

# **Flora Survey on Hiltaba Station and Gawler Ranges National Park**

*Hiltaba Pastoral Lease and Gawler Ranges National Park, South Australia*

*Survey conducted: 12 to 22 Nov 2012*

*Report submitted: 22 May 2013*



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**Vascular plants, macrofungi, lichens, and bryophytes**

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Cover photo:

**Fig. 1.** Area of outcropping granite dominated by the Gawler Ranges endemic shrub *Grevillea parallelinervis* and by *Melaleuca uncinata* and *Triodia irritans*; hill NW of Mt Hiltaba, Hiltaba Station. *Photo: J. Kellermann.*



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## Abstract

In September 2012, five staff members of the State Herbarium of South Australia, Department of Environment, Water and Natural Resources (DEWNR), participated in a two week survey on Hiltaba Station and Gawler Ranges National Park. These staff collected vascular plants and cryptogams as part of the Bush Blitz Survey program. The primary survey effort was focussed on Hiltaba Station where records were made at 134 sites. Across the two properties the survey resulted in the collection of 782 plant specimens, plus a further 524 plant sighting records. The collections were supplemented by 136 vascular plant tissue samples collected in silica gel desiccant for future DNA analysis.

A total of 88 plant taxa\* were newly recorded for the Hiltaba Nature Foundation property during the 2012 Bush Blitz Survey. This comprised 36 vascular plant taxa and 52 cryptogams (26 bryophytes, 22 lichens, and 4 macrofungi). In the Gawler Ranges National Park, 21 plant taxa were recorded for the first time, comprising 12 vascular plant taxa and 9 cryptogams.

The surveys have made a significant contribution to our knowledge of the flora on both properties.

## 1. Introduction

### 1.1 Vascular Plants

Previous vascular plant data was compiled prior to this survey from two primary sources: (a) collections held in the State Herbarium of South Australia (AD) and (b) Biological Survey records and opportunistic sightings records extracted from the Biological Databases of South Australia system (BDBSA). The BDBSA dataset included survey information compiled by Hudspith *et al.* (2001), as well as subsequent survey data from the region of interest. Spatially explicit data was extracted for records from each of the two properties. This provided a taxon list for use during field work and acted as a reference guide for comparison with outcomes from the Bush Blitz survey.

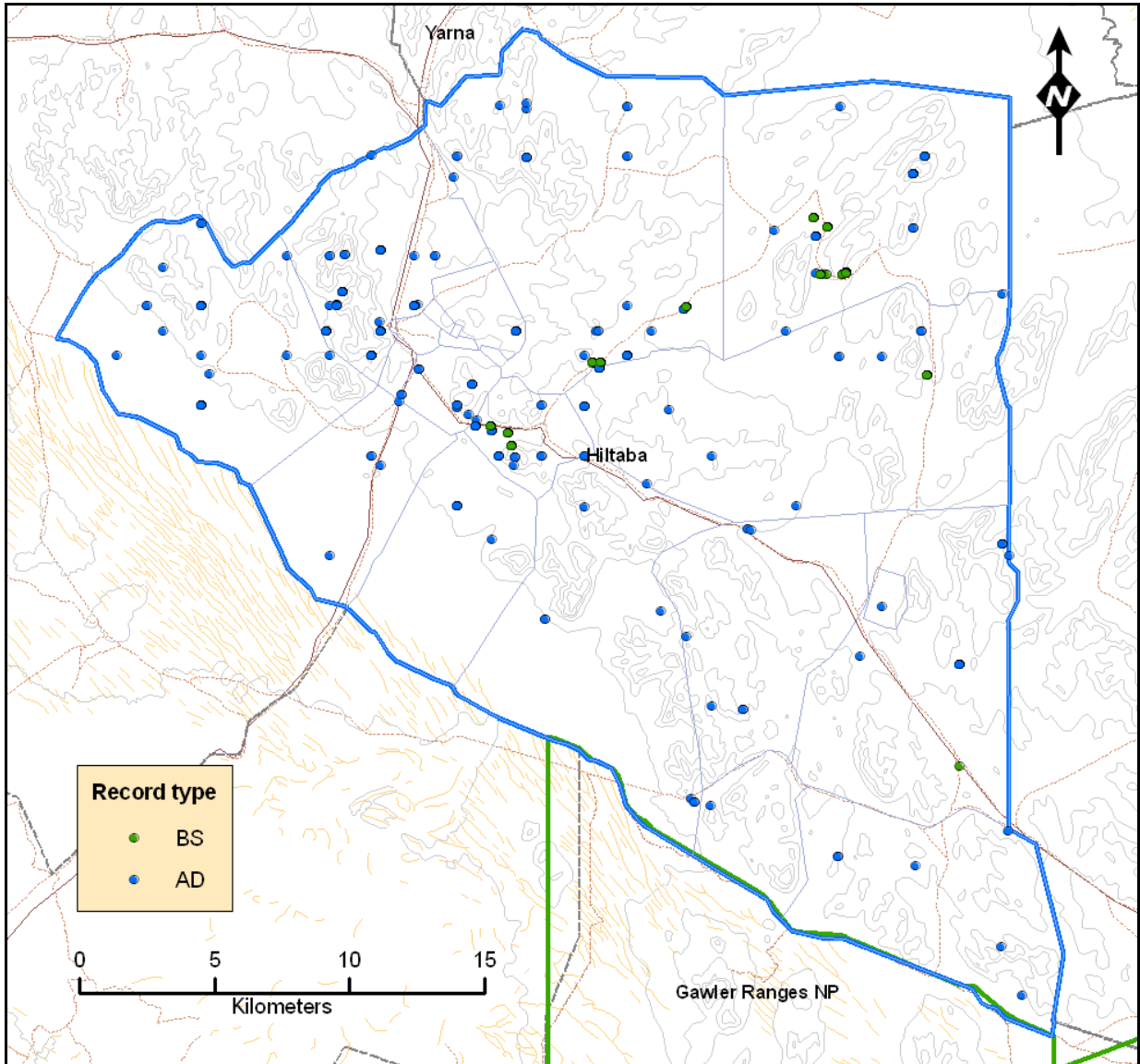
Post survey, two additional sources were incorporated into these tabulated lists: a species list provided by the Bush Blitz Team which was derived from Australia's Virtual Herbarium (AVH), and a list from the management guidelines for Hiltaba Station (Nature Foundation SA 2012).

A third additional source, a set of observational records from the Pastoral Unit (PU) dataset of the Department of Environment, Water and Natural Resources (DEWNR), was also extracted spatially for the two properties. However this was only used as supporting data and incorporated into the tables where there were clear matches with accepted taxa. This source was not used as the sole evidence for species occurrences because it was completely unvouchered and contained many questionably identified taxa.

After validation, the number of plant names recorded was reduced from 573 to 380 taxa for Hiltaba Station (Table 1) and 886 to 604 taxa for GRNP (Table 2). The total number of existing AD and BDBSA records was 1366 for Hiltaba Station (Fig. 2) and 5412 for GRNP (Fig. 3), i.e. there were many more records for the National Park.

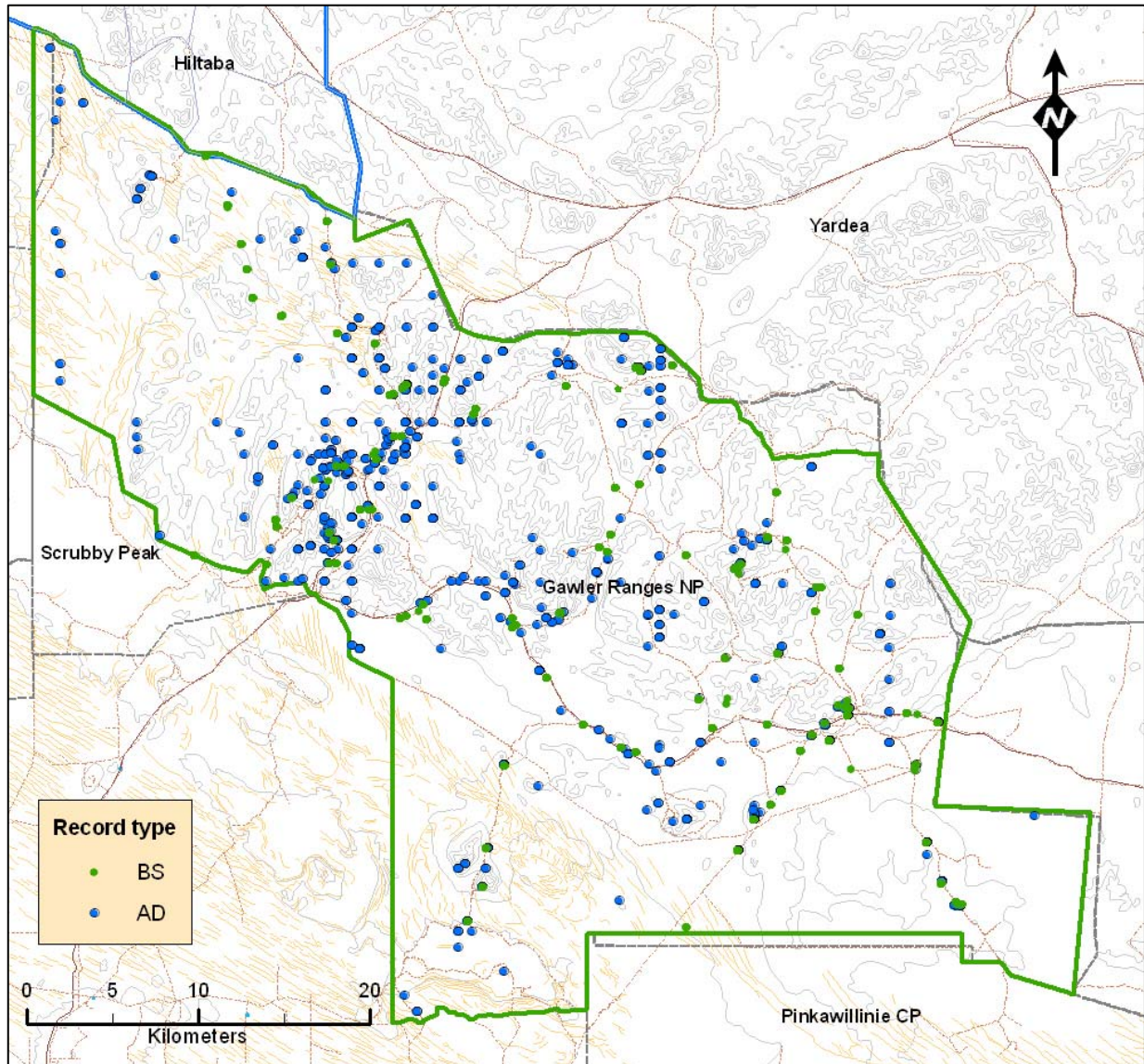
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\*Throughout this report **taxa** (singular **taxon**) refers to species or infraspecific entities (subspecies, varieties and formas) at the lowest applied rank.



**Fig. 2.** Map showing sites of existing AD collections and BS records on Hiltaba.





**Fig. 3.** Map showing sites of existing AD collections and BS records in GRNP.

**Table 1. Summary of previous vascular plant records for Hiltaba Station (accepted taxa).**

Source	No. of Taxa <sup>(5)</sup>	No. of Records
State Herbarium collections (AD) <sup>(1)</sup>	331	875
BDBSA records additional to above (BS) <sup>(1) (2)</sup>	172	491
Provided list (ex AVH)	197	-
Hiltaba Interim management Guidelines 2012-2014 report <sup>(3)</sup>	328	-
Pastoral Unit records (PU) <sup>(4)</sup>	70 (89)	261 (328)
<b>Total accepted taxa</b>	<b>380</b>	
<b>Total recorded “taxa” (before Bush Blitz)</b>	<b>573</b>	

**Table 2. Summary of previous vascular plant records for Gawler Ranges National Park (accepted taxa).**

Source	No. of Taxa <sup>(5)</sup>	No. of Records
State Herbarium collections (AD) <sup>(1)</sup>	549	2463
BDBSA records additional to above (BS) <sup>(1) (2)</sup>	395	2949
Provided list (ex AVH)	340	-
Pastoral Unit records (PU) <sup>(4)</sup>	174 (228)	1576 (1923)
<b>Total accepted taxa</b>	<b>604</b>	
<b>Total recorded “taxa” (before Bush Blitz)</b>	<b>886</b>	

Notes:

(1) Numbers of records provided for the AD and BS sources give an indication of a taxon's frequency of collection, but these figures are not always complete for AD records which may exclude some specimens databased under synonymous or misapplied names.

(2) Biological Survey (BS) records without matching AD specimens only. These are mainly the non-vouchered BS records. To prevent duplication, BS records supported by AD vouchers were removed, since these are already covered by the “SA Herbarium collections” source. In a few cases included BS records were found to have corresponding AD vouchers with non-matching plant names, usually re-determinations that have not yet been applied to update the field IDs of the BS records. Where possible these were identified and the appropriate adjustments made and documented with comments in the annotated species lists (presented here Tables 26 & 28 of Appendix 1).

(3) The Interim Management Guidelines report states that “This list includes species known to occur on Hiltaba *and those judged likely to occur there due to suitable habitat on the property and nearby occurrences.*” (Nature Foundation SA 2012).

As far as possible those taxa that were only “likely to occur” were determined by comparison with known sources (ADHERB, BDBSA and AVH). Hence records appearing exclusively in the Management Guidelines list were excluded from consideration in deeming new species records for the Hiltaba reserve.

(4) The Pastoral Unit dataset (PU data) accessed was the version in the DEWNR spatial data engine (SDE) layers. It comprises records made on Hiltaba between 20 Nov 1986 and 30 Nov 1996 and on GRNP between 6 May 1986 and 21 Oct 2010 but excludes more recent observations. The PU data is essentially unvouchered.

PU data was only incorporated where it matched records from the other sources. Numbers in brackets indicate the total of PU records available. Counts of PU records supporting each accepted taxon are given in the annotated species lists (Tables 26 and 28, Appendix 1).

(5) The number of unique taxa identified at least to species level and not redundant by inclusion (or possible inclusion) under another listed taxonomic entity.



## 1.2 Cryptogams (non-vascular plants)

It was not possible to provide a definitive list of cryptogam taxa collected from the region prior to the survey. These groups are in general under-collected, and certainly few collections will have been made in these areas, even less by persons collecting with detailed knowledge to guide them. Unfortunately, even those few existing collections are not easy to list or assess, since many of Australia's cryptogamic herbarium collections remain to be databased, and most to have their identifications critically authenticated.

In Tables 3 and 4 only the number of taxa is listed, as the number of records is not known.

**Table 3. Selected previous cryptogam records for Hiltaba Station (accepted taxa).**

Source	No. of Taxa <sup>(5)</sup>
State Herbarium collections (AD)	13

**Table 4. Selected previous cryptogam records for the Gawler Ranges region, including Gawler Ranges National Park (accepted taxa).**

Source	No. of Taxa <sup>(5)</sup>
State Herbarium collections (AD)	54

## 2. Methods

### 2.1 Compilation of previous records

As mentioned before, the following sources were used to compile a list of recorded taxa: collections held at AD, Biological Survey records and opportunistic sightings records extracted from BDBSA, a species list provided by the Bush Blitz Team, which was derived from AVH, and a list from the management guidelines for Hiltaba Station (Nature Foundation SA 2012).

These were compiled in tabular form to create single working lists for validation for each property. In the first stage of validation, obviously redundant or synonymous records were amalgamated, and generic categories removed. The remaining names were retained for the annotated lists provided in Appendix 1.

The second stage of validation involved investigating anomalous and questionable records and flagging those that needed to be excluded from these lists. These fell into three main categories:

- use of non-current taxonomic concepts and/or names
- mis-identifications
- erroneous co-ordinates derived from the location descriptions which meant that records were incorrectly included (or excluded) from the property.

All the records excluded at this second stage of validation are shown in the annotated lists (Tables 26 and 28) of Appendix 1, and a subset of these are presented in section 4.

Suspect and anomalous records were identified based on general knowledge of species distributions, and then investigated using specimen listing and mapping tools associated with the South Australian Census and the AVH, and direct querying of the State Herbarium of South Australia's specimen database (ADHERB).

Some anomalous species records were supported by collections appearing on ALA but not on the AD collection mapper. On investigation such ALA records were often found to be a

duplicate of an AD collection in another herbarium that retained an older determination, while the corresponding AD collection had been re-determined.

Where suspect AD records were involved, the collections were located when feasible, examined, and if necessary, re-determined. This was relatively simple for incorporated AD collections. However, AD collections for several surveys in the Gawler Ranges had been databased in ADHERB with their original field or post-survey determinations, but remained unincorporated and isolated from the main AD collection, where the IDs could be more reliably determined by taxonomists and curators. Since these collections were unsorted, locating them was a time-consuming process, but was done when there was strong evidence for suspecting an incorrect identification.

A further complication arose for a number of the BS records, which, while appearing not to replicate AD voucher collections, were found to have corresponding AD collections that had failed to match due to differences in the voucher number and series configuration. In a number of cases these had been re-determined and the incorrect ID maintained as an independent BS record.

Since validation of the AD, BS and provided list records proved to be very time-consuming, it was decided to exclude the PU (DEWNR Pastoral Unit) records from this process due to time constraints. A comparison of the PU species list with the other records suggested that the number of non-current names and incomplete IDs, and more importantly the level of mis-identification, was even higher than for the BS records. Furthermore, unlike the BS data, there were no recorded vouchers to which non-vouchered records could be linked for each survey trip. Consequently PU records were only included in annotated species lists (Tables 22 and 24, Appendix 1) when they matched the other validated data sets. New taxon records resulting from the BB survey were also compared against the PU dataset, and matches with pre-existing PU observations were found for several of these; these were then treated as new collections rather than new records (Tables 10 & 13).

The process of validating pre-existing species records proved to be a long, arduous and complex one. It certainly brings into question the value of species list records that are not directly derived from curated specimen vouchers.

## **2.2 Site selection**

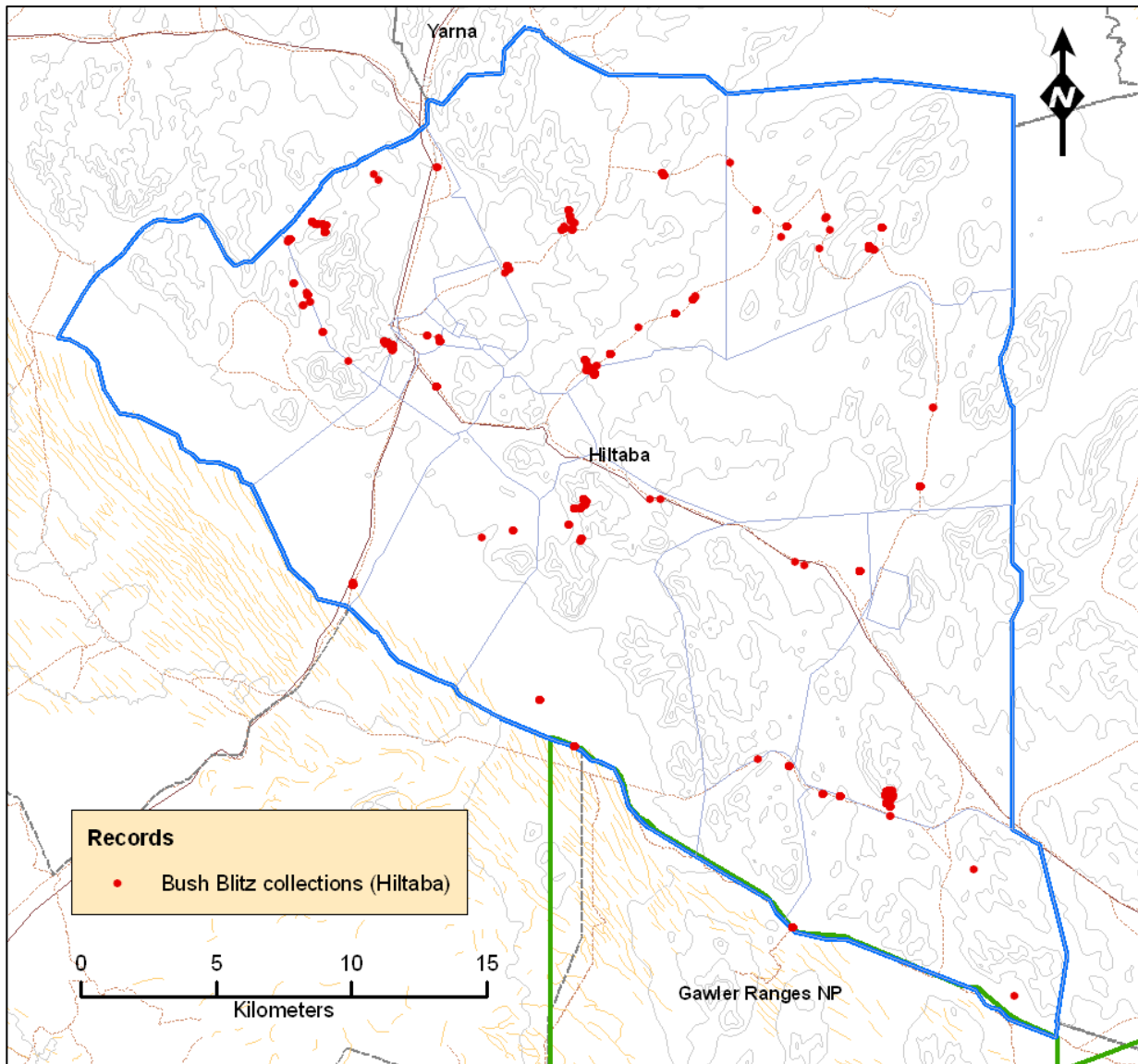
The priority of this survey was Hiltaba Station, as it had not been as extensively surveyed in the past, compared to GRNP (see Tables 1-4). Plants were recorded at 134 sites (and collected at 131) during 8 days on Hiltaba Station (Fig. 4), and at collected at 61 sites during 3 days on GRNP (Fig. 5).

A desk top survey and assessment of mapping had been undertaken to identify the range and condition of landscapes present, in order to target priority areas. This included slopes on rocky hills, likely to support species of restricted distribution, including endemics and sheltered gullies that are likely to provide more mesic environments.

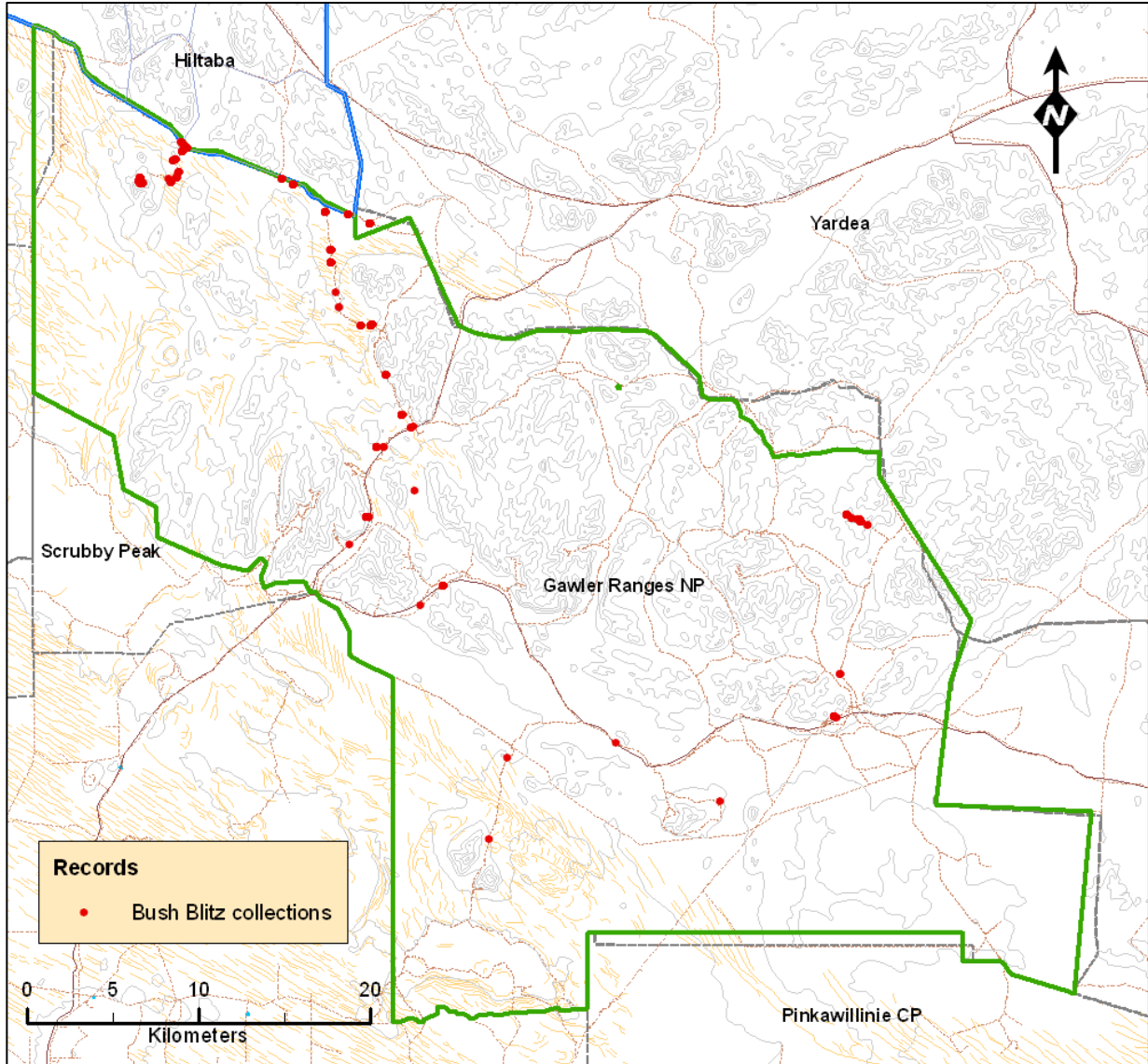
The team surveyed across the geographical and biological diversity of vascular plants and lichens, and opportunistic collections were also made of bryophytes and macrofungi. Sampling focussed on major vegetation communities within the western Gawler Ranges region, especially on areas that had experienced more limited grazing pressure, as derived from paddock plans.

The main targets of the survey were principal habitat types; of secondary importance were ecotones and run-on areas (micro-habitats). Burnt areas had also been identified as priority sampling areas pre-survey, but only two such areas were encountered during fieldwork. One salt lake was visited on the southern boundary of Hiltaba Station.

All sites are listed in Appendix 3 (Tables 31 and 32). Most sites were not sampled extensively and the number of collections varied as explained in Section 2.3 below.



**Fig. 4.** Map showing sites of Bush Blitz collections and sight records, on Hiltaba.



**Fig. 5.** Map showing sites of Bush Blitz collections and sight records in GRNP.

## 2.3 Collection methods

Plant specimens were collected when a taxon was first encountered and in suitable condition. Additional specimens at other locations were collected if they were of superior quality (i.e. had flowers and/or fruits when the first specimen did not) or were of particular interest.

Silica dried leaf samples were collected for a range of Gawler Ranges endemic plants and other taxa identified as research priorities by State Herbarium staff members. These will be used for genetic and other molecular research projects, such as DNA sequencing for phylogenetic analyses. Leaves were collected from a single branch into empty paper tea bags, and then stored in containers of silica gel for rapid desiccation.

Soil crust lichens were collected with the associated soil to which they were attached (Fig. 6).

At each collection location (site) a standard set of location and habitat data was recorded. This included a unique voucher number per specimen (if collected), date, observer name(s), UTM coordinates, reliability of coordinates, location datum, location method (e.g. GPS), location description, habitat description, and relevant plant notes.

In addition to vouchered specimens, a list of associated taxa was often recorded at a site, for conversion into non-vouchered species records at the data-entry stage.

Institutional priorities for collection included *Acacia* spp. and *Hibbertia* spp., and the families Malvaceae, Solanaceae, Myoporaceae, Rhamnaceae, Zygophyllaceae, Gramineae (Poaceae), Compositae (Asteraceae), Chenopodiaceae (particularly samphires), plus weeds, macrofungi, lichens and bryophytes.



**Fig. 6.** Method of collecting lichen and cryptogam crust soil sample. *Photo: H. Cross.*



## 2.4 Identifying the collections

For both properties, all specimens collected were lodged with the SA Herbarium, where field identifications were confirmed or updated by a team of taxonomists (Table 5). The determiner for each collection and determination details are recorded in the BDBSA database (and eventually also ADHERB), and are mostly in accordance with the special expertise indicated here. Survey participants are marked with an asterisk; further details are provided in the List of Contributors on page 4.

**Table 5. Determiners of plant collections.**

Name	Plant group
Robyn Barker	Zygophyllaceae
Graham Bell	bryophytes, lichens
Chris Brodie *	Weeds
Pam Catcheside	Macrofungi
Bob Chinnock	Aizoaceae, samphires (Chenopodiaceae)
Hugh Cross *	Lichens
Dean Cunningham	Labiatae, Thymelaeaceae
Jürgen Kellermann *	Rhamnaceae
Peter Lang *	various families
Martin O'Leary	<i>Acacia</i> (Leguminosae), <i>Eucalyptus</i> (Myrtaceae)
Rosemary Taplin	Convolvulaceae, Cyperaceae, Gramineae, Plantaginaceae
Hellmut Toelken	Dilleniaceae
Helen Vonow *	various families

## 2.5 Data entry and analysis

Field data (specimen and observational records) were entered into the DEWNR Survey System, which forms part of BDBSA. Specimen data will then be exported into ADHERB. Australia's Virtual Herbarium and ALA are populated with the specimen data from ADHERB, and ALA with non-vouchered observational records from BDBSA.

### 3. Results and Discussion

#### 3.1 Overview of collecting

The primary survey effort was focussed on Hiltaba Station. The survey resulted in the collection of 782 plant specimens (578 of which are vascular plants), plus a further 524 plant sighting records across the two properties (Table 6 & 7, Fig. 4 & 5).

**Table 6. Bush Blitz plant records from Hiltaba Station.**

	Taxa	Specimens	Obs. records
Vascular plants	212	360	297
Cryptogams	55	178	1
Total	267	538	298

**Table 7. Bush Blitz plant records from GRNP.**

	Taxa	Specimens	Obs. records
Vascular plants	213	218	226
Cryptogams	19	26	-
Total	232	244	226

All vascular plant taxa collected and observed during the Bush Blitz survey, combined with existing plant records, are listed in Tables 25 to 28 of Appendix 1.

A total of 136 vascular plant tissue samples were collected in silica gel desiccant for DNA analysis. These covered Gawler range endemic species and families that were institutional priorities, particularly Rhamnaceae, Santalaceae and Solanaceae. Also, 19 additional leaf samples were also taken from four *Casuarina pauper* (Black Oak) stands to allow an investigation of the extent of their clonal composition (Fig. 7).

Following a request from Judy West (CANB), seed samples from four populations of the Gawler Ranges endemic shrub *Dodonaea intricata* were collected for cultivation at the Australian National Botanic Gardens, Canberra.

During the survey 21 separate collections of *Stenanthemum arens* were made (Fig. 8, 9, 17 & 18). This species was only recently described (Thiele 2007) and previously only known by 7 collections from Hiltaba and Kondoolka Stations. *Stenanthemum arens* is endemic to the western Gawler Ranges and does not occur in GRNP. It was found on both granite and Gawler Range volcanic rock types. Significantly, the closely related and widely distributed *S. leucophractum* was also found to occur on Gawler Range volcanic rock in GRNP.

A combination of the timing of this survey for November, together with the preceding drier than usual conditions, mean that the survey period was not well suited for sampling annual plants. The condition of many perennial plants, often lacking flowers or fruits, indicated that sustained drier conditions have prevailed for longer than a single season. An example for this is the perennial shrub *Senecio gawlerensis*, seen at several sites to only consist of dead stems (Fig. 10).



**Fig. 7.** Three adjacent stands of *Casuarina pauper* (Black Oak) situated E of airstrip, 5 km NE of Hiltaba HS; Hiltaba Station; each appear to be separate clones distinguishable in the field by differences in habit and foliage; 19 individuals from these, and another stand near the feeder tank, had leaf tissue samples taken to allow DNA analysis; the stands are represented by herbarium vouchers BS838-275, BS838-278, and BS838-279 respectively. *Photos: P.J. Lang.*





**Fig. 8.** *Stenanthemum arens*, W of Mt Hiltaba, Hiltaba Station; vicinity of BS838-245. Twenty-one collections of this endemic north-western Gawler Ranges species were made from a range of sites across Hiltaba Station. *Photo: J. Kellermann.*



**Fig. 9.** *Stenanthemum arens*, senescent plants on granite, lower NW slope of hill NW of Mt Hiltaba, Hiltaba Station; vicinity of BS838-255. *Photo: J. Kellermann.*



**Fig. 10.** *Senecio gawlerensis*, as dead stems with a few dead leaves still attached (upper LHS), on upper slope of ridge SW of Peeweena Bore, Hiltaba Station (vicinity BS838-159). *Photo: P.J. Lang.*

### **3.2 Comments on Hiltaba Station and Gawler Ranges National Park**

#### **General condition**

Hiltaba Station is significant in having extensive areas of plains country (Fig. 11 & 12) that retains Bluebush (*Maireana sedifolia*) shrubland in good to excellent condition. This is the case particularly in the NE corner of the property in Peeweena and Peter Pan paddocks. In these areas the paddocks are larger and appear to have been subjected to lower levels of grazing by stock. This contrasts to much of the plains country in the Gawler Ranges National Park, where the perennial shrub layer has often been lost completely, or the bluebush has been replaced by Blackbush (*Maireana pyramidata*), and substantial soil erosion has occurred.

Vegetation on the hills is naturally more species rich, due in part to greater niche diversity. Higher elevations would have been largely inaccessible to stock (sheep), and the vegetation here is thus relatively intact. This situation, however, is unlikely to be maintained in the face of the high levels of goat browsing observed during the survey.





**Fig. 11.** Extensive area of intact *Maireana sedifolia* (Pearl Bluebush) Low Shrubland on open plain SW of Peeweena Bore Hiltaba Station. *Photo: P.J. Lang.*



**Fig. 12.** *Acacia papyrocarpa* Low Open Woodland with understorey dominated by *Maireana sedifolia* in good condition, Mt St. Mungo area, Hiltaba Station. *Photo: P.J. Lang.*



### Using vagrant lichens as a bioindicator

In the course of collecting, some patterns were noted as to the distribution of two soil-inhabiting vagrant lichens of the genus *Xanthoparmelia*. These species, *X. semiviridis* (Fig. 13) and *X. convoluta* (Fig. 14), were only found on the drier areas of the property, far from watering holes and hence with lower goat numbers. As we moved into the areas of heavy goat infestation the vagrant species disappeared.

This same pattern has been observed in other parts of South Australia, where the vagrant lichens have disappeared under heavy grazing by domestic stock (Rogers 1972), but have recolonised areas after the stock has been removed, e.g. in pastoral areas that have been dedicated as conservation reserves. The hard hooves of goats and sheep destroy the lichens in areas of heavy grazing. This is part of an ongoing study at the State Herbarium, and the Bush Blitz collections and the patterns observed will contribute to this study.



**Fig. 13.** Vagrant soil lichen *Xanthoparmelia semiviridis* (BS838-112), SW of Mt St. Mungo, Hiltaba Station. Photo: P.J. Lang.



**Fig. 14.** Another vagrant lichen, *X. convoluta* (BS838-111) from the same location as the previous. Photo: P.J. Lang.

## Browsing

High levels of browsing by goats were observed at various locations across Hiltaba Station, extending from open plain country to the summit of the hills. It was particularly severe near the North Wall Dam, Mt Friday, and the hills close to Hiltaba homestead. Some hills in the NE corner of the property exhibited lower levels of browsing, for example the ridgeline SE from Peeweena Bore.

A number of species seemed to be particularly palatable to goats, and were usually encountered in a browsed state. These include *Acacia continua*, *Dodonaea baueri* (Fig. 21), *Lepidosperma viscidum* (Fig. 20), *Stenanthemum arens* (Fig. 17 & 18), and *Westringia rigida*. Two species, *Pomax umbellata* and *Senecio gawlerensis*, were only seen in rock faces out of reach from goats, and may already have declined as a result of browsing pressure. *Correa backhouseana* var. *coriacea* was only seen at two locations as extremely small residual plants, and may be in a similar situation. At some locations, shrubs that are not normally browsed, such as *Acacia beckleri* (Fig. 16) and *Melaleuca lanceolata* (Fig. 15), had been severely affected by goats.

