	Comment
Lichens	
<i>Bacidia</i> sp. A.	This species appears to be undescribed.
<i>Coenogonium</i> sp.	This is species unequivocally new to science.
<i>Megaloblastenia</i> sp.	It is almost certainly a new species although some molecular data would help to confirm its relationships with <i>M. marginiflexa</i> .
<i>Phlyctis</i> sp.	New to science!

3.3 Exotic and pest species

Sixty-eight species of introduced vascular plants were recorded. Given the history of the property, the relatively high number of naturalised, exotic vascular plants is not surprising. Large tracts of the property consist of improved pasture and, consequently, contain many species of agricultural weeds. Most of these taxa are annual and perennial herbs and grasses, and were recorded in pastures, along roadsides and fence lines within the property, and around areas of habitation. Many of the species of introduced plants are likely to have

originated from past agricultural activities. Species of most concern include isolated occurrences of *Senecio jacobaea*, *Lycium ferocissimum*, *Verbascum thapsus*, *Conyza sumatrensis*, *Thinopyrum junceiforme* and *Ammophila arenaria*. These taxa would make ideal targets for eradication due to their limited population size. Three species listed as declared under the *Tasmanian Weed Management Act 1999* were recorded: *Carduus tenuiflorus*, *Senecio jacobaea* and *Lycium ferocissimum*.

Two species of exotic mosses were recorded from the Scale A area. For details of exotic species recorded from this Bush Blitz see table 3

Table 3. Exotic and pest species recorded			
Exotic/pest species	Location sighted/observed	Indication of abundance	Comments
Vascular Plants			
<i>Dysphania pumilio</i> (R.Br.) Mosyakin & Clemants	Southwestern paddocks off Seaview Road.	Common on disturbed patches of pasture	Weed of agriculture and waste places
<i>Amaryllis belladonna</i> L.	Seaview Lagoon, site of ruin; Scale A	Very localised and uncommon	Garden escapee
<i>Nerine sarniensis</i> (L.) Herb.	Scale A	Very localised and uncommon	Garden escapee
<i>Carduus tenuiflorus</i> Curtis	Seaview Lagoon.	Occasional	Weed of agriculture and waste places. Declared under the <i>Tasmanian Weed Management Act 1999</i>
<i>Cirsium vulgare</i> (Savi) Ten.	Quarry Road, approximately 2 km E of main entrance;	Occasional but widespread	Weed of agriculture and waste places
<i>Conyza sumatrensis</i> (Retz.) E.Walker	Maitland bay, towards end of Maitland Bay beach track; Quarry at end of Quarry Road.	Occasional but widespread	Weed of agriculture and waste places
<i>Cotula coronopifolia</i> L.	Lagoon near Fother's Hill; Easternmost coast on the property, off Seaview Road.	Occasional but widespread	Weed of wet habitats
<i>Agrostis stolonifera</i> L.	Seaview Lagoon	Common	Common amongst pasture
<i>Hypochaeris radicata</i> L.	Class Range Butts, approximately 3.2 km ENE of main entrance; Southwestern paddocks off Seaview Road.	Occasional but widespread	Weed of agriculture and waste places
<i>Leontodon saxatilis</i> Lam.	Seaview Lagoon, site of ruin; Quarry Road; Maitland Bay, rocky headland on west side of Maitland Bay.	Occasional but widespread	Weed of agriculture and waste places
<i>Senecio jacobaea</i> L.	Santa Barbara Road, about 750 m east of	Localised, single mature plant and	Weed of agriculture and waste places. Declared under the

	North-South Road junction.	several rosettes at this location.	<i>Tasmanian Weed Management Act 1999</i>
<i>Sonchus asper</i> (L.) Hill	Seaview Lagoon, site of ruin.	Occasional	Weed of agriculture and waste places
<i>Vellereophyton dealbatum</i> (Thunb.) Hilliard & B.L.Burtt	Quarry at end of Quarry Road; Class Range Butts, approximately 3.2 km ENE of main entrance; Strait Road.	Common and widespread particularly along sides of tracks.	Weed of agriculture and waste places
<i>Cakile maritima</i> Scop. subsp. <i>maritima</i>	Seaview Beach; Maitland Bay.	Common and abundant on beach sand at high tide mark	Coastal weed
<i>Polycarpon tetraphyllum</i> (L.) L.	Southwestern paddocks off Seaview Road;	Common on areas of disturbed soil	Weed of agriculture and waste places
<i>Briza minor</i> L.	Scale A	Occasional	Weed of agriculture and waste places
<i>Bromus hordeaceus</i> L.	Scale A	Common on areas of disturbed soil	Weed of agriculture and waste places
<i>Euphorbia lathyris</i> L.	Maitland Bay, western end of beach.	Localised	Weed of waste places
<i>Euphorbia paralias</i> L.	Seaview Beach; Rocky beach east of Black Rock Point, approx. half way between point and end of Strait Road; Maitland Bay, western end of beach.	Common and abundant on beach sand above high tide mark. Also on rocky shores.	Coastal weed
<i>Euphorbia peplus</i> L.	Maitland Bay, end of vehicle track to Maitland Bay beach.	Occasional but widespread	Weed of agriculture and waste places
<i>Trifolium arvense</i> L.	Track to Seaview Lagoon.	Occasional in pasture	Weed of agriculture and waste places
<i>Trifolium cernuum</i> Brot.	Scale A.	Occasional	Weed of agriculture and waste places
<i>Trifolium fragiferum</i> L.	Southwestern paddocks off Seaview Road; Seaview Lagoon.	Common in pasture	Pasture species
<i>Centaurium erythraea</i> Rafn	Class Range Butts, approximately 3.2 km ENE of main entrance; Strait Road.	Occasional but widespread	Weed of agriculture and waste places
<i>Centaurium tenuiflorum</i> (Hoffmanns. & Link) Fritsch ex Janch.	Quarry at end of Quarry Road; Northern end of Strait Road.	Occasional but widespread	Weed of agriculture and waste places
<i>Geranium molle</i> L.	Track to Seaview Lagoon.	Occasional	Weed of agriculture and waste places
<i>Juncus articulatus</i> L.	Cross Roads on Main North Road, approximately 800 m S	Localised	Weed of wet habitats

	of trig station on Stony Head.		
<i>Juncus bulbosus</i> L.	Cross Roads on Main North Road, approximately 800 m S of trig station on Stony Head.	Localised	Weed of wet habitats
<i>Juncus capitatus</i> Weigel	Scale A	Occasional	Weed of wet areas
<i>Isolepis levynsiana</i> Muasya & D.A.Simpson	Scale A	Occasional	Weed of wet areas
<i>Lysimachia arvensis</i> (L.) U.Manns & Anderb.	Class Range Butts, approximately 3.2 km ENE of main entrance; Rocky beach east of Black Rock Point; Seaview Lagoon, site of ruin.	Widespread and common	Weed of agriculture and waste places
<i>Parentucellia viscosa</i> (L.) Caruel	Prime Meadow, approximately 500 m ENE of Class Range targets.	Occasional	Weed of agriculture and waste places
<i>Kickxia elatine</i> (L.) Dumort. subsp. <i>elatine</i>	Class Range Butts, approximately 3.2 km ENE of main entrance.	Localised and uncommon	Weed of agriculture and waste places
<i>Plantago coronopus</i> L. subsp. <i>coronopus</i>	Southwestern paddocks off Seaview Road; Class Range Butts, approximately 3.2 km ENE of main entrance; Bluff on western side of Maitland Bay.	Widespread and common	Weed of agriculture, waste places and coastal areas
<i>Agrostis capillaris</i> L.	Quarry Road.	Common component of pasture/grassland	Weed of agriculture and waste places
<i>Aira elegantissima</i> Schur	Quarry Road.	Common component of pasture/grassland	Weed of agriculture and waste places
<i>Aira praecox</i> L.	Quarry Road.	Common component of pasture/grassland	Weed of agriculture and waste places
<i>Ammophila arenaria</i> (L.) Link subsp. <i>arenaria</i>	Southwestern paddocks off Seaview Road.	Localised and uncommon	Coastal weed
<i>Anthoxanthum odoratum</i> L.	Quarry at end of Quarry Road.	Occasional	Weed of agriculture and waste places
<i>Bromus diandrus</i> Roth	Seaview Lagoon, site of ruin.	Occasional	Weed of agriculture and waste places
<i>Moenchia erecta</i> (Huds.) Coville	Scale A	Uncommon	Weed of agriculture and waste places
<i>Myosotis discolor</i> (G.Forst.) Keyserl.	Scale A	Occasional weed of bare soil	Weed of agriculture and waste places
<i>Cynosurus echinatus</i> L.	Seaview Lagoon; Quarry Road.	Occasional	Weed of agriculture and waste places

<i>Dactylis glomerata</i> L.	Southwestern paddocks off Seaview Road.	Common component of pasture/grassland	Pasture species and weed of waste places
<i>Festuca arundinacea</i> Schreb.	Class Range Butts, approximately 3.2 km ENE of main entrance.	Localised and uncommon	Pasture species and weed of waste places
<i>Festuca rubra</i> L.	Scale A	Localised and uncommon	Turf species
<i>Holcus lanatus</i> L.	Southwestern paddocks off Seaview Road; Tributary of Curries River at entrance to base; Quarry Road, approximately 2 km E of main entrance.	Widespread but uncommon	Weed of agriculture and waste places
<i>Hordeum hystrix</i> Roth	Seaview Lagoon.	Occasional	Weed of agriculture and waste places
<i>Lagurus ovatus</i> L.	Seaview Lagoon, site of ruin; Scale A	Common and abundant in localised populations	Weed of agriculture and waste places in dry sandy soils
<i>Lolium perenne</i> L.	Scale A	Common	Pasture species and weed of waste places
<i>Paspalum dilatatum</i> Poir.	Quarry at end of Quarry Road.	Uncommon	Weed of agriculture and waste places
<i>Phalaris aquatica</i> L.	Southwestern paddocks off Seaview Road.	Occasional	Pasture species and weed of waste places
<i>Polypogon maritimus</i> Willd. var. <i>subspatheaceus</i> (Req.) Parl.	Quarry at end of Quarry Road.	Uncommon	Weed of agriculture and waste places
<i>Stenotaphrum secundatum</i> (Walter) Kuntze	Seaview Lagoon, site of ruin.	Localised and uncommon	Turf species and weed of waste places
<i>Thinopyrum junceiforme</i> (Å.Löve & D.Löve) Å.Löve	Seaview Beach.	Localised, one population only.	Coastal weed
<i>Vulpia bromoides</i> (L.) Gray	Quarry Road.	Uncommon	Weed of agriculture and waste places
<i>Romulea rosea</i> Greene	Scale A	Common in grassy areas	Weed of agriculture and waste places
<i>Acetosella vulgaris</i> Fourr.	Southwestern paddocks off Seaview Road; Quarry Road, approximately 2 km E of main entrance.	Occasional	Weed of agriculture and waste places
<i>Reseda luteola</i> L.	Class Range Butts, approximately 3.2 km ENE of main entrance.	Localised and uncommon	Weed of agriculture and waste places