*Lepidosperma viscidum* is a widely occurring species on ridges that retains inflorescences for a long period after flowering and fruiting. On Hiltaba Station, however, we only encountered plants with intact leaves and inflorescences at two sites. Everywhere else, the blades of this species had been severely cropped and dead plants were frequent (Fig. 20). The recruitment and long-term persistence of this species under such a grazing regime is in doubt.

Two *Dodonaea* species, both low shrubs, differed greatly in their susceptibility to grazing. *D. baueri* was always heavily browsed, whereas *D. intricata* was mostly untouched (Fig. 19), even when they occurred in proximity. This might be due to a higher level of varnish or resin observed on the leaves of *D. intricata*.

Evidence of impact by goats was also observed on *Acacia iteaphylla* and a number of other shrubs in creek lines, most notably by trampling and breaking lower branches.





**Fig. 15.** *Melaleuca lanceolata* (Dryland Tea-tree) reduced to an atypical, very open shrub of sparse foliage, as a result of heavy browsing, (BS838-334, Eurilla Hill SW of summit, Hiltaba Station. Photo: P.J. Lang.



**Fig. 16.** A browsed and re-sprouting shrub of *Acacia beckleri* (Beckler's Rock Wattle), situated near the unbrowsed *Dodonaea intricata* of Fig. 19, on granite ridgeline NW of Mt Hiltaba, Hiltaba Station. Photo: P.J. Lang.



**Fig. 17.** *Stenanthemum arens*, BS838-214, trimmed into dense compact habit by repeated browsing, base of ridge NNE from Waroona Peak, Hiltaba Station. Photo: J. Kellermann.



**Fig. 18.** Where protected from browsing amongst *Triodia* hummocks, *Stenanthemum arens* retains its normal more effuse habit and flower production; vicinity of BS838-255, NW of Mt Hiltaba, Hiltaba Station. Photo: P.J. Lang.





**Fig. 19.** Unbrowsed *Dodonaea intricata*, (Gawler Ranges Hop-bush ) in area impacted by goats (droppings on lower RHS); on granite ridgeline NW of Mt Hiltaba, (vicinity of BS838-260). Photo: P.J. Lang.



**Fig. 20.** *Lepidosperma viscidum* (Sticky Sword-sedge), heavily browsed with leaves pruned to about a third of their normal length, North Wall range, Hiltaba Station Photo: P.J. Lang.



**Fig. 21.** Heavily browsed *Dodonaea baueri* (Crinkled Hop-bush) reduced by browsing to near ground-level; SW of the summit of Eurilla Hill, Hiltaba Station (BS838-333). Photo: P.J. Lang.



### 3.3 Comments on Cryptogams

A summary of cryptogam collections is provided in Table 8. Details of all cryptogam taxa collected during the Bush Blitz surveys, combined with some previous records are listed in Tables 29 and 30 of Appendix 2. These lists give only a limited representation of the range of cryptogam species likely to be found on both properties; they are incomplete and in some cases tentative. The fact that several species, known to be common and widespread components of arid soil crusts, have appeared in this survey as “new records” clearly demonstrates the incomplete sampling of previous collections. It is also quite probable that previous records exist in herbaria as unidentified or misidentified specimens.

The collections were made across a variety of substrates including soil, rock and wood, and largely demonstrate variations upon fairly characteristic suites of taxa that occur across the semi-arid regions of southern Australia. The collections were predominated by soil and rock crust taxa, many of which occur in highly mixed populations. Up to 10 or more taxa can sometimes be recognised growing together within areas of soil crust as small as a few square centimetres. Several cryptogam taxa occur frequently across the collections, accompanied by a changing group of less common taxa, presumably dependent on microclimatic and other microhabitat determinants.

**Table 8. Breakdown of Bush Blitz cryptogam collections.**

	Taxa	Genera	Specimens
Macrofungi	8	4	8
Lichens	30	>20	103
Bryophytes: Mosses	25	18	88
Liverworts	3	3	3

The commonest moss across the collections is *Tortula atrovirens* (15 collections), the next most common, *Didymodon torquatus* (12).

Amongst the lichens, *Psora decipiens* (12 records) is the most frequent species, along with *Collema* sp. (9); both are very common components of soil crusts. The *Collema* sp. records may comprise more than one species. More than 20 records were made of the genus *Xanthoparmelia*. Parmeliaceae is by far the largest family of Australian lichens (625 taxa in 31 genera), and *Xanthoparmelia* the largest genus, currently with around 300 species. Many specimens are not readily identified to species level without considerable expertise and specialised chemical methods. Four *Xanthoparmelia* species were recorded with some certainty, but there are at least another four amongst the material seen.

The site at which collection BS 838-206 was made (almost on top of Mt Friday, Hiltaba Station) demonstrated a rather different suite of taxa from all other sites, these being more characteristic of wetter areas. Of the 9 taxa recognised within this one collection, at least 6 were collected only from this one locality during the survey. *Barbula subcalycina* has only been recognised in recent years, and thus many collections are inaccurately recorded in herbarium collections – most are, however, from less arid regions. *Campylopus introflexus*, *Targionia hypophylla*, *Cladia muelleri* and *Cladia aggregata* are uncommon in arid regions, other than in such cases as this site, which consists of a relatively deep gorge, protected from the destructive western aspect and with some apparent water seepage.

Bearing in mind the time of year collections were made, and the very dry conditions prior to the survey, it would be expected that a greater range of species could be found after a major rainfall event (unpredictable in this region). Certainly the number of bryophyte and fungal taxa

from the two properties would be greater, if conditions had been suitable for ephemeral species.

The collections of mosses, lichens, and other fungi for the Hiltaba Bush Blitz trip added an extra dimension to the survey. The new cryptogam records will contribute to the State Herbarium's ongoing research projects. Cryptogams are not normally collected as part of DEWNR botanical surveys, although they comprise an important component of arid ecosystems. Many have the ability to survive in very dry conditions, and form soil crusts that prevent soil erosion and provide the main primary producers in some habitats. The collections will expand our understanding of the overall biodiversity of the region. Furthermore, with new genetic techniques, we can detect many more species than possible with conventional methods.

Genetic analyses of soil samples from other regions have yielded the identification of dozens of additional species that are present in these micro-habitats. The genetic signatures include all major groups of fungi, mosses, bacteria, and plants. This approach, termed metagenomics, is part of ongoing research at the State Herbarium and emphasises unforeseen utility of existing and new soil crust collections. Genetic analyses have provided a new window into the species diversity of soil crust habitats (so-called cryptic genetic diversity) and provide new methods for comparative studies. Though just in the initial phases, these new genetic approaches have the potential to provide additional perspectives on Bush Blitz and other biological surveys.

### 3.4 Named taxa newly recorded for the reserve

#### *Hiltaba*

A total of 88 plant taxa were newly recorded for the Hiltaba Nature Foundation property during the 2012 Bush Blitz Survey (Tables 9 and 11). This comprised 36 vascular plant taxa and 52 cryptogams (26 bryophytes, 22 lichens, and 4 macrofungi). An additional two vascular plant species were recorded that were vouchered for the first time, although previously known by unvalidated Pastoral Unit records (Table 10). None of the newly recorded taxa are new regional records.

Alien species are discussed in section 3.5.

The only species with a conservation status listing is *Glossostigma* sp. Long stout-pedicelled (*W.R.Barker 2481*) which is on the SA NPW Act schedules as Vulnerable for SA.

Two species of particular note are *Kennedia prostrata* and *Radyera farragei*. The Bush Blitz collection of *K. prostrata* is the northernmost record of the species in South Australia. It was previously only known in the Gawler Ranges by two collections from a single Biological Survey in GRNP in 2000. The Hiltaba and GRNP occurrences are significant outliers from the species main distribution in temperate areas and a further northerly extension from several early records associated with granite inselbergs across northern Eyre Peninsula. *Radyera farragei* is an arid zone species, not usually associated with the Gawler Ranges. It was found to be particularly common in the Chiltadinna Well area of Hiltaba Station, where many thousands of plants were observed.

Four new records for Hiltaba came from a small area of salt pan dominated by samphires c. 150 m N of the southern boundary, opposite the start of the track to Mt Centre. The rarity of this habitat on Hiltaba explains their absence from previous lists. Another specialised habitat surveyed, was the disturbed area surrounding the old shearing shed yards and shearer's quarters, where four new weed records were found.



**Fig. 22.** *Radyera farragei* (Desert Rose Mallow), newly recorded on Hiltaba Station; shrubs along creek margin; vicinity of BS838-226, SE of Chiltadinna Bore, Hiltaba Station. Photo: P.J. Lang.



**Fig. 23.** *Radyera farragei*, flower, bud and fruit; vicinity BS838-218, on track from Warners Bore to Nitschke's Gift Dam, Hiltaba Station. Photo: J. Kellermann.



**Table 9. Named vascular plant taxa newly recorded from Hiltaba.**

\*indicates alien taxa

Taxon	Common Name	Vouchers / Locations observed	Comments
<i>Acacia aneura</i> <i>var. intermedia</i>	Broad-leaf Mulga	BS838-161 Upper slope of ridge SW of Peeweena Bore	Agrees with the type specimen of <i>Acacia aptaneura</i> and is likely to be known by that name in the future. Mulga was also observed from a distance at other locations in the north of property, but may not be this taxon.  An isolated occurrence of several plants.
<i>Acacia burkittii</i>	Pin-bush Wattle	BS838-150 Near Peeweena Bore, on track to Mt. St Mungo	A common arid zone species near the southern limit of its distribution. Several bushes along creekline.
<i>Acacia tetragonophylla</i>	Dead Finish	BS838-235 Near NW boundary of Hiltaba Station in Chiltadinna Paddock	A common and widespread arid zone species but rare here; near the southern limit of its distribution.  A large solitary bush beside a creek.
<i>Amphipogon caricinus</i> <i>var. caricinus</i>	Long Grey-beard Grass	Ridge SW of Peeweena Bore, just S of summit	Single dead tussock observed.
<i>Atriplex suberecta</i>	Lagoon Saltbush	BS838-607 Old Shearing shed yards	A widespread weedy native of disturbed areas.
<i>Austrostipa drummondii</i>	Cottony Spear- grass	BS838-136 Track N of Mungo Tank	
<i>Austrostipa exilis</i>	Heath Spear-grass	BS838-354 Mid slope of Eurilla Hill	
<i>Austrostipa puberula</i>	Fine-hairy Spear- grass	BS838-126 Track to Mungo Tank	
<i>Austrostipa trichophylla</i>		BS838-355 Mid slope of Eurilla Hill	
<i>Callitris gracilis</i>	Southern Cypress Pine	BS838-343 Summit of Eurilla Hill	
* <i>Chenopodium murale</i>	Nettle-leaf Goosefoot	BS838-605 Old Shearing shed yards	See Table 17.
<i>Chrysocephalum</i> <i>pterochaetum</i>	Shrub Everlasting	BS838-541 W-facing hill slope above feeder tank, S of Hiltaba HS	
* <i>Cucumis myriocarpus</i>	Paddy Melon	BS838-604 Old Shearing shed yards	See Table 17. Weed from old shearing shed yards area.
<i>Digitaria brownii</i>	Cotton Panic-grass	BS838-192 Mount Friday, in gorge, half way up S side	
<i>Dissocarpus biflorus</i> <i>var. biflorus</i>	Two-horn Saltbush	BS838-492 c. 150 m N of southern boundary opposite start of track to Mt Centre	In salt pan area. Uncommon amongst samphires.
* <i>Dittrichia graveolens</i>	Stinkweed	BS838-285 Track to North Wall on lower slope of range, between hills, E side	See Table 17.
<i>Dysphania cristata</i>	Crested Crumbweed	BS838-228 SE of Chiltadinna Well on track from Four Corners Bore	
<i>Eucalyptus brachycalyx</i> -- <i>Eucalyptus concinna</i>	Gilja Mallee intergrade	BS838-221 Near southern boundary on road to Wirrulla	
<i>Eucalyptus concinna</i>	Victoria Desert Mallee	BS838-305 Just inside southern boundary, E of intersection of Punkey Plain dam/track and boundary fence	

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Taxon	Common Name	Vouchers / Locations observed	Comments
<i>Eucalyptus socialis</i> -- <i>Eucalyptus yumbarrana</i> <i>ssp. yumbarrana</i>	Red Mallee intergrade	BS838-306 Just inside southern boundary, E of intersection of Punkey Plain dam/track and boundary fence	<i>Eucalyptus yumbarrana</i> is present on dunes in GRNP and here recorded on Hiltaba but only as an intergrade with <i>E. socialis</i> .
<i>Gahnia lanigera</i>	Black Grass Saw- sedge	BS838-287 Track to North Wall on lower slope of range, mid slope, E side	
<i>Glossostigma</i> sp. Long stout pedicelled (W.R.Barker 2481)		BS838-201 Mount Friday, towards top end of rocky gorge on S side	Vulnerable status in SA (NPW Act Schedules).
<i>Indigofera helmsii</i>	Helm's Indigo	BS838-242 Base of rocky hill near NW boundary, W of Mt Hiltaba.	
<i>Kennedia prostrata</i>	Scarlet Runner	BS838-294 Top of cliff on S side of plateau of ridge S of North Wall	Northernmost record of this species in SA. Previously only known in Gawler Ranges by two collections (BS1-10206 & 10639) from a single BS Survey site in GRNP, 1.4 km ENE Paney HS, discovered 16 Aug 2000.  The two Gawler Range occurrences are significant outliers from the species main distribution and a further northerly extension from several early records associated with granite inselbergs across northern Eyre Peninsula.
<i>Lomandra effusa</i>	Scented Mat-rush	BS838-224 Near southern boundary on road to Wirrulla	
<i>Maireana oppositifolia</i>	Salt Bluebush	BS838-489 c. 150 m N of southern boundary opposite start of track to Mt Centre	In salt pan area.
* <i>Nicotiana glauca</i>	Tree Tobacco	BS838-601 Old Shearing shed yards	See Table 17.
<i>Pimelea microcephala</i> <i>ssp. microcephala</i>	Shrubby Riceflower	Near southern boundary on road to Wirrulla	
* <i>Polycarpon tetraphyllum</i>	Four-leaf Allseed	BS838-188 Mount Friday, in gorge on S side	See Table 17.
<i>Radyera farragei</i>	Desert Rose Mallow	BS838-218 SW of Warner's Bore on track to Nitschke's Gift Dam  BS838-226, BS838-901 Creek crossing SE of Chiltadinna Well on track from Four Corners Bore  BS838-301 Track N of Chiltadinna Well, 3.9 km WNW of HS  BS838-302 as above, c.. 3.3 km WNW of HS  Punkey Paddock just NW of Punkey Plain Dam	An arid zone species not usually associated with the Gawler Ranges. Particularly common in the Chiltadinna Well area where many thousands of plants were observed. The nearest previous record is an AD collection from the foothills of Mount Wallaby, c. 3 km WNW of Kondoolka HS.
* <i>Rostraria cristata</i>	Annual Cat's-tail	BS838-130 Track to Mungo Tank	See Table 17.
<i>Rytidosperma setacea</i>	Small-flower Wallaby-grass	BS838-298 Top of cliff on S side of plateau of ridge S of North Wall  BS838-353 Mid slope of Eurilla Hill	

Taxon	Common Name	Vouchers / Locations observed	Comments
<i>*Salvia verbenaca</i> <i>var. vernalis</i>	Wild Sage	BS838-381 Punkey Paddock just NW of Punkey Plain Dam	See Table 17.
<i>*Sisymbrium irio</i>	London Mustard	BS838-603 Old Shearing shed yards	See Table 17.
<i>Tecticornia disarticulata</i>		BS838-496, BS838-497 c. 150 m N of southern boundary opposite start of track to Mt Centre	In salt pan area.
<i>Tecticornia pruinosa</i>	Bluish Samphire	BS838-498, BS838-499, BS838- 502, BS838-503 c. 150 m N of southern boundary opposite start of track to Mt Centre	In salt pan area.

**Table 10. Named vascular plant taxa newly collected from Hiltaba.**

Taxon	Common Name	Vouchers / Locations observed	Comments
<i>Sclerolaena diacantha</i>	Grey Bindyi	BS838-35 Pretty Point  BS838-181 Track from Trump Dam to North Wall  BS838-457 Just inside southern boundary, E of intersection of Punkey Plain dam/track and boundary fence	A common species, surprisingly overlooked by previous collections.  Represented by 2 unvouchered records from the PU database.
<i>Sida intricata</i>	Twiggy Sida	BS838-231 Creek crossing SE of Chiltadinna Well on track from Four Corners Bore	Represented by 2 unvouchered records from the PU database.



**Table 11. Named cryptogam taxa newly recorded from Hiltaba.**

Cryptogam records are discussed in section 3.3 (above).

Cryptogam group	Taxon	Vouchers	Comments
Bryophytes	<i>Aloina sullivaniana</i>	BS838-144G BS838-325G	Moderately common soil crust species
Bryophytes	<i>Barbula subcalycina</i>	BS838-206A	Not recorded for Eyre Peninsula region, but taxonomy confused until recently
Bryophytes	<i>Campylopus introflexus</i>	BS838-206C	More characteristic of wetter areas
Bryophytes	<i>Cephaloziella exiliflora</i>	BS838-206F BS838-64F	Usually collected indirectly as plants minute and difficult to recognise
Bryophytes	<i>Crossidium davidai</i>	BS838-138F	Readily confused with <i>Tortula atrovirens</i> and not commonly collected
Bryophytes	<i>Crossidium geheebii</i>	BS838-138G BS838-155E BS838-146I BS838-325C BS838-68F	Moderately common moss of soil crusts
Bryophytes	<i>Didymodon torquatus</i>	BS838-138D BS838-144D BS838-146H BS838-325A BS838-483B BS838-64A BS838-65C BS838-66C BS838-68D	Very common and widespread moss of arid regions throughout Australia
Bryophytes	<i>Fissidens megalotis</i>	BS838-17E BS838-19D BS838-325G BS838-6 BS838-64C	Common and widespread moss of arid regions throughout Australia
Bryophytes	<i>Fossombronina sp.</i>	BS838-206E	Plants sterile – not possible to determine to species level
Bryophytes	<i>Funaria hygrometrica</i>	BS838-44A	Very common and widespread moss, but an ephemeral species
Bryophytes	<i>Gemmabryum austrosabulosum</i> [syn.: <i>Bryum sabulosum</i> ]	BS838-206B BS838-44B	
Bryophytes	<i>Gemmabryum sp.</i> [syn.: <i>Bryum sp.</i> ]	BS838-138I BS838-19E BS838-325F BS838-64D BS838-65F BS838-68H BS838-69D	Possibly several taxa, but difficult to determine to species level with certainty
Bryophytes	<i>Gigaspermum repens</i>	BS838-68I	Common, widespread moss of drier sites; ephemeral
Bryophytes	<i>Goniomitrium acuminatum</i> <i>ssp. enerve</i>	BS838-325I BS838-64E BS838-67C BS838-69C	Ephemeral moss of arid regions
Bryophytes	<i>Grimmia laevigata</i>	BS838-340	Common moss on rock surfaces
Bryophytes	<i>Grimmia pulvinata var. africana</i>	BS838-211	Common moss on rock surfaces
Bryophytes	<i>Pseudocrossidium hornschurchianum</i> [syn.: <i>Barbula hornschurchiana</i> ]	BS838-325E	Occasional in drier regions
Bryophytes	<i>Pterygoneurum ovatum</i>	BS838-19B	Not commonly recognised due to minute size
Bryophytes	<i>Rosulabryum campylothecium</i>	BS838-17B BS838-208A BS838-327B BS838-483A	Common and widespread moss

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Cryptogam group	Taxon	Vouchers	Comments
Bryophytes	<i>Stonea oleaginosa</i>	BS838-68G	Not recorded for Eyre Peninsula region, but plant minute and difficult to recognise
Bryophytes	<i>Syntrichia antarctica</i> [syn.: <i>Tortula antarctica</i> ]	BS838-17A BS838-208B	Widespread moss of drier regions, particularly on sandy soils
Bryophytes	<i>Syntrichia papillosa</i> [syn.: <i>Tortula papillosa</i> ]	BS838-91B	Common on tree bark
Bryophytes	<i>Targionia hypophylla</i>	BS838-206D	Occasional in protected sites in drier areas, but more common in wetter regions
Bryophytes	<i>Tortula atrovirens</i>	BS838-138E BS838-144C BS838-146G BS838-17D BS838-19C BS838-325B BS838-64B BS838-65D BS838-66D BS838-67D BS838-68E BS838-69B	Common and widespread moss of soil crusts in arid regions
Bryophytes	? <i>Tortula</i> sp.	BS838-138H BS838-144F BS838-146J BS838-325D BS838-65E BS838-66E	See notes in text
Bryophytes	<i>Triquetrella papillata</i>	BS838-341B	Common and widespread, especially in southern, wetter areas
Fungi	<i>Geastrum</i> aff. <i>javanicum</i>	BS838-385	Uncommon; not recorded from Eyre Peninsula Region
Fungi	<i>Geastrum floriforme</i>	BS838-248	
Fungi	<i>Lycoperdon glabrescens</i>	BS838-476	
Fungi	<i>Pycnoporus sanguineus</i> [sometimes in synonymy under <i>Pycnoporus coccineus</i> ]	BS838-74	Taxonomic circumscription of <i>Pycnoporus</i> species has been controversial for many years
Fungi	<i>Tulostoma albicans</i>	BS838-277	
Lichens	<i>Acarospora citrina</i>	BS838-162C	Widespread on rocks in arid regions
Lichens	<i>Caloplaca</i> sp.	BS838-5B	Many species of rock crusts – difficult to identify
Lichens	<i>Candelaria concolor</i>	BS838-142A	On bark in drier regions
Lichens	<i>Cladia aggregata</i>	BS838-206H	More common in wetter areas
Lichens	<i>Cladia muelleri</i> [syn.: <i>Heterodea muelleri</i> ]	BS838-206G	More common in wetter areas
Lichens	<i>Collema</i> sp. [possibly several spp.]	BS838-137B BS838-145D BS838-146F BS838-17G BS838-64H BS838-66B BS838-68C	Almost ubiquitous on arid soil crusts, but species very difficult to separate
Lichens	<i>Diploschistes</i> sp.	BS838-146A BS838-162E BS838-65A	Common, widespread lichens of soil crusts, but taxonomy difficult
Lichens	? <i>Endocarpon</i> sp.	BS838-137C BS838-145C BS838-146D BS838-19A BS838-22C BS838-325J	Common, widespread lichens of soil crusts, but taxonomy difficult

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Cryptogam group	Taxon	Vouchers	Comments
Lichens	<i>Fulgensia</i> sp.	BS838-138A BS838-144B BS838-146E BS838-68B	Occasional on soil crusts
Lichens	? <i>Heppia</i> sp.	BS838-17F BS838-69A	Common, widespread lichens of soil crusts, but taxonomy difficult
Lichens	? <i>Lecanora</i> sp.	BS838-91A BS838-93B	Many species of soil and rock crusts need specialist expertise to identify
Lichens	? <i>Lecidea</i> sp.	BS838-216 BS838-75A BS838-92	Many species of soil and rock crusts need specialist expertise to identify
Lichens	<b>Parmeliaceae</b> sp. [possibly several spp.]	BS838-141 BS838-59	Parmeliaceae is the largest lichen family in Australia; genera can be difficult to separate
Lichens	? <i>Phycia</i> sp.	BS838-139C BS838-142C	Moderately common on tree bark, but species difficult to separate
Lichens	<i>Psora crystallifera</i>	BS838-138B BS838-145B BS838-146C	Common, widespread lichen of soil crusts
Lichens	<i>Teloschistes chrysophthalmus</i>	BS838-139A	Common, widespread species on tree bark
Lichens	<i>Usnea</i> sp.	BS838-326A BS838-45A BS838-73	Genus common and widespread on tree bark
Lichens	<i>Xanthoparmelia</i> ? <i>versicolor</i>	BS838-49	See below
Lichens	<i>Xanthoparmelia reptans</i>	BS838-155 BS838-18 BS838-66A	See below
Lichens	<i>Xanthoparmelia</i> sp. [includes several unidentified spp.]	BS838-110 BS838-144A BS838-156 BS838-162A BS838-162B BS838-206I BS838-21A BS838-21B BS838-22B BS838-5 BS838-5A BS838-67A BS838-75B	<i>Xanthoparmelia</i> is a large and complex genus, currently with c. 300 spp.; differences are subtle and difficult
Lichens	<i>Xanthoria</i> sp.	BS838-94B	Common and widespread genus of tree bark



### Gawler Ranges National Park

A total of 21 plant taxa were recorded for the first time in the Gawler Ranges National Park during the 2012 Bush Blitz Survey. This comprised 12 vascular plant taxa and 9 cryptogams (4 bryophytes, 4 fungi and 2 lichens). Details of these are provided below in Tables 12 and 14. An additional vascular plant species was recorded that was vouchered for the first time, although previously known by unvalidated Pastoral Unit records (Table 13). None of our collections are new regional records, or have State or EPBC Act conservation listing. Three weeds were newly collected in GRNP and are discussed in Section 3.5.

Three of the new records come from a remote and not readily accessible site near Nukey Creek where water was present near the surface. This is an exceptional habitat in the arid landscape of the Gawler Ranges. Two of these species are aliens and only persist at the site because of the moisture available.

**Table 12. Named vascular plant taxa newly recorded from GRNP.**

\*indicates alien taxa

Taxon	Common Name	Vouchers / Locations observed	Comments
<i>Eucalyptus gypsophila</i>	Kopi Mallee	BS838-311, BS838-321, BS838-537 Track to Mt Centre  BS838-569 Pine Lodge track	Not previously recorded with certainty in GRNP (location error): inclusion in provided list presumably based on the single AVH record showing for GRNP (AD, F.A. Mason, 10 Apr 1975) which is actually just S of the GRNP ("On fence line by Petersby Gate (Thurlga St[ation])").
<i>Haloragis gossei</i>	Gosse Raspwort	BS838-438 Track from Paney Shearers Quarters to Paney HS	
<i>Juncus aridicola</i>	Inland Rush	BS838-418 Nukey Creek waterhole	A single tussock.
<i>Lawrencia glomerata</i>	Clustered Lawrencia	BS838-545 Pine Lodge track	
<i>Olearia calcarea</i> <i>X Olearia muelleri</i>	hybrid Daisy-bush	BS838-510 Track to Mt Centre, near start	A presumed hybrid, sometimes found where these species occur together.
<i>Olearia exiguifolia</i>	Lobed-leaf Daisy- bush	BS838-320 Track to Mt Centre	
<i>Olearia floribunda</i>	Heath Daisy-bush	BS838-531 c. 100 m S of cairn on summit of Mt Centre BS838-570 Pine Lodge track	
* <i>Plantago coronopus</i> ssp. <i>commutata</i>	Bucks-horn Plantain	BS838-422 Nukey Creek waterhole	<i>See Table 18.</i>  The species (including both subspecies found in SA) has not previously been recorded in the Gawler Ranges. This occurrence is a significant northerly range extension of its range in this area.
* <i>Salvia verbenaca</i> var. <i>vernalis</i>	Wild Sage	BS838-390 Yardea - Scrubby Peak Road, red sand dunes NW of Scrubby Peak	<i>See Table 18.</i>
* <i>Spergularia bocconeii</i>	Red Sand-spurrey	BS838-412 Nukey Creek waterhole	<i>See Table 18.</i>
<i>Vittadinia australasica</i> var. <i>australasica</i>	Sticky New Holland Daisy	BS838-461 Northern boundary track, SE from Pine Well	
<i>Xerochrysum bracteatum</i>	Golden Everlasting	BS838-426 Track from Paney Shearers Quarters to Paney HS	

**Table 13. Named vascular plant taxa newly collected from GRNP.**

Taxon	Common Name	Vouchers / Locations observed	Comments
<i>*Dittrichia graveolens</i>	Stinkweed	Nukey Creek waterhole	See Table 18. Represented by 3 unvouchered records from the PU database.

**Table 14. Named cryptogam taxa newly recorded from the Gawler Ranges region.**

Cryptogam records are discussed in section 3.3 (above).

Cryptogam group	Taxon	Vouchers	Comments
Bryophytes	<i>Gemmabryum</i> sp. [syn.: <i>Bryum</i> sp.]	BS838-581D	Difficult to determine to species level with certainty
Bryophytes	<i>Gigaspermum repens</i>	BS838-582D	Common, widespread moss of drier sites; ephemeral
Bryophytes	<i>Goniomitrium acuminatum</i> ssp. <i>enerve</i>	BS838-581E	Ephemeral moss of arid regions
Bryophytes	<i>Tortula atrovirens</i>	BS838-548E BS838-581C BS838-582C	Common and widespread moss of soil crusts in arid regions
Fungi	<i>Geastrum clelandii</i> ♀	BS838-444	Only recently recorded from Eyre Peninsula
Fungi	<i>Tulostoma operculatum</i>	BS838-445	Not recorded from Eyre Peninsula Region
Lichens	<i>Acarospora citrina</i>	BS838-449A	Widespread on rocks in arid regions
Lichens	<i>Diploschistes</i> sp.	BS838-548C	Common, widespread lichens of soil crusts, but taxonomy difficult
Lichens	? <i>Lecidea</i> sp.	BS838-449B	Many species of soil and rock crusts need specialist expertise to identify

### 3.5 Un-named taxa

#### *Hiltaba*

**Table 15. Putatively un-named or not formalised taxa recorded from Hiltaba on the Bush Blitz survey.**

Taxon	Vouchers
<b><i>Acacia</i> aff. <i>toondulya</i></b>	BS838-1 Near feeder tank, S of Hiltaba HS, on eastern slope  BS838-8, BS838-9, BS838-14 Near feeder tank, S of Hiltaba HS, on western slope
<b><i>Cryptandra</i> sp. Hiltaba (Anon. NPGS-8100) Kellermann</b>	BS838-12 Near feeder tank, S of Hiltaba HS, western slope  BS838-169 Just S of summit on ridge SW of Peeweena Bore  BS838-247 Base of rocky hill near NW boundary of, W of Mt Hiltaba  BS838-261 Ridge line summit on hill NW of Mt Hiltaba  BS838-286 Track to North Wall on lower slope of range, mid slope, E side
<b>?<i>Tortula</i> sp.</b>	BS838-138H Track to Mungo Tank  BS838-144F, BS838-146J Track N of Mungo Tank  BS838-325D S side of Eurilla Hill  BS838-65E, BS838-66E Pretty Point, small creekline/gullies at base of rocky hill, E of road

#### ***Acacia* aff. *toondulya***

The taxonomic status of plants related to *Acacia toondulya* on Hiltaba Station warrants further investigation, as the forms occurring on this property are atypical (Fig. 24). *Acacia toondulya* was only recently described (O’Leary 2002) with the type collection coming from Toondulya Bluff on Kondoolka Station, immediately west of Hiltaba. O’Leary recognised some examples of putative hybrids with its close relative *Acacia notabilis*, but included occurrences on Hiltaba Station within the species concept and recognised considerable variation in phyllode dimensions and shape.

Specimens collected on the survey resembling *Acacia toondulya* were all identified by O’Leary as "*A. ?toondulya* (possible *A. notabilis* intergrade)". In part the uncertainty is due to the absence of flower heads, as a higher number of florets per head is an important distinguishing character from *A. notabilis*. Also, while maintaining the distinctive spindly habit of *A. toondulya*, these plants differ from typical forms of the species that occur further west in having a lower level of mealiness (less pruinose) and longer and narrower phyllodes, features in which they seem to approach *A. notabilis*. The existing flowering AD collections from Hiltaba are all determined as *A. toondulya* with the support of inflorescence characters, but exhibit a similar low level of pruinosity and narrower phyllodes. All the Hiltaba *Acacia toondulya* plants do seem to approach *A. notabilis* in this way and their taxonomic status is worthy of further investigation to see whether they form part of a continuous gradation or are perhaps a discrete entity that may even deserve further taxonomic recognition

Also encountered and sampled on the survey were forms with a shrubby habit approaching that of *A. notabilis* and somewhat smaller phyllodes. These appeared to be intergrades that



were much closer to *A. notabilis*. (e.g. BS838-183, identified as *Acacia ?notabilis* (possible *A. toondulya* intergrade). Tissue samples to enable molecular analysis were taken from these collections, and DNA evidence may be able to clarify the relationship of the Hiltaba populations with typical *A. toondulya* and *A. notabilis*. Staff at the State Herbarium of South Australia will continue investigating these taxonomic uncertainties.

A thin spindly habit, similar to that of *A. toondulya*, is also displayed by two other Gawler Ranges endemic taxa, namely *Eucalyptus lansdowneana* (Crimson mallee) and *A. aff. euthycarpa* (see below).

### ***Cryptandra* sp. Hiltaba (Anon. NPGA-8100) Kellermann**

An unknown entity related to *Cryptandra tomentosa* was identified several years ago by Jürgen Kellermann, while preparing the revision of *Cryptandra*. Fresh collection of material during the Bush Blitz field trip, and the opportunity to observe the taxon in the field, re-activated research on the species complex and it is hoped that a new taxon can be described in the near future. In the meantime, the phrase name *Cryptandra* sp. Hiltaba (Anon. NPGA-8100) has been coined and added to the Census of South Australian Plants (State Herbarium of South Australia 2013).

The taxon is distributed throughout the Gawler Ranges and northern Eyre Peninsula; it occurs scattered on rocky hills (Fig. 25 & 26). While no flowering specimens were collected, new fruiting material, and samples for molecular analysis, should aid in the investigation of the taxon. Research on the genus is still ongoing.

### **?*Tortula* sp.**

The moss referred to as ?*Tortula* sp. was collected several times during the survey. Graham Bell considers that this probably represents a species unrecorded for Australia. Whether new to science or simply unrecorded is not easy to establish in mosses, since increasing knowledge indicates wider global distributions of many taxa than has been recognised in the past.

As the gametophyte of this taxon is extremely small and sporophytes have not yet been found, considerable further work will be required to determine its status with certainty. Bell believes the same taxon may occur more widely, as similar material has previously been seen from eastern Eyre Peninsula. Ongoing studies in Pottiaceae should assist in clarification of the status this taxon.



**Fig. 24.** *Acacia* aff. *toondulya*, one of two trees (BS838-8 & BS838-9) from just SE of feeder tank, S of Hiltaba HS, Hiltaba Station. Photo: P.J. Lang.



**Fig. 25.** *Cryptandra* sp. Hiltaba (Anon. NPGA-8100), W side of hill NW of Mt Hiltaba, Hiltaba Station. Photo: J. Kellermann.



**Fig. 26.** *Cryptandra* sp. Hiltaba (Anon. NPGA-8100), detail of foliage with fruit, same plant as previous. Photo: J. Kellermann.

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**Table 16. Putatively un-named or not formalised taxa recorded from GRNP on the Bush Blitz survey.**

Taxon	Vouchers
<i>Acacia</i> aff. <i>euthycarpa</i>	BS838-446 Mid NE slope of ridge, 2 km ENE Yandinga Well and 3.7 km SE from Scrubby Peak on W side of Peterby Yards - Yardea Road
<i>Olearia</i> cf. <i>floribunda</i>	BS838-531 100 m S of cairn on summit of Mt Centre  BS838-570 Pine Lodge track

***Acacia* aff. *euthycarpa***

This entity has been known for a long time as a distinctive form of the highly variable *Acacia euthycarpa* complex. A more typical form of *A. euthycarpa* with terete phyllodes was collected on the summit of Mt Centre (BS838-529). However, the form highlighted here, which occurs on rocky slopes at a number of sites in the GRNP, has broad phyllodes and an extremely thin spindly and wispy habit (Fig. 27). There are somewhat similar weeping forms with broad phyllodes from sand dunes elsewhere on Eyre Peninsula, but the spindly habit seems to reach its extreme in these Gawler Ranges populations (and is also a feature of other species; see above). Its taxonomic relationship with *Acacia euthycarpa* ssp. *oblanceolata* S.Wright from Victoria also needs investigation (Wright *et al.* 2002).



**Fig. 27.** *Acacia* aff. *euthycarpa*, wispy Gawler Ranges form; B838-446, 2 km ENE of Yandinga Well, GRNP. Photo: C.J. Brodie.



### ***Olearia cf. floribunda***

The two Bush Blitz collections from GRNP identified as *Olearia floribunda* represent two extremes of what is currently treated as a single taxon. The collection from the summit of Mt Centre (BS838-531) matches the four collections made on Hiltaba Station, all on rocky slopes and with dense woolly indumentum and short, tightly clustered grey foliage. In contrast, the collection from the Pine Lodge track (BS838-570) has longer green leaves that are only moderately hairy and exude a substantial amount of resinous material making the plant somewhat viscid, and the foliage is less tightly clustered along the stems. The single survey collection of this form was made in *Eucalyptus oleosa* – *E. gracilis* Open Mallee over *Melaleuca lanceolata*, *Acacia merrallii* & *Maireana* spp., on an interdunal flat with pale brown calcareous sandy clay loam. This form appears to be particularly common on central Eyre Peninsula.

An examination of *O. floribunda* collections at AD indicates that some intergradation occurs between the two forms. The relationship between these forms, and with *Olearia brachyphylla*, warrants further investigation.

## **3.6 New species to be described**

### ***Hiltaba and GRNP***

No definite new species were discovered as a result of the Bush Blitz survey on either property. The previous section covers several taxa that may be described in the future.

## **3.7 Weed or pest species**

Many weeds are annuals and the dry conditions meant that alien plants are under-represented in the survey. The diversity and abundance of weeds recorded in the rocky hills was very low. Indeed, lower than would be expected given the history of the areas surveyed. We suggest that in addition to the poor conditions leading up to the survey, that this is partly due to the inaccessibility of these areas to stock and partly due to the poorer soils of skeletal rocky habitats. The majority of alien species occurred on plains, where stock would have aided their establishment by dispersal and disturbance. In many of these areas Wards Weed (*Carrichtera annua*), and sometimes Saffron Thistle (*Carthamus lanatus*), occur in high densities.

### ***Hiltaba***

Alien plants comprise only 26 of the 212 distinct vascular plant taxa (12.3%) recorded on Hiltaba Station during the survey. Eight are new records for the property. Table 17 provides details of all alien species recorded on Hiltaba during the Blush Blitz survey.

Only one weed is State-listed, Horehound (*Marrubium vulgare*). This is a declared pest plant (class 3E) under the (SA) Natural Resources Management Act 2004. No species are included in the current Weeds of National Significance (WoNS) listing.

Notably absent is Buffel Grass (*Cenchrus ciliaris*), a weed of high ecological impact that has expanded its range over much of arid and semi-arid South Australia in recent years. There are currently few records from Eyre Peninsula, but significantly, Buffel Grass was recently collected from along the Eyre Highway (near Koongawa, c. 100 km SSE from the SW corner of Hiltaba). There is potential for Buffel Grass to invade Hiltaba, particularly in drainage lines and flood-out areas. Any outbreaks should be eradicated as a high priority.

**Table 17. Details of weed species recorded in Hiltaba on the Bush Blitz survey.**

<b>Taxon</b>	<b>Common Name</b>	<b>Vouchers / Locations observed</b>	<b>Abundance / Comments</b>
<i>Anagallis arvensis</i>	Pimpernel	Mount Friday, in gorge, half way up S side	A widespread small annual herb that prefers moister sites. Likely to be more prevalent in wetter seasons but only of minor significance.
<i>Avena barbata</i> Bearded Oat	Bearded Oat	BS838-194 Mount Friday, in gorge, half way up S side  BS838-297 Top of cliff on S rim of ridge S of North Wall  3 sighting records (including near summit of Eurilla Hill and hill above Hiltaba HS)	A widespread annual grass. Widely dispersed on the property and surprisingly found mainly on hills and ridges (as stunted plants). Often competes with native species in temperate areas but its impact here would be limited by the drier climate.
<i>Bromus rubens</i> Red Brome	Red Brome	BS838-195 Mount Friday, in gorge, half way up S side	A widespread small annual grass. Only seen in small numbers, mostly dead. However, can form dense areas with good rains.
<i>Bupleurum semicompositum</i>		BS838-204 Mount Friday, towards top end of rocky gorge on S side of mountain	A widespread annual herb often seen on dry roadsides and well established throughout semi-arid parts of SA. The two occurrences recorded on this survey show its ability to establish in remote and relatively undisturbed areas. Only seen in low numbers and of little concern.
<i>Carrichtera annua</i>	Ward's Weed	BS838-131 Track to Mungo Tank  BS838-230 SE of Chiltadinna Well  + 6 sighting records	A very widespread and abundant annual herb of pastoral areas in SA. Mostly dry and dead due to the dry season. Long established and prevalent in the plains country, particularly in areas impacted by stock grazing and other disturbance. Has a major ecological impact on native species, but control not currently feasible.
<i>Carthamus lanatus</i>	Saffron Thistle	BS838-99 On track from Pretty Point to Mt Saint Mungo  BD838-132 Track to Mungo Tank  BS838-608 Old Shearing shed yards area.  Pretty Point, east of road  Mount Friday, in gorge, half way up S side  Just NW of Punkey Plain Dam  Hiltaba-Yardea road W of Barber Hill	A common robust annual herb in semi-arid areas. Mainly observed near tracks but with the potential to spread further in open areas and rocky sites.
<i>Centaurea melitensis</i>	Malta Thistle	BS838-273 Saddle near ridge NW of Mt Hiltaba	A widespread, readily dispersed, hardy annual herb. A single record of scattered plants; no dense infestations were encountered.

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Taxon	Common Name	Vouchers / Locations observed	Abundance / Comments
<i>Chenopodium murale</i>	Nettle-leaf Goosefoot	BS838-605 Old Shearing shed yards	Large annual herb, widely distributed across SA in disturbed sites. Confined to protected and disturbed areas around buildings.
<i>Cucumis myriocarpus</i>	Paddy Melon	BS838-604 Old Shearing shed yards	Trailing annual herb, widespread in arid and semi-arid SA. About 10 plants around sheep pens; not seen elsewhere.
<i>Dittrichia graveolens</i>	Stinkweed	BS838-285 Track to North Wall on lower slope of range	Almost shrubby annual herb. One localized occurrence recorded; may spread if left unchecked.
<i>Gypsophila tubulosa</i>	Annual Chalkwort	BS838-377 N end of Narlaby paddock on low hill on SW side of track	A widespread small annual herb. Generally occurs in low densities. Only a few plants seen and of little concern.
<i>Hypochaeris glabra</i>	Smooth Cat's Ear	BS838-202 Mount Friday, towards top end of rocky gorge on S side  Ridge line summit on hill NW of Mt Hiltaba	A widespread small annual herb. Generally occurs in low densities. Only a few plants seen and of little concern.
<i>Marrubium vulgare</i>	Horehound	BS838-129 Track to Mungo Tank  BS838-602 Old Shearing shed yards  Mount Friday, in gorge on S side  Track from Pretty Point to Mt St Mungo  Just NW of Punkey Plain Dam)	Declared Pest plant in SA under Natural Resources Management Act 2004. Small perennial shrub, widespread in semi-arid areas. Observed in as widely scattered occurrences in low densities.
<i>Medicago minima</i> <i>var. minima</i>	Little Medic	BS838-229 SE of Chiltadonna Well on track from Four Corners Bore  2 sighting records	A very widespread and abundant annual herb in pastoral areas. Mostly dry and dead here due to the dry season. Long established and prevalent in the plains country, particularly in areas impacted by stock grazing and other disturbance.
<i>Neatostema apulum</i>	Hairy Sheepweed	BS838-128 Track to Mungo Tank	A small annual herb, well established in the Gawler Ranges. Only sparsely present.
<i>Nicotiana glauca</i>	Tree Tobacco	BS838-601 Old Shearing shed yards	An invasive spindly tree-like shrub common throughout SA including semi-arid and arid areas, particularly in eastern regions. Normally associated with ephemeral creek and drainage lines and close to dams or watering holes. Only recorded at this location and could easily be removed to stop further spread.
<i>Pentameris airoides</i> <i>ssp. airoides</i>	False Hair-grass	BS838-203 Mount Friday, towards top end of rocky gorge on S side  3 sighting records (from Eurilla Hill, and hill NW of Mt Hiltaba)	A widespread small annual grass, usually present in low densities; and of little concern. Only scattered plants seen.

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Taxon	Common Name	Vouchers / Locations observed	Abundance / Comments
<i>Polycarpon tetraphyllum</i>	Four-leaf Allseed	BS838-188 Mount Friday, in gorge on S side	A widespread small annual herb in temperate and semi-arid areas. Near the northern limit of its distribution in this area. Only encountered as a single occurrence of several small plants. May be more common in a wetter season, but suitable habitats are probably limited.
<i>Rostraria cristata</i>	Annual Cat's-tail	BS838-130 Track to Mungo Tank	A widespread small annual grass; of little concern. Only seen in small numbers, mostly dead.
<i>Salvia verbenaca</i> var. <i>vernalis</i>	Wild Sage	BS838-381 Just NW of Punkey Plain Dam  Hiltaba-Yardea road, W of Barber Hill	A widespread perennial herb. Observed in patches around the property; probably still spreading.
<i>Schismus barbatus</i>	Arabian Grass	BS838-233 SE of Chiltadonna Well	A widespread small annual grass, usually present in low densities; and of little concern.
<i>Silene nocturna</i>	Catchfly	BS838-233 SE of Chiltadonna Well  BS838-344 Summit of Eurilla Hill  BS838-612 Shearers quarters, at base of rainwater tank	A widespread small annual herb of low impact. Only scattered plants seen.
<i>Sisymbrium erysimoides</i>	Smooth Mustard	Mount Friday, in gorge on S side  W side of hill NW of Mt Hiltaba	Widespread annual herb. Likely to be more common in wetter seasons but restricted in distribution, mainly in shaded sites such as under tree canopies.
<i>Sisymbrium irio</i>	London Mustard	BS838-603 Old Shearing shed yards	Widespread annual herb. Only found around the Old Shearing shed yards.
<i>Urospermum picroides</i>	False Hawkbit	BS838-190 Mount Friday, in gorge, half way up S side  BS838-240 Base of rocky hill W of Mt Hiltaba	Widespread, readily dispersed annual herb often associated with mesic niches in rocky terrain; occurs in low densities and is of little concern.
<i>Vulpia myuros</i> f. <i>myuros</i>	Rat's-tail Fescue	BS838-60 Pretty Point, ridge east of road, upper slopes  BS838-262 Ridge line summit on hill NW of Mt Hiltaba  BS838-335 Just SW of summit of Eurilla Hill	A widespread and invasive small annual grass that may occur in high densities. Can have a significant ecological impact by competing with smaller native herbs and germinating seedlings. Well established but control not currently feasible.



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A small proportion of the distinct vascular plant taxa recorded in GRNP during the survey are alien, namely 7.5%, or 16 of the 213 recorded (Table 18). Three of the alien taxa are new records for the property.

None are state-listed declared species under the (SA) Natural Resources Management Act 2004; and none are included in the current Weeds of National Significance (WoNS) listing.

Notably absent is Buffel Grass (*Cenchrus ciliaris*), a weed of high ecological impact that has expanded its range over much of arid and semi-arid South Australia in recent years. There are currently few records from Eyre Peninsula, but significantly it was collected along the Eyre Highway near Koongawa in 2011, only 50 km SE from the southern boundary of GRNP. There is potential for Buffel Grass to invade GRNP particularly in drainage lines and flood-out areas, and in areas with high visitor traffic. Any outbreaks should be eradicated as a high priority.

**Table 18. Details of weed species recorded in GRNP on the Bush Blitz survey.**

Taxon	Common Name	Vouchers / Locations observed	Abundance / Comments
<i>Anagallis arvensis</i>	Pimpernel	BS838-191 Tributary of Nukey Creek	A widespread small annual herb that prefers moister sites. Likely to be more prevalent in wetter seasons but only of minor significance.
<i>Briza minor</i>	Lesser Quaking-grass	BS838-420 Nukey Creek waterhole	A widespread small annual grass. Only seen in small numbers, mostly dead.
<i>Bupleurum semicompositum</i>		BS838-410 Nukey Creek waterhole	A widespread annual herb often seen on dry roadsides and well established throughout semi-arid parts of SA. The two occurrences recorded on this survey show its ability to establish in remote and relatively undisturbed areas. Only seen in low numbers and of little concern.
<i>Carrichtera annua</i>	Ward's Weed	7 sighting records	A very widespread and abundant annual herb of pastoral areas in SA. Mostly dry and dead due to the dry season. Long established and prevalent in the plains country, particularly in areas impacted by stock grazing and other disturbance. Has a major ecological impact on native species, but control not currently feasible.
<i>Centaurea melitensis</i>	Malta Thistle	BS838-395 Saddle on S side of Nukey Bluff	A widespread, readily dispersed, hardy annual herb. A single record of scattered plants; no dense infestations were encountered.
<i>Dittrichia graveolens</i>	Stinkweed	Nukey Creek waterhole	Almost shrubby annual herb. Usually found in high traffic areas on the sides of tracks. One localized occurrence recorded; may spread if left unchecked.

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Taxon	Common Name	Vouchers / Locations observed	Abundance / Comments
<i>Marrubium vulgare</i>	Horehound	BS838-388 Yardea - Scrubby Peak Road, red sand dunes NW of Scrubby Peak  Nukey Creek waterhole	Declared Pest plant in SA under Natural Resources Management Act 2004. Small perennial shrub, widespread in semi-arid areas. Only a few plants present at these sites.
<i>Neatostema apulum</i>	Hairy Sheepweed	Saddle on S side of Nukey Bluff-	A small annual herb, well established in the Gawler Ranges. Only sparsely present.
<i>Pentameris airoides</i> <i>ssp. airoides</i>	False Hair-grass	Nukey Creek waterhole  mid NE slope of ridge, 2 km ENE Yandinga Well-	A widespread small annual grass, usually present in low densities; and of little concern. Only scattered plants seen.
<i>Plantago coronopus</i> <i>ssp. commutata</i>	Bucks-horn Plantain	BS838-422 Nukey Creek waterhole	A common herb in the agricultural zone but outside its main range here. Only seen at this damp location and unlikely to be of concern in this arid climate.
<i>Reichardia tingitana</i>	False Sowthistle	BS838-439 Track from Paney Shearers Quarters to Paney HS	A widespread annual herb in semiarid areas of the State. Generally occurs in low densities in natural environments but can become common on roadsides due to extra run-off water, especially on sealed roads. Only a few plants seen and of little concern here.
<i>Salvia verbenaca</i> <i>var. vernalis</i>	Wild Sage	BS838-390 Yardea-Scrubby Peak Road, red sand dunes NW of Scrubby Peak	A widespread perennial herb. Only scattered herbarium records from this district and probably still spreading, but a lot more common than collections indicate.
<i>Sonchus oleraceus</i>	Common Sow-thistle	BS838-396 Saddle on S side of Nukey Bluff	A very widespread, well established annual herb across most of SA. Usually in low densities and of no concern.
<i>Spergularia bocconeii</i>	Red Sand-spurrey	BS838-412 Nukey Creek waterhole	A sparsely distributed annual or biennial herbaceous weed of sandy depressions and saline swamps. Seen only at this site with in a specialized habitat. Only a few plants and of little concern.
<i>Trifolium arvense</i> <i>var. arvense</i>	Hare's-foot Clover	BS838-419 Nukey Creek waterhole	A common annual herb in the agricultural zone, but outside its main range here. Only seen at this location and unlikely to be of concern in this arid climate.
<i>Urospermum picroides</i>	False Hawkbit	BS838-393 Saddle on S side of Nukey Bluff	Widespread, readily dispersed annual herb. In arid areas, it is often associated with mesic microhabitats in rocky terrain. Occurs in low densities and of little concern.

### 3.8 Vulnerable, threatened or endangered species

#### Hiltaba Station

During the survey, six taxa that are listed as rare or threatened under the *National Parks and Wildlife Act 1972* were collected from Hiltaba Station (Table 19). All apart from *Santalum spicatum* (Fig. 28 & 29) are endemic to South Australia. Previously recorded taxa listed under the EPBC Act or State legislation are flagged in Tables 25 and 27 of Appendix 1.

**Table 19. Rare or threatened species listed under SA or EPBC Act legislation and collected in Hiltaba on the Bush Blitz survey.**

SA: status according to listing under National Parks & Wildlife Act 1972 schedules; R = Rare, V = Vulnerable

Taxon	EPBC	SA	Vouchers / Locations observed	Abundance / Comments
<i>Acacia iteaphylla</i> Flinders Ranges Wattle	-	R	BS838-29 Pretty Point  BS838-328 Mid south-facing slope of Eurilla Hill  Summit of Eurilla Hill  Ridge NW of Mt Hiltaba  Mount Friday, in gorge on S side	Locally common in rocky areas where there is sufficient soil moisture.
<i>Acacia toondulya</i> Toondulya Wattle  <u>Note:</u> all records as " <i>Acacia</i> <i>?toondulya</i> (possible <i>A.</i> <i>notabilis</i> intergrade)"	-	R	BS838-1 Near feeder tank, S of Hiltaba HS, on eastern slope  BS838-8, BS838-9, BS838-14 Near feeder tank, S of Hiltaba HS, on western slope	Very patchily distributed in small stands; see field notes.
<i>Glossostigma</i> sp. Long stout-pedicelled (W.R.Barker 2481)		V	BS838-201A Mount Friday, towards top end of rocky gorge on S side	Remains from long dried-out rock pool.
<i>Grevillea anethifolia</i>	-	R	BS838-351 Upper eastern slope of Eurilla Hill.	More than 200 plants, mostly 20 to 60 cm tall, appear to be suckering.
<i>Melaleuca armillaris</i> ssp. <i>akineta</i> Needle-leaf Honey-myrtle  Fig. 30	-	R	BS838-46 Pretty Point, second ridge west of road  BS838-253 Lower NW slope of hill NW of Mt Hiltaba  BS838-345 Summit of Eurilla Hill  BS838-299 Footslope on side of gully on S side of range, S of North Wall  Mount Friday, towards top end of rocky gorge on S side  Ridgeline summit on hill NW of Mt Hiltaba	Patchily distributed large shrubs or small trees, mostly in rocky gullies or crevices, and at the edges of rock slabs where run-off water accumulates.
<i>Santalum spicatum</i> Sandalwood  Fig. 28 & 29	-	V	BS838-299 Footslope on side of gully on S side of range, S of North Wall	Single old shrub/small tree at this site. This was the only plant encountered by the botanical team, but two other sightings were reported, although not recorded, by other survey participants.



**Fig. 28.** Isolated *Santalum spicatum* (Sandalwood) on SW footslopes of North Wall range, Hiltaba Station; BS838-299. Photo: P.J. Lang.



**Fig. 29.** *Santalum spicatum* foliage and fruit of the plant in Fig. 28. Photo: P.J. Lang.



**Fig. 29.** *Melaleuca armillaris* ssp. *akineta* (Needle-leaf Honey-myrtle), W of Pretty Point, Hiltaba Station. Photo: P.J. Lang.



**Gawler Ranges National Park**

Three taxa that are listed as rare under the *National Parks and Wildlife Act 1972* were collected from Hiltaba Station (Table 20). In addition, material identified as *Hibbertia* aff. *crispula* was collected twice in GRNP and *H. crispula* is listed as Vulnerable under the EPBC Act. The collections are intermediate between typical *H. crispula* from the Nullarbor Region and *H. virgata* from the northern Eyre Peninsula, but were determined as being closest to *H. crispula* (see Table 28 of Appendix 1 for details).

**Table 20. Rare or threatened species listed under SA or EPBC Act legislation and collected in GRNP on the Bush Blitz survey.**

EPBC: status according to listing under EPBC Act; VU = Vulnerable

SA: status according to listing under National Parks & Wildlife Act 1972 schedules; R = Rare, V = Vulnerable

Taxon	EPBC	SA	Vouchers / Locations observed	Abundance / Comments
<i>Grevillea anethifolia</i>	-	R	BS838-351 Northern boundary track near junction of track to Mt Centre  Upper northern slope of Mt Centre	Localised patch on small north-facing escarpment.
<i>Hibbertia crispula</i> Oldea Guinea-flower  (Note: both records as " <i>Hibbertia</i> aff. <i>crispula</i> ")	VU	V	BS838-588 Sand dune near Kododo Hill, south from camping area  BS838-594 Dune W of road between Kododo Hill and Scrubby Peak	Locally common in rocky areas where there is sufficient soil moisture.
<i>Melaleuca armillaris</i> ssp. <i>akineta</i> Needle-leaf Honey-myrtle	-	R	Just below summit of Mt Centre on NW side  c. 100 m S of cairn on summit of Mt Centre  Mid NE slope of ridge, 2 km ENE Yandinga Well on W side of Peterby Yards-Yardea Road  Saddle on S side of Nukey Bluff	Localised small stands and patches
<i>Melaleuca leiocarpa</i> Pungent Honey-myrtle	-	R	BS838-550 Pine Lodge track	Uncommon; with mallee on dune of pale orange-brown loamy sand.

## **4. General comment on species lists**

The vascular plants lists provided by Bush Blitz for each property were compared with the plant list in the management guidelines for Hiltaba Station (Nature Foundation SA 2012) and records from ADHERB, AVH and BDBSA. They were validated as outlined in section 2.1 in two stages. The first stage of validation resulted in 573 names of vascular plants for Hiltaba Station and 886 names for GRNP. The second stage of validation reduced these numbers to 380 and 604 of previously recorded taxa, respectively. During this process, four main types of errors were encountered. These are listed in Tables 21 and 23, which indicate the numbers of each type for Hiltaba and GRNP, respectively. The reliability of existing species lists was relatively poor, as about one quarter of names had to be excluded. Tables 22 and 24 show names that were excluded due to identification or location errors. Tables 26 and 28 in Appendix 1 also show names that were excluded as a result of unresolved synonymy and incomplete identifications (see definition in Tables 21 and 23).

The source with the lowest level of error and problem records was data taken from the State Herbarium of South Australia (AD) records, followed by Biological Survey (BS) records. For example only about 1% of records were wrongly identified in AD for Hiltaba. The lists provided by Bush Blitz and the management plan contained a significantly higher number of errors. A problem with these lists was that the records were unsourced, which made validation difficult. BS records had the most precise locations, as these were generally derived by GPS, and no location errors were identified from this source. Location details for older herbarium specimens were often very imprecise, and coordinates generated from these contributed to many records being erroneously assigned to Hiltaba or GRNP.

Another source of error in the provided lists was contributed by some duplicate collections in AVH, as already described. Duplicate herbarium specimens held by different institutions often do not have the same identification (see Section 2.1).

The process of validating pre-existing species records proved to be a long, arduous and complex one. It certainly brings into question the value of species list records that are not directly derived from curated specimen vouchers.

**Hiltaba**
**Table 21. Analysis of vascular plant names previously recorded for Hiltaba Station but excluded from final listing.**

Shows number of names excluded for each source against each error class.

Sources: **Prov**: Provided list from Bush Blitz based mainly on ALA records  
**Mgt**: List published in the Hiltaba management guidelines (Nature Foundation SA 2012)  
**AD**: State Herbarium of SA collections  
**BS**: Biological Survey records not matching above

Code	Type of error	Source				
		Prov	Mgt	AD	BS	all
<b>I</b>	<b>Identification incorrect</b> Note definition below for “synonymous name” which includes some ambiguous IDs.	13	19	2	8	<b>29</b>
<b>L</b>	<b>Location issue</b> Presumed to be based on record(s) from outside GRNP, or a general location not definitely in GRNP (e.g. “Gawler Ranges”).	4	21	6	-	<b>23</b>
<b>Q</b>	<b>Questionable occurrence</b> Recorded, but in need of confirmation; feasible based on the taxon’s general distribution, but ID needs confirmation and not definitely established as present on the property.	5	5	2	1	<b>8</b>
<b>S</b>	<b>Synonymous names (unresolved) – see Appendix</b> Includes unambiguous synonyms and misapplied names that have no current application in SA; also includes designated non-current applications (“NC”), and <u>incomplete identifications</u> as to rank, where these are equivalent to, or at least partially match, a taxon accepted for the property.  In reconciling the lists from different sources, many non-ambiguous synonyms and minor variations in names were fixed in stage 1 of the validation by combining them under the correct entry. They do not show in these tallies. In Appendix 1, Table 26, however, there are often notes in the comment field citing the non-standard designations that were incorporated. Thus the tallies given here greatly underestimate the number of synonymous name variations that needed processing.	19	14	7	16	<b>41</b>
	<b>total excluded species:</b>	<b>41</b>	<b>59</b>	<b>17</b>	<b>25</b>	<b>101</b>
	<b>total included species:</b>	197	328	332	172	380
	<b>%</b>	<b>20.8</b>	<b>18.0</b>	<b>5.1</b>	<b>14.5</b>	<b>26.6</b>

**Table 22. Vascular plants previously recorded for Hiltaba Station, but excluded from final listing due to identification or location errors.**

Type = exclusion type, as listed in Table 21. For sources of information see key to Table 21.

Type	Taxon	Prov	Mgt	AD	BS	Comment
<b>I</b>	<i>Acacia calamifolia</i>	Y	Y			Presumed to be a misidentification of <i>Acacia euthycarpa</i> ; the related species <i>A. calamifolia</i> does not occur on Eyre Peninsula, although it is often confused with the former.
<b>I</b>	<i>Anthocercis anisantha anisantha</i>		Y			Presumably in error for ssp. <i>collina</i> ; ssp. <i>anisantha</i> is endemic to southern Eyre Peninsula. However, two collections at AD of ssp. <i>anisantha</i> are outliers from further north on Eyre Peninsula (but not within the study area) and their IDs warrant reassessment; they may represent aberrant forms.

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Type	Taxon	Prov	Mgt	AD	BS	Comment
I	<i>Arachnorchis aff. tentaculata</i>		Y			Most likely refers to <i>Caladenia interanea</i> (D.L.Jones) R.J.Bates (syn. <i>Arachnorchis interanea</i> D.L.Jones) (q.v.). The name <i>Caladenia tentaculata</i> has previously been misapplied to this species in the Gawler Ranges, but <i>C. tentaculata</i> s.str. is limited to higher rainfall parts of the Mt Lofty Ranges, South East and eastern States (Bates 2012).
I	<i>Arachnorchis tentaculata</i>		Y			Most likely refers to <i>Caladenia interanea</i> (D.L.Jones) R.J.Bates (syn. <i>Arachnorchis interanea</i> D.L.Jones) (q.v.). The name <i>Caladenia tentaculata</i> has previously been misapplied to this species in the Gawler Ranges, but <i>C. tentaculata</i> s.str. is limited to higher rainfall parts of the Mt Lofty Ranges, South East and eastern States (Bates 2012).
I	<i>Atriplex kochiana</i>	Y				A presumed misidentification; based on AVH, this is a more northern species and does not occur in the survey area.
L	<i>Austrostipa nullanulla</i>	Y				Presumably based on AD collection (D.J. Duval 1588) from "Island in SE corner of Lake Acraman"; Lake Acraman adjoins the Yarna section of Hiltaba Station, but is not within the Hiltaba Nature Foundation Reserve; this spear-grass is specific to gypseous substrates and is unlikely to occur on the property.
L	<i>Boronia inornata ssp. leptophylla</i>	Y				Presumably based on a single collection on AVH with the imprecise locality "Gawler Ranges between Lake Everard and Wirrulla" (CANB, H. Reeve 360) so is not definitely recorded on the property.
L	<i>Bulbostylis barbata</i>	Y	Y	1		This is based on a single AD specimen with the imprecise locality of "Mt Granite [in GRNP] to Hiltaba" and so is not definitely recorded on the property.
I	<i>Centaurium tenuiflorum</i>	Y				Presumably in error for <i>Schenkia australis</i> (q.v.); there are no AVH collections from the property; presumably based on the single record BS from Hiltaba misidentified as " <i>Centaurium tenuiflorum</i> (NC)" (q.v.).
I	<i>Centaurium tenuiflorum</i> (NC)				1	Misidentification: the single BS record from Hiltaba has a recorded voucher (given as P.Canty BS1-8049) corresponding to AD collection (Anon. NPWS[-]8049) which was re-determined as <i>Schenkia australis</i> by L. Zeltner on 22 Sep 2011.
L	<i>Ceratogyne obionoides</i>	Y				Presumably included in management guidelines list as "expected to occur"; there are no AVH records from Hiltaba Station; however there are 3 AD collections further south in the GRNP, including one from Mt Centre (T.S. Te 784) which is close to Hiltaba and possibly the basis for its inclusion on the list.
I	<i>Chenopodium gaudichaudianum</i>		Y			Presumed to be <i>Chenopodium curvispicatum</i> ; <i>C. gaudichaudianum</i> has often been confused with this species in the past and has a more northerly distribution.
L	<i>Commersonia crauophylla</i>	Y				Presumably included in management guidelines list as "expected to occur" under synonym <i>Rulingia crauophylla</i> ; possibly based on AD collection L. Haegi 781 with location "Gawler Ranges. c. 17 km SSW of Hiltaba Homestead on Yantanabie road" which is well outside the reserve.
L	<i>Corynotheca licrota</i>	Y				Unlikely to occur on the property; this species is associated with sand dunes and the AVH has no records this far south on Eyre Peninsula; possibly based on a single collection (AD, R. Bates 32118) with the imprecise locality "Between Lake Gairdner and Lake Acraman" which is outside the study area.
I	<i>Cryptandra sp. Floriferous</i> (W.R.Barker 4131)	Y		10		This record is likely to be the undescribed taxon " <i>Cryptandra</i> sp. Hiltaba (Anon. NPGA-8100) Kellermann".
I	<i>Cryptandra tomentosa</i>	Y				Presumably based on the BS records as the non-current concept " <i>Cryptandra tomentosa</i> (NC)" (q.v.), but incorrectly referred to <i>C. tomentosa</i> which does not occur on Eyre Peninsula (J. Kellermann, pers. comm.).



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Type	Taxon	Prov	Mgt	AD	BS	Comment
I	<i>Cyperus lhotskyanus</i>	Y	Y			Misidentification of <i>C. alterniflorus</i> : <i>C. lhotskyanus</i> is confined to the SE region in SA; the single record of <i>C. lhotskyanus</i> for GRNP projected on AVH (HO, P. Gibbons 738) is a duplicate of an AD collection identified as <i>C. alterniflorus</i> .
I	<i>Dampiera dysantha</i>				2	Presumed misidentifications; well outside the range of <i>Dampiera dysantha</i> , which on Eyre Peninsula is confined to the southern end; the two non-vouchered BS records must be regarded as unreliable, one similar BS record from GRNP corresponds to AD voucher (NPWSA 7734) which was re-identified as <i>D. rosmarinifolia</i> in Apr. 2000.
I	<i>Dodonaea viscosa</i> ssp. <i>viscosa</i>	Y				This subspecies does not occur in the study area nor in SA; the record was found to be based on a single AD collection from Hiltaba projected on AVH with an erroneous ID due to a data entry error; this has now been corrected to ssp. <i>angustissima</i> .
I	<i>Eucalyptus commixta</i>	Y				The meaning of this name is unknown; it does not appear on the Australian Plant Name Index (APNI).
L	<i>Eucalyptus lansdowneana</i>	Y				Presumably included in management guidelines list as "expected to occur" or based on an imprecise record; there are no AVH records from Hiltaba Station, and although there are many collections further south in the GRNP, these are very localised and it is unlikely that outliers would occur on Hiltaba.
Q	<i>Eucalyptus pileata</i>		Y	1		Better treated as a form of <i>Eucalyptus calcareana</i> or <i>E. phenax</i> ssp. <i>phenax</i> in this area.
I	<i>Euchiton involucratus</i>	Y	Y		1	Presumed misidentification of <i>Euchiton sphaericus</i> ; outside the range of <i>E. involucratus</i> and no records showing on AVH; the single unvouchered BS record as " <i>E. involucratus</i> (NC)" is unreliable; a similar record from GRNP has a corresponding AD voucher (NPWSA 7670 ) that was re-determined as <i>E. sphaericus</i> on 21 Apr 2005.
I	<i>Goodenia geniculata</i>				1	Probable misidentification of <i>Goodenia glabra</i> ; based only on unvouchered records; <i>G. geniculata</i> is confined to more temperate areas, but some Gawler Ranges collections of <i>G. glabra</i> at AD were originally misidentified as that species and may be the basis for the identification of the unvouchered BS records.
L	<i>Goodenia gibbosa</i>	Y		1		Location error: based on an AD collection, R.J. Bates 48847 "On edge of Lake, near Mt Ive Station", which is well outside the western Gawler Ranges although the coordinates provided plot on Hiltaba Station.
I	<i>Goodenia lobata</i>	Y				Unsubstantiated record not supported by AVH and outside the species main area of occurrence in gypseous breakaway country within the AD Lake Eyre Region.
L	<i>Gratwickia monochaeta</i>	Y				Presumably included in management guidelines list as "expected to occur" or based on an imprecise record; there are no BS or AVH records from Hiltaba Station.
L	<i>Halosarcia lylei</i>		Y			Presumably based on collection from "18 km SE of Hiltaba homestead. Shoreline of Salt Lake" (AD, L.D. Williams 9139) which is to the south and outside of the reserve; this samphire is specific to the margins of gypseous substrates and is unlikely to occur on the property.
L	<i>Hibbertia crispula</i>	Y				Presumably included in management guidelines list (misspelt as " <i>crispula</i> ") as "expected to occur" or based on an imprecise record; while <i>Hibbertia crispula</i> is present to the west on the adjoining Kondoolka Station, there are no AVH records from Hiltaba Station and there is little if any suitable sand dune habitat present in the property likely to support this species.
I	<i>Indigofera australis</i> ssp. <i>australis</i>	Y	Y			Presumably based on records as the non-current concept " <i>Indigofera australis</i> var. <i>australis</i> (NC)" (q.v.); however these are almost certainly ssp. <i>hesperia</i> which has a more westerly distribution than ssp. <i>australis</i> .

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Type	Taxon	Prov	Mgt	AD	BS	Comment
L	<i>Ipomoea cairica</i>			1		Location error: based on the AD collection (R. Bates 31881) of a creeper on the Pine Lodge ruins which is in GRNP although the coordinates provided plot on Hiltaba Station.
Q	<i>Isolepis hookeriana</i>	Y	Y			Uncertain ID; see comments for the " <i>Isolepis hookeriana</i> (NC)" record below, which is presumably the basis for its inclusion on the lists.
Q	<i>Isolepis hookeriana</i> (NC)				1	Uncertain ID; the species is absent from the Gawler Ranges in AVH and the single unvouchered BS record is unreliable; a similar vouchered BS record as " <i>Isolepis hookeriana</i> (NC)" from GRNP was found to have the corresponding AD specimen (AD, SANPWS 7952) re-determined as <i>I. platycarpa</i> in Mar. 1993, but with the BS record in need of update.
Q	<i>Lachnagrostis aemula</i>		Y			Unsubstantiated record not supported by AVH.
Q	<i>Lepidosperma concavum</i>	Y	Y			Uncertain ID; <i>Lepidosperma concavum</i> is absent from the Gawler Ranges in AVH and the source of this record is unclear; it may be linked to three unvouchered BS records from GRNP, but these are considered to be unreliable; the status of all the Eyre Peninsula specimens at AD previously identified as <i>L. concavum</i> is currently under review.
L	<i>Leptorhynchus melanocarpus</i>	Y				Not actually recorded on the property and presumably only included in the management guidelines list as "likely to occur"; <i>Leptorhynchus melanocarpus</i> has a restricted distribution and its known distribution is confined to Lake Acraman which adjoins the former Yarna section of Hiltaba Station, but is not within the Hiltaba Nature Foundation Reserve; it is specific to gypseous substrates and is unlikely to occur on the property.
I	<i>Limosella granitica</i>	Y				Possible misidentification of <i>Limosella australis</i> or presumably only included in the management guidelines list as "likely to occur": there are no collections of <i>L. granitica</i> from the property on AVH nor any BS records, and the nearest vouchered occurrence is on Wallala Hill, 15 km NNE of Wirrulla; an AD collections of <i>Limosella</i> from near the southern boundary of Hiltaba (D.J. Duval 1598, lower granite sheet slopes of Mt Centre) was determined as <i>L. australis</i> by W.R. Barker in Sep 2009.
I	<i>Melaleuca armillaris armillaris</i>		Y			Presumably in error for ssp. <i>akineta</i> ; since ssp. <i>armillaris</i> , although widely cultivated in SA, is native to NSW.
L	<i>Melaleuca eleuterostachya</i>	Y	Y			Not actually recorded on the property and presumably only included in the management guidelines list as "likely to occur"; there are no AVH records for Hiltaba, but <i>Melaleuca eleuterostachya</i> probably occurs in sand dunes just south of the southern boundary; an AD collection, T.R.N. Lothian 4047 from "c. 55 km NE of Wirrulla" is probably from this area of dunes based on a "by road" distance from Wirrulla although the derived co-ordinates place it on Kondoolka Station under the assumption of a direct distance; this species was included on the provided list as <i>M. adnata</i> .
L	<i>Melaleuca halmaturorum</i>	Y	Y	1		Not actually recorded on the property and presumably only included in the management guidelines list as "likely to occur"; there are no AVH records for Hiltaba, but <i>Melaleuca halmaturorum</i> would occur in the salt lake system south of the southern boundary; an AD collection, T.R.N. Lothian 4043 from "c. 55 km NE of Wirrulla" is probably from this area of salt lakes based on a "by road" distance from Wirrulla although the derived co-ordinates place it on Kondoolka Station under the assumption of a direct distance.
L	<i>Melaleuca oxyphylla</i>	Y				Not actually recorded on the property and presumably only included in the management guidelines list as "likely to occur"; there are no AVH records for Hiltaba, although the species occurs in GRNP (but well to the southeast) and there as an isolated record (Bates 20803) from north of Lake Acraman.