<i>Verbascum thapsus</i> L.	Maitland Bay, end of vehicle track to Maitland Bay beach.	Localised and uncommon	Weed of agriculture and waste places
<i>Lycium ferocissimum</i> Miers	Seaview Lagoon, site of ruin.	Localised and occasional	Agricultural and environmental weed. Declared under the <i>Tasmanian Weed Management Act 1999</i>
<i>Solanum nigrum</i> L.	Southwestern paddocks off Seaview Road; Strait Road.	Widespread but uncommon	Weed of agriculture and waste places
<i>Senecio vulgaris</i> L.	Santa Barbara Road, about 750 m east of North-South Road junction.	Occasional	Weed of agriculture and waste places
<i>Sonchus oleraceus</i> L.	Stony Head, NE extremity of property.	Occasional	Weed of agriculture and waste places
<i>Sporobolus africanus</i> Lam.	Scale A	Common on grassy roadside verges	Weed of roadsides and grasslands
<i>Vulpia myuros</i> (Lam.) Chase	Scale A	Occasional	Weed of agriculture and waste places
<i>Chenopodium glaucum</i> L.	Lagoon near Fother's Hill; Seaview Lagoon, site of ruin.	Occasional in localised populations	Uncertainty exists regarding this species status in Tasmania, i.e. it is not known if it is native or not.
<i>Argentina anserina</i> (L.) Rydb.	Easternmost coast on the property, off Seaview Road.	Abundant in localised populations	Uncertainty exists regarding this species status in Tasmania, i.e. it is not known if it is native or not.
Bryophytes			
<i>Brachythecium albicans</i> (Hedw.) Schimp.	Scale A, and at Class Range behind butts	Common	Common weed in lawns and grassy areas
<i>Eurhynchium praelongum</i> (Hedw.) Bruch & Schimp.	Scale A, and at entrance to property	Common	Common weed in lawns and grassy areas

3.4 Threatened species

Ten species listed as rare and three listed as vulnerable under the *Tasmanian Threatened Species Protection Act 1995* were recorded during the survey. One species listed as vulnerable under the EPBC were recorded. For details of the threatened species recorded during this Bush Blitz see table 4.

Table 4. Threatened species			
Species	Listing status and level (EBPC, /Territory)	Location sighted/observed	Indication of abundance
<i>Calocephalus lacteus</i> Less.	r (State)	Maitland Bay, rocky headland on west side of Maitland Bay.	Occasional
<i>Lepidosperma forsythii</i> A.A.Ham.	r (State)	Strait Road.	Common
<i>Hibbertia virgata</i> R.Br. ex DC.	r (State)	Prime Meadow, approximately 2.5 km east of Scale A.	Uncommon
<i>Schenkia australis</i> (R.Br.) G.Mans.	r (State)	Eastern side of Maitland Bay; Bluff on western side of Maitland Bay.	Locally common
<i>Lasiopetalum baueri</i> Steetz	r (State)	Maitland Bay.	Occasional
<i>Asperula minima</i> Hook.f.	r (State)	Approximately 500 m SE of the summit of Ryans Hill.	Very common
<i>Stylium beaugleholei</i> J.H.Willis	r (State)	Stony Head trail, creek crossing approximately 1 km S of Stony Head and 200 m N of Cross Roads.	Locally very common
<i>Stylium despectum</i> R.Br.	r (State)	Cobble Cove, in the northeastern-most corner of the property.	Locally common
<i>Stylium perpusillum</i> Hook.f.	r (State)	Stony Head trail, creek crossing approximately 1 km S of Stony Head and 200 m N of Cross Roads.	Uncommon
<i>Phyllangium divergens</i> (Hook.f.) Dunlop	v (State)	Stony Head bluff. Top of NE-facing gully descending to the shore.	Very common
<i>Glycine microphylla</i> (Benth.) Tindale	v (State)	Quarry approximately 1.4 km ESE of main entrance.	One plant only
<i>Xerochrysum palustre</i> (Flann) R.J.Bayer	v (State) VU (EPBC)	Seaview Rd., lagoon approximately 1.9 km N of main entrance.	One population consisting of thousands of plants
<i>Comesperma defoliatum</i> F.Muell.	R (State)	Cross Roads on Main North Road, approximately 800 m S of trig station on Stony Head.	One plant only

3.5 Range extensions

Vascular plants and bryophytes not previously recorded within 50 km of the survey area are listed below as range extensions. Several lichen taxa recorded from the survey area are either first records for Tasmania, Australia, or the Southern Hemisphere. For details of the range extensions recorded during this Bush Blitz see table 5.

Table 5. Range extensions or significant infill in distribution records for species

Species	Location sighted/observed	Distance from nearest known record (km)	Comments
Vascular Plants			
<i>Trifolium cernuum</i> Brot.	Scale A	60 km	Introduced species.
<i>Trifolium fragiferum</i> L.	Southwestern paddocks off Seaview Road.	60 km	Introduced species.
<i>Xerochrysum palustre</i> (Flann) R.J.Bayer	Seaview Rd., lagoon approximately 1.9 km N of main entrance.	70 km	Closest records are from Tomahawk and Longford.
<i>Amaryllis belladonna</i> L.	Seaview Lagoon, site of ruin; Scale A	190 km	Introduced species commonly associated with abandoned gardens.
<i>Centaurium tenuiflorum</i> (Hoffmanns. & Link) Fritsch ex Janch.	Northern end of Strait Road.	50 km	Introduced species
<i>Comesperma defoliatum</i> F.Muell.	Cross Roads on Main North Road, approximately 800 m S of trig station on Stony Head.	80 km	Nearest locations at Mt Cameron to E and Sisters Hills to W
<i>Euchiton sphaericus</i> (Willd.) Holub	Prime meadow, approximately 500 m ENE of Class Range targets; Quarry at end of Quarry Road.	55 km	Nearest locations Ulverstone, Goulds Country,
<i>Galium leiocarpum</i> I.Thomps.	Stony Head bluff. Top of NE-facing gully descending to the shore.	50 km	Nearest location Launceston
<i>Hordeum hystrix</i> Roth	Seaview Lagoon.	65 km	Introduced species.
<i>Hypericum japonicum</i> Thunb.	Summit of Ryans Hill; Quarry Road.	50 km	Hollybank
<i>Nerine sarniensis</i> (L.) Herb.	Scale A	200 km	Introduced species commonly associated with abandoned gardens.
<i>Solenogyne dominii</i> L.G.Adams	Perimeter Trail Section 4.	65 km	First record for the north coast - closest record Evandale
<i>Pentapogon quadrifidus</i> R.Br.	Stony Head, track to Stony Head	55 km	Nearest location Launceston
<i>Rytidosperma geniculatum</i> (J.M.Black) Connor & Edgar	Scale A	55 km	Nearest location Launceston
Lichens			
<i>Amandinea hypostictica</i>	Maitland Bay W	N/A	First record for Tasmania. Otherwise known from the

			Australian mainland and Kangaroo Island
<i>Angiactis banksiae</i>	Maitland Bay W	N/A	A very uncommon species, hitherto known from coastal south-eastern and south-western Australia, and from Flinders Island. A first record for the Tasmanian mainland.
<i>Caloplaca giffillaniorum</i>	Maitland Bay W; Stony Head	N/A	Previously known only from Kangaroo Island. A first record for Tasmania.
<i>Cladonia subradiata</i>	Strait Road	N/A	Widely distributed on the Australian mainland. A first record for Tasmania.
<i>Micarea xanthonica</i>	Ryans Hill	N/A	Known from oceanic habitats in the temperate Northern Hemisphere (the Pacific North-West of North America, southern Norway, Great Britain). A new record for the Southern Hemisphere.
<i>Phaeographis lindigiana</i>	Ryans Hill; Scale A	N/A	Previously known from the eastern Australian mainland and Flinders Island. A first record for the Tasmanian mainland.
<i>Pseudothelomma ocellatum</i>	Stockyards	N/A	A very widespread, opportunistic/weedy species. First record for Australia.

Bryophytes

<i>Frullania rostrata</i> (Hook.f. & Taylor) Hook.f. & Taylor ex Gottsche, Lindenb. & Nees	Quarry Road, c. 280 m N of Quarry	60 km	Nearest locations Wombat Plain (St Patricks River) and Strickland Gorge
<i>Hymenostomum sullivanii</i> Müll.Hal. ex Geh.	W end of Maitland Bay	200 km	This species is not well known. Nearest location Maria Island.
<i>Rhynchostegium tenuifolium</i> (Hedw.) Reichardt	Perimeter Trail section 5; Beside Prime Meadow; Ryans Hill, SE of summit; 400 m SE of Stony Head	75 km	Nearest location Alberton, SE of Ringarooma
<i>Rosulabryum subtomentosum</i> (Hampe) J.R.Spence	Ryans Hill, SE of summit; Black Rock Point	85 km	Nearest locations St Columba Falls and Musselroe Wind Farm.
<i>Zygodon minutus</i> Müll.Hal. & Hampe	Scale A Range Control; Quarry Road, c. 830 m E of Airfield Quarry	65 km	Nearest location Forth
<i>Pyrrhobryum paramattense</i> (Müll.Hal.) Manuel	Ryans Hill, SE of summit	55 km	Nearest location Parris Rivulet, Tonganah.

<i>Warburgiella macrospora</i> (Dixon & Sainsbury) B.C.Tan, W.B.Schofield & H.P.Ramsay	Airfield Quarry; Ryans Hill, SE of summit	130 km	Nearest location Viormy property, Central Highlands.
----------------------------------------------------------------------------------------	-------------------------------------------	--------	------------------------------------------------------------

3.6 Genetic information

No genetic sampling was undertaken.

4. Information on species lists

The vascular plant species lists reflect typical compositions for northern Tasmanian coastal heathland and hinterland. Threatened vascular plants and significant range extensions were higher than we have experienced for previous Tasmanian Bush Blitzes, perhaps reflecting the land management history of only localised disturbance.

5. Information for land managers

Several areas stood out in terms of their biodiversity and frequency of novel, endemic or threatened species.

The bluffs and headlands around Stony Head proper and the heathland just to the south host three threatened annual herbs: *Stylium beagleholei* J.H.Willis, *Stylium perpusillum* Hook.f. and *Phyllangium divergens* (Hook.f.) Dunlop, all of which have very restricted distributions in Tasmania, as well as *Comesperma defoliatum* F.Muell., which is also a significant range extension from the nearest previously known population at Mount Cameron (80 km to the east).

The basalt headland on the western side of Maitland Bay hosts *Calocephalus lacteus* Less., *Schenkia australis* (R.Br.) G.Mans. and *Lasiopetalum baueri* Steetz, as well as the seldom-seen *Selaginella gracillima* (Kunze) Spring ex Salomon. Several lichens from this site, most notably *Angiactis banksiae*, were also new records for Tasmania.

The northeastern-most boundary of the property hosts two threatened vascular plants: *Stylium despectum* R.Br. on the roadside at the end of the road, and *Lepidosperma forsythii* A.A.Ham. in open heathland and heathy woodland to the south.

A wet gully of *Pomaderris apetala* Labill. subsp. *apetala* forest extending south-east from the summit of Ryans Hill hosts a particularly high diversity hot-spot for both lichens and bryophytes. *Melaleuca ericifolia* Sm. Dense scrub along Quarry Road, approximately 1.7 km south-east of the main camp also hosts a very high diversity of cryptogams, including several new to science. The main camp supports a surprising variety of bryophyte species, because it has both dry exposed soil, and damp areas close to the buildings.

6. Other significant findings

No other significant findings were made.