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Type	Taxon	Prov	Mgt	AD	BS	Comment
I	<i>Parietaria debilis</i>	Y			1	Misidentification of <i>Parietaria cardiostegia</i> (q.v.): there are no records of <i>P. debilis</i> for Hiltaba on AVH; the single BS record from 1985, on which the management guidelines listing is presumably based, is recorded as the non-current concept " <i>Parietaria debilis</i> (NC)"; however, it has a corresponding AD voucher (NPGA 8039) which was re-determined in Dec 1990 as <i>P. cardiostegia</i> .
I	<i>Pimelea octophylla</i>		Y			Misidentification of <i>Pimelea imbricata</i> var. <i>petraea</i> (q.v.); the single AD collection of <i>P. octophylla</i> from Hiltaba, on which the provided listing is presumably based (R. Bates 3386, 20 km E of Hiltaba), was examined and re-determined as <i>P. imbricata</i> var. <i>petraea</i> .
L	<i>Polycalymma stuartii</i>	Y				Not definitely recorded on the property and presumably only included in the management guidelines list as "likely to occur"; there are no AVH records for Hiltaba; probably based on an AD collection (G.E. Gardner, 21 Oct 1999) with the imprecise locality "Gawler Ranges between Hiltaba and Yardea"; as the synonym <i>Myriocephalus stuartii</i> for both this collection and the management guidelines listing.
Q	<i>Pomax aspera</i> Keighery MS	Y				The single collection in AVH (CANB 323061, J. Carrick 2448) from Mt St Mungo (on Hiltaba Station) which bears this manuscript name (det. G.J. Keighery Mar 1990) is a duplicate of the original AD collection currently identified as <i>Pomax umbellata</i> (q.v.); AVH interpreted " <i>Pomax aspera</i> Keighery MS" as the APC entity " <i>Pomax</i> sp. Sand dunes (P.G. Wilson 752) NT Herbarium"; the taxonomy of <i>Pomax</i> in the Gawler Ranges needs clarification, but for the time being <i>Pomax</i> is treated here as a single entity under <i>P. umbellata</i> .
Q	<i>Prasophyllum occultans</i>	Y				Doubtful property record; <i>Prasophyllum occultans</i> is absent from the Gawler Ranges in AVH and the source of this record is unclear.
I	<i>Prasophyllum patens</i>		Y			Doubtful property record; <i>Prasophyllum patens</i> is absent from the Gawler Ranges in AVH and the source of this record is unclear.
I	<i>Rumex dumosus</i>	Y			1	Misidentification, probably of <i>Rumex brownii</i> (q.v.); outside the range of <i>R. dumosus</i> and no records showing on AVH; the single BS record from 1985 (recorded as the non-current concept " <i>Rumex dumosus</i> var. <i>dumosus</i> (NC)" which is equivalent to <i>Rumex dumosus</i> ) is unvouchered; but a second BS record from the same survey trip collected in GRNP has a corresponding AD voucher (NPGA 7945) that was re-determined as <i>R. brownii</i> on Sep 2003; presumably only included in the management guidelines list as "likely to occur" or based on misidentified BS records.
I	<i>Scaevola aemula</i>	Y			3	Misidentification of <i>Scaevola humilis</i> : the 3 BS records include one with a corresponding AD voucher and this has been subsequently re-determined as <i>S. humilis</i> ; the 2 remaining non-vouchered records are presumed to be this also; there is an AD collection of <i>S. aemula</i> from the adjoining Pinkawillinie CP but there are none from the Gawler Ranges
L	<i>Senecio lacustrinus</i>	Y			1	Not definitely recorded on the property; presumably based on the AD collection (G.E. Gardner, 12 Oct 1969) with the imprecise locality "Gawler Ranges. Between Hiltaba and Yardea".
I	<i>Spyridium bifidum</i> var. <i>bifidum</i>	Y			6	Misapplied name for <i>Spyridium stenophyllum</i> ssp. <i>renovatum</i> (q.v.): <i>S. bifidum</i> var. <i>bifidum</i> is now treated as endemic to the Marble Range area of Eyre Peninsula; there are six AD collections from Hiltaba projected on ALA as <i>S. bifidum</i> var. <i>bifidum</i> and all have been subsequently re-determined as <i>S. stenophyllum</i> ssp. <i>renovatum</i> .

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Type	Taxon	Prov	Mgt	AD	BS	Comment
I	<i>Stenanthemum leucophractum</i>	Y			3	Presumed misidentification of <i>Stenanthemum arens</i> , a species previously included within <i>S. leucophractum</i> ; on Hiltaba Station many records were made of <i>S. arens</i> during the Bush Blitz survey but none of <i>S. leucophractum</i> , although the latter does occur in GRNP; the single record of <i>S. leucophractum</i> for Hiltaba projected on AVH (CANB, J. Carrick 2547) is presumably the basis for the management guidelines listing, however, it is a duplicate of an AD collection subsequently determined as <i>S. arens</i> by the species author, K.R. Thiele, in Aug 2005; the 3 BS records are unvouchered and considered unreliable.
L	<i>Swainsona microcalyx</i>	Y				Not definitely recorded on Hiltaba: presumably included in management guidelines list as "expected to occur"; possibly based on two AD sheets (J.B. Cleland, Aug 1928 & Anon s.dat.) with the imprecise locations "c. 64 km E of Wirrulla Railway Station"; and "c. 40 miles E of Wirrulla", respectively, with assigned coordinates within GRNP (based on a direct distance), but falling within Hiltaba Station using a "by road" distance, but not definitely locatable in either with confidence.
L	<i>Swainsona pyrophila</i>	Y				Presumably included in management guidelines list as "expected to occur" or based on an imprecise record; there are no AVH records from Hiltaba Station or GRNP, but there is an AD collection from Pinkawillinie CP which is contiguous with GRNP..
Q	<i>Thelymitra megalyptra</i>	Y	Y	1		Not definitely recorded on Hiltaba: the single AD collection (A.G. Spooner 2387) from Pretty Point on Hiltaba Station, was determined as <i>T. megalyptra</i> by J. Jeanes in Jul 2002, but it is probably the more recently described <i>T. alcockiae</i> (q.v.) (Jeanes 2013) based on its habitat; <i>T. megalyptra</i> is a species of mallee habitats and might occur on Hiltaba, but there are no definite records based on an application of Jeanes' new treatment of the <i>T. nuda</i> complex, and the map he provides shows the distribution of <i>T. megalyptra</i> on Eyre Peninsula as confined to the southern end.
I	<i>Thelymitra nuda</i>	Y	Y			Name previously applied in a wider sense to members of the <i>Thelymitra nuda</i> complex; outside the range of <i>T. nuda</i> which is "a species of higher rainfall districts, from southern Eyre Peninsula [and other regions]" (Bates 2012) and is "found in more mesic near-coastal forests and heathlands (Jeanes 2013); most likely refers to <i>T. alcockiae</i> (q.v.).
L	<i>Trigonella suavissima</i>	Y		1		Location error: based on an AD collection (R.J. Bates 48848) "Near Thurlga Station", although the imprecise co-ordinates provided (precision given as within 30 km) are centred on Hiltaba Station, the location description places it outside.
L	<i>Wurmbea decumbens</i>	Y				Presumably included (as " <i>Wurmbea decurrens</i> ") in management guidelines list as "expected to occur"; although there are collections of <i>W. decumbens</i> from further south in the GRNP, Hiltaba is beyond the known range of the species and there are no AVH records from there.
I	<i>Zygophyllum ammophilum</i>	Y	Y			Misidentification: presumably based on the 4 BS records as the non-current concept " <i>Zygophyllum ammophilum</i> (NC)" (q.v.); no records on AVH from Hiltaba; two of the BS records are non-vouchered and indeterminate, the other two have corresponding AD vouchers (BS1-7990 and BS1-8019) which were both subsequently re-determined as <i>Z. angustifolium</i> by R.M. Barker in Dec 1995.
L	<i>Zygophyllum ovatum</i>	Y				Not definitely recorded on Hiltaba: there are no AVH records for Hiltaba; presumably included in management guidelines list as "expected to occur" based on occurrences from the adjoining properties of Yardea Station and GRNP.



**Gawler Ranges National Park**

**Table 23. Analysis of vascular plant names previously recorded for Gawler Ranges National Park, but excluded from final listing.**

Shows number of names excluded for each source against each error class.

Sources: **Prov:** Provided list from Bush Blitz based mainly on ALA records  
**AD:** State Herbarium of SA collections  
**BS:** Biological Survey records not matching above

Code	Type of error	Source			
		Prov	AD	BS	all
<b>I</b>	<b>Identification incorrect</b> Note definition below for “synonymous name” which includes some ambiguous IDs.	34	9	32	<b>56</b>
<b>L</b>	<b>Location issue</b> Presumed to be based on record from outside GRNP, or a general location not definitely in GRNP (e.g. “Gawler Ranges”).	8	10	-	<b>14</b>
<b>Q</b>	<b>Questionable occurrence</b> Recorded, but in need of confirmation; feasible based on the taxon’s general distribution, but ID needs confirmation and not definitely established as present on the property.	3	1	5	<b>5</b>
<b>S</b>	<b>Synonymous name</b> Includes unambiguous synonyms and misapplied names that have no current application in SA; also includes designated non-current applications (“NC”), and <u>incomplete identifications</u> as to rank, where these are equivalent to, or at least partially match, a taxon accepted for the property.  In reconciling the lists from different sources, many non-ambiguous synonyms and minor variations in names were fixed in stage 1 of the validation by combining them under the correct entry, and do not show in these tallies. In Appendix 1, Table 28, however, there are often notes in the comment field citing the non-standard designations that were incorporated. Thus the tallies given here greatly underestimate the number of synonymous name variations that needed processing.	33	11	26	<b>58</b>
<b>total:</b>		<b>78</b>	<b>31</b>	<b>63</b>	<b>133</b>

**Table 24. Vascular plants previously recorded for Gawler Ranges National Park, but excluded from final listing due to identification or location errors.**

Type = exclusion type, as listed in Table 23. For sources of information see key to Table 23.

Type	Taxon	Prov	AD	BS	Comment
<b>Q</b>	<i>Acacia aneura</i>	Y			Not definitely recorded within GRNP: a single record on AVH (NSW, G. Gardiner, 5 Aug 1969) has an imprecise location (“Gawler Ranges. Thurlga Road” which is not clearly located within the GRNP.
<b>I</b>	<i>Acacia auripila</i>	Y			Presumed error based on records identified as “ <i>Acacia</i> sp. aff. <i>rigens</i> ” which in AVH is treated as a synonym of the Western Australian species <i>A. auripila</i> . However, records from the Gawler Ranges identified as “ <i>Acacia</i> sp. aff. <i>rigens</i> ” would be the atypical flat-phyllode form of <i>A. rigens</i> from Eyre Peninsula which is not currently recognised as a distinct taxon.
<b>I</b>	<i>Acacia calamifolia</i>	Y	6		Presumed misidentifications of <i>Acacia euthycarpa</i> ; the related species <i>A. calamifolia</i> does not occur on Eyre Peninsula, although it is often confused with the former.

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Type	Taxon	Prov	AD	BS	Comment
I	<i>Aira cupaniana</i>			1	Presumed misidentification of <i>Pentameris airoides</i> var. <i>airoides</i> (q.v.) which resembles <i>A. cupaniana</i> ; there are no AVH records of <i>A. cupaniana</i> for GRNP which is well beyond the northern limit of the distribution of <i>A. cupaniana</i> on Eyre Peninsula; based on a single BS record from Oct 2001 with a corresponding AD voucher (BS1-10438) which could not be located and appears to be undatabased and unincorporated probably due to its re-determination.
I	<i>Anthocercis anisantha anisantha</i>	Y			Presumably in error for ssp. <i>collina</i> ; <i>Anthocercis</i> ssp. <i>anisantha</i> is endemic to southern Eyre Peninsula. However, two collections at AD of ssp. <i>anisantha</i> are outliers from further north on Eyre Peninsula (but not within the study area) and their IDs warrant reassessment; they may represent aberrant forms.
I	<i>Arachnorchis aff. tentaculata</i>	Y			Most likely refers to <i>Caladenia interanea</i> (D.L.Jones) R.J.Bates (syn. <i>Arachnorchis interanea</i> D.L.Jones) (q.v.). The name <i>Caladenia tentaculata</i> has previously been misapplied to this species in the Gawler Ranges, but <i>C. tentaculata</i> s.str. is limited to higher rainfall parts of the Mt Lofty Ranges, the South-Eastern Region and the eastern States (Bates 2012).
I	<i>Arachnorchis dilatata</i>	Y			Presumably based on past usage of <i>Caladenia dilatata</i> which was misapplied in SA to a variety of species including <i>C. septuosa</i> and <i>C. tensa</i> .
I	<i>Baeckea ericaea</i>	Y		1	Misidentification of <i>Baeckea crassifolia</i> ; <i>B. ericaea</i> does not occur on Eyre Peninsula; its inclusion in the provided list is presumably based on a single AVH record of a CANB duplicate of a BS voucher (SANPWS 7931) that has subsequently been re-determined in AD to <i>B. crassifolia</i> .
I	<i>Brachyscome exilis</i>	Y		1	Presumed misidentification; the single unvouchered BS record is outside the range of this species.
I	<i>Bromus diandrus</i>			1	Probable misidentification of <i>Bromus madritensis</i> ; there are no AVH records of <i>B. diandrus</i> for GRNP, which is beyond the northern limit of its distribution on Eyre Peninsula; the single BS record is unvouchered and regarded as unreliable.
I	<i>Bulbine alata</i>			1	Presumed misidentification; the single unvouchered BS record is outside the range of this species.
I	<i>Caladenia tentaculata</i>	Y		2	Most likely refers to <i>Caladenia interanea</i> (D.L.Jones) R.J.Bates (syn. <i>Arachnorchis interanea</i> D.L.Jones) (q.v.). The name <i>Caladenia tentaculata</i> has previously been mis-applied to this species in the Gawler Ranges, but <i>C. tentaculata</i> s.str. is limited to higher rainfall parts of the Mt Lofty Ranges, South East and eastern States (Bates 2012). Recorded on provided list as <i>Arachnorchis aff. tentaculata</i> .
I	<i>Calandrinia volubilis</i>			1	Misidentification of <i>Calandrinia eremaea</i> (q.v.); the single BS record of <i>C. volubilis</i> has a corresponding AD voucher (A.K. Ramsay BS679-211) that is undatabased and not yet incorporated in the AD collection to enable validation of the field ID; it was located, examined and re-determined as <i>C. eremaea</i> .
I	<i>Callitris canescens</i>			1	Misidentification of <i>Callitris glaucophylla</i> (q.v.); the single BS record has a corresponding undatabased and unincorporated AD voucher (BS587-79) which was located, examined and re-determined to that species; GRNP is beyond the northern limit of <i>C. canescens</i> on Eyre Peninsula.
I	<i>Cassinia uncata</i>	Y	1		Presumed misidentification of <i>Cassinia laevis</i> (q.v.): the single AD record (K.L. Graham, BS1-10456) from the S slope of Paney Bluff is a BS voucher not yet incorporated in the AD collection to enable validation of the field ID; almost all <i>C. uncata</i> records in SA are now referred to <i>C. complanata</i> , however this occurrence is well outside the range of that taxon on Eyre Peninsula, and, given its location on elevated terrain, is presumed to be <i>C. laevis</i> .
I	<i>Centaurium tenuiflorum</i>			2	Misidentification of <i>Schenkia australis</i> (q.v.); one of the 2 BS records has a corresponding AD voucher (A.K. Ramsay BS679-200) that is undatabased and not yet incorporated in the AD collection to enable validation of the field ID; it was located, examined and re-determined to that species; the other BS record is unvouchered and from the same area and survey trip, so it is presumed to be a similar misidentification.

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Type	Taxon	Prov	AD	BS	Comment
I	<i>Centrolepis cephaliformis</i> <i>ssp. cephaliformis</i>	Y	1		Presumably based on the single AD record, R.J. Bates 20911 from "Around S side of Homestead Lake, Scrubby Peak Station"; this is actually in an area of the station excluded from GRNP.
I	<i>Chenopodium gaudichaudianum</i>	Y		1	Presumed to be <i>Chenopodium curvispicatum</i> ; <i>C. gaudichaudianum</i> has often been confused with this species in the past and has a more northerly distribution.
I	<i>Correa reflexa</i>	Y			Species does not occur in this region; most likely refers to <i>Correa backhouseana</i> var. <i>coriacea</i> which was previously treated as <i>C. reflexa</i> var. <i>coriacea</i> .
I	<i>Cryptandra</i> sp. <i>Floriferous</i> (W.R.Barker 4131)		10		These records are all likely to be the undescribed taxon " <i>Cryptandra</i> sp. Hiltaba (Anon. NPGA-8100) Kellermann".
I	<i>Cryptandra tomentosa</i> (NC)			5	Species indeterminate: the 5 BS records include one with a corresponding AD voucher subsequently re-determined as " <i>Cryptandra</i> sp. Floriferous (W.R.Barker 4131)" which is actually likely to be <i>Cryptandra</i> sp. Hiltaba (Anon. NPGA-8100) Kellermann; the remaining 4 non-vouchered records thus may either represent this species or <i>C. myriantha</i> , as would be inferred from the non-current concept " <i>Cryptandra tomentosa</i> (NC)".
I	<i>Cyperus lhotskyanus</i>	Y			Misidentification of <i>C. alterniflorus</i> : <i>C. lhotskyanus</i> is confined to the South-Eastern Region in SA; the single record of <i>C. lhotskyanus</i> for GRNP projected on AVH (HO, P. Gibbons 738) is a duplicate of an AD collection identified as <i>C. alterniflorus</i> .
I	<i>Dampiera dysantha</i>			7	Presumed misidentifications; well outside the range of <i>Dampiera dysantha</i> which on Eyre Peninsula is confined to the southern end; mostly unvouchered BS records; one BS record corresponds to an AD voucher (Anon. 7734, S.A.NPWS Gawler Ranges Survey) which was re-determined as <i>D. rosmarinifolia</i> in Apr. 2000.
I	<i>Darwinia micropetala</i>	Y			Does not occur in region, in error for <i>Darwinia salina</i> : presumably based on the single BS record as the non-current concept " <i>D. micropetala</i> (NC)", which in this region is equivalent to <i>D. salina</i> .
I	<i>Daviesia benthamii benthamii</i>	Y			In error; <i>Daviesia benthamii</i> ssp. <i>benthamii</i> is endemic to WA, although this name was previously misapplied to <i>D. benthamii</i> ssp. <i>acanthoclona</i> in SA.
I	<i>Daviesia ulicifolia ulicifolia</i>	Y			In error, presumably <i>Daviesia ulicifolia</i> ssp. <i>aridicola</i> , as ssp. <i>ulicifolia</i> does not occur in this region.
I	<i>Dodonaea viscosa</i> ssp. <i>cuneata</i>	Y		1	Uncertain ID; based on AVH, <i>Dodonaea viscosa</i> ssp. <i>cuneata</i> is absent from the Gawler Ranges except for a single occurrence at the eastern end near Siam HS; listing is presumably based on the single BS unvouchered record which is regarded as unreliable.
L	<i>Eremophila platythamnos</i> <i>ssp. villosa</i>		1		Location error: based on the AD collection F.A. Mason, 8 Oct 1972 with the imprecise location of "Gawler Ranges, Kondoolka" which is well removed from GRNP, although the coordinates used plot within the reserve.
L	<i>Erophila verna</i> ssp. <i>verna</i>		1		Not definitely recorded within GRNP: a single AD record (S.A. White Sep 1912) with the imprecise location "Gawler Range".
Q	<i>Eucalyptus percostata</i>	Y	2		Better treated as a form of <i>Eucalyptus calcareana</i> or <i>E. phenax</i> ssp. <i>phenax</i> in this area.
Q	<i>Eucalyptus pileata</i>	Y	2		Better treated as a form of <i>Eucalyptus calcareana</i> or <i>E. phenax</i> ssp. <i>phenax</i> in this area.
I	<i>Eucalyptus rugosa</i>	Y			Outside the range of this species and no records showing on AVH; presumably in error for the closely related <i>Eucalyptus brachycalyx</i> .
L	<i>Eucalyptus youngiana</i>	Y			Occurs on Kondoolka Station to the west, but no records on AVH for GRNP and considered unlikely to be present there.
I	<i>Euchiton involucratus</i>	Y		1	Misidentification of <i>Euchiton sphaericus</i> ; the BS record as <i>E. involucratus</i> (NC) has a corresponding AD voucher (NPWSA 7670) that was re-determined as <i>E. sphaericus</i> on 21 Apr 2005; outside the range of this species and no records showing on AVH.
I	<i>Gahnia hystrix</i>	Y			Misidentification; this species is endemic to Kangaroo Island.

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Type	Taxon	Prov	AD	BS	Comment
I	<i>Glischrocaryon behrii</i>	Y		2	Misidentification of <i>Glischrocaryon flavescens</i> (q.v.); outside (northwest from) the main species distribution of <i>G. behrii</i> ; presumably based only on 2 BS records both from Oct 2009: one has a corresponding AD voucher (BS1-10403) that is undatabased and not yet incorporated in the AD collection to enable validation of the field ID; this was located, examined and re-determined as <i>G. flavescens</i> ; the other BS record is unvouchered but from a nearby site and is presumed to be a similar misidentification; there is also another unvalidated voucher from the Gawler Ranges Conservation Reserve but this is SW of GRNP.
I	<i>Goodenia fascicularis</i>			1	Misidentification of an unidentified Boraginaceae species; well south of the main distribution of <i>Goodenia fascicularis</i> ; the single BS record from Sep. 2007 has a corresponding AD voucher (BS587-537) that is undatabased and not yet incorporated in the AD collection to enable validation of the field ID; it was located, and found to comprise small seedlings which were re-determined as Boraginaceae sp.
I	<i>Goodenia geniculata</i>			4	Probable misidentification of <i>Goodenia glabra</i> ; based only on unvouchered records; <i>G. geniculata</i> is confined to more temperate areas, but some Gawler Ranges collections of <i>G. glabra</i> at AD were originally misidentified as that species and may be the basis for the identification of the unvouchered BS records.
I	<i>Grammosolen dixonii</i>	Y			Misidentification of <i>Grammosolen truncatus</i> : the single record of <i>G. dixonii</i> for GRNP projected on AVH (CANB, L. Haegi 1597) has an earlier determination by Haegi and is a duplicate of an AD collection with a more recent determination by Haegi as <i>G. truncatus</i> .
L	<i>Gunniopsis septifraga</i>		1		Location error: the single AD collection (E.H. Ising, 14 Sep 1938) has the imprecise location "S of Gawler Range" which is outside the study area, although the coordinates used plot within GRNP.
I	<i>Hibbertia fasciculata prostrata</i>	Y			Misidentification: in SA <i>Hibbertia fasciculata</i> is confined to Kangaroo Island and lower South-eastern Regions.
I	<i>Hibbertia riparia</i>	Y		3	Outside the range of this species in SA; presumably mis-applied to <i>Hibbertia devitata</i> (q.v.) in this region; includes 3 BS records as the non-current concept " <i>Hibbertia riparia</i> (NC)" which are also presumed to be <i>H. devitata</i> .
I	<i>Isolepis hookeriana</i>	Y			Misidentification: presumably based on a single BS record for GRNP as the non-current concept " <i>Isolepis hookeriana</i> (NC)", however the AD voucher of this record (AD, SANPWS 7952) was re-determined as <i>I. platycarpa</i> in Mar. 1993, and the corresponding BS record needs updating.
Q	<i>Lachnagrostis aemula</i>	Y			Unsubstantiated record not supported by AVH.
L	<i>Lemooria burkittii</i>		1		Not definitely recorded within GRNP: a single AD record (S.A. White, 27 Aug 1912) with the imprecise location "Gawler Ranges".
Q	<i>Lepidosperma concavum</i>	Y		3	Uncertain ID; <i>Lepidosperma concavum</i> is absent from the Gawler Ranges in AVH and the three unvouchered BS records are considered to be unreliable; the status of all the Eyre Peninsula specimens at AD previously identified as <i>L. concavum</i> is currently under review.
I	<i>Leptorhynchos squamatus ssp. squamatus</i>	Y		2	Misidentification of <i>Leptorhynchos scaber</i> (q.v.); outside the range of this species which on Eyre Peninsula is confined to more temperate habitat in the south; represented by 2 BS records: one has a corresponding AD voucher (A.C. Robinson BS1-11588) that is undatabased and not yet incorporated in the AD collection to enable validation of the field ID; this was located, examined and re-determined as <i>L. scaber</i> ; the other BS record is unvouchered but from a nearby site and is presumed to be a similar misidentification.
I	<i>Lomandra multiflora ssp. dura</i>			1	Misidentification of <i>Lomandra leucocephala ssp. robusta</i> (q.v.); <i>L. multiflora ssp. dura</i> is absent on Eyre Peninsula and is confined to the Mt Lofty and Finders Ranges and Yorke Peninsula; the single BS record from Sep 2007 has a corresponding AD voucher (BS587-8) that is undatabased and not yet incorporated in the AD collection to enable validation of the field ID; it was located and re-determined as <i>L. leucocephala ssp. robusta</i> .



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Type	Taxon	Prov	AD	BS	Comment
I	<i>Melaleuca armillaris armillaris</i>	Y			Presumably in error for ssp. <i>akineta</i> ; since ssp. <i>armillaris</i> , although widely cultivated in SA, is native to NSW..
L	<i>Myosurus minimus var. australis</i>		1		Not definitely recorded within GRNP: a single AD record (S.A. White, 10 Sep 1912) with the imprecise location "Gawler Range".
I	<i>Myriocephalus rhizocephalus</i>	Y		3	Misidentification of <i>Isoetopsis graminifolia</i> (q.v.); one of the 3 BS records has a corresponding AD voucher (A.K. Ramsay BS679-98) that is undatabased and not yet incorporated in the AD collection to enable validation of the field ID; it was located, examined and re-determined to that species; the other 2 BS records are from the same area and survey trip and are presumed to be similar misidentifications.
L	<i>Osteocarpum salsuginosum</i>	Y			Presumably based on the single AD record, P.G. Wilson 546 from "S of Scrubby Peak, c. 8 km W of Petersby [Peterby] Tanks"; this is actually in an area of the Scrubby Peak station excluded from GRNP.
I	<i>Phyllangium divergens</i>			1	Misidentification of <i>Phyllangium sulcatum</i> (q.v.); well outside (NW) of the known range of <i>P. divergens</i> (after the correction of 1 AD collection from Kondoolka Station which was examined and re-determined as <i>P. sulcatum</i> ), and recorded on a rocky hill which also suggests <i>P. sulcatum</i> ; the single BS record has a corresponding AD voucher (BS1-11654), which is undatabased and not yet incorporated in the AD collection to enable validation of the field ID; it was located, examined and re-determined as <i>P. sulcatum</i> .
I	<i>Pimelea curviflora curviflora</i>	Y			In error: <i>Pimelea curviflora var. curviflora</i> is confined to NSW.
Q	<i>Pimelea curviflora var. sericea</i>			1	Based on an unvouchered BS record and the ID is not considered to be reliable at the variety level.
I	<i>Pimelea glauca</i>	Y	1		Location error: well north of the known species distribution and the single AD collection (A.R.R.Higginson, prior 16 May 1958) has the imprecise location "S and SW of Gawler Range area" which is outside the study area, although the coordinates used plot within GRNP.
I	<i>Pimelea humilis</i>			1	Misidentification of <i>Pimelea petrophila</i> (q.v.); outside the range of <i>P. humilis</i> which is confined to more temperate areas; the single BS record from Oct. 2009 has a corresponding AD voucher (A.K. Ramsay BS679-235) that is undatabased and not yet incorporated in the AD collection to enable validation of the field ID; it was located, examined and re-determined as <i>P. petrophila</i> .
Q	<i>Pimelea subvillifera</i>	Y			Record source unknown, possibly only included as "expected to occur" or based on an imprecise record; there are no AVH records from GRNP, possibly based on AD collection R.J. Chinnock 2914 from "23 km NE of Poochera directly N of Karcultaby" which is near to, although not definitely within, the Gawler Ranges Conservation Reserve and to the south of GRNP.
I	<i>Podolepis rugata var. rugata</i>	Y		1	Misidentification of <i>Podolepis jaceoides</i> (q.v.); the inclusion in the provided list (as <i>P. rugata</i> ) is presumably based on the single BS record from Oct 2001 which has a corresponding AD voucher (BS1-10454) that is undatabased and not yet incorporated in the AD collection to enable validation of the field ID; it was located and found to have been subsequently re-determined (correctly) as <i>P. jaceoides</i> on 28 Nov 2001.
Q	<i>Prostanthera serpyllifolia ssp. serpyllifolia</i>			1	Unreliable ID; the single BS record is unvouchered and beyond the northern limit of the subspecies distribution; not regarded as a reliable record given the absence of any voucher from the property and the difficulty in separating some specimens of this subspecies from ssp. <i>microphylla</i> .
L	<i>Quinetia urvillei</i>	Y	1		Not definitely recorded within GRNP: a single AD record (E.H.Ising, s.dat.) with the imprecise location "Gawler Range".
I	<i>Rhodanthe chlorocephala ssp. rosea</i>			1	Misidentification of <i>Rhodanthe stuartiana</i> (q.v.); the eastern limit of this species known distribution is to the west of the Gawler Ranges; the single BS record from Oct 2001 has a corresponding AD voucher (BS1-10403) that is undatabased and not yet incorporated in the AD collection to enable validation of the field ID; it was located and found to have been subsequently re-determined by P.J. Lang as <i>R. stuartiana</i> on 24 Nov 2005.

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Type	Taxon	Prov	AD	BS	Comment
I	<i>Rumex dumosus</i>			1	Misidentification of <i>Rumex brownii</i> (q.v.); outside the range of <i>R. dumosus</i> and no records showing on AVH; the single BS record from 1985 (recorded as the non-current concept " <i>Rumex dumosus</i> var. <i>dumosus</i> (NC)" which is equivalent to <i>Rumex dumosus</i> ) has a corresponding AD voucher (NPGA 7945) that was re-determined as <i>R. brownii</i> on Sep 2003.
I	<i>Scaevola aemula</i>			9	Misidentification of <i>Scaevola humilis</i> : the 9 BS records include three with corresponding AD vouchers and these have all been subsequently re-determined as <i>S. humilis</i> ; the remaining non-vouchered records are presumed to be this also; there is an AD collection of <i>S. aemula</i> from the adjoining Pinkawillinie CP but there are none from GRNP.
I	<i>Senna cardiosperma</i> ssp. <i>cardiosperma</i>			1	Misidentification of <i>Senna cardiosperma</i> ssp. <i>gawlerensis</i> (q.v.); there are no collections ssp. <i>cardiosperma</i> in AVH from the Gawler Ranges; the single BS record from Sep 2007 has a corresponding AD voucher (R. Sinclair BS587-440) that is undatabased and not yet incorporated in the AD collection to enable validation of the field ID; it was located and found to have been subsequently re-determined as ssp. <i>gawlerensis</i> .
I	<i>Sigesbeckia orientalis</i>	Y			Previous misapplication in this region for <i>Sigesbeckia australiensis</i> (q.v.); in SA, <i>S. orientalis</i> is confined to the Mt Lofty Ranges
L	<i>Solanum capsiciforme</i>		1		Not definitely recorded within GRNP: a single AD record (J.B. Cleland, 5 Sep 1965) with the imprecise location "Gawler Range".
I	<i>Stackhousia clementii</i>		1		Misidentification of <i>Stackhousia muricata</i> ssp. Perennial (W.R.Barker 3641) (q.v.); south of the main distribution of <i>S. clementii</i> ; the single AD collection (P.J. Lang BS1-10114) is a BS record voucher that was databased but not yet incorporated in the AD collection and had an unvalidated ID; it was located, examined and re-determined as <i>S. muricata</i> ssp. Perennial (W.R.Barker 3641).
I	<i>Stackhousia monogyna</i>		1		Misidentification of <i>Stackhousia muricata</i> ssp. Perennial (W.R.Barker 3641) (q.v.); the single AD collection (M.J. Thorpe 46, Southern ridgetop below Scrubby Peak) was examined and re-determined as <i>S. muricata</i> ssp. Perennial (W.R.Barker 3641).
Q	<i>Stuartina muelleri</i>	Y		1	Unreliable record: may also be <i>Stuartina hamata</i> or a possibly misidentification of another genus; there are no AVH records of <i>Stuartina</i> from the Gawler Ranges and the record occurs to the north of the <i>S. muelleri</i> distribution on Eyre Peninsula and south of the main distribution of <i>S. hamata</i> ; presumably based on a single BS record with a voucher that has not yet been validated and incorporated in the AD collection; the specimen could not be located.
I	<i>Swainsona affinis</i>	Y			Misidentification of <i>Swainsona microphylla</i> (q.v.); <i>S. affinis</i> has a more northern distribution; listing is presumably based on the single record of <i>S. affinis</i> for GRNP projected on AVH (MEL, N.N. Donner 3378), which is a duplicate of an AD collection identified by J. Thompson in Sep 1991 as <i>S. microphylla</i> .
L	<i>Swainsona canescens</i>	Y	1		Not definitely recorded within GRNP: a single AD record (H.W. Caulfield, Oct 1955) with the imprecise location "Gawler Range"; no other AVH records within GRNP.
L	<i>Swainsona colutoides</i>	Y			Located near, but not within GRNP: presumably based on two AD sheets (T.S. Te 781) from a GPS location which plots 250 m W of GRNP boundary; no AVH records for GRNP.
L	<i>Swainsona microcalyx</i>	Y	2		Not definitely recorded within GRNP: two AD sheets (J.B. Cleland, Aug 1928 & Anon s.dat) with the imprecise locations "C. 64 km E of Wirrulla Railway Station" and "c. 40 miles E of Wirrulla", respectively, cannot be placed with confidence within GRNP; using a "by road" distance they would fall within Hiltaba Station.
L	<i>Swainsona tenuis</i>	Y	1		Not definitely recorded within GRNP: a single AD record (K.M. Alcock 34) with the imprecise location "Gawler Ranges"; no other AVH records within GRNP.
L	<i>Tecticornia pergranulata</i>	Y			There are no records on AVH for GRNP; listing possibly based on AD collection L.D. Williams 9127 with imprecise locality "30 km E of N of Minnipa" which plots near southern boundary of GRNP and would be associated with salt pans which are outside the reserve.

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Type	Taxon	Prov	AD	BS	Comment
Q	<i>Thelymitra megalyptra</i>	Y	1	1	Not definitely recorded within GRNP: the single AD collection (NPGA-7863) from the NE face of Scrubby Peak was determined as <i>T. megalyptra</i> by J. Jeanes in Jul 2002, but it is probably the more recently described <i>T. alcockiae</i> (q.v.) (Jeanes 2013) based on its habitat; <i>T. megalyptra</i> is a species of mallee habitats and might occur in GRNP, but there are no definite records based on an application of Jeanes' new treatment of the <i>T. nuda</i> complex, and the map he provides shows the distribution of <i>T. megalyptra</i> on Eyre Peninsula as confined to the southern end.
I	<i>Thelymitra nuda</i>	Y		2	Name previously applied in a wider sense to members of the <i>Thelymitra nuda</i> complex; outside the range of <i>T. nuda</i> which is "a species of higher rainfall districts, from southern Eyre Peninsula [and other regions]" (Bates 2012) and is "found in more mesic near-coastal forests and heathlands (Jeanes 2013); most likely refers to <i>T. alcockiae</i> (q.v.).
I	<i>Thysanotus tenellus</i>		1	1	Misidentification of <i>Thysanotus baueri</i> ; the single AD collection (T.S. Te 777) was examined and re-determined as <i>T. baueri</i> ; the BS record is unvouchered and presumably results from a similar error; the distribution of <i>T. tenellus</i> does not extend to Eyre Peninsula.
I	<i>Vulpia fasciculata</i>			1	Probable misidentification; no AVH records of <i>Vulpia fasciculata</i> from AVH, and the species distribution does not extend N of central Eyre Peninsula in this region; based on a single BS record with a corresponding voucher that has not yet been validated and incorporated in the AD collection.
I	<i>Wurmbea dioica</i> ssp. <i>dioica</i>		2	1	Probable misidentification; based on 2 AD collections with unreliable field IDs that have been databased and projected on AVH, but have not yet been validated and incorporated into the AD collection.

## 5. Conclusions

The 2012 Bush Blitz Surveys of Hiltaba Station and Gawler Ranges National Park provided an opportunity to significantly improve knowledge about the flora of both properties. A total of 88 plant taxa were newly recorded for the Hiltaba Nature Foundation property during the 2012 Bush Blitz Survey. This comprised 36 vascular plant taxa and 52 cryptogams (26 bryophytes, 22 lichens, and 4 macrofungi). In GRNP, 21 plant taxa were recorded for the first time, comprising 12 vascular plant taxa and 9 cryptogams.

On Hiltaba Station, we recorded 208 taxa of vascular plants, representing c. 50% of the finally accepted 418 taxa for the area. In GRNP, 210 taxa of vascular plants were recorded, representing 34% of the finally 617 accepted taxa for the Park. The dry seasonal conditions substantially reduced the number of taxa suitable for collecting, with a general lack of annual plants and flowering perennials encountered.

The existing species lists for both properties were extensively revised for vascular plants. In the case of cryptogams there were very few existing records and the survey enabled the establishment of an initial list of taxa, which can be used as a starting point for further work.

Bush Blitz collections from Hiltaba contributed significantly to the revision of the species list for that property, validating a large number of existing records and adding 88 new taxa. Due to the lower number of survey days on GRNP and the larger area of that property, Bush Blitz collections contributed at a lower level to the validation for GRNP.

The number of weed taxa was low on both properties, probably due in part to the dry seasonal conditions, as well as the general resilience of rocky hill habitat, and its resistance to weed invasion.

Across the two properties, the survey resulted in the collection of 782 plant specimens, plus a further 524 plant sighting records. A total of 136 vascular plant tissue samples were collected in silica gel desiccant for DNA analysis. All collections have been lodged at the State Herbarium of South Australia (AD).



**Fig. 30.** *Isotoma petraea* (Rock Isotome) on face of granite bolder, hill NW of Mt Hiltaba, Hiltaba Station; BS838-270. Photo: P.J. Lang.

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### ***Field Staff***

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### ***Preparation of DENR Vehicles and Field Gear***

Dave Armstrong

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### ***Data Transfer (BDBSA to ADHERB)***

Felicity Smith, Helen Owens



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# **Appendices**

## **Flora Survey on Hiltaba Station and Gawler Ranges National Park**

*Hiltaba Pastoral Lease and Gawler Ranges National Park, South Australia*

*Survey conducted: 12 to 22 Nov 2012*

*Report submitted: 22 May 2013*

**P.J. Lang, J. Kellermann, G.H. Bell & H.B. Cross**

**with contributions from C.J. Brodie, H.P. Vonow & M. Waycott**

***SA Department of Environment, Water and Natural Resources***

***Vascular plants, macrofungi, lichens, and bryophytes***

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## Appendices

### Appendix 1. Lists of vascular plants occurring on Hiltaba Station and Gawler Ranges National Park.

#### *Reserve Name: Hiltaba Station*

Number of taxa: 418 (including subspecies and varieties but without double counting).

**Table 25. Full vascular plant taxon list for Hiltaba Station.**

EPBC: status according to listing under EPBC Act; VU = Vulnerable

State Listed: status according to listing under National Parks & Wildlife Act 1972 schedules; R = Rare, V = Vulnerable

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Aizoaceae	<i>Disphyma crassifolium ssp. clavellatum</i>	Round-leaf Pigface					
Aizoaceae	<i>Mesembryanthemum crystallinum</i>	Common Iceplant					Y
Aizoaceae	<i>Mesembryanthemum nodiflorum</i>	Slender Iceplant					Y
Aizoaceae	<i>Sarcozona praecox</i>	Sarcozona					
Aizoaceae	<i>Tetragonia eremaea</i>	Desert Spinach					
Amaranthaceae	<i>Ptilotus decipiens</i>						
Amaranthaceae	<i>Ptilotus gaudichaudii ssp. gaudichaudii</i>	Paper Foxtail					
Amaranthaceae	<i>Ptilotus nobilis ssp. nobilis</i>	Regal Foxtail					
Amaranthaceae	<i>Ptilotus obovatus</i>	Silver Mulla Mulla					
Amaranthaceae	<i>Ptilotus seminudus</i>	Rabbit-tails					
Amaranthaceae	<i>Ptilotus sessilifolius</i>	Crimson-tails					
Amaranthaceae	<i>Ptilotus spathulatus</i>	Pussy Tails					
Apiaceae	<i>Apium annuum</i>	Annual Celery					
Apiaceae	<i>Bupleurum semicompositum</i>	Hare's Ear					Y
Apiaceae	<i>Daucus glochidiatus</i>	Native Carrot					
Apocynaceae	<i>Alyxia buxifolia</i>	Sea Box					

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Araceae	<i>Lemna disperma</i>	Common Duckweed					
Araliaceae	<i>Hydrocotyle callicarpa</i>	Tiny Pennywort					
Araliaceae	<i>Hydrocotyle foveolata</i>	Yellow Pennywort					
Araliaceae	<i>Hydrocotyle pilifera</i> var. <i>glabrata</i>	Buttercup Pennywort					
Araliaceae	<i>Trachymene ceratocarpa</i>	Creeping Carrot					
Araliaceae	<i>Trachymene cyanopetala</i>	Purple Trachymene					
Araliaceae	<i>Trachymene ornata</i>	Cotton-ball Trachymene					
Asparagaceae	<i>Lomandra collina</i>	Sand Mat-rush					
Asparagaceae	<i>Lomandra effusa</i>	Scented Mat-rush	Y				
Asparagaceae	<i>Thysanotus baueri</i>	Mallee Fringe-lily					
Asparagaceae	<i>Thysanotus patersonii</i>	Twining Fringe-lily					
Asphodelaceae	<i>Bulbine semibarbata</i>	Small Leek-lily					
Aspleniaceae	<i>Pleurosorus rutifolius</i>	Blanket Fern					
Aspleniaceae	<i>Pleurosorus subglandulosus</i>	Clubbed Blanket Fern					
Asteraceae	<i>Actinobole uliginosum</i>	Flannel Cudweed					
Asteraceae	<i>Angianthus tomentosus</i>	Hairy Angianthus					
Asteraceae	<i>Blennospora drummondii</i>	Dwarf Button-flower					
Asteraceae	<i>Brachyscome lineariloba</i>	Hard-head Daisy					
Asteraceae	<i>Brachyscome perpusilla</i>	Tiny Daisy					
Asteraceae	<i>Brachyscome trachycarpa</i>	Inland Daisy					
Asteraceae	<i>Calotis hispidula</i>	Hairy Burr-daisy					
Asteraceae	<i>Calotis multicaulis</i>	Woolly-headed Burr-daisy					
Asteraceae	<i>Carthamus lanatus</i>	Saffron Thistle					Y
Asteraceae	<i>Cassinia laevis</i>	Curry Bush					
Asteraceae	<i>Centaurea melitensis</i>	Malta Thistle					Y
Asteraceae	<i>Chrysocephalum apiculatum</i>	Common Everlasting					



Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Asteraceae	<i>Chrysocephalum pterochaetum</i>	Shrub Everlasting	Y				
Asteraceae	<i>Chrysocephalum semipapposum</i>	Clustered Everlasting					
Asteraceae	<i>Chthonocephalus pseudevax</i>	Ground-heads					
Asteraceae	<i>Cotula australis</i>	Common Cotula					
Asteraceae	<i>Cratystylis conocephala</i>	Bluebush Daisy					
Asteraceae	<i>Dittrichia graveolens</i>	Stinkweed	Y				Y
Asteraceae	<i>Euchiton sphaericus</i>	Annual Cudweed					
Asteraceae	<i>Hedypnois rhagadioloides</i>	Cretan Weed					Y
Asteraceae	<i>Helichrysum leucopsideum</i>	Satin Everlasting					
Asteraceae	<i>Hyalosperma demissum</i>	Dwarf Sunray					
Asteraceae	<i>Hyalosperma glutinosum ssp. glutinosum</i>	Golden Sunray					
Asteraceae	<i>Hyalosperma semisterile</i>	Orange Sunray					
Asteraceae	<i>Hypochoeris glabra</i>	Smooth Cat's Ear					Y
Asteraceae	<i>Isoetopsis graminifolia</i>	Grass Cushion					
Asteraceae	<i>Leiocarpa semicalva ssp. semicalva</i>	Scented Button-bush, Hill Daisy					
Asteraceae	<i>Leptorhynchus tetrachaetus</i>	Little Buttons					
Asteraceae	<i>Leptorhynchus waitzia</i>	Button Immortelle					
Asteraceae	<i>Microseris lanceolata</i>	Yam Daisy					
Asteraceae	<i>Millotia muelleri</i>	Common Bow-flower					
Asteraceae	<i>Millotia myosotidifolia</i>	Broad-leaf Millotia					
Asteraceae	<i>Millotia perpusilla</i>	Tiny Bow-flower					
Asteraceae	<i>Millotia tenuifolia var. tenuifolia</i>	Soft Millotia					
Asteraceae	<i>Minuria cunninghamii</i>	Bush Minuria					
Asteraceae	<i>Minuria leptophylla</i>	Minnie Daisy					
Asteraceae	<i>Olearia calcarea</i>	Crinkle-leaf Daisy-bush					
Asteraceae	<i>Olearia decurrens</i>	Winged Daisy-bush					

## Bush Blitz – Flora Survey on Hiltaba Station and Gawler Ranges NP, November 2012

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Asteraceae	<i>Olearia floribunda</i>	Heath Daisy-bush					
Asteraceae	<i>Olearia muelleri</i>	Mueller's Daisy-bush					
Asteraceae	<i>Olearia pimeleoides</i>	Pimelea Daisy-bush					
Asteraceae	<i>Podolepis capillaris</i>	Wiry Podolepis					
Asteraceae	<i>Podolepis jaceoides</i>	Showy Copper-wire Daisy				R	
Asteraceae	<i>Podolepis tepperi</i>	Delicate Copper-wire Daisy					
Asteraceae	<i>Podotheca angustifolia</i>	Sticky Long-heads					
Asteraceae	<i>Pogonolepis muelleriana</i>	Stiff Cup-flower					
Asteraceae	<i>Pycnosorus pleiocephalus</i>	Soft Billy-buttons					
Asteraceae	<i>Rhodanthe oppositifolia ssp. oppositifolia</i>	Twin-leaf Everlasting				V	
Asteraceae	<i>Rhodanthe polygalifolia</i>	Milkwort Everlasting					
Asteraceae	<i>Rhodanthe pygmaea</i>	Pigmy Daisy					
Asteraceae	<i>Rhodanthe stricta</i>	Slender Everlasting					
Asteraceae	<i>Rhodanthe stuartiana</i>	Clay Everlasting					
Asteraceae	<i>Senecio gawlerensis</i>	Gawler Ranges Groundsel					
Asteraceae	<i>Senecio glossanthus</i>	Annual Groundsel					
Asteraceae	<i>Sigesbeckia australiensis</i>	Australian Sigesbeckia					
Asteraceae	<i>Siloxerus multiflorus</i>	Small Wrinklewort					
Asteraceae	<i>Sonchus oleraceus</i>	Common Sow-thistle					Y
Asteraceae	<i>Trichanthodium skirrophorum</i>	Woolly Yellow-heads					
Asteraceae	<i>Urospermum picroides</i>	False Hawkbit					Y
Asteraceae	<i>Vittadinia gracilis</i>	Woolly New Holland Daisy					
Boraginaceae	<i>Echium plantagineum</i>	Salvation Jane					Y
Boraginaceae	<i>Embadium uncinatum</i>	Gawler Ranges Slipper-plant					
Boraginaceae	<i>Halgania cyanea</i>	Rough Blue-flower					
Boraginaceae	<i>Heliotropium asperrimum</i>	Rough Heliotrope					

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Boraginaceae	<i>Neatostema apulum</i>	Hairy Sheepweed					Y
Boraginaceae	<i>Omphalolappula concava</i>	Burr Stickseed					
Boraginaceae	<i>Plagiobothrys pluriseipaleus</i>	White Rochelia					
Brassicaceae	<i>Alyssum linifolium</i>	Flax-leaf Alyssum					Y
Brassicaceae	<i>Arabidella trisecta</i>	Shrubby Cress					
Brassicaceae	<i>Carrichtera annua</i>	Ward's Weed					Y
Brassicaceae	<i>Harmsiodoxa brevipes var. brevipes</i>	Short Cress					
Brassicaceae	<i>Lepidium oxytrichum</i>	Green Pepperpress					
Brassicaceae	<i>Lepidium papillosum</i>	Warty Pepperpress					
Brassicaceae	<i>Menkea australis</i>	Fairy Spectacles					
Brassicaceae	<i>Sisymbrium erysimoides</i>	Smooth Mustard					Y
Brassicaceae	<i>Sisymbrium irio</i>	London Mustard	Y				Y
Brassicaceae	<i>Stenopetalum lineare</i>	Narrow Thread-petal					
Brassicaceae	<i>Stenopetalum sphaerocarpum</i>	Round-fruit Thread-petal					
Campanulaceae	<i>Isotoma petraea</i>	Rock Isotome					
Campanulaceae	<i>Wahlenbergia communis</i>	Tufted Bluebell					
Campanulaceae	<i>Wahlenbergia gracilentia</i>	Annual Bluebell					
Campanulaceae	<i>Wahlenbergia stricta ssp. stricta</i>	Tall Bluebell					
Campanulaceae	<i>Wahlenbergia tumidifrutta</i>	Swollen-fruit Bluebell					
Caryophyllaceae	<i>Cerastium glomeratum</i>	Common Mouse-ear Chickweed					Y
Caryophyllaceae	<i>Gypsophila tubulosa</i>	Annual Chalkwort					Y
Caryophyllaceae	<i>Herniaria cinerea</i>	Rupturewort					Y
Caryophyllaceae	<i>Polycarpon tetraphyllum</i>	Four-leaf Allseed	Y				Y
Caryophyllaceae	<i>Sagina maritima</i>	Sea Pearlwort					
Caryophyllaceae	<i>Scleranthus pungens</i>	Prickly Knawel					
Caryophyllaceae	<i>Silene apetala</i>	Sand Catchfly					Y

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Caryophyllaceae	<i>Silene gallica var. gallica</i>	French Catchfly					Y
Caryophyllaceae	<i>Silene nocturna</i>	Mediterranean Catchfly					Y
Caryophyllaceae	<i>Spergularia brevifolia</i>	Salt Sand-spurrey					
Caryophyllaceae	<i>Spergularia diandra</i>	Lesser Sand-spurrey					Y
Casuarinaceae	<i>Allocasuarina helmsii</i>	Helm's Oak-bush					
Casuarinaceae	<i>Casuarina pauper</i>	Black Oak					
Celastraceae	<i>Stackhousia muricata ssp. Perennial</i>	Yellow Candles					
Centrolepidaceae	<i>Centrolepis polygyna</i>	Wiry Centrolepis					
Chenopodiaceae	<i>Atriplex stipitata</i>	Bitter Saltbush					
Chenopodiaceae	<i>Atriplex suberecta</i>	Lagoon Saltbush	Y				
Chenopodiaceae	<i>Atriplex vesicaria</i>	Bladder Saltbush					
Chenopodiaceae	<i>Chenopodium curvispicatum</i>	Cottony Goosefoot					
Chenopodiaceae	<i>Chenopodium desertorum ssp. desertorum</i>	Frosted Goosefoot					
Chenopodiaceae	<i>Chenopodium murale</i>	Nettle-leaf Goosefoot	Y				
Chenopodiaceae	<i>Dissocarpus biflorus var. biflorus</i>	Two-horn Saltbush	Y				
Chenopodiaceae	<i>Dissocarpus paradoxus</i>	Ball Bindyi					
Chenopodiaceae	<i>Dysphania cristata</i>	Crested Crumbweed	Y				
Chenopodiaceae	<i>Dysphania melanocarpa</i>	Black Crumbweed					
Chenopodiaceae	<i>Einadia nutans ssp. nutans</i>	Nodding Saltbush					
Chenopodiaceae	<i>Enchylaena tomentosa var. tomentosa</i>	Ruby Saltbush					
Chenopodiaceae	<i>Eriochiton sclerolaenoides</i>	Woolly-fruit Bluebush					
Chenopodiaceae	<i>Maireana erioclada</i>	Rosy Bluebush					
Chenopodiaceae	<i>Maireana georgei</i>	Satiny Bluebush					
Chenopodiaceae	<i>Maireana oppositifolia</i>	Salt Bluebush	Y				
Chenopodiaceae	<i>Maireana pentatropis</i>	Erect Mallee Bluebush					
Chenopodiaceae	<i>Maireana pyramidata</i>	Black Bluebush					

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Chenopodiaceae	<i>Maireana radiata</i>	Radiate Bluebush					
Chenopodiaceae	<i>Maireana sedifolia</i>	Bluebush					
Chenopodiaceae	<i>Maireana trichoptera</i>	Hairy-fruit Bluebush					
Chenopodiaceae	<i>Maireana turbinata</i>	Top-fruit Bluebush					
Chenopodiaceae	<i>Osteocarpum salsuginosum</i>	Inland Bonefruit					
Chenopodiaceae	<i>Rhagodia crassifolia</i>	Fleshy Saltbush					
Chenopodiaceae	<i>Rhagodia parabolica</i>	Mealy Saltbush					
Chenopodiaceae	<i>Rhagodia spinescens</i>	Spiny Saltbush					
Chenopodiaceae	<i>Rhagodia ulicina</i>	Intricate Saltbush					
Chenopodiaceae	<i>Salsola australis</i>	Buckbush					
Chenopodiaceae	<i>Sclerolaena brevifolia</i>	Small-leaf Bindyi	Y				
Chenopodiaceae	<i>Sclerolaena diacantha</i>	Grey Bindyi	Y				
Chenopodiaceae	<i>Sclerolaena obliquicuspis</i>	Oblique-spined Bindyi					
Chenopodiaceae	<i>Sclerolaena parviflora</i>	Small-flower Bindyi					
Chenopodiaceae	<i>Sclerolaena patenticuspis</i>	Spear-fruit Bindyi					
Chenopodiaceae	<i>Sclerolaena uniflora</i>	Small-spine Bindyi					
Chenopodiaceae	<i>Tecticornia disarticulata</i>		Y				
Chenopodiaceae	<i>Tecticornia halocnemoides ssp. halocnemoides</i>	Grey Samphire					
Chenopodiaceae	<i>Tecticornia pruinosa</i>	Bluish Samphire	Y				
Colchicaceae	<i>Wurmbea australis</i>	Inland Nancy					
Colchicaceae	<i>Wurmbea dioica ssp. brevifolia</i>	Early Nancy					
Convolvulaceae	<i>Convolvulus remotus</i>	Grassy Bindweed					
Crassulaceae	<i>Crassula colligata ssp. lamprosperma</i>						
Crassulaceae	<i>Crassula colorata var. acuminata</i>	Dense Crassula					
Crassulaceae	<i>Crassula peduncularis</i>	Purple Crassula				R	
Crassulaceae	<i>Crassula tetramera</i>	Australian Stonecrop					



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Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Cucurbitaceae	<i>Cucumis myriocarpus</i>	Paddy Melon	Y				Y
Cupressaceae	<i>Callitris gracilis</i>	Southern Cypress Pine	Y				
Cyperaceae	<i>Cyperus alterniflorus</i>	Umbrella Flat-sedge					
Cyperaceae	<i>Cyperus gymnocaulos</i>	Spiny Flat-sedge					
Cyperaceae	<i>Cyperus rigidellus</i>	Dwarf Flat-sedge					
Cyperaceae	<i>Gahnia lanigera</i>	Black Grass Saw-sedge	Y				
Cyperaceae	<i>Isolepis marginata</i>	Little Club-rush					Y
Cyperaceae	<i>Isolepis platycarpa</i>	Flat-fruit Club-rush					
Cyperaceae	<i>Lepidosperma viscidum</i>	Sticky Sword-sedge					
Cyperaceae	<i>Schoenus nanus</i>	Little Bog-rush					
Droseraceae	<i>Drosera macrantha ssp. planchonii</i>	Climbing Sundew					
Ericaceae	<i>Astroloma humifusum</i>	Cranberry Heath					
Euphorbiaceae	<i>Beyeria lechenaultii</i>	Pale Turpentine Bush					
Euphorbiaceae	<i>Euphorbia drummondii</i>	Mat Spurge					
Euphorbiaceae	<i>Euphorbia tannensis ssp. eremophila</i>	Desert Spurge					
Fabaceae	<i>Acacia acanthoclada ssp. acanthoclada</i>	Harrow Wattle					
Fabaceae	<i>Acacia ancistrophylla var. lissophylla</i>	Hook-leaf Wattle					
Fabaceae	<i>Acacia aneura var. intermedia</i>	Broad-leaf Mulga	Y				
Fabaceae	<i>Acacia beckleri ssp. beckleri</i>	Beckler's Rock Wattle					
Fabaceae	<i>Acacia burkittii</i>	Pin-bush Wattle	Y				
Fabaceae	<i>Acacia continua</i>	Thorn Wattle					
Fabaceae	<i>Acacia euthycarpa</i>	Wallowa					
Fabaceae	<i>Acacia halliana</i>	Hall's Wattle					
Fabaceae	<i>Acacia havilandiorum</i>	Needle Wattle					
Fabaceae	<i>Acacia iteaphylla</i>	Flinders Ranges Wattle				R	
Fabaceae	<i>Acacia ligulata</i>	Umbrella Bush					

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Fabaceae	<i>Acacia notabilis</i>	Notable Wattle					
Fabaceae	<i>Acacia nyssophylla</i>	Spine Bush					
Fabaceae	<i>Acacia oswaldii</i>	Umbrella Wattle					
Fabaceae	<i>Acacia papyrocarpa</i>	Western Myall					
Fabaceae	<i>Acacia rigens</i>	Nealie					
Fabaceae	<i>Acacia tarculensis</i>	Steel Bush					
Fabaceae	<i>Acacia tetragonophylla</i>	Dead Finish	Y				
Fabaceae	<i>Acacia toondulya</i>	Toondulya Wattle				R	
Fabaceae	<i>Aotus subspinescens</i>	Mallee Aotus					
Fabaceae	<i>Eutaxia microphylla</i>	Common Eutaxia					
Fabaceae	<i>Glycine rubiginosa</i>	Twining Glycine					
Fabaceae	<i>Goodia medicaginea</i>	Western Golden-tip					
Fabaceae	<i>Indigofera australis ssp. hesperia</i>	Austral Indigo					
Fabaceae	<i>Indigofera helmsii</i>	Helm's Indigo	Y				
Fabaceae	<i>Kennedia prostrata</i>	Scarlet Runner	Y				
Fabaceae	<i>Medicago minima var. minima</i>	Little Medic					Y
Fabaceae	<i>Senna artemisioides ssp. filifolia</i>	Fine-leaf Desert Senna					
Fabaceae	<i>Senna artemisioides ssp. petiolaris</i>						
Fabaceae	<i>Senna artemisioides ssp. X artemisioides</i>	Silver Cassia					
Fabaceae	<i>Senna artemisioides ssp. X coriacea</i>						
Fabaceae	<i>Senna cardiosperma ssp. gawlerensis</i>	Gawler Ranges Senna					
Fabaceae	<i>Senna pleurocarpa var. pleurocarpa</i>	Stripe-pod Senna					
Fabaceae	<i>Swainsona disjuncta</i>						
Fabaceae	<i>Swainsona formosa</i>	Sturt Pea					
Fabaceae	<i>Templetonia egena</i>	Broombush Templetonia					
Frankeniaceae	<i>Frankenia sp.</i>	Sea-heath					

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Gentianaceae	<i>Schenkia australis</i>	Spike Centaury					
Geraniaceae	<i>Erodium aureum</i>						Y
Geraniaceae	<i>Erodium carolinianum</i>	Clammy Heron's-bill					
Geraniaceae	<i>Erodium cicutarium</i>	Cut-leaf Heron's-bill					Y
Geraniaceae	<i>Erodium crinitum</i>	Blue Heron's-bill					
Geraniaceae	<i>Erodium cygnorum</i>	Blue Heron's-bill					
Geraniaceae	<i>Geranium retrorsum</i>	Grassland Geranium					
Geraniaceae	<i>Geranium solanderi</i> var. <i>solanderi</i>	Austral Geranium					
Goodeniaceae	<i>Dampiera rosmarinifolia</i>	Rosemary Dampiera					
Goodeniaceae	<i>Goodenia calcarata</i>	Streaked Goodenia					
Goodeniaceae	<i>Goodenia glabra</i>	Smooth Goodenia					
Goodeniaceae	<i>Goodenia havilandii</i>	Hill Goodenia					
Goodeniaceae	<i>Goodenia pusilliflora</i>	Small-flower Goodenia					
Goodeniaceae	<i>Goodenia willisiana</i>	Silver Goodenia					
Goodeniaceae	<i>Scaevola humilis</i>	Inland Fanflower					
Goodeniaceae	<i>Velleia arguta</i>	Toothed Velleia					
Haloragaceae	<i>Glischrocaryon flavescens</i>	Yellow Pennants					
Haloragaceae	<i>Gonocarpus elatus</i>	Hill Raspwort					
Haloragaceae	<i>Haloragis gossei</i>	Gosse's Raspwort					
Haloragaceae	<i>Myriophyllum verrucosum</i>	Red Milfoil					
Hemerocallidaceae	<i>Dianella revoluta</i> var. <i>revoluta</i>	Black-anther Flax-lily					
Hydrocharitaceae	<i>Ottelia ovalifolia</i> ssp. <i>ovalifolia</i>	Duck-lettuce					
Hypoxidaceae	<i>Hypoxis glabella</i> var. <i>glabella</i>	Tiny Star					
Juncaceae	<i>Juncus bufonius</i>	Toad Rush					
Juncaginaceae	<i>Triglochin isingiana</i>	Spurred Arrowgrass					
Juncaginaceae	<i>Triglochin longicarpa</i>	Dwarf Arrowgrass					

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Juncaginaceae	<i>Triglochin trichophora</i>	Torpedo Arrowgrass					
Lamiaceae	<i>Marrubium vulgare</i>	Horehound					Y
Lamiaceae	<i>Prostanthera florifera</i>	Gawler Ranges Mintbush					
Lamiaceae	<i>Prostanthera serpyllifolia ssp. microphylla</i>	Small-leaf Mintbush					
Lamiaceae	<i>Prostanthera striatiflora</i>	Striated Mintbush					
Lamiaceae	<i>Salvia verbenaca var. vernalis</i>	Wild Sage	Y				Y
Lamiaceae	<i>Teucrium corymbosum</i>	Rock Germander					
Lamiaceae	<i>Westringia rigida</i>	Stiff Westringia	Y				
Lauraceae	<i>Cassytha flindersii</i>	Flinders Ranges Dodder-laurel					
Lauraceae	<i>Cassytha melantha</i>	Coarse Dodder-laurel					
Lauraceae	<i>Cassytha peninsularis</i>	Peninsula Dodder-laurel					
Loranthaceae	<i>Amyema miquelii</i>	Box Mistletoe					
Loranthaceae	<i>Amyema preissii</i>	Wire-leaf Mistletoe					
Loranthaceae	<i>Amyema quandang var. quandang</i>	Grey Mistletoe					
Loranthaceae	<i>Lysiana exocarpi ssp. exocarpi</i>	Harlequin Mistletoe					
Loranthaceae	<i>Lysiana murrayi</i>	Mulga Mistletoe					
Malvaceae	<i>Abutilon leucopetalum</i>	Desert Lantern-bush					
Malvaceae	<i>Abutilon otocarpum</i>	Desert Lantern-bush					
Malvaceae	<i>Alyogyne hakeifolia</i>	Hakea-leaf Hibiscus					
Malvaceae	<i>Radyera farragei</i>	Desert Rose Mallow	Y				
Malvaceae	<i>Sida calyxhymenia</i>	Tall Sida					
Malvaceae	<i>Sida intricata</i>	Twiggy Sida	Y				
Malvaceae	<i>Sida phaeotricha</i>	Hill Sida					
Malvaceae	<i>Sida spodochroma</i>						
Myrtaceae	<i>Calytrix involuocrata</i>	Cup Fringe-myrtle					
Myrtaceae	<i>Eucalyptus brachycalyx -- Eucalyptus concinna</i>		Y				

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Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Myrtaceae	<i>Eucalyptus calcareana</i>	Nundroo Mallee					
Myrtaceae	<i>Eucalyptus concinna</i>	Victoria Desert Mallee	Y				
Myrtaceae	<i>Eucalyptus dumosa</i>	White Mallee					
Myrtaceae	<i>Eucalyptus gracilis</i>	Yorrell					
Myrtaceae	<i>Eucalyptus oleosa</i>	Red Mallee					
Myrtaceae	<i>Eucalyptus phenax ssp. phenax</i>	White Mallee					
Myrtaceae	<i>Eucalyptus porosa</i>	Mallee Box					
Myrtaceae	<i>Eucalyptus socialis</i> -- <i>Eucalyptus yumbarrana ssp. yumbarrana</i>		Y				
Myrtaceae	<i>Eucalyptus socialis ssp. socialis</i>	Beaked Red Mallee					
Myrtaceae	<i>Eucalyptus socialis ssp. viridans</i>	Beaked Red Mallee					
Myrtaceae	<i>Leptospermum coriaceum</i>	Dune Tea-tree					
Myrtaceae	<i>Melaleuca armillaris ssp. akineta</i>	Needle-leaf Honey-myrtle				R	
Myrtaceae	<i>Melaleuca lanceolata</i>	Dryland Tea-tree					
Myrtaceae	<i>Melaleuca pauperiflora ssp. mutica</i>	Boree					
Myrtaceae	<i>Melaleuca uncinata</i>	Broombush					
Ophioglossaceae	<i>Ophioglossum lusitanicum</i>	Austral Adder's-tongue					
Orchidaceae	<i>Caladenia capillata</i>	Wispy Spider-orchid					
Orchidaceae	<i>Caladenia cardiochila</i>	Heart-lip Spider-orchid					
Orchidaceae	<i>Caladenia interanea</i>	Inland Green-comb Spider Orchid					
Orchidaceae	<i>Caladenia septuosa</i>	Eyre Peninsula Spider-orchid					
Orchidaceae	<i>Caladenia tensa</i>	Rigid Spider-orchid					
Orchidaceae	<i>Caladenia toxochila</i>	Bow-lip Spider-orchid					
Orchidaceae	<i>Microtis eremaea</i>	Slender Onion-orchid				E	
Orchidaceae	<i>Prasophyllum occidentale</i>	Plains Leek-orchid					
Orchidaceae	<i>Pterostylis excelsa</i>	Dryland Greenhood					



Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Orchidaceae	<i>Pterostylis nana</i>	Dwarf Greenhood					
Orchidaceae	<i>Pterostylis ovata</i>	Gawler Ranges Greenhood					
Orchidaceae	<i>Pterostylis xerophila</i>	Desert Greenhood			VU	V	
Orchidaceae	<i>Thelymitra alcockiae</i>	Coastal Sun Orchid					
Oxalidaceae	<i>Oxalis perennans</i>	Native Sorrel					
Papaveraceae	<i>Papaver hybridum</i>	Rough Poppy					Y
Phrymaceae	<i>Glossostigma cleistanthum</i>	Spoon Mud-mat					
Phrymaceae	<i>Glossostigma drummondii</i>	Desert Mud-mat					
Phrymaceae	<i>Glossostigma sp. Long stout-pedicelled (W.R.Barker 2481)</i>		Y			V	
Pittosporaceae	<i>Bursaria spinosa ssp. spinosa</i>	Sweet Bursaria					
Pittosporaceae	<i>Pittosporum angustifolium</i>	Native Apricot					
Plantaginaceae	<i>Plantago drummondii</i>	Dark Plantain					
Plantaginaceae	<i>Plantago sp. B (R.Bates 44765)</i>	Little Plantain					
Poaceae	<i>Amphipogon caricinus var. caricinus</i>	Long Grey-beard Grass	Y				
Poaceae	<i>Aristida contorta</i>	Curly Wire-grass					
Poaceae	<i>Austrodanthonia setacea</i>	Small-flower Wallaby-grass	Y				
Poaceae	<i>Austrostipa drummondii</i>	Cottony Spear-grass	Y				
Poaceae	<i>Austrostipa elegantissima</i>	Feather Spear-grass					
Poaceae	<i>Austrostipa eremophila</i>	Rusty Spear-grass					
Poaceae	<i>Austrostipa exilis</i>	Heath Spear-grass	Y				
Poaceae	<i>Austrostipa nitida</i>	Balcarra Spear-grass					
Poaceae	<i>Austrostipa nodosa</i>	Tall Spear-grass					
Poaceae	<i>Austrostipa platychaeta</i>	Flat-awn Spear-grass					
Poaceae	<i>Austrostipa puberula</i>	Fine-hairy Spear-grass	Y				
Poaceae	<i>Austrostipa scabra ssp. falcata</i>	Slender Spear-grass					

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Poaceae	<i>Austrostipa scabra ssp. scabra</i>	Rough Spear-grass					
Poaceae	<i>Austrostipa trichophylla</i>		Y				
Poaceae	<i>Avena barbata</i>	Bearded Oat					Y
Poaceae	<i>Avena fatua</i>	Wild Oat					Y
Poaceae	<i>Bromus madritensis</i>	Compact Brome					Y
Poaceae	<i>Bromus rubens</i>	Red Brome					Y
Poaceae	<i>Cymbopogon oblectus</i>	Silky-head Lemon-grass					
Poaceae	<i>Digitaria brownii</i>	Cotton Panic-grass	Y				
Poaceae	<i>Eragrostis dielsii</i>	Mallee Love-grass					
Poaceae	<i>Hordeum glaucum</i>	Blue Barley-grass					Y
Poaceae	<i>Hordeum leporinum</i>	Wall Barley-grass					Y
Poaceae	<i>Lachnagrostis filiformis</i>	Common Blown-grass					
Poaceae	<i>Neurachne munroi</i>	Window Mulga-grass					
Poaceae	<i>Paspalidium constrictum</i>	Knotty-butt Paspalidium					
Poaceae	<i>Pentameris airoides ssp. airoides</i>	False Hair-grass					Y
Poaceae	<i>Poa annua</i>	Winter Grass					Y
Poaceae	<i>Rostraria cristata</i>	Annual Cat's-tail	Y				Y
Poaceae	<i>Rostraria pumila</i>	Tiny Bristle-grass					Y
Poaceae	<i>Rytidosperma caespitosum</i>	Ringed Wallaby Grass					
Poaceae	<i>Schismus barbatus</i>	Arabian Grass					Y
Poaceae	<i>Triodia bunicola</i>	Flinders Ranges Spinifex					
Poaceae	<i>Triodia irritans</i>	Spinifex					
Poaceae	<i>Tripogon loliiformis</i>	Five-minute Grass					
Poaceae	<i>Vulpia muralis</i>	Wall Fescue					Y
Poaceae	<i>Vulpia myuros f. myuros</i>	Rat's-tail Fescue					Y
Polygonaceae	<i>Muehlenbeckia adpressa</i>	Climbing Lignum					