7. Conclusions

Access to the Stony Head Military Training Area during the 2021 Bush Blitz in Tasmania provided an opportunity to record the biodiversity of an area of the State that has had limited specimen based biological sampling. A wide range of habitats were surveyed and resulted in the discovery of a high diversity of vascular plants, bryophytes and lichens. Several threatened species and species new to science were recorded during the survey expanding our knowledge of the flora of the area. Numerous species were significant range extensions and included taxa that were new records for Tasmania, Australia and the Southern hemisphere. A large number of introduced species were recorded and can be linked to the property's past and current farming use.

Acknowledgements

We thank Kate Gillespie and Helen Cross from Bush Blitz for all their hard work to get the survey done during challenging times. We also thank Dr Kate Hibbert, and other support staff from the Department of Defence for their help and support during the survey. Kate's knowledge of the property and her advice on locations to visit allowed us to cover a wider range of habitats than otherwise would have been possible. Finally, we thank our colleagues from the Tasmanian Museum and Art Gallery and Queen Victoria Museum & Art Gallery, especially David Maynard for the loan of a set of diving belt weights, Jessica Walker and Claire Jinnette from Earthwatch, and our embedded teachers Ben Smethurst, Ruth Whelan and Helen Wilson for their company and assistance during the survey.

References

- Orange, A., James, P.W. & White, F.J.** 2010: *Microchemical Methods for the Identification of Lichens*. British Lichen Society, London: 101 pp.

Appendix 1.1 List of vascular plants recorded during the Stony Head Bush Blitz						
Family	Species	Common name	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic / pest
Adiantaceae	<i>Adiantum aethiopicum</i> L.	common maidenhair	No	No	No	No
Aizoaceae	<i>Carpobrotus rossii</i> (Haw.) Schwantes	native pigface	No	No	No	No
Aizoaceae	<i>Disphyma crassifolium</i> (L.) Bolus subsp. <i>clavellatum</i> (Haw.) Chinnock	roundleaf pigface	No	No	No	No
Aizoaceae	<i>Tetragonia implexicoma</i> (Miq.) Hook.f.	bower spinach	No	No	No	No
Amaranthaceae	<i>Atriplex billardierei</i> (Moq.) Hook.f.	glistening saltbush	No	No	No	No
Amaranthaceae	<i>Atriplex cinerea</i> Poir.	grey saltbush	No	No	No	No
Amaranthaceae	<i>Atriplex prostrata</i> Boucher ex DC.	creeping orache	No	No	No	No
Amaranthaceae	<i>Chenopodium glaucum</i> L.	pale goosefoot	No	No	No	Yes?
Amaranthaceae	<i>Dysphania pumilio</i> (R.Br.) Mosyakin & Clements	small crumbweed	No	No	No	Yes
Amaranthaceae	<i>Rhagodia candolleana</i> Moq. subsp. <i>candolleana</i>	coastal saltbush	No	No	No	No
Amaranthaceae	<i>Suaeda australis</i> (R.Br.) Moq.	southern seablite	No	No	No	No
Amaryllidaceae	<i>Amaryllis belladonna</i> L.		No	No	No	Yes
Amaryllidaceae	<i>Nerine sarniensis</i> (L.) Herb.		No	No	No	Yes
Apiaceae	<i>Apium prostratum</i> Labill. ex Vent. subsp. <i>prostratum</i> var. <i>filiforme</i> (A.Rich.)	slender sea-celery	No	No	No	No
Apiaceae	<i>Eryngium vesiculosum</i> Labill.	prickfoot	No	No	No	No
Apocynaceae	<i>Alyxia buxifolia</i> R.Br.	seabox	No	No	No	No
Araliaceae	<i>Hydrocotyle foveolata</i> H.Eichler	yellow pennywort	No	No	No	No
Araliaceae	<i>Hydrocotyle hirta</i> R.Br. ex A.Rich.	hairy pennywort	No	No	No	No
Araliaceae	<i>Hydrocotyle muscosa</i> R.Br. ex A.Rich.	mossy pennywort	No	No	No	No
Asparagaceae	<i>Lomandra longifolia</i> Labill.	sagg	No	No	No	No
Aspleniaceae	<i>Asplenium flabellifolium</i> Cav.	necklace fern	No	No	No	No
Asteraceae	<i>Actites megalocarpus</i> (Hook.f.) Lander	dune thistle	No	No	No	No
Asteraceae	<i>Argentipallium dealbatum</i> (Labill.) Paul G.Wilson	white everlasting	No	No	No	No
Asteraceae	<i>Brachyscome spathulata</i> Gaudich.		No	No	No	No
Asteraceae	<i>Calocephalus lacteus</i> Less.	milky beautyheads	No	No	Rare	No
Asteraceae	<i>Carduus tenuiflorus</i> Curtis	winged thistle	No	No	No	Yes
Asteraceae	<i>Cassinia aculeata</i> (Labill.) R.Br. subsp. <i>aculeata</i>	common dollybush	No	No	No	No
Asteraceae	<i>Centipeda elatinoides</i> (Less.) Benth. & Hook.f. ex O.Hoffm.	spreading sneezeweed	No	No	No	No
Asteraceae	<i>Chrysocephalum apiculatum</i> (Labill.) Steetz subsp. <i>apiculatum</i>		No	No	No	No
Asteraceae	<i>Cirsium vulgare</i> (Savi) Ten.	spear thistle	No	No	No	Yes
Asteraceae	<i>Conyza sumatrensis</i> (Retz.) E.Walker	tall fleabane	No	No	No	Yes
Asteraceae	<i>Cotula australis</i> (Sieber ex Spreng.) Hook.f.	southern buttons	No	No	No	No
Asteraceae	<i>Cotula coronopifolia</i> L.	water buttons	No	No	No	Yes
Asteraceae	<i>Euchiton involucratus</i> (G.Forst.) Holub	star cottonleaf	No	No	No	No

Family	Species	Common name	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic / pest
Asteraceae	<i>Euchiton japonicus</i> Willd.	common cottonleaf	No	No	No	No
Asteraceae	<i>Euchiton sphaericus</i> (Willd.) Holub	globe cottonleaf	No	No	No	No
Asteraceae	<i>Helichrysum luteoalbum</i> (L.) Rchb.	jersey cudweed	No	No	No	No
Asteraceae	<i>Hypochaeris radicata</i> L.	rough catsear	No	No	No	Yes
Asteraceae	<i>Lagenophora gunniana</i> Steetz		No	No	No	No
Asteraceae	<i>Lagenophora sublyrata</i> (Cass.) A.R.Bean & Jian Wang ter		No	No	No	No
Asteraceae	<i>Leontodon saxatilis</i> Lam.	hairy hawkbit	No	No	No	Yes
Asteraceae	<i>Leucophyta brownii</i> Cass.	cushionbush	No	No	No	No
Asteraceae	<i>Olearia axillaris</i> (DC.) F.Muell. ex Benth.	coast daisybush	No	No	No	No
Asteraceae	<i>Ozothamnus turbinatus</i> DC.	coast everlastingbush	No	No	No	No
Asteraceae	<i>Senecio biserratus</i> Belcher	jagged fireweed	No	No	No	No
Asteraceae	<i>Senecio jacobaea</i> L.	ragwort	No	No	No	Yes
Asteraceae	<i>Senecio minimus</i> Poir.	shrubby fireweed	No	No	No	No
Asteraceae	<i>Senecio prenanthoides</i> A.Rich.	common fireweed	No	No	No	No
Asteraceae	<i>Senecio vulgaris</i> L.	groundsel	No	No	No	Yes
Asteraceae	<i>Solenogyne dominii</i> L.G.Adams	smooth flat-herb	No	No	No	No
Asteraceae	<i>Sonchus asper</i> (L.) Hill	prickly sowthistle	No	No	No	Yes
Asteraceae	<i>Sonchus oleraceus</i> L.	sow thistle	No	No	No	Yes
Asteraceae	<i>Vellereophyton dealbatum</i> (Thunb.) Hilliard & B.L.Burtt	white cudweed	No	No	No	Yes
Asteraceae	<i>Xerochrysum palustre</i> (Flann) R.J.Bayer	swamp everlasting	No	VU	Vulnerable	No
Blechnaceae	<i>Blechnum nudum</i> (Labill.) Mett. ex Luerss.	fishbone waterfern	No	No	No	No
Boraginaceae	<i>Myosotis discolor</i> (G.Forst.) Keyserl.	changing forgetmenot	No	No	No	Yes
Brassicaceae	<i>Cakile maritima</i> Scop. subsp. <i>maritima</i>	searocket	No	No	No	Yes
Campanulaceae	<i>Lobelia anceps</i> L.f.	angled lobelia	No	No	No	No
Campanulaceae	<i>Lobelia pedunculata</i> R.Br.	matted lobelia	No	No	No	No
Caryophyllaceae	<i>Moenchia erecta</i> (Huds.) Coville	erect chickweed	No	No	No	Yes
Caryophyllaceae	<i>Polycarpon tetraphyllum</i> (L.) L.	fourleaf allseed	No	No	No	Yes
Caryophyllaceae	<i>Spergularia tasmanica</i> (Kindb.) L.G.Adams	greater seaspurrey	No	No	No	No
Caryophyllaceae	<i>Stellaria pungens</i> Brongn.	prickly starwort	No	No	No	No
Casuarinaceae	<i>Allocasuarina littoralis</i> (Salisb.) L.A.S.Johnson	black sheoak	No	No	No	No
Casuarinaceae	<i>Allocasuarina monilifera</i> (L.A.S.Johnson) L.A.S.Johnson	necklace sheoak	No	No	No	No
Centrolepidaceae	<i>Centrolepis strigosa</i> (R.Br.) Poir. subsp. <i>strigosa</i>	hairy bristlewort	No	No	No	No
Convolvulaceae	<i>Dichondra repens</i> J.R.Forst. & G.Forst.	kidneyweed	No	No	No	No
Crassulaceae	<i>Crassula decumbens</i> Baker	spreading stonecrop	No	No	No	No
Crassulaceae	<i>Crassula natans</i> Thunb. var. <i>minus</i> (Eckl. & Zeyh.) G.D.Rowley	floating stonecrop	No	No	No	No
Cyperaceae	<i>Baumea acuta</i> (Labill.) Palla	pale twigsedge	No	No	No	No