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Polygonaceae	<i>Rumex brownii</i>	Slender Dock					
Portulacaceae	<i>Calandrinia calyptata</i>	Pink Purslane					
Potamogetonaceae	<i>Lepilaena australis</i>	Austral Water-mat					
Primulaceae	<i>Lysimachia arvensis</i>	Scarlet Pimpernel					Y
Proteaceae	<i>Grevillea anethifolia</i>					R	
Proteaceae	<i>Grevillea huegelii</i>	Comb Grevillea					
Proteaceae	<i>Grevillea parallelinervis</i>	Gawler Ranges Grevillea					
Proteaceae	<i>Hakea francisiana</i>	Bottlebrush Hakea					
Proteaceae	<i>Hakea leucoptera</i> ssp. <i>leucoptera</i>	Silver Needlewood					
Pteridaceae	<i>Anogramma leptophylla</i>	Annual Fern				R	
Pteridaceae	<i>Cheilanthes distans</i>	Bristly Cloak-fern					
Pteridaceae	<i>Cheilanthes lasiophylla</i>	Woolly Cloak-fern					
Pteridaceae	<i>Cheilanthes sieberi</i> ssp. <i>sieberi</i>	Narrow Rock-fern					
Ranunculaceae	<i>Ranunculus hamatosetosus</i>	Hill Buttercup					
Ranunculaceae	<i>Ranunculus sessiliflorus</i> var. <i>pilulifer</i>	Annual Buttercup				V	
Rhamnaceae	<i>Cryptandra</i> sp. <i>Hiltaba</i> (Anon. NPGA-8100)						
Rhamnaceae	<i>Spyridium stenophyllum</i> ssp. <i>renovatum</i>						
Rhamnaceae	<i>Stenanthemum arens</i>						
Rubiaceae	<i>Galium leptogonium</i>	Reflexed Bedstraw					
Rubiaceae	<i>Galium microlobum</i>	Rough Bedstraw					
Rubiaceae	<i>Pomax umbellata</i>	Pomax					
Rutaceae	<i>Boronia coerulescens</i> ssp. <i>coerulescens</i>	Blue Boronia					
Rutaceae	<i>Correa backhouseana</i> var. <i>coriacea</i>	Thick-leaf Correa					
Rutaceae	<i>Geijera linearifolia</i>	Sheep Bush					
Rutaceae	<i>Phebalium bullatum</i>	Silvery Phebalium					
Rutaceae	<i>Philothea linearis</i>	Narrow-leaf Wax-flower					

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Santalaceae	<i>Exocarpos aphyllus</i>	Leafless Cherry					
Santalaceae	<i>Santalum acuminatum</i>	Quandong					
Santalaceae	<i>Santalum spicatum</i>	Sandalwood				V	
Sapindaceae	<i>Alectryon oleifolius ssp. canescens</i>	Bullock Bush					
Sapindaceae	<i>Dodonaea baueri</i>	Crinkled Hop-bush					
Sapindaceae	<i>Dodonaea intricata</i>	Gawler Ranges Hop-bush					
Sapindaceae	<i>Dodonaea lobulata</i>	Lobed-leaf Hop-bush					
Sapindaceae	<i>Dodonaea stenozyga</i>	Desert Hop-bush					
Sapindaceae	<i>Dodonaea viscosa ssp. angustissima</i>	Narrow-leaf Hop-bush					
Scrophulariaceae	<i>Eremophila alternifolia</i>	Narrow-leaf Emubush					
Scrophulariaceae	<i>Eremophila glabra ssp. glabra</i>	Tar Bush					
Scrophulariaceae	<i>Eremophila latrobei ssp. glabra</i>	Crimson Emubush					
Scrophulariaceae	<i>Eremophila oppositifolia ssp. oppositifolia</i>	Opposite-leaved Emubush					
Scrophulariaceae	<i>Eremophila scoparia</i>	Broom Emubush					
Scrophulariaceae	<i>Eremophila serrulata</i>	Green Emubush					
Scrophulariaceae	<i>Limosella curdieana var. Long-pedicelled (W.R.Barker 3577)</i>	Large Mudwort					
Scrophulariaceae	<i>Myoporum platycarpum ssp. platycarpum</i>	False Sandalwood					
Solanaceae	<i>Anthocercis anisantha ssp. collina</i>	Gawler Ranges Ray-flower					
Solanaceae	<i>Duboisia hopwoodii</i>	Pituri					
Solanaceae	<i>Lycium australe</i>	Australian Boxthorn					
Solanaceae	<i>Nicotiana glauca</i>	Tree Tobacco	Y				Y
Solanaceae	<i>Nicotiana maritima</i>	Coast Tobacco					
Solanaceae	<i>Solanum nigrum</i>	Black Nightshade					Y
Solanaceae	<i>Solanum petrophilum</i>	Rock Nightshade					
Solanaceae	<i>Solanum simile</i>	Kangaroo Apple					

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Solanaceae	<i>Solanum sturtianum</i>	Sturt's Nightshade					
Thymelaeaceae	<i>Pimelea imbricata</i> var. <i>petraea</i>	Rock Woolly Riceflower					
Thymelaeaceae	<i>Pimelea micrantha</i>	Silky Riceflower					
Thymelaeaceae	<i>Pimelea microcephala</i> ssp. <i>microcephala</i>	Shrubby Riceflower	Y				
Thymelaeaceae	<i>Pimelea simplex</i> ssp. <i>simplex</i>	Desert Riceflower					
Urticaceae	<i>Parietaria cardiostegia</i>	Mallee Smooth-nettle					
Verbenaceae	<i>Verbena supina</i> var. <i>erecta</i>	Trailing Verbena					Y
Violaceae	<i>Hybanthus floribundus</i> ssp. <i>floribundus</i>	Shrub Violet					
Violaceae	<i>Hybanthus monopetalus</i>	Slender Violet					
Zygophyllaceae	<i>Zygophyllum angustifolium</i>	Scrambling Twinleaf					
Zygophyllaceae	<i>Zygophyllum apiculatum</i>	Pointed Twinleaf					
Zygophyllaceae	<i>Zygophyllum aurantiacum</i> ssp. <i>aurantiacum</i>	Shrubby Twinleaf	Y				
Zygophyllaceae	<i>Zygophyllum crenatum</i>	Notched Twinleaf					
Zygophyllaceae	<i>Zygophyllum ermaeum</i>						
Zygophyllaceae	<i>Zygophyllum iodocarpum</i>	Violet Twinleaf					



**Table 26. Annotated list of vascular plant taxa recorded for Hiltaba Station.**

X = excluded

Underlined type indicates records from the BB Survey not present in the other sources.

**Prov** = provided list; **Mgt** = Management Guidelines list; **AD** = State Herbarium of SA collections; **BS** = Biological Survey records not matching previous; **PU** = Pastoral Unit sight records; **BBv** = Bush Blitz survey voucher collection; **BBn** = Bush Blitz survey non-vouchered record.

X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
	<i>Abutilon leucopetalum</i>	Malvaceae			1					
	<i>Abutilon otocarpum</i>	Malvaceae		Y	1					
	<i>Acacia acanthoclada</i> ssp. <i>acanthoclada</i>	Fabaceae		Y	1					
	<i>Acacia ancistrophylla</i> var. <i>lissophylla</i>	Fabaceae	Y	Y	3			2		
	<u><i>Acacia aneura</i> var. <i>intermedia</i></u>	<u>Fabaceae</u>						<u>1</u>		
	<i>Acacia beckleri</i> ssp. <i>beckleri</i>	Fabaceae	Y	Y	4	3	2	2	7	All Gawler Ranges occurrences are this subspecies; incorporates BS & PU records as the non-current concept " <i>Acacia beckleri</i> (NC)" and AD records identified only to species as <i>A. beckleri</i> .
	<u><i>Acacia burkittii</i></u>	<u>Fabaceae</u>						<u>1</u>		
X	<i>Acacia calamifolia</i>	Fabaceae	Y	Y						Presumed to be a misidentification of <i>Acacia euthycarpa</i> ; the related species <i>A. calamifolia</i> does not occur on Eyre Peninsula, although it is often confused with the former.
	<i>Acacia continua</i>	Fabaceae	Y	Y	7	3	2	1	2	
	<i>Acacia euthycarpa</i>	Fabaceae	Y	Y	10		1	2	1	Includes 1 PU record as <i>Acacia calamifolia</i> (q.v.).
	<i>Acacia halliana</i>	Fabaceae	Y	Y	1					
	<i>Acacia havilandiorum</i>	Fabaceae	Y	Y	1					
	<i>Acacia iteaphylla</i>	Fabaceae	Y	Y	11		1	2	3	
	<i>Acacia ligulata</i>	Fabaceae	Y	Y	3	1	4	1	1	Includes BS records (all) as the non-current concept " <i>Acacia ligulata</i> (NC)"; since <i>Acacia cupularis</i> has not been recorded from Gawler Ranges, these are presumed to be <i>A. ligulata</i> .
	<i>Acacia notabilis</i>	Fabaceae	Y	Y	3	2		2		
	<i>Acacia nyssophylla</i>	Fabaceae	Y	Y	2				1	

X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
	<i>Acacia oswaldii</i>	Fabaceae	Y	Y		3	1	4	3	
	<i>Acacia papyrocarpa</i>	Fabaceae	Y	Y	1	4	5	3	4	
	<i>Acacia rigens</i>	Fabaceae	Y	Y	5		2	2	3	
	<i>Acacia tarculensis</i>	Fabaceae	Y	Y	3			2	1	
	<u><i>Acacia tetragonophylla</i></u>	<u>Fabaceae</u>						<u>1</u>		
	<i>Acacia toondulya</i>	Fabaceae	Y	Y	4			4	1	Specimens collected on the survey were all identified as " <i>A. ?toondulya</i> (possible <i>A. notabilis</i> intergrade)". In part the uncertainty was due to the lack of flowers which precluded use of the floret number character, but is also related to the lower level of pruinosity and narrower phyllodes compared to typical forms of <i>A. toondulya</i> , features in which they approach <i>A. notabilis</i> . A similar low level of pruinosity and narrower phyllodes are also evident in the existing AD Hiltaba collections that have flowers, all of which have all been determined as <i>A. toondulya</i> . All the Hiltaba plants do seem to approach <i>A. notabilis</i> in this way and their taxonomic status warrants further investigation.
	<i>Actinobole uliginosum</i>	Asteraceae	Y	Y	2	5				
	<i>Alectryon oleifolius ssp. canescens</i>	Sapindaceae	Y	Y		7	5	1	5	
	<i>Allocasuarina helmsii</i>	Casuarinaceae	Y	Y	3					
	<i>Alyogyne hakeifolia</i>	Malvaceae		Y	5	1				
	<i>Alyssum linifolium</i>	Brassicaceae		Y	3					
	<i>Alyxia buxifolia</i>	Apocynaceae		Y	2			1		
	<u><i>Amhipogon caricinus var. caricinus</i></u>	<u>Poaceae</u>							<u>1</u>	
	<i>Amyema miquelii</i>	Loranthaceae		Y	1	2		3		
	<i>Amyema preissii</i>	Loranthaceae		Y	1					
	<i>Amyema quandang var. quandang</i>	Loranthaceae			3			2		
X	<i>Anagallis arvensis</i>	Primulaceae			1	2		1		Now treated as <i>Lysimachia arvensis</i> (q.v.) in APC.
	<i>Angianthus tomentosus</i>	Asteraceae	Y	Y	6	6	3	3		
	<i>Anogramma leptophylla</i>	Pteridaceae		Y	1					

X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
X	<i>Anthocercis anisantha anisantha</i>	Solanaceae	Y							Presumably in error for ssp. <i>collina</i> ; ssp. <i>anisantha</i> is endemic to southern Eyre Peninsula. However, two collections at AD of ssp. <i>anisantha</i> are outliers from further north on Eyre Peninsula (but not within the study area) and their IDs warrant reassessment; they may represent aberrant forms.
	<b><i>Anthocercis anisantha ssp. collina</i></b>	Solanaceae	Y	Y	11	1		3	1	
	<b><i>Aotus subspinescens</i></b>	Fabaceae	Y	Y	1					
	<b><i>Apium annuum</i></b>	Apiaceae		Y	1					
	<b><i>Arabidella trisecta</i></b>	Brassicaceae		Y	1					
X	<i>Arachnorchis aff. tentaculata</i>	Orchidaceae	Y							Most likely refers to <i>Caladenia interanea</i> (D.L.Jones) R.J.Bates (syn. <i>Arachnorchis interanea</i> D.L.Jones) (q.v.). The name <i>Caladenia tentaculata</i> has previously been misapplied to this species in the Gawler Ranges, but <i>C. tentaculata</i> s.str. is limited to higher rainfall parts of the Mt Lofty Ranges, South East and eastern States (Bates, 2012).
X	<i>Arachnorchis cardiochila</i>	Orchidaceae	Y							<i>Arachnorchis</i> is not recognised as a genus separate from the broader concept of <i>Caladenia</i> in the SA Census, and in accordance with the APC. The name replicates the taxon's inclusion in the provided list under <i>Caladenia</i> (q.v.).
X	<i>Arachnorchis interanea</i>	Orchidaceae	Y							<i>Arachnorchis</i> is not recognised as a genus separate from the broader concept of <i>Caladenia</i> in the SA Census, and in accordance with the APC. This is name also replicates its inclusion in the provided list under <i>Caladenia</i> (q.v.). Although described under <i>Arachnorchis</i> , the combination under <i>Caladenia</i> has been published by Barker & Bates (2008).
X	<i>Arachnorchis septuosa</i>	Orchidaceae	Y							<i>Arachnorchis</i> is not recognised as a genus separate from the broader concept of <i>Caladenia</i> in the SA Census, and in accordance with the APC. The name replicates the taxon's inclusion in the provided list under <i>Caladenia</i> (q.v.).
X	<i>Arachnorchis tensa</i>	Orchidaceae	Y	Y						<i>Arachnorchis</i> is not recognised as a genus separate from the broader concept of <i>Caladenia</i> in the SA Census, and in accordance with the APC. The name replicates the taxon's inclusion in the provided list under <i>Caladenia</i> (q.v.).
X	<i>Arachnorchis tentaculata</i>	Orchidaceae	Y							Most likely refers to <i>Caladenia interanea</i> (D.L.Jones) R.J.Bates (syn. <i>Arachnorchis interanea</i> D.L.Jones) (q.v.). The name <i>Caladenia tentaculata</i> has previously been misapplied to this species in the Gawler Ranges, but <i>C. tentaculata</i> s.str. is limited to higher rainfall parts of the Mt Lofty Ranges, South East and eastern States (Bates, 2012).
X	<i>Arachnorchis toxochila</i>	Orchidaceae	Y							<i>Arachnorchis</i> is not recognised as a genus separate from the broader concept of <i>Caladenia</i> in the SA Census, and in accordance with the APC. The name replicates the taxon's inclusion in the provided list under <i>Caladenia</i> (q.v.).
	<b><i>Aristida contorta</i></b>	Poaceae	Y	Y		1		1		
	<b><i>Astroloma humifusum</i></b>	Ericaceae	Y	Y	2			1	1	
X	<i>Atriplex kochiana</i>	Chenopodiaceae		Y						A presumed misidentification; based on AVH, this is a more northern species and does not occur in the survey area.

X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
	<i>Atriplex stipitata</i>	Chenopodiaceae	Y	Y	2	1	9	1	13	
	<i>Atriplex suberecta</i>	Chenopodiaceae						1		
	<i>Atriplex vesicaria</i>	Chenopodiaceae	Y	Y	3	2	4	4	2	
X	<i>Austrodanthonia caespitosa</i>	Poaceae	Y		3	4	4			Synonym of <i>Rytidosperma caespitosum</i> (q.v.).
	<i>Austrodanthonia setacea</i>	Poaceae						2		
	<i>Austrostipa drummondii</i>	Poaceae						1		
	<i>Austrostipa elegantissima</i>	Poaceae	Y	Y		4	3			
	<i>Austrostipa eremophila</i>	Poaceae	Y		1	2				
	<i>Austrostipa exilis</i>	Poaceae						1		
	<i>Austrostipa nitida</i>	Poaceae	Y	Y	4	4		1	1	
	<i>Austrostipa nodosa</i>	Poaceae	Y	Y	2	2				
X	<i>Austrostipa nullanulla</i>	Poaceae		Y						Presumably based on AD collection (D.J. Duval 1588) from "Island in SE corner of Lake Acraman"; Lake Acraman adjoins the Yarna section of Hiltaba Station, but is not within the Hiltaba Nature Foundation Reserve; this spear-grass is specific to gypseous substrates and is unlikely to occur on the property.
	<i>Austrostipa platychaeta</i>	Poaceae	Y	Y	1	4		1	1	
	<i>Austrostipa puberula</i>	Poaceae						1		
	<i>Austrostipa scabra</i> ssp. <i>falcata</i>	Poaceae	Y		1					
	<i>Austrostipa scabra</i> ssp. <i>scabra</i>	Poaceae	Y	Y		5				On provided list merely as <i>Austrostipa scabra</i> (but with <i>A. scabra falcata</i> as a separate record).
X	<i>Austrostipa</i> sp.	Poaceae							7	Species indeterminate.
	<i>Austrostipa trichophylla</i>	Poaceae						1		
	<i>Avena barbata</i>	Poaceae		Y	1			2	3	
	<i>Avena fatua</i>	Poaceae		Y	1					
	<i>Beyeria lechenaultii</i>	Euphorbiaceae	Y	Y	7		1	2	1	
	<i>Blennospora drummondii</i>	Asteraceae	Y	Y	1					

X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
	<b><i>Boronia coerulescens ssp. coerulescens</i></b>	Rutaceae	Y	Y	2					
X	<i>Boronia inornata ssp. leptophylla</i>	Rutaceae		Y						Presumably based on a single collection on AVH with the imprecise locality "Gawler Ranges between Lake Everard and Wirrulla" (CANB, H. Reeve 360) so is not definitely recorded on the property.
	<b><i>Brachyscome lineariloba</i></b>	Asteraceae	Y	Y	5	6				
	<b><i>Brachyscome perpusilla</i></b>	Asteraceae	Y	Y	6	1				
	<b><i>Brachyscome trachycarpa</i></b>	Asteraceae		Y	1					
	<b><i>Bromus madritensis</i></b>	Poaceae				3				
	<b><i>Bromus rubens</i></b>	Poaceae		Y	5	6		1		
	<b><i>Bulbine semibarbata</i></b>	Asphodelaceae	Y	Y	2	2				
X	<i>Bulbostylis barbata</i>	Cyperaceae	Y	Y	1					This is based on a single AD specimen with the imprecise locality of "Mt Granite [in GRNP] to Hiltaba" and so is not definitely recorded on the property.
	<b><i>Bupleurum semicompositum</i></b>	Apiaceae		Y	1	4		1		
	<b><i>Bursaria spinosa ssp. spinosa</i></b>	Pittosporaceae		Y	2	1	2	1	1	Includes BS records as the non-current concept " <i>Bursaria spinosa</i> var. <i>spinosa</i> (NC)" which is equivalent, given the absence of <i>ssp. lasiophylla</i> in this region.
	<b><i>Caladenia capillata</i></b>	Orchidaceae		Y	1					
	<b><i>Caladenia cardiochila</i></b>	Orchidaceae			1					
	<b><i>Caladenia interanea</i></b>	Orchidaceae		Y						
	<b><i>Caladenia septuosa</i></b>	Orchidaceae		Y	1					
	<b><i>Caladenia tensa</i></b>	Orchidaceae		Y						
X	<i>Caladenia tessellata</i>	Orchidaceae		Y						This species is not recognised as occurring in SA; it was listed as a misapplication under <i>C. cardiochila</i> in Barker et al.(2005), and probably refers to that species.
	<b><i>Caladenia toxochila</i></b>	Orchidaceae		Y	5					
	<b><i>Calandrinia calyptrata</i></b>	Portulacaceae	Y	Y	2	3				
	<b><i>Callitris gracilis</i></b>	Cupressaceae						1		
	<b><i>Calotis hispidula</i></b>	Asteraceae	Y	Y	4	5				

X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
	<i>Calotis multicaulis</i>	Asteraceae	Y	Y	1					
	<i>Calytrix involucreta</i>	Myrtaceae	Y	Y		1	3	1	1	
	<i>Carrichtera annua</i>	Brassicaceae		Y	2	10	14	2	6	
	<i>Carthamus lanatus</i>	Asteraceae		Y		3	2	3	4	
	<i>Cassinia laevis</i>	Asteraceae	Y	Y	2				1	
	<i>Cassytha flindersii</i>	Lauraceae	Y		1					
	<i>Cassytha melantha</i>	Lauraceae	Y	Y	2					
	<i>Cassytha peninsularis</i>	Lauraceae	Y	Y	5			1		
	<i>Casuarina pauper</i>	Casuarinaceae	Y	Y	4	3	5	3	11	
	<i>Centaurea melitensis</i>	Asteraceae		Y	1	2		1		
X	<i>Centaurium tenuiflorum</i>	Gentianaceae		Y						Presumably in error for <i>Schenkia australis</i> (q.v.); there are no AVH collections from the property; presumably based on the single record BS from Hiltaba misidentified as " <i>Centaurium tenuiflorum</i> (NC)" (q.v.).
X	<i>Centaurium tenuiflorum</i> (NC)	Gentianaceae				1				Misidentification: the single BS record from Hiltaba has a recorded voucher (given as P.Canty BS1-8049) corresponding to AD collection (Anon. NPWS[-]8049) which was re-determined as <i>Schenkia australis</i> by L. Zeltner on 22 Sep 2011.
	<i>Centrolepis polygyna</i>	Centrolepidaceae	Y	Y	2					
	<i>Cerastium glomeratum</i>	Caryophyllaceae		Y	1					
X	<i>Ceratogyne obionoides</i>	Asteraceae		Y						Presumably included in management guidelines list as "expected to occur"; there are no AVH records from Hiltaba Station; however there are 3 AD collections further south in the GRNP, including one from Mt Centre (T.S. Te 784) which is close to Hiltaba and possibly the basis for its inclusion on the list.
X	<i>Chamaesyce drummondii</i> (NC)	Euphorbiaceae				3	2			Equivalent to <i>Euphorbia drummondii</i> (q.v.) in this region.
	<i>Cheilanthes distans</i>	Pteridaceae				1				
	<i>Cheilanthes lasiophylla</i>	Pteridaceae		Y	5	3		2		
	<i>Cheilanthes sieberi</i> ssp. <i>sieberi</i>	Pteridaceae		Y	3	4		1	1	Includes one BB sight record identified to species only and presumed to be this subspecies.
	<i>Chenopodium curvispicatum</i>	Chenopodiaceae			1			1		



X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
	<b><i>Chenopodium desertorum</i> ssp. <i>desertorum</i></b>	Chenopodiaceae	Y			1		1		
X	<i>Chenopodium gaudichaudianum</i>	Chenopodiaceae	Y							Presumed to be <i>Chenopodium curvispicatum</i> ; <i>C. gaudichaudianum</i> has often been confused with this species in the past and has a more northerly distribution.
	<b><u><i>Chenopodium murale</i></u></b>	<u>Chenopodiaceae</u>						<u>1</u>		
	<b><i>Chrysocephalum apiculatum</i></b>	Asteraceae	Y	Y	7		4	1	1	
	<b><u><i>Chrysocephalum pterochaetum</i></u></b>	<u>Asteraceae</u>						<u>1</u>		
	<b><i>Chrysocephalum semipapposum</i></b>	Asteraceae	Y	Y	2		2	1	2	
	<b><i>Chthonocephalus pseudevax</i></b>	Asteraceae	Y			1				
X	<i>Commersonia kraurophylla</i>	Malvaceae		Y						Presumably included in management guidelines list as "expected to occur" under synonym <i>Rulingia kraurophylla</i> ; possibly based on AD collection L. Haegi 781 with location "Gawler Ranges. c. 17 km SSW of Hiltaba Homestead on Yantanabie road" which is well outside the reserve.
	<b><i>Convolvulus remotus</i></b>	Convolvulaceae	Y	Y	1	1		3		
	<b><i>Correa backhouseana</i> var. <i>coriacea</i></b>	Rutaceae	Y	Y		1		1		
X	<i>Corynotheca licrota</i>	Hemerocallidaceae		Y						Unlikely to occur on the property; this species is associated with sand dunes and the AVH has no records this far south on Eyre Peninsula; possibly based on a single collection (AD, Bates 32118) with the imprecise locality "Between Lake Gairdner and Lake Acraman" which is outside the study area.
	<b><i>Cotula australis</i></b>	Asteraceae	Y	Y	3					
	<b><i>Crassula colligata</i> ssp. <i>lamprosperma</i></b>	Crassulaceae		Y	3					
	<b><i>Crassula colorata</i> var. <i>acuminata</i></b>	Crassulaceae		Y	2					
	<b><i>Crassula peduncularis</i></b>	Crassulaceae		Y	1					
X	<i>Crassula sieberiana</i> ssp. <i>tetramera</i> (NC)	Crassulaceae				2				Species indeterminate: may be either <i>Crassula tetramera</i> or <i>C. extrorsa</i> as the latter has also been collected from the Gawler Ranges.
	<b><i>Crassula tetramera</i></b>	Crassulaceae		Y	3					
	<b><i>Cratystylis conocephala</i></b>	Asteraceae	Y	Y	1	1		3		

## Bush Blitz – Flora Survey on Hiltaba Station and Gawler Ranges NP, November 2012

X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
X	<i>Cryptandra</i> sp.	Rhamnaceae							1	Species indeterminate.
X	<i>Cryptandra</i> sp. <i>Floriferous</i> (W.R.Barker 4131)	Rhamnaceae		Y	10					This record is likely to be the undescribed taxon " <i>Cryptandra</i> sp. Hiltaba (Anon. NPGA-8100) Kellermann".
	<b><i>Cryptandra</i> sp. <i>Hiltaba</i> (Anon. NPGA-8100)</b>	Rhamnaceae			11			5		One AD collection was re-determined to this species on 14 Feb 2013; the other 10 records are based on AD collections yet to be examined, and although currently identified as <i>Cryptandra</i> sp. <i>Floriferous</i> (W.R.Barker 4131), these are also likely to be the new species.
X	<i>Cryptandra tomentosa</i>	Rhamnaceae		Y						Presumably based on the BS records as the non-current concept " <i>Cryptandra tomentosa</i> (NC)" q.v., but incorrectly referred to <i>C. tomentosa</i> which does not occur on Eyre Peninsula (J. Kellermann, pers. comm.).
X	<i>Cryptandra tomentosa</i> (NC)	Rhamnaceae				2				Species indeterminate: one of the 2 BS records has a corresponding AD voucher (SANPWS 8100) which was re-determined on 14 Feb 2013 as " <i>Cryptandra</i> sp. Hiltaba (Anon. NPGA-8100) Kellermann"; the other (non-vouchered) record may thus either represent this species or <i>C. myriantha</i> as would be inferred from the non-current concept " <i>Cryptandra tomentosa</i> (NC)".
	<b><i>Cucumis myriocarpus</i></b>	Cucurbitaceae						1		
	<b><i>Cymbopogon oblectus</i></b>	Poaceae	Y	Y	1	2		1		
	<b><i>Cyperus alterniflorus</i></b>	Cyperaceae	Y	Y	6					
	<b><i>Cyperus gymnocaulos</i></b>	Cyperaceae	Y	Y	1					
X	<i>Cyperus lhotskyanus</i>	Cyperaceae	Y	Y						Misidentification of <i>C. alterniflorus</i> : <i>C. lhotskyanus</i> is confined to the SE region in SA; the single record of <i>C. lhotskyanus</i> for GRNP projected on AVH (HO, P. Gibbons 738) is a duplicate of an AD collection identified as <i>C. alterniflorus</i> .
	<b><i>Cyperus rigidellus</i></b>	Cyperaceae	Y	Y	1					
X	<i>Dampiera dysantha</i>	Goodeniaceae				2				Presumed misidentifications; well outside the range of <i>Dampiera dysantha</i> , which on Eyre Peninsula is confined to the southern end; the two non-vouchered BS records must be regarded as unreliable, one similar BS record from GRNP corresponds to AD voucher (NPWSA 7734) which was re-identified as <i>D. rosmarinifolia</i> in Apr. 2000.
	<b><i>Dampiera rosmarinifolia</i></b>	Goodeniaceae		Y	5					
	<b><i>Daucus glochidiatus</i></b>	Apiaceae		Y	4	7			1	
	<b><i>Dianella revoluta</i> var. <i>revoluta</i></b>	Hemerocallidaceae	Y	Y		1		1	1	Incorporates listings as " <i>Dianella revoluta</i> " and the 10 BS records as the non-current concept " <i>Dianella revoluta</i> (NC)"; currently in SA this is the only infraspecific taxon recognised for <i>D. revoluta</i> on EP.
	<b><i>Digitaria brownii</i></b>	Poaceae						1		
	<b><i>Disphyma crassifolium</i> ssp. <i>clavellatum</i></b>	Aizoaceae	Y	Y				1		

X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
	<u><i>Dissocarpus biflorus</i> var. <i>biflorus</i></u>	Chenopodiaceae						1		
	<i>Dissocarpus paradoxus</i>	Chenopodiaceae	Y	Y	1			1		
	<u><i>Dittrichia graveolens</i></u>	Asteraceae						1		
	<i>Dodonaea baueri</i>	Sapindaceae	Y	Y	13	1	1	2	1	
	<i>Dodonaea intricata</i>	Sapindaceae	Y	Y	4			11		
	<i>Dodonaea lobulata</i>	Sapindaceae	Y	Y	4	2	8	3	1	
	<i>Dodonaea stenozyga</i>	Sapindaceae	Y	Y	2					
	<i>Dodonaea viscosa</i> ssp. <i>angustissima</i>	Sapindaceae	Y	Y	10	5	6	2	9	
X	<i>Dodonaea viscosa</i> ssp. <i>viscosa</i>	Sapindaceae		Y						This subspecies does not occur in the study area nor in SA; the record was found to be based on a single AD collection from Hiltaba projected on AVH with an erroneous ID due to a data entry error; this has now been corrected to ssp. <i>angustissima</i> .
	<i>Drosera macrantha</i> ssp. <i>planchonii</i>	Droseraceae	Y	Y	3					
	<i>Duboisia hopwoodii</i>	Solanaceae		Y	2					
	<u><i>Dysphania cristata</i></u>	Chenopodiaceae						1		
	<i>Dysphania melanocarpa</i>	Chenopodiaceae	Y	Y						
	<i>Echium plantagineum</i>	Boraginaceae		Y	1					
	<i>Einadia nutans</i> ssp. <i>nutans</i>	Chenopodiaceae		Y						Probably valid: there are no AVH records for Hiltaba or GRNP, although the area is within the wider range of the species; the listing in the management guidelines is probably based on the single AD collection (A.G. Spooner 2365) from "Hills 5 miles [8 km] N of Hiltaba"; while a direct distance and the derived coordinates place this record just outside the property, it was probably collected on Hiltaba since a "by road" distance NNE from the homestead would place it inside the northern boundary of the reserve.
	<i>Embadium uncinatum</i>	Boraginaceae	Y	Y	4	1				
	<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	Chenopodiaceae	Y	Y	2	9	12	1	2	
	<i>Eragrostis dielsii</i>	Poaceae		Y						
	<i>Eremophila alternifolia</i>	Scrophulariaceae		Y	1	2	4	2	1	

X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
	<i>Eremophila glabra ssp. glabra</i>	Scrophulariaceae		Y	6	3	3	2		Includes BS records, all as the non-current concept " <i>Eremophila glabra</i> (NC)", and management guidelines listing as <i>E. glabra</i> ; the only subspecies occurring in the region is <i>ssp. glabra</i> .
	<i>Eremophila latrobei ssp. glabra</i>	Scrophulariaceae		Y	1					
	<i>Eremophila oppositifolia ssp. oppositifolia</i>	Scrophulariaceae		Y	4		1	1		
	<i>Eremophila scoparia</i>	Scrophulariaceae		Y		2		1	1	
	<i>Eremophila serrulata</i>	Scrophulariaceae		Y	6	1	1	1		
	<i>Eriochiton sclerolaenoides</i>	Chenopodiaceae	Y	Y	4	6	2	1	2	
	<i>Erodium aureum</i>	Geraniaceae		Y	4	1				
	<i>Erodium carolinianum</i>	Geraniaceae		Y	1					
	<i>Erodium cicutarium</i>	Geraniaceae		Y	2	1				
	<i>Erodium crinitum</i>	Geraniaceae			6	2	7			
	<i>Erodium cygnorum</i>	Geraniaceae		Y	4	2				
	<u><i>Eucalyptus brachycalyx</i></u> -- <u><i>Eucalyptus concinna</i></u>	Myrtaceae						1		
	<i>Eucalyptus calcareana</i>	Myrtaceae		Y	1					
X	<i>Eucalyptus commixta</i>	Myrtaceae		Y						The meaning of this name is unknown; it does not appear on the Australian Plant Name Index (APNI).
	<u><i>Eucalyptus concinna</i></u>	Myrtaceae						1		
	<i>Eucalyptus dumosa</i>	Myrtaceae	Y	Y	3		4	2	4	The new treatment for Flora of SA (in prep.) does not recognise <i>Eucalyptus dumosa</i> as occurring on Eyre Peninsula, but material collected on this survey provides strong evidence for its retention, although it clearly intergrades with the allied <i>E. phenax ssp. phenax</i> and <i>E. calcareana</i> .
	<i>Eucalyptus gracilis</i>	Myrtaceae	Y	Y	3	2	1	2	3	
X	<i>Eucalyptus lansdowneana</i>	Myrtaceae		Y						Presumably included in management guidelines list as "expected to occur" or based on an imprecise record; there are no AVH records from Hiltaba Station, and although there are many collections further south in the GRNP, these are very localised and it is unlikely that outliers would occur on Hiltaba.
	<i>Eucalyptus oleosa</i>	Myrtaceae	Y	Y	2			3	3	The two AD records have determinations as <i>Eucalyptus oleosa ssp. ampliata</i> (q.v.), while the 3 vouchered BB collections were determined as " <i>E. oleosa ssp. ?ampliata</i> ".

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X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
X	<i>Eucalyptus oleosa</i> ssp. <i>ampliata</i>	Myrtaceae			2			3		Subsumed here under <i>Eucalyptus oleosa</i> ; ssp. <i>oleosa</i> and ssp. <i>ampliata</i> were previously separated on operculum shape, but this is reportedly unreliable, and seedling leaves are needed to distinguish subspecies with certainty.
	<b><i>Eucalyptus phenax</i> ssp. <i>phenax</i></b>	Myrtaceae	Y	Y	1			7	1	On provided list merely as <i>Eucalyptus phenax</i> , but equivalent since only ssp. <i>phenax</i> occurs in this region.
X	<i>Eucalyptus pileata</i>	Myrtaceae	Y		1					Better treated as a form of <i>Eucalyptus calcareana</i> or <i>E. phenax</i> ssp. <i>phenax</i> in this area.
	<b><i>Eucalyptus porosa</i></b>	Myrtaceae	Y	Y	3	3	2	2	9	
X	<i>Eucalyptus socialis</i>	Myrtaceae	Y			1				Indeterminate for subspecies: includes 1 BS record as the non-current concept " <i>Eucalyptus socialis</i> (NC)"
	<b><u><i>Eucalyptus socialis</i> -- <i>Eucalyptus yumbarrana</i> ssp. <i>yumbarrana</i></u></b>	Myrtaceae						2		
	<b><i>Eucalyptus socialis</i> ssp. <i>socialis</i></b>	Myrtaceae		Y	6			2	1	
	<b><i>Eucalyptus socialis</i> ssp. <i>viridans</i></b>	Myrtaceae		Y	2			1		
X	<i>Euchiton involucratus</i>	Asteraceae	Y	Y		1				Presumed misidentification of <i>Euchiton sphaericus</i> ; outside the range of <i>E. involucratus</i> and no records showing on AVH; the single unvouchered BS record as " <i>E. involucratus</i> (NC)" is unreliable; a similar record from GRNP has a corresponding AD voucher (NPWSA 7670 ) that was re-determined as <i>E. sphaericus</i> on 21 Apr 2005.
	<b><i>Euchiton sphaericus</i></b>	Asteraceae						1		Based on a single BS record as " <i>Euchiton involucratus</i> (NC)" (q.v.).
	<b><i>Euphorbia drummondii</i></b>	Euphorbiaceae	Y	Y		3	2	1		Based on BS and PU records as " <i>Chamaesyce drummondii</i> (NC)" which is equivalent to <i>Euphorbia drummondii</i> in this region.
	<b><i>Euphorbia tannensis</i> ssp. <i>eremophila</i></b>	Euphorbiaceae	Y	Y	5	4		1		
	<b><i>Eutaxia microphylla</i></b>	Fabaceae	Y	Y	4	4		1	3	
	<b><i>Exocarpos aphyllus</i></b>	Santalaceae		Y	2	5	1	5	1	
	<b><i>Frankenia</i> sp.</b>	Frankeniaceae		Y		2	3	3		Includes 2 BS and 1 PU record identified as <i>Frankenia serpyllifolia</i> , a name that is currently applied to a number of taxa; the genus is undergoing revision and reliable identification of collections made on Hiltaba will have to wait until its completion.
	<b><u><i>Gahnia lanigera</i></u></b>	Cyperaceae						1		
X	<i>Galium gaudichaudii</i>	Rubiaceae		Y						Presumably based on BS records as the non-current concept " <i>Galium gaudichaudii</i> (NC)" (q.v.).