Family	Species	Common name	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic / pest
Cyperaceae	<i>Baumea juncea</i> (R.Br.) Palla	bare twigsedge	No	No	No	No
Cyperaceae	<i>Carex appressa</i> R.Br.		No	No	No	No
Cyperaceae	<i>Carex inversa</i> R.Br.	knob sedge	No	No	No	No
Cyperaceae	<i>Cyperus gunnii</i> Hook.f.	flecked flatsedge	No	No	No	No
Cyperaceae	<i>Eleocharis acuta</i> R.Br.	common spikesedge	No	No	No	No
Cyperaceae	<i>Ficinia nodosa</i> (Rottb.) Goetgh., Muasya & D.A.Simpson	knobby clubsedge	No	No	No	No
Cyperaceae	<i>Isolepis inundata</i> R.Br.	swamp clubsedge	No	No	No	No
Cyperaceae	<i>Isolepis levynsiana</i> Muasya & D.A.Simpson	tiny flatsedge	No	No	No	Yes?
Cyperaceae	<i>Lepidosperma concavum</i> R.Br.	sand swordsedge	No	No	No	No
Cyperaceae	<i>Lepidosperma ensiforme</i> (Rodway) D.I.Morris	arching swordsedge	No	No	No	No
Cyperaceae	<i>Lepidosperma forsythii</i> A.A.Ham.	stout rapiersedge	No	No	Rare	No
Cyperaceae	<i>Lepidosperma gladiatum</i> Labill.	coast swordsedge	No	No	No	No
Cyperaceae	<i>Lepidosperma longitudinale</i> Labill.	pithy swordsedge	No	No	No	No
Cyperaceae	<i>Schoenoplectus pungens</i> (Vahl) Palla	sharp clubsedge	No	No	No	No
Cyperaceae	<i>Schoenus apogon</i> Roem. & Schult.	common bogsedge	No	No	No	No
Cyperaceae	<i>Schoenus turbinatus</i> (R.Br.) Poir.	heathland bogsedge	No	No	No	No
Dennstaedtiaceae	<i>Pteridium esculentum</i> (G.Forst.) Cockayne subsp. esculentum		No	No	No	No
Dicksoniaceae	<i>Dicksonia antarctica</i> Labill.	soft treefern	No	No	No	No
Dilleniaceae	<i>Hibbertia acicularis</i> (Labill.) F.Muell.	prickly guineaflower	No	No	No	No
Dilleniaceae	<i>Hibbertia procumbens</i> (Labill.) DC.	spreading guineaflower	No	No	No	No
Dilleniaceae	<i>Hibbertia sericea</i> (R.Br. ex DC.) Benth. var. sericea	silky guineaflower	No	No	No	No
Dilleniaceae	<i>Hibbertia virgata</i> R.Br. ex DC.	twiggy guineaflower	No	No	Rare	No
Droseraceae	<i>Drosera auriculata</i> Backh. ex Planch.	tall sundew	No	No	No	No
Droseraceae	<i>Drosera hookeri</i> R.P.Gibson, B.J.Conn & Conran	grassland sundew	No	No	No	No
Droseraceae	<i>Drosera peltata</i> Thunb.	pale sundew	No	No	No	No
Droseraceae	<i>Drosera pygmaea</i> DC.	dwarf sundew	No	No	No	No
Dryopteridaceae	<i>Polystichum proliferum</i> (R.Br.) C.Presl	mother shieldfern	No	No	No	No
Elaeocarpaceae	<i>Tetratheca labillardierei</i> Joy Thoms.	glandular pinkbells	No	No	No	No
Ericaceae	<i>Epacris impressa</i> Labill.	common heath	No	No	No	No
Ericaceae	<i>Epacris lanuginosa</i> Labill.	swamp heath	No	No	No	No
Ericaceae	<i>Leucopogon australis</i> R.Br.	spike beardheath	No	No	No	No
Ericaceae	<i>Leucopogon parviflorus</i> (Andrews) Lindl.	coast beardheath	No	No	No	No
Ericaceae	<i>Leucopogon virgatus</i> (Labill.) R.Br. var. <i>virgatus</i>	twiggy beardheath	No	No	No	No
Ericaceae	<i>Monotoca elliptica</i> (Sm.) R.Br.	tree broomheath	No	No	No	No
Ericaceae	<i>Monotoca glauca</i> (Labill.) Druce	goldey wood	No	No	No	No
Ericaceae	<i>Sprengelia incarnata</i> Sm.	pink swampheath	No	No	No	No

Family	Species	Common name	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic / pest
Euphorbiaceae	<i>Amperea xiphoclada</i> (Sieber ex Spreng.) Druce var. <i>xiphoclada</i>	broom spurge	No	No	No	No
Euphorbiaceae	<i>Euphorbia lathyris</i> L.	caper spurge	No	No	No	Yes
Euphorbiaceae	<i>Euphorbia paralias</i> L.	sea spurge	No	No	No	Yes
Euphorbiaceae	<i>Euphorbia peplus</i> L.	petty spurge	No	No	No	Yes
Fabaceae	<i>Acacia dealbata</i> Link subsp. <i>dealbata</i>	silver wattle	No	No	No	No
Fabaceae	<i>Acacia longifolia</i> (Andrews) Willd. subsp. <i>sophorae</i> (Labill.) Court	coast wattle	No	No	No	No
Fabaceae	<i>Acacia melanoxylon</i> R.Br.	blackwood	No	No	No	No
Fabaceae	<i>Acacia mucronata</i> Willd. ex H.L.Wendl. subsp. <i>longifolia</i> (Benth.) Court	longleaf caterpillar wattl	No	No	No	No
Fabaceae	<i>Acacia myrtifolia</i> (Sm.) Willd.	redstem wattle	No	No	No	No
Fabaceae	<i>Acacia stricta</i> (Andrews) Willd.	hop wattle	No	No	No	No
Fabaceae	<i>Acacia suaveolens</i> (Sm.) Willd.	sweet wattle	No	No	No	No
Fabaceae	<i>Acacia terminalis</i> (Salisb.) J.F.Macbr.	sunshine wattle	No	No	No	No
Fabaceae	<i>Acacia verticillata</i> (L'Hér.) Willd. subsp. <i>verticillata</i>	prickly moses	No	No	No	No
Fabaceae	<i>Aotus ericoides</i> (Vent.) G.Don	golden pea	No	No	No	No
Fabaceae	<i>Bossiaea cinerea</i> R.Br.	showy bossia	No	No	No	No
Fabaceae	<i>Daviesia ulicifolia</i> Andrews subsp. <i>ulicifolia</i>	yellow spiky bitterpea	No	No	No	No
Fabaceae	<i>Dillwynia glaberrima</i> Sm.	smooth parrotpea	No	No	No	No
Fabaceae	<i>Dillwynia sericea</i> A.Cunn.	showy parrotpea	No	No	No	No
Fabaceae	<i>Glycine microphylla</i> (Benth.) Tindale	small-leaf glycine	No	No	Vulnerable	No
Fabaceae	<i>Gompholobium huegelii</i> Benth.	common wedgepea	No	No	No	No
Fabaceae	<i>Kennedia prostrata</i> R.Br.	running postman	No	No	No	No
Fabaceae	<i>Lotus subbiflorus</i> Lag.	hairy birdfoot-trefoil	No	No	No	No
Fabaceae	<i>Platylobium triangulare</i> R.Br.	arrow flatpea	No	No	No	No
Fabaceae	<i>Pultenaea daphnoides</i> J.C.Wendl.	heartleaf bushpea	No	No	No	No
Fabaceae	<i>Pultenaea dentata</i> Labill.	swamp bushpea	No	No	No	No
Fabaceae	<i>Pultenaea gunnii</i> Benth. subsp. <i>gunnii</i>	delicate golden bushpea	No	No	No	No
Fabaceae	<i>Trifolium arvense</i> L.	haresfoot clover	No	No	No	Yes
Fabaceae	<i>Trifolium cernuum</i> Brot.	nodding clover	No	No	No	Yes
Fabaceae	<i>Trifolium fragiferum</i> L.	strawberry clover	No	No	No	Yes
Gentianaceae	<i>Centaurea erythraea</i> Rafn	common centaury	No	No	No	Yes
Gentianaceae	<i>Centaurea tenuiflorum</i> (Hoffmanns. & Link) Fritsch ex Janch.	slender centaury	No	No	No	Yes
Gentianaceae	<i>Schenkia australis</i> (R.Br.) G.Mans.	spike centaury	No	No	Rare	No
Gentianaceae	<i>Sebaea ovata</i> (Labill.) R.Br.	yellow sebaea	No	No	No	No
Geraniaceae	<i>Geranium molle</i> L.	soft cranesbill	No	No	No	Yes
Geraniaceae	<i>Pelargonium inodorum</i> Willd.	annual storksbill	No	No	No	No
Gleicheniaceae	<i>Gleichenia dicarpa</i> R.Br.	pouched coralfern	No	No	No	No

Family	Species	Common name	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic / pest
Gleicheniaceae	<i>Gleichenia microphylla</i> R.Br.	scrambling coralfern	No	No	No	No
Goodeniaceae	<i>Goodenia humilis</i> R.Br.	swamp native-primrose	No	No	No	No
Goodeniaceae	<i>Goodenia lanata</i> (Hook.f.) Allan	trailing native-primrose	No	No	No	No
Goodeniaceae	<i>Goodenia ovata</i> Sm.	hop native-primrose	No	No	No	No
Goodeniaceae	<i>Selliera radicans</i> Cav.	shiny swampmat	No	No	No	No
Haloragaceae	<i>Gonocarpus micranthus</i> Thunb. subsp. <i>micranthus</i>	creeping raspwort	No	No	No	No
Hemerocallidaceae	<i>Caesia parviflora</i> R.Br. var. <i>parviflora</i>	pale grasslily	No	No	No	No
Hemerocallidaceae	<i>Dianella revoluta</i> R.Br. var. <i>revoluta</i>	spreading flaxlily	No	No	No	No
Hypericaceae	<i>Hypericum japonicum</i> Thunb.	matted st johns-wort	No	No	No	No
Hypoxidaceae	<i>Hypoxis hygrometrica</i> Labill. var. <i>hygrometrica</i>	golden weatherglass	No	No	No	No
Iridaceae	<i>Patersonia fragilis</i> (Labill.) Asch. & Graebn.	short purpleflag	No	No	No	No
Iridaceae	<i>Patersonia occidentalis</i> R.Br. var. <i>occidentalis</i>	long purpleflag	No	No	No	No
Iridaceae	<i>Romulea rosea</i> Greene	lilac oniongrass	No	No	No	Yes
Juncaceae	<i>Juncus acutiflorus</i> Ehrh. ex Hoffm.	sharpflower rush	No	No	No	No
Juncaceae	<i>Juncus articulatus</i> L.	jointed rush	No	No	No	Yes
Juncaceae	<i>Juncus bufonius</i> L.	toad rush	No	No	No	No
Juncaceae	<i>Juncus bulbosus</i> L.	bulbous rush	No	No	No	Yes
Juncaceae	<i>Juncus capitatus</i> Weigel	capitate rush	No	No	No	Yes
Juncaceae	<i>Juncus pallidus</i> R.Br.	pale rush	No	No	No	No
Juncaceae	<i>Juncus pauciflorus</i> R.Br.	looseflower rush	No	No	No	No
Juncaceae	<i>Juncus planifolius</i> R.Br.	broadleaf rush	No	No	No	No
Juncaceae	<i>Juncus subsecundus</i> N.A.Wakef.	finger rush	No	No	No	No
Lauraceae	<i>Cassytha glabella</i> R.Br. f. <i>dispar</i> (Schltdl.) J.Z.Weber		No	No	No	No
Lauraceae	<i>Cassytha melantha</i> R.Br.	large dodderlaurel	No	No	No	No
Lauraceae	<i>Cassytha pubescens</i> R.Br.	downy dodderlaurel	No	No	No	No
Lentibulariaceae	<i>Utricularia lateriflora</i> R.Br.	tiny bladderwort	No	No	No	No
Liliaceae	<i>Burchardia umbellata</i> Greene	milkmaids	No	No	No	No
Loganiaceae	<i>Mitrasacme pilosa</i> Labill. var. <i>pilosa</i>	hairy mitrewort	No	No	No	No
Loganiaceae	<i>Phyllangium divergens</i> (Hook.f.) Dunlop	wiry mitrewort	No	No	Vulnerable	No
Luzuriagaceae	<i>Drymophila cyanocarpa</i> R.Br.	turquoise berry	No	No	No	No
Lythraceae	<i>Lythrum hyssopifolia</i> L.	small loosestrife	No	No	No	No
Malvaceae	<i>Lasiopteratum baueri</i> Steetz	slender velvetbush	No	No	Rare	No
Menyanthaceae	<i>Ornduffia reniformis</i> (R.Br.) Tippery & Les	running marshflower	No	No	No	No
Myrsinaceae	<i>Lysimachia arvensis</i> (L.) U.Manns & Anderb.	scarlet pimpernel	No	No	No	Yes
Myrtaceae	<i>Eucalyptus amygdalina</i> Labill.	black peppermint	No	No	No	No
Myrtaceae	<i>Eucalyptus ovata</i> Labill. var. <i>ovata</i>	black gum	No	No	No	No

Family	Species	Common name	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic / pest
Myrtaceae	<i>Euryomyrtus parviflora</i> Miq.	creeping heathmyrtle	No	No	No	No
Myrtaceae	<i>Leptospermum lanigerum</i> (Sol. ex Aiton) Sm.	woolly teatree	No	No	No	No
Myrtaceae	<i>Leptospermum scoparium</i> J.R.Forst. & G.Forst.	common teatree	No	No	No	No
Myrtaceae	<i>Melaleuca ericifolia</i> Sm.	coast paperbark	No	No	No	No
Myrtaceae	<i>Melaleuca gibbosa</i> Labill.	slender honeymyrtle	No	No	No	No
Myrtaceae	<i>Melaleuca squarrosa</i> Donn ex Sm.	scented paperbark	No	No	No	No
Onagraceae	<i>Epilobium billardiereanum</i> Ser. ex DC. subsp. <i>cinereum</i> (A.Rich.) P.H.Raven	grey willowherb	No	No	No	No
Orchidaceae	<i>Dipodium roseum</i> D.L.Jones & M.A.Clem.	rosy hyacinth-orchid	No	No	No	No
Orchidaceae	<i>Diuris sulphurea</i> R.Br.	tiger orchid	No	No	No	No
Orchidaceae	<i>Eriochilus cucullatus</i> (Labill.) Rchb.f.	pale autumn orchid	No	No	No	No
Orobanchaceae	<i>Parentucellia viscosa</i> (L.) Caruel	yellow glandweed	No	No	No	Yes
Oxalidaceae	<i>Oxalis perennans</i> Haw.	grassland wood sorrel	No	No	No	No
Oxalidaceae	<i>Oxalis radicosa</i> A.Rich.	stoutroot wood sorrel	No	No	No	No
Oxalidaceae	<i>Oxalis rubens</i> L.		No	No	No	No
Phyllanthaceae	<i>Phyllanthus gunnii</i> Hook.f.	shrubby spurge	No	No	No	No
Phyllanthaceae	<i>Poranthera microphylla</i> Brongn.	small poranthera	No	No	No	No
Pittosporaceae	<i>Billardiera macrantha</i> Hook.f.	forest appleberry	No	No	No	No
Pittosporaceae	<i>Billardiera mutabilis</i> Salisb.	green appleberry	No	No	No	No
Pittosporaceae	<i>Bursaria spinosa</i> Cav. subsp. <i>spinosa</i>	prickly box	No	No	No	No
Plantaginaceae	<i>Kickxia elatine</i> (L.) Dumort. subsp. <i>elatine</i>	sharpleaf toadflax	No	No	No	Yes
Plantaginaceae	<i>Limosella australis</i> R.Br.	southern mudwort	No	No	No	No
Plantaginaceae	<i>Plantago coronopus</i> L. subsp. <i>coronopus</i>	slender buckshorn plantain	No	No	No	Yes
Plantaginaceae	<i>Veronica gracilis</i> R.Br.	slender speedwell	No	No	No	No
Poaceae	<i>Agrostis capillaris</i> L.		No	No	No	Yes
Poaceae	<i>Agrostis stolonifera</i> L.	creeping bent	No	No	No	Yes
Poaceae	<i>Aira elegantissima</i> Schur	delicate hairgrass	No	No	No	Yes
Poaceae	<i>Aira praecox</i> L.	early hairgrass	No	No	No	Yes
Poaceae	<i>Ammophila arenaria</i> (L.) Link subsp. <i>arenaria</i>	marram grass	No	No	No	Yes
Poaceae	<i>Anthoxanthum odoratum</i> L.	sweet vernalgrass	No	No	No	Yes
Poaceae	<i>Austrostipa flavescens</i> (Labill.) S.W.L.Jacobs & J.Everett	yellow speargrass	No	No	No	No
Poaceae	<i>Austrostipa mollis</i> Benth.	soft speargrass	No	No	No	No
Poaceae	<i>Austrostipa pubinodis</i> (Trin. & Rupr.) S.W.L.Jacobs & J.Everett	tall speargrass	No	No	No	No
Poaceae	<i>Austrostipa stipoides</i> (Hook.f.) S.W.L.Jacobs & J.Everett	coast speargrass	No	No	No	No
Poaceae	<i>Briza minor</i> L.	lesser quaking-grass	No	No	No	Yes
Poaceae	<i>Bromus diandrus</i> Roth	great brome	No	No	No	Yes
Poaceae	<i>Bromus hordeaceus</i> L.	soft brome	No	No	No	Yes

Family	Species	Common name	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic / pest
Poaceae	<i>Cynosurus echinatus</i> L.	rough dogtail	No	No	No	Yes
Poaceae	<i>Dactylis glomerata</i> L.	cocksfoot	No	No	No	Yes
Poaceae	<i>Deyeuxia quadriseta</i> (Labill.) Benth.	reed bentgrass	No	No	No	No
Poaceae	<i>Dichelachne crinita</i> (Carmich.) Kornmann	longhair plumegrass	No	No	No	No
Poaceae	<i>Distichlis distichophylla</i> (Labill.) Fassett	australian saltgrass	No	No	No	No
Poaceae	<i>Echinopogon ovatus</i> (G.Forst.) P.Beauv.	hedgehog grass	No	No	No	No
Poaceae	<i>Eragrostis brownii</i> (Kunth) Nees	common lovegrass	No	No	No	No
Poaceae	<i>Festuca arundinacea</i> Schreb.	tall fescue	No	No	No	Yes
Poaceae	<i>Festuca rubra</i> L.	red fescue	No	No	No	Yes
Poaceae	<i>Hemarthria uncinata</i> R.Br. var. <i>uncinata</i>	hooked matgrass	No	No	No	No
Poaceae	<i>Holcus lanatus</i> L.	yorkshire fog	No	No	No	Yes
Poaceae	<i>Hordeum hystrix</i> Roth	mediterranean barleygrass	No	No	No	Yes
Poaceae	<i>Imperata cylindrica</i> (L.) P.Beauv. var. <i>major</i> (Nees) C.E.Hubb.	blady grass	No	No	No	No
Poaceae	<i>Lachnagrostis aemula</i> (R.Br.) Trin.	tumbling blownglass	No	No	No	No
Poaceae	<i>Lachnagrostis filiformis</i> (G.Forst.) Trin.	common blownglass	No	No	No	No
Poaceae	<i>Lagurus ovatus</i> L.	haretail grass	No	No	No	Yes
Poaceae	<i>Lolium perenne</i> L.	perennial ryegrass	No	No	No	Yes
Poaceae	<i>Microlaena stipoides</i> (Labill.) R.Br. var. <i>stipoides</i>	weeping grass	No	No	No	No
Poaceae	<i>Paspalum dilatatum</i> Poir.	paspalum	No	No	No	Yes
Poaceae	<i>Pentapogon quadrifidus</i> R.Br.	five-awned speargrass	No	No	No	No
Poaceae	<i>Phalaris aquatica</i> L.	toowoomba canarygrass	No	No	No	Yes
Poaceae	<i>Phragmites australis</i> (Cav.) Trin. ex Steud.	southern reed	No	No	No	No
Poaceae	<i>Poa labillardierei</i> Steud. var. <i>labillardierei</i>	silver tussockgrass	No	No	No	No
Poaceae	<i>Polypogon maritimus</i> Willd. var. <i>subspatheaceus</i> (Req.) Parl.	coast beardgrass	No	No	No	Yes
Poaceae	<i>Rytidosperma geniculatum</i> (J.M.Black) Connor & Edgar	kneed wallabygrass	No	No	No	No
Poaceae	<i>Rytidosperma pilosum</i> (R.Br.) Connor & Edgar	velvet wallabygrass	No	No	No	No
Poaceae	<i>Rytidosperma racemosum</i> (R.Br.) Connor & Edgar var. <i>racemosum</i>	stiped wallabygrass	No	No	No	No
Poaceae	<i>Spinifex sericeus</i> R.Br.	beach spinifex	No	No	No	No
Poaceae	<i>Sporobolus africanus</i> Lam.	ratstail grass	No	No	No	Yes
Poaceae	<i>Stenotaphrum secundatum</i> (Walter) Kuntze	buffalo grass	No	No	No	Yes
Poaceae	<i>Themeda triandra</i> Forssk.	kangaroo grass	No	No	No	No
Poaceae	<i>Thinopyrum junceiforme</i> (Å.Löve & D.Löve) Å.Löve	sea wheatgrass	No	No	No	Yes
Poaceae	<i>Vulpia bromoides</i> (L.) Gray	squirreltail fescue	No	No	No	Yes
Poaceae	<i>Vulpia myuros</i> (Lam.) Chase	ratstail fescue	No	No	No	Yes
Polygonaceae	<i>Comesperma defoliatum</i> F.Muell.	leafless milkwort	No	No	Rare	No
Polygonaceae	<i>Acetosella vulgaris</i> Fourr.	sheep sorrel	No	No	No	Yes