X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
X	<i>Galium gaudichaudii</i> (NC)	Rubiaceae				2				Species indeterminate, but more likely to be <i>Galium microlobum</i> than <i>G. gaudichaudii</i> ; one BS record as <i>G. gaudichaudii</i> (NC) has a corresponding AD voucher (SANPWS 89031) that was re-determined as <i>G. microlobum</i> on 3 Sep 2008.
	<b><i>Galium leptogonium</i></b>	Rubiaceae		Y	2					
	<b><i>Galium microlobum</i></b>	Rubiaceae		Y	2					
	<b><i>Geijera linearifolia</i></b>	Rutaceae	Y	Y	3	4		1	4	
	<b><i>Geranium retrorsum</i></b>	Geraniaceae		Y	1					
	<b><i>Geranium solanderi</i> var. <i>solanderi</i></b>	Geraniaceae		Y	2					
	<b><i>Glischrocaryon flavescens</i></b>	Haloragaceae	Y	Y	2	3		1		
	<b><i>Glossostigma cleistanthum</i></b>	Phrymaceae	Y	Y	1					
	<b><i>Glossostigma drummondii</i></b>	Phrymaceae	Y	Y	1					
	<b><u><i>Glossostigma</i> sp. Long stout-pedicelled (W.R.Barker 2481)</u></b>	Phrymaceae						1		
X	<i>Glycine clandestina</i>	Fabaceae	Y							Misapplied name synonymous with <i>Glycine rubiginosa</i> (q.v.).
	<b><i>Glycine rubiginosa</i></b>	Fabaceae	Y	Y	4	1				
	<b><i>Gonocarpus elatus</i></b>	Haloragaceae	Y	Y	4	3		1	2	
	<b><i>Goodenia calcarata</i></b>	Goodeniaceae			1					
X	<i>Goodenia geniculata</i>	Goodeniaceae				1				Probable misidentification of <i>Goodenia glabra</i> ; based only on unvouchered records; <i>G. geniculata</i> is confined to more temperate areas, but some Gawler Ranges collections of <i>G. glabra</i> at AD were originally misidentified as that species and may be the basis for the identification of the unvouchered BS records.
X	<i>Goodenia gibbosa</i>	Goodeniaceae		Y	1					Location error: based on an AD collection, R.J. Bates 48847 "On edge of Lake, near Mt Ive Station", which is well outside the western Gawler Ranges although the coordinates provided plot on Hiltaba Station.
	<b><i>Goodenia glabra</i></b>	Goodeniaceae		Y	3					
	<b><i>Goodenia havilandii</i></b>	Goodeniaceae		Y	4	3		2		
X	<i>Goodenia lobata</i>	Goodeniaceae		Y						Unsubstantiated record not supported by AVH and outside the species main area of occurrence in gypseous breakaway country within the AD Lake Eyre Region.



X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
	<i>Goodenia pusilliflora</i>	Goodeniaceae		Y	4	7				
	<i>Goodenia willisiana</i>	Goodeniaceae		Y	2				2	
X	<i>Goodia lotifolia</i> var. <i>lotifolia</i>	Fabaceae	Y	Y						Name previously misapplied in SA for <i>Goodia medicaginea</i> .
	<i>Goodia medicaginea</i>	Fabaceae	Y	Y	3					
X	<i>Gratwickia monochaeta</i>	Asteraceae		Y						Presumably included in management guidelines list as "expected to occur" or based on an imprecise record; there are no BS or AVH records from Hiltaba Station.
	<i>Grevillea anethifolia</i>	Proteaceae	Y	Y		1		1		
	<i>Grevillea huegelii</i>	Proteaceae	Y	Y	1			2		
	<i>Grevillea parallelinervis</i>	Proteaceae	Y	Y	19	2	4	5	7	
	<i>Gypsophila tubulosa</i>	Caryophyllaceae	Y			1		1		
	<i>Hakea francisiana</i>	Proteaceae	Y	Y	2					
	<i>Hakea leucoptera</i> ssp. <i>leucoptera</i>	Proteaceae	Y	Y	3			1		
	<i>Halgania cyanea</i>	Boraginaceae	Y	Y		3	1	2		
	<i>Haloragis gossei</i>	Haloragaceae	Y		1					
X	<i>Halosarcia lylei</i>	Chenopodiaceae	Y							Presumably based on collection from "18 km SE of Hiltaba homestead. Shoreline of Salt Lake" (AD, L.D. Williams 9139) which is to the south and outside of the reserve; this samphire is specific to the margins of gypseous substrates and is unlikely to occur on the property.
	<i>Harmsiodoxa brevipes</i> var. <i>brevipes</i>	Brassicaceae		Y	1					
	<i>Hedypnois rhagadioloides</i>	Asteraceae		Y	1	5				Includes 1 AD collection determined as <i>Hedypnois rhagadioloides</i> ssp. <i>cretica</i> .
	<i>Helichrysum leucopsideum</i>	Asteraceae		Y	1					
	<i>Heliotropium asperrimum</i>	Boraginaceae		Y	1					
	<i>Herniaria cinerea</i>	Caryophyllaceae		Y	2					
X	<i>Hibbertia crispula</i>	Dilleniaceae		Y						Presumably included in management guidelines list (misspelt as " <i>crespula</i> ") as "expected to occur" or based on an imprecise record; while <i>Hibbertia crispula</i> is present to the west on the adjoining Kondoolka Station, there are no AVH records from Hiltaba Station and there is little if any suitable sand dune habitat present in the property likely to support this species.

X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
	<i>Hordeum glaucum</i>	Poaceae		Y	1					
	<i>Hordeum leporinum</i>	Poaceae		Y	1	4				
	<i>Hyalosperma demissum</i>	Asteraceae	Y	Y	2					
	<i>Hyalosperma glutinosum ssp. glutinosum</i>	Asteraceae	Y	Y	4					
	<i>Hyalosperma semisterile</i>	Asteraceae	Y	Y	1					
	<i>Hybanthus floribundus ssp. floribundus</i>	Violaceae		Y	1					
	<i>Hybanthus monopetalus</i>	Violaceae		Y	3	1				
	<i>Hydrocotyle callicarpa</i>	Araliaceae		Y	1					
	<i>Hydrocotyle foveolata</i>	Araliaceae			1					
	<i>Hydrocotyle pilifera var. glabrata</i>	Araliaceae		Y	5					
	<i>Hypochaeris glabra</i>	Asteraceae		Y	2	5		1	1	
	<i>Hypoxis glabella var. glabella</i>	Hypoxidaceae	Y	Y	3	1				
X	<i>Indigofera australis ssp. australis</i>	Fabaceae	Y	Y						Presumably based on records as the non-current concept " <i>Indigofera australis</i> var. <i>australis</i> (NC)" q.v.; however these are almost certainly <i>ssp. hesperia</i> which has a more westerly distribution than <i>ssp. australis</i> .
	<i>Indigofera australis ssp. hesperia</i>	Fabaceae		Y	3	2				Incorporates 2 BS records as " <i>Indigofera australis</i> var. <i>australis</i> (NC)".
X	<i>Indigofera australis</i> var. <i>australis</i> (NC)	Fabaceae				2				Non-current concept records made prior to the description of <i>ssp. hesperia</i> as a new taxon in 2010; these are taken to be equivalent to <i>ssp. hesperia</i> which has a more westerly distribution than <i>ssp. australis</i> .
	<i>Indigofera helmsii</i>	Fabaceae						1	1	
X	<i>Ipomoea cairica</i>	Convolvulaceae			1					Location error: based on the AD collection (R. Bates 31881) of a creeper on the Pine Lodge ruins which is in GRNP although the coordinates provided plot on Hiltaba Station.
	<i>Isoetopsis graminifolia</i>	Asteraceae	Y	Y	1	4				
X	<i>Isolepis hookeriana</i>	Cyperaceae	Y	Y						Uncertain ID; see comments for the " <i>Isolepis hookeriana</i> (NC)" record below which is presumably the basis for its inclusion on the lists.

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X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
X	<i>Isolepis hookeriana</i> (NC)	Cyperaceae				1				Uncertain ID; the species is absent from the Gawler Ranges in AVH and the single unvouchered BS record is unreliable; a similar vouchered BS record as " <i>Isolepis hookeriana</i> (NC)" from GRNP was found to have the corresponding AD specimen (AD, SANPWS 7952) re-determined as <i>I. platycarpa</i> in Mar. 1993, but with the BS record in need of update.
	<b><i>Isolepis marginata</i></b>	Cyperaceae		Y	1					
	<b><i>Isolepis platycarpa</i></b>	Cyperaceae	Y	Y	1					
	<b><i>Isotoma petraea</i></b>	Campanulaceae		Y	5	1		1	1	
	<b><i>Juncus bufonius</i></b>	Juncaceae		Y	2					
	<b><u><i>Kennedia prostrata</i></u></b>	Fabaceae						1		Northernmost record of the species in SA. Previously only known in Gawler Ranges by two collections (BS1-10206 & 10639) from a single BS Survey site in GRNP, 1.4 km ENE Paney HS, discovered 16 Aug 2000. The Hiltaba and GRNP occurrences are significant outliers from the species main distribution and a further northerly extension from several early records associated with granite inselbergs across northern Eyre Peninsula.
X	<i>Lachnagrostis aemula</i>	Poaceae	Y							Unsubstantiated record not supported by AVH.
	<b><i>Lachnagrostis filiformis</i></b>	Poaceae	Y	Y	2			1		
	<b><i>Leiocarpa semicalva</i> ssp. <i>semicalva</i></b>	Asteraceae		Y	1	1				
	<b><i>Lemna disperma</i></b>	Araceae	Y	Y	1					
	<b><i>Lepidium oxytrichum</i></b>	Brassicaceae		Y	1					
	<b><i>Lepidium papillosum</i></b>	Brassicaceae		Y	4					
X	<i>Lepidosperma concavum</i>	Cyperaceae	Y	Y						Uncertain ID; <i>Lepidosperma concavum</i> is absent from the Gawler Ranges in AVH and the source of this record is unclear; it may be linked to three unvouchered BS records from GRNP but these are considered to be unreliable; the status of all the Eyre Peninsula specimens at AD previously identified as <i>L. concavum</i> is currently under review.
	<b><i>Lepidosperma viscidum</i></b>	Cyperaceae	Y	Y	2			2	2	
	<b><i>Lepilaena australis</i></b>	Potamogetonaceae	Y	Y	2					
X	<i>Leptorhynchos melanocarpus</i>	Asteraceae		Y						Not actually recorded on the property and presumably only included in the management guidelines list as "likely to occur"; <i>Leptorhynchos melanocarpus</i> has a restricted distribution and its known distribution is confined to Lake Acraman which adjoins the former Yarna section of Hiltaba Station, but is not within the Hiltaba Nature Foundation Reserve; it is specific to gypseous substrates and is unlikely to occur on the property.

X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
	<i>Leptorhynchus tetrachaetus</i>	Asteraceae			1					Omitted from the extract due to incorrect coordinates but added manually for the single AD collection (R. Bates, 20909) with the location "Hiltaba Station".
	<i>Leptorhynchus waitzia</i>	Asteraceae	Y	Y	1					
	<i>Leptospermum coriaceum</i>	Myrtaceae	Y		1					
X	<i>Limosella curdieana</i>	Scrophulariaceae		Y	1			1		Variety indeterminate: may be either of the two varieties below.
	<i>Limosella curdieana</i> var. <i>curdieana</i>	Scrophulariaceae			1					Added manually based on the AD collection (W.R. Barker 3588, sheet AD97925273-A) from c. 4 km by road NNE of Hiltaba Homestead; this record failed to extract automatically because of variation in the expression for the unpublished infraspecific name.
	<i>Limosella curdieana</i> var. <i>Long-pedicelled</i> (W.R.Barker 3577)	Scrophulariaceae			2					Added manually and based on 3 AD collections from the same location as the above ssp. "curdieana" (W.R. Barker 3588(sheet AD97925273-A), 3590, 3592, from c. 4 km by road NNE of Hiltaba Homestead; these records failed to extract automatically because of variation in the expression for the phrase name.
X	<i>Limosella granitica</i>	Scrophulariaceae		Y						Possible misidentification of <i>Limosella australis</i> or presumably only included in the management guidelines list as "likely to occur": there are no collections of <i>L. granitica</i> from the property on AVH nor any BS records, and the nearest vouchered occurrence is on Wallala Hill, 15 km NNE of Wirrulla; an AD collections of <i>Limosella</i> from near the southern boundary of Hiltaba (D.J.Duval 1598, lower granite sheet slopes of Mt Centre) was determined as <i>L. australis</i> by W.R. Barker in Sep 2009.
X	<i>Linguella nana</i>	Orchidaceae	Y							Treated in SA as <i>Pterostylis nana</i> (q.v.); in accordance with CHAH (although awaiting review for the APC).
	<i>Lomandra collina</i>	Asparagaceae		Y	1				1	
	<i>Lomandra effusa</i>	Asparagaceae						1		
	<i>Lycium australe</i>	Solanaceae	Y	Y	1	6	10	1	3	
	<i>Lysiana exocarpi</i> ssp. <i>exocarpi</i>	Loranthaceae		Y		1				
	<i>Lysiana murrayi</i>	Loranthaceae			1					
	<i>Lysimachia arvensis</i>	Primulaceae		Y	1	2		1		Recorded as the synonym <i>Anagallis arvensis</i> .
	<i>Maireana erioclada</i>	Chenopodiaceae	Y	Y	3	2	1	2		
	<i>Maireana georgei</i>	Chenopodiaceae		Y	2		8			
	<i>Maireana oppositifolia</i>	Chenopodiaceae						1		
	<i>Maireana pentatropis</i>	Chenopodiaceae	Y	Y		2	1	1		

X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
	<i>Maireana pyramidata</i>	Chenopodiaceae	Y	Y		2	2	1	5	
	<i>Maireana radiata</i>	Chenopodiaceae	Y		1			2	1	
	<i>Maireana sedifolia</i>	Chenopodiaceae	Y	Y	3	6	10	1	9	
	<i>Maireana trichoptera</i>	Chenopodiaceae	Y	Y	2	2		1	3	
	<i>Maireana turbinata</i>	Chenopodiaceae	Y	Y	3	1		1	2	
	<i>Marrubium vulgare</i>	Lamiaceae		Y	1	3		2	3	
	<i>Medicago minima var. minima</i>	Fabaceae		Y	1	4	11	1	2	
X	<i>Melaleuca adnata</i>	Myrtaceae	Y							Misapplied name synonymous with <i>Melaleuca eleuterostachya</i> (q.v.).
X	<i>Melaleuca armillaris armillaris</i>	Myrtaceae	Y							Presumably in error for ssp. <i>akineta</i> ; since ssp. <i>armillaris</i> , although widely cultivated in SA, is native to NSW.
	<i>Melaleuca armillaris ssp. akineta</i>	Myrtaceae		Y	11	1	3	3	2	
X	<i>Melaleuca eleuterostachya</i>	Myrtaceae	Y	Y						Not actually recorded on the property and presumably only included in the management guidelines list as "likely to occur"; there are no AVH records for Hiltaba, but <i>Melaleuca eleuterostachya</i> probably occurs in sand dunes just south of the southern boundary; an AD collection, T.R.N. Lothian 4047 from "c. 55 km NE of Wirrulla" is probably from this area of dunes based on a "by road" distance from Wirrulla although the derived co-ordinates place it on Kondoolka Station under the assumption of a direct distance; this species was included on the provided list as <i>M. adnata</i> .
X	<i>Melaleuca halmaturorum</i>	Myrtaceae	Y	Y	1					Not actually recorded on the property and presumably only included in the management guidelines list as "likely to occur"; there are no AVH records for Hiltaba, but <i>Melaleuca halmaturina</i> would occur in the salt lake system south of the southern boundary; an AD collection, T.R.N. Lothian 4043 from "c. 55 km NE of Wirrulla" is probably from this area of salt lakes based on a "by road" distance from Wirrulla although the derived co-ordinates place it on Kondoolka Station under the assumption of a direct distance.
	<i>Melaleuca lanceolata</i>	Myrtaceae	Y	Y	2	2		3	1	Incorporates BS records which were all as
X	<i>Melaleuca oxyphylla</i>	Myrtaceae		Y						Not actually recorded on the property and presumably only included in the management guidelines list as "likely to occur"; there are no AVH records for Hiltaba, although the species occurs in GRNP (but well to the southeast) and there as an isolated record (Bates 20803) from north of Lake Acraman.
	<i>Melaleuca pauperiflora ssp. mutica</i>	Myrtaceae	Y	Y	1					
X	<i>Melaleuca raphiophylla</i>	Myrtaceae	Y	Y						Name previously misapplied in SA for <i>Melaleuca armillaris ssp. akineta</i> (q.v.).
	<i>Melaleuca uncinata</i>	Myrtaceae	Y	Y	1		3	7	12	

X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
	<i>Menkea australis</i>	Brassicaceae		Y	1					
	<i>Mesembryanthemum crystallinum</i>	Aizoaceae		Y		1				
	<i>Mesembryanthemum nodiflorum</i>	Aizoaceae		Y	1	2				
	<i>Microseris lanceolata</i>	Asteraceae	Y	Y	1	4				
	<i>Microtis eremaea</i>	Orchidaceae		Y	1					
	<i>Millotia muelleri</i>	Asteraceae	Y	Y	3					
	<i>Millotia myosotidifolia</i>	Asteraceae	Y	Y	4	4				
	<i>Millotia perpusilla</i>	Asteraceae	Y	Y	3	1				
	<i>Millotia tenuifolia</i> var. <i>tenuifolia</i>	Asteraceae	Y	Y	2					
	<i>Minuria cunninghamii</i>	Asteraceae	Y	Y	2	2		1		
	<i>Minuria leptophylla</i>	Asteraceae	Y	Y	6	1				
	<i>Muehlenbeckia adpressa</i>	Polygonaceae		Y	6	1				
	<i>Myoporum platycarpum</i> ssp. <i>platycarpum</i>	Scrophulariaceae		Y	1	3		3	3	Includes 3 BS records as the non-current concept " <i>Myoporum platycarpum</i> (NC)" and listed in the management guidelines as <i>M. platycarpum</i> ; these are equivalent to ssp. <i>platycarpum</i> for this area which is well beyond the distribution of ssp. <i>perbellum</i> found further east on Eyre Peninsula.
X	<i>Myriocephalus stuartii</i>	Asteraceae		Y						Synonym of <i>Polycalymma stuartii</i> (q.v.).
	<i>Myriophyllum verrucosum</i>	Haloragaceae	Y		1					
	<i>Neatostema apulum</i>	Boraginaceae				1		1		
	<i>Neurachne munroi</i>	Poaceae	Y	Y	1					
	<i>Nicotiana glauca</i>	Solanaceae						1		
	<i>Nicotiana maritima</i>	Solanaceae	Y		2					
X	<i>Nicotiana</i> sp.	Solanaceae		Y						Presumably based on records of <i>Nicotiana maritima</i> (q.v.).
	<i>Olearia calcarea</i>	Asteraceae	Y	Y	1	1		2		



X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
	<i>Olearia decurrens</i>	Asteraceae	Y	Y	1	6			9	
	<i>Olearia floribunda</i>	Asteraceae		Y	2			4		
	<i>Olearia muelleri</i>	Asteraceae		Y	1			1	1	
	<i>Olearia pimeleoides</i>	Asteraceae		Y	1					
X	<i>Oligochaetochilus excelsus</i>	Orchidaceae	Y							Treated in SA as <i>Pterostylis excelsa</i> (q.v.) in accordance with CHAH (although awaiting review for the APC).
X	<i>Oligochaetochilus ovatus</i>	Orchidaceae	Y							Treated in SA as <i>Pterostylis ovata</i> (q.v.) in accordance with CHAH (although awaiting review for the APC).
	<i>Omphalolappula concava</i>	Boraginaceae	Y	Y	4	1				
	<i>Ophioglossum lusitanicum</i>	Ophioglossaceae		Y	5	1				
	<i>Osteocarpum salsuginosum</i>	Chenopodiaceae	Y	Y	1			1		
	<i>Ottelia ovalifolia ssp. ovalifolia</i>	Hydrocharitaceae	Y	Y	1					Listings presumably based on the single AD collection (R. Bates 3156) with the location "10 km E of Hiltaba" which is within the reserve; omitted from the AD extract but added manually.
	<i>Oxalis perennans</i>	Oxalidaceae		Y	2	6		1		Incorporates BS records which were all recorded as " <i>Oxalis perennans</i> (NC)".
	<i>Papaver hybridum</i>	Papaveraceae		Y	1					
	<i>Parietaria cardiostegia</i>	Urticaceae		Y	4					
X	<i>Parietaria debilis</i>	Urticaceae		Y		1				Misidentification of <i>Parietaria cardiostegia</i> (q.v.): there are no records of <i>P. debilis</i> for Hiltaba on AVH; the single BS record from 1985, on which the management guidelines listing is presumably based, is recorded as the non-current concept " <i>Parietaria debilis</i> (NC)"; however, it has a corresponding AD voucher (NPGA 8039) which was re-determined in Dec 1990 as <i>P. cardiostegia</i> .
	<i>Paspalidium constrictum</i>	Poaceae	Y			1				The single AD collection was recorded as the synonym <i>Setaria constricta</i> (q.v.).
	<i>Pentameris airoides ssp. airoides</i>	Poaceae		Y	1	5		1	3	Based on records extracted as the synonym <i>Pentaschistis airoides</i> (q.v.).
X	<i>Pentaschistis airoides</i>	Poaceae		Y	1	5				Synonym, now treated as <i>Pentameris airoides ssp. airoides</i> in accordance with APC.
	<i>Phebalium bullatum</i>	Rutaceae	Y	Y	2					
	<i>Philothea linearis</i>	Rutaceae	Y	Y	12	3	2	3	5	
	<i>Pimelea imbricata var. petraea</i>	Thymelaeaceae	Y		1	1				Includes 1 BS record as the synonym <i>Pimelea octophylla ssp. petraea</i> .
	<i>Pimelea micrantha</i>	Thymelaeaceae	Y	Y	2			1		

X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
	<b><i>Pimelea microcephala</i> ssp. <i>microcephala</i></b>	Thymelaeaceae		Y					1	Previously not actually recorded on the property and presumably only included in the management guidelines list as "likely to occur" (and as " <i>P. microcephala</i> " which is equivalent, as ssp. <i>microcephala</i> is the only subspecies in this region); there are no AVH records for Hiltaba, but there are AD collections of <i>P. microcephala</i> ssp. <i>microcephala</i> from Kondoolka Station to the west and Yardea Station to the east.
X	<i>Pimelea octophylla</i>	Thymelaeaceae	Y							Misidentification of <i>Pimelea imbricata</i> var. <i>petraea</i> (q.v.); the single AD collection of <i>P. octophylla</i> from Hiltaba, on which the provided listing is presumably based (R. Bates 3386, 20 km E of Hiltaba), was examined and re-determined as <i>P. imbricata</i> var. <i>petraea</i> .
X	<i>Pimelea octophylla</i> ssp. <i>petraea</i> (NC)	Thymelaeaceae				1				Equivalent to <i>Pimelea imbricata</i> var. <i>petraea</i> (q.v.)
X	<i>Pimelea simplex</i>	Thymelaeaceae	Y			1	1			Indeterminate for subspecies, may include <i>Pimelea simplex</i> ssp. <i>continua</i> .
	<b><i>Pimelea simplex</i> ssp. <i>simplex</i></b>	Thymelaeaceae		Y	4	2				
	<b><i>Pittosporum angustifolium</i></b>	Pittosporaceae		Y	3	5	3	1	1	
	<b><i>Plagiobothrys plurisepaleus</i></b>	Boraginaceae		Y	1					
	<b><i>Plantago drummondii</i></b>	Plantaginaceae		Y		3				
	<b><i>Plantago</i> sp. B (R.Bates 44765)</b>	Plantaginaceae			4			1		Taxon added manually; <i>Plantago</i> sp. B (R.Bates 44765) Toelken was omitted from AVH and AD data extract because the AD collections are databased under a manuscript name.
	<b><i>Pleurosorus rutifolius</i></b>	Aspleniaceae		Y	3	1		1		
	<b><i>Pleurosorus subglandulosus</i></b>	Aspleniaceae		Y	4			1		
	<b><i>Poa annua</i></b>	Poaceae		Y	2					
	<b><i>Podolepis capillaris</i></b>	Asteraceae	Y	Y	6	7	2	2	2	
	<b><i>Podolepis jaceoides</i></b>	Asteraceae	Y	Y	2					
	<b><i>Podolepis tepperi</i></b>	Asteraceae	Y	Y	4	1				
	<b><i>Podotheca angustifolia</i></b>	Asteraceae	Y	Y	1	1				
	<b><i>Pogonolepis muelleriana</i></b>	Asteraceae	Y	Y	4	1				Presumably based on a single collection on AVH with the imprecise locality "Gawler Ranges between Lake Everard and Wirrulla" (CANB, H. Reeve 360) so is not definitely recorded on the property.
X	<i>Polycalymma stuartii</i>	Asteraceae		Y						Not definitely recorded on the property and presumably only included in the management guidelines list as "likely to occur"; there are no AVH records for Hiltaba; probably based on an AD collection (G.E. Gardner, 21 Oct 1999) with the imprecise locality "Gawler Ranges between Hiltaba and Yardea"; as the synonym <i>Myriocephalus stuartii</i> for both this collection and the management

X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
										guidelines listing.
	<b><i>Polycarpon tetraphyllum</i></b>	Caryophyllaceae						1		
X	<i>Pomax aspera</i> Keighery MS	Rubiaceae		Y						The single collection in AVH (CANB 323061, J. Carrick 2448) from Mt St Mungo (on Hiltaba Station) which bears this manuscript name (det. G.J. Keighery Mar 1990) is a duplicate of the original AD collection currently identified as <i>Pomax umbellata</i> (q.v.); AVH interpreted " <i>Pomax aspera</i> Keighery MS" as the APC entity " <i>Pomax</i> sp. Sand dunes (P.G.Wilson 752) NT Herbarium"; the taxonomy of <i>Pomax</i> in the Gawler Ranges needs clarification, but for the time being <i>Pomax</i> is treated here as a single entity under <i>P. umbellata</i> .
	<b><i>Pomax umbellata</i></b>	Rubiaceae		Y	5	2		2		
	<b><i>Prasophyllum occidentale</i></b>	Orchidaceae	Y		1					
X	<i>Prasophyllum occultans</i>	Orchidaceae		Y						Doubtful property record; <i>Prasophyllum occultans</i> is absent from the Gawler Ranges in AVH and the source of this record is unclear.
X	<i>Prasophyllum odoratum</i>	Orchidaceae	Y			1				Species indeterminate; presumably based on the single BS record as the non-current concept " <i>Prasophyllum odoratum</i> (NC)" which is ambiguous and may apply to a number of taxa.
X	<i>Prasophyllum patens</i>	Orchidaceae	Y							Doubtful property record; <i>Prasophyllum patens</i> is absent from the Gawler Ranges in AVH and the source of this record is unclear.
	<b><i>Prostanthera florifera</i></b>	Lamiaceae		Y	5			3	3	
	<b><i>Prostanthera serpyllifolia</i> ssp. <i>microphylla</i></b>	Lamiaceae		Y	1					
	<b><i>Prostanthera striatiflora</i></b>	Lamiaceae		Y	6	3	2	1	2	
	<b><i>Pterostylis excelsa</i></b>	Orchidaceae	Y		1					Included in provided list as <i>Oligochaetochilus excelsus</i> .
	<b><i>Pterostylis nana</i></b>	Orchidaceae	Y	Y	1					Included in provided list as <i>Linguella nana</i> .
	<b><i>Pterostylis ovata</i></b>	Orchidaceae	Y	Y	1	3				Included in provided list as <i>Oligochaetochilus ovatus</i> .
	<b><i>Pterostylis xerophila</i></b>	Orchidaceae	Y	Y		1				Based on unvouchered sighting on 25 Sep 1989 for BS408 Threatened Flora Monitoring (EP) with coordinates which plot 2.9 km ENE Eurilla Hill (summit).
	<b><i>Ptilotus decipiens</i></b>	Amaranthaceae			1					
X	<i>Ptilotus exaltatus</i> var. <i>exaltatus</i>	Amaranthaceae	Y	Y	1	1				Non-current taxonomy: now included in <i>P. nobilis</i> ssp. <i>nobilis</i> (q.v.).
	<b><i>Ptilotus gaudichaudii</i> ssp.</b>	Amaranthaceae	Y		1					

## Bush Blitz – Flora Survey on Hiltaba Station and Gawler Ranges NP, November 2012

X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
	<i>gaudichaudii</i>									
	<i>Ptilotus nobilis ssp. nobilis</i>	Amaranthaceae	Y	Y	1	1		1		Based on 1 AD collection and 1 BS record as the non-current concept " <i>Ptilotus exaltatus</i> var. <i>exaltatus</i> (NC)" which is equivalent in this area; presumably included on management guidelines list and provided list under this name on the same basis.
	<i>Ptilotus obovatus</i>	Amaranthaceae	Y	Y		2		1	1	
	<i>Ptilotus seminudus</i>	Amaranthaceae	Y	Y	1			1		
	<i>Ptilotus sessilifolius</i>	Amaranthaceae	Y	Y		2		1		
	<i>Ptilotus spathulatus</i>	Amaranthaceae	Y	Y		4				
	<i>Pycnosorus pleiocephalus</i>	Asteraceae	Y	Y	2					
	<i>Radvera farragei</i>	Malvaceae						5	2	
	<i>Ranunculus hamatosestosus</i>	Ranunculaceae		Y	3					
	<i>Ranunculus sessiliflorus var. pilulifer</i>	Ranunculaceae		Y	1					
	<i>Rhagodia crassifolia</i>	Chenopodiaceae	Y	Y	1	1		1	1	
	<i>Rhagodia parabolica</i>	Chenopodiaceae	Y	Y	4	9	10	2	3	
	<i>Rhagodia spinescens</i>	Chenopodiaceae	Y			1	5	1	2	Not previously recorded with certainty on Hiltaba: there are no records of <i>Rhagodia spinescens</i> for Hiltaba on AVH; a single BS record from 1985, on which the provided listing is presumably based, has a corresponding AD voucher (NPGA 8069) which was re-determined as <i>Chenopodium curvispicatum</i> on 12 Jul 2012 by P.J. Lang; the unvouchered PU records were regarded as unreliable and the BB collection provides the first definite vouchered record for the property.
	<i>Rhagodia ulicina</i>	Chenopodiaceae	Y		1		2	1	1	
	<i>Rhodanthe oppositifolia ssp. oppositifolia</i>	Asteraceae		Y	1					Inclusion in management guidelines list possibly based on the AD collection (R.Bates 20789) from "Second hill E of Mt. St. Mungo" which was omitted from the AD extract due to incorrect coordinates but added manually.
	<i>Rhodanthe polygalifolia</i>	Asteraceae	Y	Y	5	4			1	
	<i>Rhodanthe pygmaea</i>	Asteraceae	Y	Y	7	5				
	<i>Rhodanthe stricta</i>	Asteraceae	Y	Y	2					
	<i>Rhodanthe stuartiana</i>	Asteraceae	Y		1					
	<i>Rostraria cristata</i>	Poaceae						1		

X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
	<b><i>Rostraria pumila</i></b>	Poaceae		Y	2	3				
X	<i>Rulingia craurophylla</i>	Malvaceae		Y						Synonym; now treated in SA as <i>Commersonia craurophylla</i> (q.v.).
	<b><i>Rumex brownii</i></b>	Polygonaceae		Y	2					
X	<i>Rumex dumosus</i>	Polygonaceae		Y		1				Misidentification, probably of <i>Rumex brownii</i> (q.v.); outside the range of <i>R. dumosus</i> and no records showing on AVH; the single BS record from 1985 (recorded as the non-current concept " <i>Rumex dumosus</i> var. <i>dumosus</i> (NC)" which is equivalent to <i>Rumex dumosus</i> ) is unvouchered; but a second BS record from the same survey trip collected in GRNP has a corresponding AD voucher (NPGA 7945) that was re-determined as <i>R. brownii</i> on Sep 2003; presumably only included in the management guidelines list as "likely to occur" or based on misidentified BS records.
X	<i>Rutidosia multiflora</i>	Asteraceae	Y							Synonym; now treated as <i>Siloxerus multiflorus</i> (q.v.) on APC.
	<b><i>Rytidosperma caespitosum</i></b>	Poaceae		Y	3	4	4		1	AD, BS and PU records as the synonym <i>Austrodanthonia caespitosa</i> .
	<b><i>Sagina maritima</i></b>	Caryophyllaceae		Y	1					
	<b><i>Salsola australis</i></b>	Chenopodiaceae			3			2		Includes records as <i>Salsola tragus</i> (q.v.).
X	<i>Salsola tragus</i>	Chenopodiaceae		Y						All <i>Salsola</i> is being treated as <i>S. australis</i> in SA pending clarification of taxonomy; in accordance with APC.
	<b><u><i>Salvia verbenaca var. vernalis</i></u></b>	Lamiaceae						1	1	
	<b><i>Santalum acuminatum</i></b>	Santalaceae		Y	2	4		2		
	<b><i>Santalum spicatum</i></b>	Santalaceae		Y	2			1		
	<b><i>Sarcozona praecox</i></b>	Aizoaceae	Y	Y	2	4				
X	<i>Scaevola aemula</i>	Goodeniaceae		Y		3	1			Misidentification of <i>Scaevola humilis</i> : the 3 BS records include one with a corresponding AD voucher and this has been subsequently re-determined as <i>S. humilis</i> ; the 2 remaining non-vouchered records are presumed to be this also; there is an AD collection of <i>S. aemula</i> from the adjoining Pinkawillinie CP but there are none from the Gawler Ranges
	<b><i>Scaevola humilis</i></b>	Goodeniaceae		Y	6					
	<b><i>Schenkia australis</i></b>	Gentianaceae		Y	1			1	1	
	<b><i>Schismus barbatus</i></b>	Poaceae		Y	1	8	1	1		
	<b><i>Schoenus nanus</i></b>	Cyperaceae	Y	Y	1					
	<b><i>Scleranthus pungens</i></b>	Caryophyllaceae	Y	Y		1	2	1	2	
	<b><u><i>Sclerolaena brevifolia</i></u></b>	Chenopodiaceae							1	