Family	Species	Common name	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic / pest
Polygonaceae	<i>Muehlenbeckia adpressa</i> (Labill.) Meisn.	climbing lignum	No	No	No	No
Polygonaceae	<i>Persicaria prostrata</i> (R.Br.) Soják	creeping waterpepper	No	No	No	No
Portulacaceae	<i>Montia australasica</i> Hook.	white purslane	No	No	No	No
Potamogetonaceae	<i>Potamogeton cheesemanii</i> A.Benn.		No	No	No	No
Proteaceae	<i>Banksia marginata</i> Cav.	silver banksia	No	No	No	No
Proteaceae	<i>Hakea teretifolia</i> (Salisb.) Britten subsp. <i>hirsuta</i> (Endl.) R.M.Barker	dagger needlebush	No	No	No	No
Pteridaceae	<i>Pteris comans</i> G.Forst.	netted brake	No	No	No	No
Ranunculaceae	<i>Ranunculus sessiliflorus</i> R.Br. ex DC. var. <i>sessiliflorus</i>	rockplate buttercup	No	No	No	No
Resedaceae	<i>Reseda luteola</i> L.	weld	No	No	No	Yes
Restionaceae	<i>Empodium minus</i> (Hook.f.) L.A.S.Johnson & D.F.Cutler	spreading roperush	No	No	No	No
Restionaceae	<i>Eurychorda complanata</i> (R.Br.) B.G.Briggs & L.A.S.Johnson	flat cordrush	No	No	No	No
Restionaceae	<i>Hypolaena fastigiata</i> R.Br.	tassel roperush	No	No	No	No
Restionaceae	<i>Leptocarpus tenax</i> (Labill.) R.Br.	slender twinerush	No	No	No	No
Rhamnaceae	<i>Pomaderris apetala</i> Labill. subsp. <i>maritima</i> N.G.Walsh & Coates	coast dogwood	No	No	No	No
Rosaceae	<i>Acaena echinata</i> Nees		No	No	No	No
Rosaceae	<i>Acaena novae-zelandiae</i> Kirk	common buzzy	No	No	No	No
Rosaceae	<i>Argentina anserina</i> (L.) Rydb.		No	No	No	Yes?
Rosaceae	<i>Rubus parvifolius</i> L.	native raspberry	No	No	No	No
Rubiaceae	<i>Asperula minima</i> Hook.f.	mossy woodruff	No	No	Rare	No
Rubiaceae	<i>Galium leiocarpum</i> I.Thomps.	smoothfruit bedstraw	No	No	No	No
Rubiaceae	<i>Opercularia varia</i> Hook.f.	variable stinkweed	No	No	No	No
Rutaceae	<i>Boronia parviflora</i> Sm.	swamp boronia	No	No	No	No
Rutaceae	<i>Correa alba</i> Andrews var. <i>alba</i>	white correa	No	No	No	No
Rutaceae	<i>Zieria arborescens</i> Sims subsp. <i>arborescens</i>	stinkwood	No	No	No	No
Santalaceae	<i>Exocarpos strictus</i> R.Br.	pearly native-cherry	No	No	No	No
Santalaceae	<i>Leptomeria drupacea</i> (Labill.) Druce	erect currantbush	No	No	No	No
Scrophulariaceae	<i>Myoporum insulare</i> R.Br.	common boobialla	No	No	No	No
Scrophulariaceae	<i>Verbascum thapsus</i> L.		No	No	No	Yes
Selaginellaceae	<i>Selaginella gracillima</i> (Kunze) Spring ex Salomon	tiny spikemoss	No	No	No	No
Selaginellaceae	<i>Selaginella uliginosa</i> (Labill.) Spring	swamp spikemoss	No	No	No	No
Solanaceae	<i>Lycium ferocissimum</i> Miers	african boxthorn	No	No	No	Yes
Solanaceae	<i>Solanum nigrum</i> L.	blackberry nightshade	No	No	No	Yes
Solanaceae	<i>Solanum vescum</i> F.Muell.	gunyang	No	No	No	No
Stylidiaceae	<i>Stylidium armeria</i> (Labill.) Labill. subsp. <i>armeria</i>	broadleaf triggerplant	No	No	No	No
Stylidiaceae	<i>Stylidium beaugleholei</i> J.H.Willis	blushing triggerplant	No	No	Rare	No
Stylidiaceae	<i>Stylidium despectum</i> R.Br.	small triggerplant	No	No	Rare	No

Family	Species	Common name	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic / pest
Stylidiaceae	<i>Stylium perpusillum</i> Hook.f.	tiny triggerplant	No	No	Rare	No
Violaceae	<i>Viola hederacea</i> Labill. subsp. <i>hederacea</i>	ivyleaf violet	No	No	No	No

Appendix 1.2 List of Bryophytes recorded during the Stony Head Bush Blitz					
Family	Species	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic / pest
LIVERWORTS					
Aytoniaceae	<i>Asterella drummondii</i> (Hook.f. & Taylor) R.M.Schust. ex D.G.Long	No	No	No	No
Fossombroniacaeae	<i>Fossombronia</i> sp. Stony Head 1	No	No	No	No
Frullaniaceae	<i>Frullania clavata</i> Mitt.	No	No	No	No
Frullaniaceae	<i>Frullania deplanata</i> Mitt.	No	No	No	No
Frullaniaceae	<i>Frullania probosciphora</i> Taylor	No	No	No	No
Frullaniaceae	<i>Frullania rostrata</i> (Hook.f. & Taylor) Hook.f. & Taylor ex Gottsche, Lindenb. & Nees	No	No	No	No
Geocalycaceae	<i>Chiloscyphus semiteres</i> (Lehm.) Lehm. & Lindenb.	No	No	No	No
Geocalycaceae	<i>Chiloscyphus aff. semiteres</i> (Lehm.) Lehm. & Lindenb.	No	No	No	No
Geocalycaceae	<i>Chiloscyphus</i> sp. Stony Head 1	No	No	No	No
Geocalycaceae	<i>Chiloscyphus</i> sp. Stony Head 2	No	No	No	No
Geocalycaceae	<i>Heteroscyphus</i> sp. Stony Head 1	No	No	No	No
Lepidoziaceae	<i>Bazzania adnexa</i> (Lehm. & Lindenb.) Trevis. var. <i>adnexa</i>	No	No	No	No
Lepidoziaceae	<i>Lepidozia</i> sp. Stony Head 1	No	No	No	No
Marchantiaceae	<i>Lunularia cruciata</i> (L.) Dumort.	No	No	No	No
Marchantiaceae	<i>Marchantia berteroana</i> Lehm. & Lindenb.	No	No	No	No
Metzgeriaceae	<i>Metzgeria furcata</i> (L.) Dumort.	No	No	No	No
Ricciaceae	<i>Riccia</i> sp. Stony Head 1	No	No	No	No
MOSSES					
Aulacomniaceae	<i>Leptotheca gaudichaudii</i> Schwägr.var. <i>gaudichaudii</i>	No	No	No	No
Bartramiaceae	<i>Breutelia affinis</i> (Hook.) Mitt.	No	No	No	No
Bartramiaceae	<i>Philonotis australiensis</i> D.G.Griffin & W.R.Buck	No	No	No	No
Brachytheciaceae	<i>Brachythecium albicans</i> (Hedw.) Schimp.	No	No	No	Yes
Brachytheciaceae	<i>Brachythecium</i> sp. Stony Head 1	No	No	No	No
Brachytheciaceae	<i>Eurhynchium praelongum</i> (Hedw.) Bruch & Schimp.	No	No	No	Yes
Brachytheciaceae	<i>Rhynchosstegium tenuifolium</i> (Hedw.) Reichardt	No	No	No	No
Bryaceae	<i>Gemmabryum</i> sp. Stony Head 1	No	No	No	No
Bryaceae	<i>Orthodontium lineare</i> Schwägr.	No	No	No	No
Bryaceae	<i>Rosulabryum billardierei</i> (Schwägr.) J.R.Spence	No	No	No	No
Bryaceae	<i>Rosulabryum subomentosum</i> (Hampe) J.R.Spence	No	No	No	No
Bryaceae	<i>Rosulabryum torquescens</i> (Bruch & Schimp.) J.R.Spence	No	No	No	No
Dicranaceae	<i>Campylopus appressifolius</i> Mitt.	No	No	No	No

Family	Species	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic / pest
Dicranaceae	<i>Campylopus bicolor</i> (Müll.Hal.) Wilson	No	No	No	No
Dicranaceae	<i>Campylopus clavatus</i> Wilson	No	No	No	No
Dicranaceae	<i>Campylopus introflexus</i> (Hedw.) Brid.	No	No	No	No
Dicranaceae	<i>Campylopus pallidus</i> Hook.f. & Wilson	No	No	No	No
Dicranaceae	<i>Dicranoloma billardierei</i> (Brid.) Paris	No	No	No	No
Dicranaceae	<i>Dicranoloma dicarpum</i> (Nees) Paris	No	No	No	No
Dicranaceae	<i>Dicranoloma menziesii</i> (Taylor) Renaud	No	No	No	No
Ditrichaceae	<i>Ceratodon purpureus</i> (Hedw.) Brid.	No	No	No	No
Ditrichaceae	<i>Ditrichum difficile</i> (Duby) M.Fleisch.	No	No	No	No
Fissidentaceae	<i>Fissidens asplenioides</i> Hedw.	No	No	No	No
Fissidentaceae	<i>Fissidens curvatus</i> Hornsch. var. <i>curvatus</i>	No	No	No	No
Fissidentaceae	<i>Fissidens taylorii</i> Müll.Hal.	No	No	No	No
Fissidentaceae	<i>Fissidens tenellus</i> Hook.f. & Wilson var. <i>australiensis</i> (A.Jaeger) Beever & I.G.Stone	No	No	No	No
Funariaceae	<i>Funaria hygrometrica</i> Hedw.	No	No	No	No
Hookeriaceae	<i>Calyptrochaeta apiculata</i> (Hook.f. & Wilson) Vitt	No	No	No	No
Hypnaceae	<i>Hypnum cupressiforme</i> Hedw.	No	No	No	No
Lembophyllaceae	<i>Lembophyllum clandestinum</i> (Hook.f. & Wilson) Lindb. ex Paris	No	No	No	No
Orthotrichaceae	<i>Macromitrium archeri</i> Mitt.	No	No	No	No
Orthotrichaceae	<i>Zygodon menziesii</i> (Schwägr.) Arn.	No	No	No	No
Orthotrichaceae	<i>Zygodon minutus</i> Müll.Hal. & Hampe	No	No	No	No
Polytrichaceae	<i>Polytrichum juniperinum</i> Hedw.	No	No	No	No
Pottiaceae	<i>Barbula calycina</i> Schwägr.	No	No	No	No
Pottiaceae	<i>Didymodon torquatus</i> (Taylor) Catches.	No	No	No	No
Pottiaceae	<i>Hymenostomum sullivanii</i> Müll.Hal. ex Geh.	No	No	No	No
Pottiaceae	<i>Syntrichia antarctica</i> (Hampe) R.H.Zander	No	No	No	No
Pottiaceae	<i>Syntrichia papillosa</i> (Wilson) Jur.	No	No	No	No
Pottiaceae	<i>Tortula muralis</i> Hedw.	No	No	No	No
Pottiaceae	<i>Triquetrella papillata</i> (Hook.f. & Wilson) Broth.	No	No	No	No
Pottiaceae	<i>Weissia controversa</i> Hedw.	No	No	No	No
Pottiaceae	<i>Weissia</i> sp. Stony Head 1	No	No	No	No
Ptychomniaceae	<i>Ptychomnion aciculare</i> (Brid.) Mitt.	No	No	No	No
Racopilaceae	<i>Racopilum cuspidigerum</i> (Schwägr.) Ångstr. var. <i>convolutaceum</i> (Müll.Hal.) Zanten & Dijkstra	No	No	No	No
Rhizogoniaceae	<i>Pyrrhobryum paramattense</i> (Müll.Hal.) Manuel	No	No	No	No
Sematophyllaceae	<i>Rhaphidorrhynchium amoenum</i> (Hedw.) M.Fleisch. var. <i>amoenum</i>	No	No	No	No

Family	Species	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic / pest
Sematophyllaceae	<i>Sematophyllum homomallum</i> (Hampe) Broth.	No	No	No	No
Sematophyllaceae	<i>Warburgiella macrospora</i> (Dixon & Sainsbury) B.C.Tan, W.B.Schofield & H.P.Ramsay	No	No	No	No
Sematophyllaceae	<i>Wijkia extenuata</i> (Brid.) H.A.Crum	No	No	No	No
Sphagnaceae	<i>Sphagnum novozelandicum</i> Mitt.	No	No	No	No
Splachnaceae	<i>Tayloria octoblepharum</i> (Hook.) Mitt.	No	No	No	No
Thuidiaceae	<i>Thuidiopsis furfurosa</i> (Hook.f. & Wilson) M.Fleisch.	No	No	No	No
Thuidiaceae	<i>Thuidiopsis sparsa</i> (Hook.f. & Wilson) Broth.	No	No	No	No

Appendix 1.3 List of lichens recorded during the Stony Head Bush Blitz					
Family	Species	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic / pest
Acarosporaceae	<i>Acarospora citrina</i> (Taylor) Zahlbr. ex Rech.	No	No	No	No
Acarosporaceae	<i>Acarospora fuscata</i> (Nyl.) Arnold	No	No	No	No
Physciaceae	<i>Amandinea decedens</i> (Nyl.) Blaha & H.Mayrhofer	No	No	No	No
Physciaceae	<i>Amandinea hypostictica</i> (Elix) Elix	No	No	No	No
Physciaceae	<i>Amandinea neoconglomerata</i> Elix	No	No	No	No
Physciaceae	<i>Amandinea punctata</i> (Hoffm.) Coppins & Scheid.	No	No	No	No
Roccellaceae	<i>Angiactis banksiae</i> (Müll.Arg.) Kantvilas & Stajsic	No	No	No	No
Monoblastiaceae	<i>Anisomeridium biforme</i> (Borrer) R.C.Harris	No	No	No	No
Monoblastiaceae	<i>Anisomeridium disjunctum</i> P.M.McCarthy & Kantvilas	No	No	No	No
Arthoniaceae	<i>Arthonia cf. anombrophila</i> Coppins & P.James	No	No	No	No
Arthoniaceae	<i>Arthonia cf. apteropteridis</i> Kantvilas & Vezda	No	No	No	No
Arthoniaceae	<i>Arthonia cinnabarinata</i> (DC.) Wallr.	No	No	No	No
Arthoniaceae	<i>Arthonia ilicina</i> Taylor	No	No	No	No
Arthoniaceae	<i>Arthonia</i> spp. indet.	No	No	No	No
Arthoniaceae	<i>Arthothelium ampliatum</i> (C.Knight & Mitt.) Müll.Arg.	No	No	No	No
Arthoniaceae	<i>Arthothelium endoaurantiacum</i> Makhija & Patw.	No	No	No	No
Arthoniaceae	<i>Arthothelium interveniens</i> (Nyl.) Zahlbr.	No	No	No	No
Parmeliaceae	<i>Austroparmelina conlabrosa</i> (Hale) A.Crespo, Divakar & Elix	No	No	No	No
Parmeliaceae	<i>Austroparmelina pseudorelicina</i> (Jatta) A.Crespo, Divakar & Elix	No	No	No	No
Ramalinaceae	<i>Bacidia</i> sp. A	Yes	No	No	No
Ramalinaceae	<i>Bacidia</i> sp. B	No	No	No	No
Ramalinaceae	<i>Bacidia laurocerasi</i> (Delise ex Duby) Zahlbr.	No	No	No	No
Ramalinaceae	<i>Bacidia littoralis</i> Kantvilas	No	No	No	No
Ramalinaceae	<i>Bacidia septosior</i> (Nyl.) Zahlbr.	No	No	No	No
Ramalinaceae	<i>Bacidia stenospora</i> C.Knight	No	No	No	No
Ramalinaceae	<i>Bacidia wellingtonii</i> (Stirt.) D.J.Galloway	No	No	No	No
Roccellaceae	<i>Bactrospora metabola</i> (Nyl.) Egea & Torrente	No	No	No	No
Roccellaceae	<i>Bactrospora paludicola</i> Kantvilas	No	No	No	No
Pilocarpaceae	<i>Bapalmuia buchananii</i> (Stirt.) Kalb & LÝcking	No	No	No	No
Physciaceae	<i>Buellia aeruginosa</i> A.Nordin, Owe-Larsson & Elix	No	No	No	No
Physciaceae	<i>Buellia cranwelliae</i> Zahlbr.	No	No	No	No
Physciaceae	<i>Buellia dissia</i> (Stirt.) Zahlbr.	No	No	No	No

Family	Species	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic / pest
Physciaceae	<i>Buellia schaereri</i> De Not.	No	No	No	No
Physciaceae	<i>Buellia stellulata</i> (Taylor) Mudd var. <i>stellulata</i>	No	No	No	No
Physciaceae	<i>Buellia suttonensis</i> Elix & A.Knight	No	No	No	No
Physciaceae	<i>Buellia</i> sp.	No	No	No	No
Caliciaceae	<i>Calicium glaucellum</i> Ach.	No	No	No	No
Caliciaceae	<i>Calicium tricolor</i> F.Wilson	No	No	No	No
Caliciaceae	<i>Calicium victorianum</i> (F.Wilson) Tibell subsp. <i>victorianum</i>	No	No	No	No
Teloschistaceae	<i>Caloplaca bartlettii</i> S.Y.Kondr. & Kärnefelt	No	No	No	No
Teloschistaceae	<i>Caloplaca cliffwetmorei</i> S.Y.Kondr. & Kärnefelt	No	No	No	No
Teloschistaceae	<i>Caloplaca cranfieldii</i> S.Y.Kondr. & Kärnefelt	No	No	No	No
Teloschistaceae	<i>Caloplaca eos</i> S.Y.Kondr. & Kärnefelt	No	No	No	No
Teloschistaceae	<i>Caloplaca gallowayi</i> S.Y.Kondr., Kärnefelt & Filson	No	No	No	No
Teloschistaceae	<i>Caloplaca gilfillaniorum</i> Kantvilas & S.Y.Kondr.	No	No	No	No
Teloschistaceae	<i>Caloplaca holocarpa</i> (Hoffm.) A.E.Wade	No	No	No	No
Teloschistaceae	<i>Caloplaca kilcundaensis</i> S.Y.Kondr. & Kärnefelt	No	No	No	No
Teloschistaceae	<i>Caloplaca lateritia</i> (Taylor) Zahlbr.	No	No	No	No
Teloschistaceae	<i>Caloplaca maccarthyi</i> S.Y.Kondr., Kärnefelt & Elix	No	No	No	No
Teloschistaceae	<i>Caloplaca sublobulata</i> (Nyl.) Zahlbr.	No	No	No	No
Teloschistaceae	<i>Caloplaca</i> sp. 1	No	No	No	No
Teloschistaceae	<i>Caloplaca</i> sp. 2	No	No	No	No
Candelariaceae	<i>Candelariella vitellina</i> (Hoffm.) Müll.Arg.	No	No	No	No
Candelariaceae	<i>Candelariella xanthostigmoides</i> (Müll.Arg.) R.W.Rogers	No	No	No	No
Lecanoraceae	<i>Carbonea latypizodes</i> (Müll.Arg.) Knoph & Rambold	No	No	No	No
Carbonicolaceae	<i>Carbonicola foveata</i> (Timdal) Bendiksby & Timdal	No	No	No	No
Catillariaceae	<i>Catillaria austrolittoralis</i> Kantvilas & van den Boom	No	No	No	No
Ramalinaceae	<i>Catinaria atropurpurea</i> (Schaer.) Vězda & Poelt	No	No	No	No
Mycocaliciaceae	<i>Chaenothecopsis ? savonica</i> (Räsänen) Tibell	No	No	No	No
Roccellaceae	<i>Chiodecton colensoi</i> (A.Massal.) Müll.Arg.	No	No	No	No
Chrysotrichaceae	<i>Chrysotrix sulphurella</i> (Räsänen) Kantvilas & Elix	No	No	No	No
Chrysotrichaceae	<i>Chrysotrix xanthina</i> (Vain.) Kalb	No	No	No	No
Cladoniaceae	<i>Cladia aggregata</i> (Sw.) Nyl.	No	No	No	No
Cladoniaceae	<i>Cladia inflata</i> (F.Wilson) D.J.Galloway	No	No	No	No
Cladoniaceae	<i>Cladia retipora</i> (Labill.) Nyl.	No	No	No	No
Cladoniaceae	<i>Cladia schizophora</i> (Nyl.) Nyl.	No	No	No	No

Family	Species	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic / pest
Cladoniaceae	<i>Cladonia capitellata</i> (Hook.f. & Taylor) C.Bab. var. <i>squamatica</i> A.W.Archer	No	No	No	No
Cladoniaceae	<i>Cladonia confusa</i> R.Sant.	No	No	No	No
Cladoniaceae	<i>Cladonia humilis</i> (With.) J.R.Laundon var. <i>humilis</i>	No	No	No	No
Cladoniaceae	<i>Cladonia merochlorophaea</i> Asahina	No	No	No	No
Cladoniaceae	<i>Cladonia paeminoza</i> A.W.Archer	No	No	No	No
Cladoniaceae	<i>Cladonia praetermissa</i> A.W.Archer var. <i>praetermissa</i>	No	No	No	No
Cladoniaceae	<i>Cladonia ramulosa</i> (With.) J.R.Laundon	No	No	No	No
Cladoniaceae	<i>Cladonia rigida</i> (Hook.f. & Taylor) Hampe var. <i>rigida</i>	No	No	No	No
Cladoniaceae	<i>Cladonia subradiata</i> (Vain.) Sandst.	No	No	No	No
Cladoniaceae	<i>Cladonia verticillata</i> (Hoffm.) Schaer.	No	No	No	No
Ramalinaceae	<i>Cliostomum griffithii</i> (Sm.) Coppins	No	No	No	No
Coenogoniaceae	<i>Coenogonium implexum</i> Nyl.	No	No	No	No
Coenogoniaceae	<i>Coenogonium luteum</i> (Dicks.) Kalb & Lücking	No	No	No	No
Coenogoniaceae	<i>Coenogonium</i> sp.	Yes	No	No	No
Collemataceae	? <i>Collema fasciculare</i> (L.) Wigg. var. <i>fasciculare</i>	No	No	No	No
Collemataceae	<i>Collema glaucophthalmum</i> Nyl. var. <i>glaucophthalmum</i>	No	No	No	No
Collemataceae	<i>Collema glaucophthalmum</i> Nyl. var. <i>implicatum</i> (Nyl.) Degel.	No	No	No	No
Collemataceae	<i>Collema subconveniens</i> Nyl.	No	No	No	No
Physciaceae	<i>Diploicia canescens</i> (Dicks.) A.Massal.	No	No	No	No
Graphidaceae	<i>Diploschistes eugenaeus</i> (A.Massal.) J.Steiner	No	No	No	No
Parmeliaceae	<i>Flavoparmelia rutidota</i> (Hook.f. & Taylor) Hale	No	No	No	No
Parmeliaceae	<i>Flavoparmelia soredians</i> (Nyl.) Hale	No	No	No	No
Fuscideaceae	<i>Fuscidea lightfootii</i> (Sm.) Coppins & P.James	No	No	No	No
Graphidaceae	<i>Graphis desquamescens</i> (Fée) Zahlbr.	No	No	No	No
Graphidaceae	<i>Graphis dracaenae</i> Vain.	No	No	No	No
Haematommatacea	<i>Haematomma sorediatum</i> R.W.Rogers	No	No	No	No
Catillariaceae	<i>Halecania subsquamosa</i> (Müll.Arg.) van den Boom & H.Mayrhofer	No	No	No	No
Graphidaceae	<i>Halegrapha mucronata</i> (Stirt.) Lücking	No	No	No	No
Physciaceae	<i>Heterodermia tremulans</i> (Müll.Arg.) W.L.Culb.	No	No	No	No
Ophioparmaceae	<i>Hypocenomyce australis</i> Timdal	No	No	No	No
Ophioparmaceae	<i>Hypocenomyce scalaris</i> (Ach.) M.Choisy	No	No	No	No
Parmeliaceae	<i>Hypogymnia pulverata</i> (Nyl.) Elix	No	No	No	No
Parmeliaceae	<i>Hypotrachyna revoluta</i> (Flörke) Hale	No	No	No	No
Lecanoraceae	<i>Lecanora</i> cf. <i>austrointumescens</i> Lumbsch & Elix	No	No	No	No

Family	Species	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic / pest
Lecanoraceae	<i>Lecanora dispersa</i> (Pers.) Sommerf.	No	No	No	No
Lecanoraceae	<i>Lecanora flavopallida</i> Stirt.	No	No	No	No
Lecanoraceae	<i>Lecanora mobergiana</i> Lumbsch & Elix	No	No	No	No
Lecanoraceae	<i>Lecanora symmicta</i> (Ach.) Ach.	No	No	No	No
Lecanoraceae	<i>Lecidella flavovirens</i> Kantvilas & Elix	No	No	No	No
Lecanoraceae	<i>Lecidella granulosula</i> (Nyl.) Knoph & Leuckert var. <i>granulosula</i>	No	No	No	No
Lecanoraceae	<i>Lecidella stigmataea</i> (Ach.) Hertel & Leuckert	No	No	No	No
Lecanoraceae	<i>Lecidella xylogena</i> (Müll.Arg.) Kantvilas & Elix	No	No	No	No
Pertusariaceae	<i>Lepra erubescens</i> (Hook.f. & Taylor) A.W.Archer & Elix	No	No	No	No
Stereocaulaceae	<i>Lepraria coriensis</i> (Hue) Sipman	No	No	No	No
Stereocaulaceae	<i>Lepraria finkii</i> (de Lesd.) R.C.Harris	No	No	No	No
Stereocaulaceae	<i>Lepraria toenae</i> Kantvilas & Kukwa	No	No	No	No
Collemataceae	<i>Leptogium crispatum</i> Nyl.	No	No	No	No
Lichenaceae	<i>Lichina intermedia</i> (C.Bab.) M.Schultz	No	No	No	No
Fuscideaceae	<i>Maronea constans</i> (Nyl.) Hepp	No	No	No	No
Megalariaceae	<i>Megalaria grossa</i> (Pers. ex Nyl.) Hafellner	No	No	No	No
Megalariaceae	<i>Megalaria melaloma</i> (C.Knight) Kantvilas	No	No	No	No
Megalariaceae	<i>Megalaria melanotropa</i> (Nyl.) D.J.Galloway	No	No	No	No
Megalariaceae	<i>Megalaria subtasmanica</i> Kantvilas	No	No	No	No
Megalosporaceae	<i>Megaloblastenia</i> sp.	Yes	No	No	No
Megalosporaceae	<i>Megalospora pulverata</i> Kantvilas	No	No	No	No
Parmeliaceae	<i>Menegazzia caesiopruinosa</i> P.James	No	No	No	No
Parmeliaceae	<i>Menegazzia subpertusa</i> P.James & D.J.Galloway	No	No	No	No
Pilocarpaceae	<i>Micarea byssacea</i> (Th.Fr.) Czarnota, Guzow-Krzem. & Coppins	No	No	No	No
Pilocarpaceae	<i>Micarea aff. deminuta</i> Coppins	No	No	No	No
Pilocarpaceae	<i>Micarea intersociella</i> (Stirt.) Coppins	No	No	No	No
Pilocarpaceae	<i>Micarea mutabilis</i> Coppins & Kantvilas	No	No	No	No
Pilocarpaceae	<i>Micarea xanthonica</i> Coppins & Tjønsberg	No	No	No	No
Mycoblastaceae	<i>Mycoblastus coniophorus</i> (Elix & A.W.Archer) Kantvilas & Elix	No	No	No	No
Parmeliaceae	<i>Notoparmelia cunninghamii</i> (Cromb.) A.Crespo, Ferencova & Divakar	No	No	No	No
Ochrolechiaceae	<i>Ochrolechia apiculata</i> Verseghy	No	No	No	No
Ochrolechiaceae	<i>Ochrolechia blandior</i> (Nyl.) Darb.	No	No	No	No
Ochrolechiaceae	<i>Ochrolechia gyrophorica</i> (A.W.Archer) A.W.Archer & Lumbsch	No	No	No	No
Roccellaceae	<i>Opegrapha atra</i> Pers.	No	No	No	No

Family	Species	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic / pest
Roccellaceae	Opegrapha cf. herbarum Mont.	No	No	No	No
Roccellaceae	Opegrapha spodopolia Nyl.	No	No	No	No
Roccellaceae	Opegrapha varia Pers.	No	No	No	No
Roccellaceae	Opegrapha viridis (Ach.) Nyl.	No	No	No	No
Roccellaceae	Opegrapha sp. A	No	No	No	No
Roccellaceae	Opegrapha spp. indet.	No	No	No	No
Lecanoraceae	Palicella sp.	No	No	No	No
Pannariaceae	Pannaria pulverulacea Elvebakk	No	No	No	No
Parmeliaceae	Pannoparmelia wilsonii (Räsänen) D.J.Galloway	No	No	No	No
Lecideaceae	Paraporpidia leptocarpa (C.Bab. & Mitt.) Rambold & Hertel	No	No	No	No
Pannariaceae	Parmeliella nigrocincta (Mont.) M.Yli.Arg.	No	No	No	No
Parmeliaceae	Parmotrema neopustulatum Kurok.	No	No	No	No
Parmeliaceae	Parmotrema perlatum (Huds.) M.Choisy	No	No	No	No
Parmeliaceae	Parmotrema reticulatum (Taylor) M.Choisy	No	No	No	No
Peltigeraceae	Peltigera dolichorhiza (Nyl.) Nyl.	No	No	No	No
Pertusariaceae	Pertusaria crassilabra Müll.Arg.	No	No	No	No
Pertusariaceae	? Pertusaria krogii A.W.Archer. Elix, Eb.Fisch., Killman & Sérus.	No	No	No	No
Pertusariaceae	Pertusaria pertractata Stirt.	No	No	No	No
Pertusariaceae	? Pertusaria sp.	No	No	No	No
Graphidaceae	Phaeographis lindigiana Müll.Arg.	No	No	No	No
Phlyctidaceae	Phlyctis sp.	Yes	No	No	No
Phlyctidaceae	Phlyctis subuncinata Stirt.	No	No	No	No
Physciaceae	Physcia neonubila Elix	No	No	No	No
Physciaceae	Physcia poncinsii Hue	No	No	No	No
Trapeliaceae	Placynthiella icmalea (Ach.) Coppins & P.James	No	No	No	No
Porinaceae	Porina leptalea (Durieu & Mont.) A.L.Sm.	No	No	No	No
Porinaceae	Porina meridionalis P.M.McCarthy	No	No	No	No
Porinaceae	Porina raphidiophora (Nyl.) Müll.Arg.	No	No	No	No
Porinaceae	Porina whinrayi P.M.McCarthy	No	No	No	No
Lobariaceae	Pseudocyphellaria rubella (Hook.f. & Taylor) D.J.Galloway & P.James	No	No	No	No
Caliciaceae	Pseudothelomma ocellatum (Körb.) M. Prieto & Wedin	No	No	No	No
Pannariaceae	Psoroma asperellum Nyl.	No	No	No	No
Parmeliaceae	Punctelia pseudocoralloidea (Gyeln.) Elix & Kantvilas	No	No	No	No
Parmeliaceae	Punctelia transtasmanica Elix & Kantvilas	No	No	No	No

Family	Species	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic / pest
Pyrenulaceae	<i>Pyrenula dermatodes</i> (Borrer) Schaer.	No	No	No	No
Ramalinaceae	<i>Ramalina fissa</i> (Müll.Arg.) Vain.	No	No	No	No
Ramalinaceae	<i>Ramalina inflata</i> (Hook.f. & Taylor) Hook.f. & Taylor	No	No	No	No
Lecanoraceae	? <i>Ramboldia arandensis</i> (Elix) Kalb, Lumbsch & Elix	No	No	No	No
Lecanoraceae	<i>Ramboldia blastidiata</i> Kantvilas & Elix	No	No	No	No
Lecanoraceae	<i>Ramboldia laeta</i> (Stirt.) Kalb, Lumbsch & Elix	No	No	No	No
Lecanoraceae	<i>Ramboldia sorediata</i> Kalb	No	No	No	No
Lecanoraceae	<i>Ramboldia stuartii</i> (Hampe) Kantvilas & Elix	No	No	No	No
Rhizocarpaceae	<i>Rhizocarpon reductum</i> Th.Fr.	No	No	No	No
Rhizocarpaceae	<i>Rhizocarpon viridiatrum</i> (Wulfen) Körb.	No	No	No	No
Physciaceae	<i>Rinodina australiensis</i> Müll.Arg	No	No	No	No
Physciaceae	<i>Rinodina blastidiata</i> Matzer & H.Mayrhofer	No	No	No	No
Physciaceae	<i>Rinodina oleae</i> Bagl.	No	No	No	No
Physciaceae	<i>Rinodina subcrustacea</i> (Müll.Arg.) Zahlbr.	No	No	No	No
Roccellaceae	<i>Schismatomma occultum</i> (C.Knight & Mitt.) Zahlbr.	No	No	No	No
Scoliciosporaceae	<i>Scoliciosporum umbrinum</i> (Ach.) Arnold	No	No	No	No
Lecanorales	? <i>Strangospora</i> sp.	No	No	No	No
Teloschistaceae	<i>Teloschistes spinosus</i> (Hook.f. & Taylor) J.S.Murray	No	No	No	No
Teloschistaceae	<i>Teloschistes velifer</i> F.Wilson	No	No	No	No
Mycoblastaceae	<i>Tephromela alectonica</i> Kalb	No	No	No	No
Mycoblastaceae	<i>Tephromela sorediata</i> Kalb & Elix	No	No	No	No
Caliciaceae	? <i>Thelomma</i> sp.	No	No	No	No
Graphidaceae	<i>Thelotrema lepadinum</i> (Ach.) Ach.	No	No	No	No
Cladoniaceae	<i>Thysanothecium scutellatum</i> (Fr.) D.J.Galloway	No	No	No	No
Trapeliaceae	<i>Trapeliopsis flexuosa</i> (Fr.) Coppins & P.James	No	No	No	No
Lecanoraceae	<i>Tylothallia verrucosa</i> (Müll.Arg.) Kantvilas	No	No	No	No
Parmeliaceae	<i>Usnea cornuta</i> Körb.	No	No	No	No
Parmeliaceae	<i>Usnea dasaea</i> Stirt.	No	No	No	No
Parmeliaceae	<i>Usnea inermis</i> Motyka	No	No	No	No
Parmeliaceae	<i>Usnea rubrotincta</i> Stirt.	No	No	No	No
Verrucariaceae	<i>Verrucaria prominula</i> Nyl.	No	No	No	No
Parmeliaceae	<i>Xanthoparmelia australasica</i> D.J.Galloway	No	No	No	No
Parmeliaceae	<i>Xanthoparmelia conranensis</i> (Elix) Elix	No	No	No	No
Parmeliaceae	<i>Xanthoparmelia flavescentireagens</i> (Gyeln.) D.J.Galloway	No	No	No	No

Family	Species	Putative new species	Threatened (EPBC Act)	Threatened (State Act)	Exotic / pest
Parmeliaceae	<i>Xanthoparmelia mougeotina</i> (Nyl.) D.J.Galloway	No	No	No	No
Parmeliaceae	<i>Xanthoparmelia streimannii</i> (Elix & P.Armstr.) Elix & J.Johnst.	No	No	No	No
Parmeliaceae	<i>Xanthoparmelia subprolixa</i> (Nyl. ex Kremp.) O.Blanco, A.Crespo, Elix, D.Hawksw. & Lumbsch	No	No	No	No
Teloschistaceae	<i>Xanthoria ligulata</i> (Kšrb.) P.James	No	No	No	No
N/A	unidentified species A	No	No	No	No