X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
	<b><i>Sclerolaena diacantha</i></b>	Chenopodiaceae						2		
	<b><i>Sclerolaena obliquicuspis</i></b>	Chenopodiaceae	Y	Y	3		9			
	<b><i>Sclerolaena parviflora</i></b>	Chenopodiaceae	Y	Y	1			1		
	<b><i>Sclerolaena patenticuspis</i></b>	Chenopodiaceae	Y	Y	1	5	1	1		
X	<b><i>Sclerolaena sp.</i></b>	Chenopodiaceae							3	Species indeterminate.
	<b><i>Sclerolaena uniflora</i></b>	Chenopodiaceae	Y	Y	1	1				
	<b><i>Senecio gawlerensis</i></b>	Asteraceae	Y	Y	6	3	7	1	2	
	<b><i>Senecio glossanthus</i></b>	Asteraceae	Y	Y	8	2				Incorporates some BS records as the non-current concept " <i>Senecio glossanthus</i> (NC)".
X	<b><i>Senecio lacustrinus</i></b>	Asteraceae		Y	1					Not definitely recorded on the property; presumably based on the AD collection (G.E. Gardner, 12 Oct 1969) with the imprecise locality "Gawler Ranges. Between Hiltaba and Yardea".
	<b><i>Senna artemisioides ssp. filifolia</i></b>	Fabaceae	Y	Y		4	2	2		
	<b><i>Senna artemisioides ssp. petiolaris</i></b>	Fabaceae	Y	Y	6	1	5	5	1	Includes 1 BS and 5 PU records as the non-current concept " <i>Senna artemisioides ssp. petiolaris</i> (NC)" which is equivalent in this area.
	<b><i>Senna artemisioides ssp. X artemisioides</i></b>	Fabaceae		Y	3	1	1	1		
	<b><i>Senna artemisioides ssp. X coriacea</i></b>	Fabaceae			1	1	4			
	<b><i>Senna cardiosperma ssp. gawlerensis</i></b>	Fabaceae	Y	Y	2	2		1	1	
	<b><i>Senna pleurocarpa var. pleurocarpa</i></b>	Fabaceae	Y			1				
X	<b><i>Setaria constricta</i></b>	Poaceae			1					Now treated as <i>Paspalidium constrictum</i> (q.v.) in APC.
	<b><i>Sida calyxhymania</i></b>	Malvaceae			1					
	<b><i>Sida intricata</i></b>	Malvaceae						1		
	<b><i>Sida phaeotricha</i></b>	Malvaceae		Y	2					
	<b><i>Sida spodochroma</i></b>	Malvaceae			1					
	<b><i>Sigesbeckia australiensis</i></b>	Asteraceae	Y	Y	3	2		2		

X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
	<i>Silene apetala</i>	Caryophyllaceae		Y	1					
	<i>Silene gallica var. gallica</i>	Caryophyllaceae		Y	1					
	<i>Silene nocturna</i>	Caryophyllaceae		Y	1	4		3		
X	<i>Silene sp.</i>	Caryophyllaceae							1	Species indeterminate.
	<i>Siloxerus multiflorus</i>	Asteraceae		Y	2					
	<i>Sisymbrium erysimoides</i>	Brassicaceae		Y	3	7			2	
	<i>Sisymbrium irio</i>	Brassicaceae						1		
	<i>Solanum nigrum</i>	Solanaceae		Y	2					
	<i>Solanum petrophilum</i>	Solanaceae	Y	Y	8	5		4		
	<i>Solanum simile</i>	Solanaceae	Y		1					
	<i>Solanum sturtianum</i>	Solanaceae		Y	1					
	<i>Sonchus oleraceus</i>	Asteraceae		Y	2	8				
	<i>Spergularia brevifolia</i>	Caryophyllaceae		Y	1					
	<i>Spergularia diandra</i>	Caryophyllaceae		Y	4					Confirmed: the AD collections were checked to ensure they were not the similar species <i>Spergularia diandroides</i> which has been recorded further west in the Gawler Ranges.
X	<i>Spyridium bifidum var. bifidum</i>	Rhamnaceae		Y	6					Misapplied name for <i>Spyridium stenophyllum</i> ssp. <i>renovatum</i> (q.v.): <i>S. bifidum var. bifidum</i> is now treated as endemic to the Marble Range area of Eyre Peninsula; there are six AD collections from Hiltaba projected on ALA as <i>S. bifidum var. bifidum</i> and all have been subsequently re-determined as <i>S. stenophyllum</i> ssp. <i>renovatum</i> .
	<i>Spyridium stenophyllum</i> ssp. <i>renovatum</i>	Rhamnaceae			6			5		
	<i>Stackhousia muricata</i> ssp. <i>Perennial</i>	Celastraceae		Y	2					
	<i>Stenanthemum arens</i>	Rhamnaceae		Y	5			22	2	



X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
X	<i>Stenanthemum leucophractum</i>	Rhamnaceae		Y		3				Presumed misidentification of <i>Stenanthemum arens</i> , a species previously included within <i>S. leucophractum</i> ; on Hiltaba Station many records were made of <i>S. arens</i> during the Bush Blitz survey but none of <i>S. leucophractum</i> , although the latter does occur in GRNP; the single record of <i>S. leucophractum</i> for Hiltaba projected on AVH (CANB, J. Carrick 2547) is presumably the basis for the management guidelines listing, however, it is a duplicate of an AD collection subsequently determined as <i>S. arens</i> by the species author, K.R. Thiele in Aug 2005; the 3 BS records are unvouchered and considered unreliable.
	<b><i>Stenopetalum lineare</i></b>	Brassicaceae		Y	1					
	<b><i>Stenopetalum sphaerocarpum</i></b>	Brassicaceae		Y	4					
	<b><i>Swainsona disjuncta</i></b>	Fabaceae	Y		1					
	<b><i>Swainsona formosa</i></b>	Fabaceae	Y			1				
X	<i>Swainsona microcalyx</i>	Fabaceae		Y						Not definitely recorded on Hiltaba: presumably included in management guidelines list as "expected to occur"; possibly based on two AD sheets (J.B. Cleland, Aug 1928 & anon s.dat.) with the imprecise locations "c. 64 km E of Wirrulla Railway Station"; and "c. 40 miles E of Wirrulla", respectively, with assigned coordinates within GRNP (based on a direct distance), but falling within Hiltaba Station using a "by road" distance, but not definitely locatable in either with confidence.
X	<i>Swainsona pyrophila</i>	Fabaceae		Y						Presumably included in management guidelines list as "expected to occur" or based on an imprecise record; there are no AVH records from Hiltaba Station or GRNP, but there is an AD collection from Pinkawillinie CP which is contiguous with GRNP..
	<b><u><i>Tecticornia disarticulata</i></u></b>	Chenopodiaceae						2		
	<b><i>Tecticornia halocnemoides</i> <i>ssp. halocnemoides</i></b>	Chenopodiaceae	Y	Y				2		Not previously recorded with certainty on Hiltaba: inclusion on lists presumably based on CANB collection M.Fagg 371 with imprecise location as "ca 370 km north of Pt Lincoln. ca 80 km south of Kingoonya" which is uncertain as to property, or alternatively based on AD collection (T.J.Hudspith BS1-10813) from 8.1 km direct ESE of Mount St Mungo which falls on Yardea Station.
	<b><u><i>Tecticornia pruinosa</i></u></b>	Chenopodiaceae						4		
	<b><i>Templetonia egena</i></b>	Fabaceae	Y	Y	3			1	2	
	<b><i>Tetragonia eremaea</i></b>	Aizoaceae	Y	Y	1	1				
	<b><i>Teucrium corymbosum</i></b>	Lamiaceae		Y	5		1	2		
	<b><i>Thelymitra alcockiae</i></b>	Orchidaceae		Y						This species was only recently published after the production of these lists and was included on the management guidelines list as <i>Thelymitra</i> "alcockiae"; <i>T. alcockiae</i> is a member of the <i>T. nuda</i> complex and has previously been treated as <i>T. aff. megalyptra</i> ; in the protologue Jeanes (2013) cites an AD collection from within GRNP and provides a distribution map which shows many records extending from northern Eyre Peninsula to the Gawler Ranges; it is likely that most, if not all, of the Gawler Ranges records of <i>T. megalyptra</i> and <i>T. nuda</i> refer to this new species.

## Bush Blitz – Flora Survey on Hiltaba Station and Gawler Ranges NP, November 2012

X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
X	<i>Thelymitra megcalyptra</i>	Orchidaceae	Y	Y	1					Not definitely recorded on Hiltaba: the single AD collection (A.G. Spooner 2387) from Pretty Point on Hiltaba Station, was determined as <i>T. megcalyptra</i> by J. Jeanes in Jul 2002, but it is probably the more recently described <i>T. alcockiae</i> (q.v.) (Jeanes 2013) based on its habitat; <i>T. megcalyptra</i> is a species of mallee habitats and might occur on Hiltaba, but there are no definite records based on an application of Jeanes' new treatment of the <i>T. nuda</i> complex, and the map he provides shows the distribution of <i>T. megcalyptra</i> on Eyre Peninsula as confined to the southern end.
X	<i>Thelymitra nuda</i>	Orchidaceae	Y	Y						Name previously applied in a wider sense to members of the <i>Thelymitra nuda</i> complex; outside the range of <i>T. nuda</i> which is "a species of higher rainfall districts, from southern Eyre Peninsula [and other regions]" (Bates, 2012) and is "found in more mesic near-coastal forests and heathlands (Jeanes, 2013); most likely refers to <i>T. alcockiae</i> (q.v.).
	<b><i>Thysanotus baueri</i></b>	Asparagaceae		Y	1			2	1	
	<b><i>Thysanotus patersonii</i></b>	Asparagaceae		Y	3	3			1	
	<b><i>Trachymene ceratocarpa</i></b>	Araliaceae		Y	1					Recorded as the synonym <i>Uldinia ceratocarpa</i> on the management guidelines list.
	<b><i>Trachymene cyanopetala</i></b>	Araliaceae		Y	2					
	<b><i>Trachymene ornata</i></b>	Araliaceae		Y	4	4				
	<b><i>Trichanthodium skirrophorum</i></b>	Asteraceae	Y	Y		2				
	<b><i>Triglochin isingiana</i></b>	Juncaginaceae	Y		6					
	<b><i>Triglochin longicarpa</i></b>	Juncaginaceae	Y	Y	1					
	<b><i>Triglochin trichophora</i></b>	Juncaginaceae		Y	1					Includes one AD collection as " <i>Triglochin trichophorum</i> ".
X	<i>Trigonella suavissima</i>	Fabaceae		Y	1					Location error: based on an AD collection (R.J. Bates 48848) "Near Thurlga Station", although the imprecise co-ordinates provided (precision given as within 30 km) are centred on Hiltaba Station, the location description places it outside.
	<b><i>Triodia bunicola</i></b>	Poaceae	Y	Y	1					
	<b><i>Triodia irritans</i></b>	Poaceae		Y	1	2	7	2	25	
X	<i>Triodia sp.</i>	Poaceae							1	Species indeterminate.
	<b><i>Tripogon loliiformis</i></b>	Poaceae	Y	Y	3			1		
X	<i>Uldinia ceratocarpa</i>	Araliaceae		Y						Synonym; now treated as <i>Trachymene ceratocarpa</i> (q.v.) on APC.
	<b><i>Urospermum picroides</i></b>	Asteraceae		Y	2			2		
	<b><i>Velleia arguta</i></b>	Goodeniaceae		Y	1					

X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
	<i>Verbena supina</i> var. <i>erecta</i>	Verbenaceae		Y	1					
	<i>Vittadinia gracilis</i>	Asteraceae	Y			1		1		
	<i>Vulpia muralis</i>	Poaceae			1					
	<i>Vulpia myuros</i> f. <i>myuros</i>	Poaceae		Y	1	5		3		
	<i>Wahlenbergia communis</i>	Campanulaceae		Y	2					
	<i>Wahlenbergia gracilentia</i>	Campanulaceae		Y	1					
	<i>Wahlenbergia stricta</i> ssp. <i>stricta</i>	Campanulaceae		Y	2	1	2	1		
	<i>Wahlenbergia tumidifruca</i>	Campanulaceae		Y	2					
	<i>Westringia rigida</i>	Lamiaceae							2	
	<i>Wurmbea australis</i>	Colchicaceae	Y	Y	5					
X	<i>Wurmbea decumbens</i>	Colchicaceae		Y						Presumably included (as " <i>Wurmbea decurrens</i> ") in management guidelines list as "expected to occur"; although there are collections of <i>W. decumbens</i> from further south in the GRNP, Hiltaba is beyond the known range of the species and there are no AVH records from there.
X	<i>Wurmbea decurrens</i>	Colchicaceae		Y						In error for <i>Wurmbea decumbens</i> (q.v.).
	<i>Wurmbea dioica</i> ssp. <i>brevifolia</i>	Colchicaceae	Y	Y	1					
X	<i>Zygophyllum ammophilum</i>	Zygophyllaceae	Y	Y						Misidentification: presumably based on the 4 BS records as the non-current concept " <i>Zygophyllum ammophilum</i> (NC)" (q.v.); no records on AVH from Hiltaba; two of the BS records are non-vouchered and indeterminate, the other two have corresponding AD vouchers (BS1-7990 and BS1-8019) which were both subsequently re-determined as <i>Z. angustifolium</i> by R.M. Barker in Dec 1995.
X	<i>Zygophyllum ammophilum</i> (NC)	Zygophyllaceae				4				Species indeterminate: non-current concept which may be either <i>Zygophyllum ammophilum</i> or <i>Z. simile</i> ; however two of these records are actually misidentifications of <i>Z. angustifolium</i> (see <i>Z. ammophilum</i> annotation above.)
	<i>Zygophyllum angustifolium</i>	Zygophyllaceae	Y	Y	9					
	<i>Zygophyllum apiculatum</i>	Zygophyllaceae	Y	Y	4	4	3	1	3	
X	<i>Zygophyllum aurantiacum</i>	Zygophyllaceae	Y							Presumably based on the 2 BS records as the non-current concept " <i>Zygophyllum aurantiacum</i> (NC)" (q.v.), and indeterminate to subspecies; no records on AVH from Hiltaba.
X	<i>Zygophyllum aurantiacum</i> (NC)	Zygophyllaceae				2	6			Subspecies indeterminate: non-current concept which includes a number of subspecies for this region but is most likely ssp. <i>aurantiacum</i> or ssp. <i>simplicifolium</i> .

X	Taxon	Family	Prov	Mgt	AD	BS	PU	BBv	BBn	Comment
	<b><u>Zygophyllum aurantiacum</u></b> <b><u>ssp. aurantiacum</u></b>	Zygophyllaceae						1	3	
	<b>Zygophyllum crenatum</b>	Zygophyllaceae	Y	Y	1	1				
	<b>Zygophyllum eremaeum</b>	Zygophyllaceae	Y	Y	1		2			
	<b>Zygophyllum iodocarpum</b>	Zygophyllaceae	Y	Y	2	7	2			Includes 7 BS records as the non-current concept " <i>Zygophyllum iodocarpum</i> (NC)" (q.v.).
X	<i>Zygophyllum iodocarpum</i> (NC)	Zygophyllaceae				7	2			Non-current concept equivalent to <i>Z. iodocarpum</i> given the absence of <i>Z. rowelliae</i> in this area.
X	<i>Zygophyllum ovatum</i>	Zygophyllaceae		Y						Not definitely recorded on Hiltaba: there are no AVH records for Hiltaba; presumably included in management guidelines list as "expected to occur" based on occurrences from the adjoining properties of Yardea Station and GRNP.

**Reserve Name: Gawler Ranges National Park**

Number of taxa: 617 (including subspecies and varieties, but without double counting).

**Table 27. Full vascular plant taxon list for Gawler Ranges National Park.**

EPBC: status according to listing under EPBC Act; VU = Vulnerable

State Listed: status according to listing under National Parks &amp; Wildlife Act 1972 schedules; R = Rare, V = Vulnerable

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Adiantaceae	<i>Anogramma leptophylla</i>	Annual Fern				R	
Aizoaceae	<i>Disphyma crassifolium ssp. clavellatum</i>	Round-leaf Pigface					
Aizoaceae	<i>Mesembryanthemum crystallinum</i>	Common Iceplant					Y
Aizoaceae	<i>Mesembryanthemum nodiflorum</i>	Slender Iceplant					Y
Aizoaceae	<i>Sarcozona praecox</i>	Sarcozona					
Aizoaceae	<i>Tetragonia eremaea</i>	Desert Spinach					
Amaranthaceae	<i>Amaranthus cuspidifolius</i>	Boggabri Weed					
Amaranthaceae	<i>Hemichroa diandra</i>	Mallee Hemichroa					
Amaranthaceae	<i>Ptilotus nobilis ssp. nobilis</i>	Regal Foxtail					
Amaranthaceae	<i>Ptilotus seminudus</i>	Rabbit-tails					
Amaranthaceae	<i>Ptilotus sessilifolius</i>	Crimson-tails					
Amaranthaceae	<i>Ptilotus spathulatus</i>	Pussy-tails					
Apiaceae	<i>Apium annuum</i>	Annual Celery					
Apiaceae	<i>Apium prostratum var. filiforme</i>	Native Celery					
Apiaceae	<i>Bupleurum semicompositum</i>	Hare's Ear					Y
Apiaceae	<i>Conium maculatum</i>	Hemlock					Y
Apiaceae	<i>Daucus glochidiatus</i>	Native Carrot					
Apocynaceae	<i>Alyxia buxifolia</i>	Sea Box					
Apocynaceae	<i>Rhyncharrhena linearis</i>	Bush Bean					
Apocynaceae	<i>Sarcostemma viminale ssp. australe</i>	Caustic Bush					

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Araliaceae	<i>Hydrocotyle callicarpa</i>	Tiny Pennywort					
Araliaceae	<i>Hydrocotyle capillaris</i>	Thread Pennywort					
Araliaceae	<i>Hydrocotyle medicaginooides</i>	Medic Pennywort					
Araliaceae	<i>Hydrocotyle pilifera</i> var. <i>glabrata</i>	Buttercup Pennywort					
Araliaceae	<i>Hydrocotyle rugulosa</i>	Mallee Pennywort					
Araliaceae	<i>Hydrocotyle trachycarpa</i>	Wild Parsley					
Araliaceae	<i>Trachymene ceratocarpa</i>	Creeping Carrot					
Araliaceae	<i>Trachymene cyanopetala</i>	Purple Trachymene					
Araliaceae	<i>Trachymene ornata</i>	Cotton-ball Trachymene					
Araliaceae	<i>Trachymene pilosa</i>	Dwarf Trachymene					
Asparagaceae	<i>Arthropodium minus</i>	Small Vanilla-lily					
Asparagaceae	<i>Lomandra collina</i>	Sand Mat-rush					
Asparagaceae	<i>Lomandra effusa</i>	Scented Mat-rush					
Asparagaceae	<i>Lomandra leucocephala</i> ssp. <i>robusta</i>	Woolly Mat-rush					
Asparagaceae	<i>Thysanotus baueri</i>	Mallee Fringe-lily					
Asparagaceae	<i>Thysanotus exiliflorus</i>	Inland Fringe-lily					
Asparagaceae	<i>Thysanotus patersonii</i>	Twining Fringe-lily					
Asphodelaceae	<i>Bulbine semibarbata</i>	Small Leek-lily					
Aspleniaceae	<i>Pleurosorus rutifolius</i>	Blanket Fern					
Aspleniaceae	<i>Pleurosorus subglandulosus</i>	Clubbed Blanket Fern					
Asteraceae	<i>Actinobole uliginosum</i>	Flannel Cudweed					
Asteraceae	<i>Angianthus tomentosus</i>	Hairy Angianthus					
Asteraceae	<i>Arctotheca calendula</i>	Cape Weed					Y
Asteraceae	<i>Asteridea athrixioides</i> f. <i>athrixioides</i>	Wirewort					
Asteraceae	<i>Blennospora drummondii</i>	Dwarf Button-flower					
Asteraceae	<i>Brachyscome ciliaris</i> var. <i>ciliaris</i>	Variable Daisy					

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Asteraceae	<i>Brachyscome lineariloba</i>	Hard-head Daisy					
Asteraceae	<i>Brachyscome perpusilla</i>	Tiny Daisy					
Asteraceae	<i>Brachyscome trachycarpa</i>	Inland Daisy					
Asteraceae	<i>Calotis cymbacantha</i>	Showy Burr-daisy					
Asteraceae	<i>Calotis hispidula</i>	Hairy Burr-daisy					
Asteraceae	<i>Carthamus lanatus</i>	Saffron Thistle					Y
Asteraceae	<i>Cassinia laevis</i>	Curry Bush					
Asteraceae	<i>Centaurea melitensis</i>	Malta Thistle					Y
Asteraceae	<i>Ceratogyne obionoides</i>	Wingwort				R	
Asteraceae	<i>Chrysocephalum apiculatum</i>	Common Everlasting					
Asteraceae	<i>Chrysocephalum semipapposum</i>	Clustered Everlasting					
Asteraceae	<i>Chthonocephalus pseudevax</i>	Ground-heads					
Asteraceae	<i>Cratystylis conocephala</i>	Bluebush Daisy					
Asteraceae	<i>Dittrichia graveolens</i>	Stinkweed	Y				Y
Asteraceae	<i>Elachanthus pusillus</i>	Elachanth					
Asteraceae	<i>Eriochlamys behrii</i>	Woolly Mantle					
Asteraceae	<i>Euchiton sphaericus</i>	Annual Cudweed					
Asteraceae	<i>Gratwickia monochaeta</i>					R	
Asteraceae	<i>Hedypnois rhagadioloides</i>	Cretan Weed					Y
Asteraceae	<i>Helichrysum leucopsideum</i>	Satin Everlasting					
Asteraceae	<i>Hyalosperma demissum</i>	Dwarf Sunray					
Asteraceae	<i>Hyalosperma glutinosum ssp. glutinosum</i>	Golden Sunray					
Asteraceae	<i>Hyalosperma semisterile</i>	Orange Sunray					
Asteraceae	<i>Hypochaeris glabra</i>	Smooth Cat's Ear					Y
Asteraceae	<i>Hypochaeris radicata</i>	Rough Cat's Ear					Y
Asteraceae	<i>Isoetopsis graminifolia</i>	Grass Cushion					



Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Asteraceae	<i>Leiocarpa semicalva ssp. semicalva</i>	Scented Button-bush					
Asteraceae	<i>Leiocarpa websteri</i>	Narrow Plover-daisy					
Asteraceae	<i>Leptorhynchos scaber</i>	Annual Buttons				R	
Asteraceae	<i>Leptorhynchos waitzia</i>	Button Immortelle					
Asteraceae	<i>Microseris lanceolata</i>	Yam Daisy					
Asteraceae	<i>Millotia macrocarpa</i>	Large-fruit Millotia					
Asteraceae	<i>Millotia muelleri</i>	Common Bow-flower					
Asteraceae	<i>Millotia myosotidifolia</i>	Broad-leaf Millotia					
Asteraceae	<i>Millotia perpusilla</i>	Tiny Bow-flower					
Asteraceae	<i>Millotia tenuifolia var. tenuifolia</i>	Soft Millotia					
Asteraceae	<i>Minuria leptophylla</i>	Minnie Daisy					
Asteraceae	<i>Olearia calcarea</i>	Crinkle-leaf Daisy-bush					
Asteraceae	<i>Olearia calcarea X Olearia muelleri</i>	hybrid Daisy-bush	Y				
Asteraceae	<i>Olearia ciliata</i>	Fringed Daisy-bush					
Asteraceae	<i>Olearia decurrens</i>	Winged Daisy-bush					
Asteraceae	<i>Olearia exiguifolia</i>	Lobed-leaf Daisy-bush	Y				
Asteraceae	<i>Olearia floribunda</i>	Heath Daisy-bush	Y				
Asteraceae	<i>Olearia lepidophylla</i>	Clubmoss Daisy-bush					
Asteraceae	<i>Olearia magniflora</i>	Splendid Daisy-bush					
Asteraceae	<i>Olearia muelleri</i>	Mueller's Daisy-bush					
Asteraceae	<i>Olearia pimeleoides</i>	Pimelea Daisy-bush					
Asteraceae	<i>Ozothamnus decurrens</i>	Ridged Bush-everlasting					
Asteraceae	<i>Ozothamnus retusus</i>	Notched Bush-everlasting					
Asteraceae	<i>Podolepis canescens</i>	Grey Copper-wire Daisy					
Asteraceae	<i>Podolepis capillaris</i>	Wiry Podolepis					
Asteraceae	<i>Podolepis jaceoides</i>	Showy Copper-wire Daisy				R	

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Asteraceae	<i>Podolepis tepperi</i>	Delicate Copper-wire Daisy					
Asteraceae	<i>Podotheca angustifolia</i>	Sticky Long-heads					
Asteraceae	<i>Pogonolepis muelleriana</i>	Stiff Cup-flower					
Asteraceae	<i>Pycnosorus pleiocephalus</i>	Soft Billy-buttons					
Asteraceae	<i>Reichardia tingitana</i>	False Sowthistle					Y
Asteraceae	<i>Rhodanthe corymbiflora</i>	Paper Everlasting					
Asteraceae	<i>Rhodanthe floribunda</i>	White Everlasting					
Asteraceae	<i>Rhodanthe laevis</i>	Smooth Daisy					
Asteraceae	<i>Rhodanthe moschata</i>	Musk Daisy					
Asteraceae	<i>Rhodanthe oppositifolia ssp. oppositifolia</i>	Twin-leaf Everlasting				V	
Asteraceae	<i>Rhodanthe polygalifolia</i>	Milkwort Everlasting					
Asteraceae	<i>Rhodanthe pygmaea</i>	Pigmy Daisy					
Asteraceae	<i>Rhodanthe stricta</i>	Slender Everlasting					
Asteraceae	<i>Rhodanthe stuartiana</i>	Clay Everlasting					
Asteraceae	<i>Senecio dolichocephalus</i>	Woodland Groundsel					
Asteraceae	<i>Senecio gawlerensis</i>	Gawler Ranges Groundsel					
Asteraceae	<i>Senecio glossanthus</i>	Annual Groundsel					
Asteraceae	<i>Senecio magnificus</i>	Showy Groundsel					
Asteraceae	<i>Senecio quadridentatus</i>	Cotton Groundsel					
Asteraceae	<i>Senecio spanomerus</i>						
Asteraceae	<i>Sigesbeckia australiensis</i>	Australian Sigesbeckia					
Asteraceae	<i>Siloxerus multiflorus</i>	Small Wrinklewort					
Asteraceae	<i>Sonchus oleraceus</i>	Common Sow-thistle					Y
Asteraceae	<i>Trichanthodium skirrophorum</i>	Woolly Yellow-heads					
Asteraceae	<i>Urospermum picroides</i>	False Hawkbit					Y
Asteraceae	<i>Vittadinia australasica var. australasica</i>	Sticky New Holland Daisy	Y				

## Bush Blitz – Flora Survey on Hiltaba Station and Gawler Ranges NP, November 2012

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Asteraceae	<i>Vittadinia cervicalis</i> var. <i>cervicalis</i>	Waisted New Holland Daisy					
Asteraceae	<i>Vittadinia cuneata</i> var. <i>cuneata</i>	Fuzzy New Holland Daisy					
Asteraceae	<i>Vittadinia dissecta</i> var. <i>hirta</i>	Dissected New Holland Daisy					
Asteraceae	<i>Vittadinia gracilis</i>	Woolly New Holland Daisy					
Asteraceae	<i>Vittadinia megacephala</i>	Giant New Holland Daisy					
Asteraceae	<i>Waitzia acuminata</i> var. <i>acuminata</i>	Orange Immortelle					
Asteraceae	<i>Xerochrysum bracteatum</i>	Golden Everlasting	Y				
Boraginaceae	<i>Buglossoides arvensis</i>	Sheepweed					Y
Boraginaceae	<i>Echium plantagineum</i>	Salvation Jane					Y
Boraginaceae	<i>Embadium uncinatum</i>	Gawler Ranges Slipper-plant					
Boraginaceae	<i>Halgania cyanea</i>	Rough Blue-flower					
Boraginaceae	<i>Heliotropium asperrimum</i>	Rough Heliotrope					
Boraginaceae	<i>Heliotropium europaeum</i>	Common Heliotrope					
Boraginaceae	<i>Neatostema apulum</i>	Hairy Sheepweed					Y
Boraginaceae	<i>Omphalolappula concava</i>	Burr Stickseed					
Boraginaceae	<i>Plagiobothrys plurisepaleus</i>	White Rochelia					
Brassicaceae	<i>Alyssum linifolium</i>	Flax-leaf Alyssum					Y
Brassicaceae	<i>Arabidella nasturtium</i>	Yellow Cress					
Brassicaceae	<i>Arabidella trisecta</i>	Shrubby Cress					
Brassicaceae	<i>Carrichtera annua</i>	Ward's Weed					Y
Brassicaceae	<i>Geococcus pusillus</i>	Earth Cress					
Brassicaceae	<i>Lepidium rotundum</i>	Veined Pepperpress					
Brassicaceae	<i>Menkea australis</i>	Fairy Spectacles					
Brassicaceae	<i>Microlepidium pilosulum</i>	Hairy Shepherd's-purse				R	
Brassicaceae	<i>Sisymbrium erysimoides</i>	Smooth Mustard					Y
Brassicaceae	<i>Sisymbrium irio</i>	London Mustard					Y

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Brassicaceae	<i>Sisymbrium orientale</i>	Indian Hedge Mustard					Y
Brassicaceae	<i>Stenopetalum lineare</i>	Narrow Thread-petal					
Brassicaceae	<i>Stenopetalum sphaerocarpum</i>	Round-fruit Thread-petal					
Campanulaceae	<i>Isotoma petraea</i>	Rock Isotome					
Campanulaceae	<i>Lobelia cleistogamoides</i>					R	
Campanulaceae	<i>Wahlenbergia communis</i>	Tufted Bluebell					
Campanulaceae	<i>Wahlenbergia gracilentia</i>	Annual Bluebell					
Campanulaceae	<i>Wahlenbergia luteola</i>	Yellow-wash Bluebell					
Campanulaceae	<i>Wahlenbergia preissii</i>						
Campanulaceae	<i>Wahlenbergia stricta ssp. stricta</i>	Tall Bluebell					
Campanulaceae	<i>Wahlenbergia tumidifrutta</i>	Swollen-fruit Bluebell					
Caryophyllaceae	<i>Herniaria cinerea</i>	Rupturewort					Y
Caryophyllaceae	<i>Polycarpon tetraphyllum</i>	Four-leaf Allseed					Y
Caryophyllaceae	<i>Sagina apetala</i>	Annual Pearlwort					Y
Caryophyllaceae	<i>Scleranthus pungens</i>	Prickly Knawel					
Caryophyllaceae	<i>Silene apetala</i>	Sand Catchfly					Y
Caryophyllaceae	<i>Silene gallica var. gallica</i>	French Catchfly					Y
Caryophyllaceae	<i>Silene nocturna</i>	Mediterranean Catchfly					Y
Caryophyllaceae	<i>Silene tridentata</i>						Y
Caryophyllaceae	<i>Spergularia bocconeii</i>	Red Sand-spurrey	Y				Y
Caryophyllaceae	<i>Spergularia diandra</i>	Lesser Sand-spurrey					Y
Caryophyllaceae	<i>Spergularia marina</i>	Salt Sand-spurrey					
Casuarinaceae	<i>Allocasuarina helmsii</i>	Helm's Oak-bush					
Casuarinaceae	<i>Allocasuarina muelleriana ssp. muelleriana</i>	Common Oak-bush					
Casuarinaceae	<i>Allocasuarina verticillata</i>	Drooping Sheoak					
Casuarinaceae	<i>Casuarina pauper</i>	Black Oak					

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Celastraceae	<i>Stackhousia muricata</i> ssp. <i>Perennial</i> (W.R.Barker 3641)	Yellow Candles					
Centrolepidaceae	<i>Centrolepis polygyna</i>	Wiry Centrolepis					
Centrolepidaceae	<i>Centrolepis strigosa</i> ssp. <i>strigosa</i>	Hairy Centrolepis					
Chenopodiaceae	<i>Atriplex acutibractea</i> ssp. <i>acutibractea</i>	Pointed Saltbush					
Chenopodiaceae	<i>Atriplex acutibractea</i> ssp. <i>karoniensis</i>	Pointed Saltbush					
Chenopodiaceae	<i>Atriplex eardleyae</i>	Eardley's Saltbush					
Chenopodiaceae	<i>Atriplex stipitata</i>	Bitter Saltbush					
Chenopodiaceae	<i>Atriplex vesicaria</i>	Bladder Saltbush					
Chenopodiaceae	<i>Chenopodium curvispicatum</i>	Cottony Goosefoot					
Chenopodiaceae	<i>Chenopodium desertorum</i> ssp. <i>anidiophyllum</i>	Mallee Goosefoot					
Chenopodiaceae	<i>Chenopodium desertorum</i> ssp. <i>desertorum</i>	Frosted Goosefoot					
Chenopodiaceae	<i>Chenopodium desertorum</i> ssp. <i>microphyllum</i>	Small-leaf Goosefoot					
Chenopodiaceae	<i>Chenopodium murale</i>	Nettle-leaf Goosefoot					Y
Chenopodiaceae	<i>Dysphania cristata</i>	Crested Goosefoot					
Chenopodiaceae	<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	Ruby Saltbush					
Chenopodiaceae	<i>Eriochiton sclerolaenoides</i>	Woolly-fruit Bluebush					
Chenopodiaceae	<i>Maireana brevifolia</i>	Short-leaf Bluebush					
Chenopodiaceae	<i>Maireana enchylaenoides</i>	Wingless Fissure-plant					
Chenopodiaceae	<i>Maireana erioclada</i>	Rosy Bluebush					
Chenopodiaceae	<i>Maireana georgei</i>	Satiny Bluebush					
Chenopodiaceae	<i>Maireana lobiflora</i>	Lobed Bluebush					
Chenopodiaceae	<i>Maireana oppositifolia</i>	Salt Bluebush					
Chenopodiaceae	<i>Maireana pentatropis</i>	Erect Mallee Bluebush					
Chenopodiaceae	<i>Maireana pyramidata</i>	Black Bluebush					
Chenopodiaceae	<i>Maireana radiata</i>	Radiate Bluebush					

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Chenopodiaceae	<i>Maireana sedifolia</i>	Bluebush					
Chenopodiaceae	<i>Maireana trichoptera</i>	Hairy-fruit Bluebush					
Chenopodiaceae	<i>Maireana turbinata</i>	Top-fruit Bluebush					
Chenopodiaceae	<i>Rhagodia candolleana ssp. candolleana</i>	Sea-berry Saltbush					
Chenopodiaceae	<i>Rhagodia crassifolia</i>	Fleshy Saltbush					
Chenopodiaceae	<i>Rhagodia parabolica</i>	Mealy Saltbush					
Chenopodiaceae	<i>Rhagodia preissii ssp. preissii</i>	Mallee Saltbush					
Chenopodiaceae	<i>Rhagodia spinescens</i>	Spiny Saltbush					
Chenopodiaceae	<i>Rhagodia ulicina</i>	Intricate Saltbush					
Chenopodiaceae	<i>Salsola australis</i>	Buckbush					
Chenopodiaceae	<i>Sclerolaena brevifolia</i>	Small-leaf Bindyi					
Chenopodiaceae	<i>Sclerolaena diacantha</i>	Grey Bindyi					
Chenopodiaceae	<i>Sclerolaena obliquicuspis</i>	Oblique-spined Bindyi					
Chenopodiaceae	<i>Sclerolaena parviflora</i>	Small-flower Bindyi					
Chenopodiaceae	<i>Sclerolaena patenticuspis</i>	Spear-fruit Bindyi					
Chenopodiaceae	<i>Sclerolaena uniflora</i>	Small-spine Bindyi					
Chenopodiaceae	<i>Sclerolaena uniflora hybrid</i>						
Chenopodiaceae	<i>Tecticornia indica ssp. leiostachya</i>	Brown-head Samphire					
Colchicaceae	<i>Wurmbea australis</i>	Inland Nancy					
Colchicaceae	<i>Wurmbea decumbens</i>	Trailing Nancy				R	
Colchicaceae	<i>Wurmbea dioica ssp. brevifolia</i>	Early Nancy					
Convolvulaceae	<i>Convolvulus angustissimus ssp. angustissimus</i>	Australian Bindweed					
Convolvulaceae	<i>Convolvulus angustissimus ssp. peninsularum</i>	Grassland Bindweed					
Convolvulaceae	<i>Convolvulus remotus</i>	Grassy Bindweed					
Convolvulaceae	<i>Ipomoea cairica</i>	Mile-a-minute					Y
Convolvulaceae	<i>Wilsonia humilis</i>	Silky Wilsonia					

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Crassulaceae	<i>Crassula colligata</i> ssp. <i>lamprosperma</i>						
Crassulaceae	<i>Crassula colorata</i> var. <i>acuminata</i>	Dense Crassula					
Crassulaceae	<i>Crassula colorata</i> var. <i>colorata</i>	Dense Crassula					
Crassulaceae	<i>Crassula extrorsa</i>						
Crassulaceae	<i>Crassula natans</i> var. <i>minus</i>	Water Crassula					Y
Crassulaceae	<i>Crassula tetramera</i>	Australian Stonecrop					
Cruciferae	<i>Brassica tournefortii</i>	Wild Turnip					Y
Cucurbitaceae	<i>Citrullus lanatus</i>	Bitter Melon					Y
Cucurbitaceae	<i>Cucumis myriocarpus</i>	Paddy Melon					Y
Cupressaceae	<i>Callitris glaucophylla</i>	White Cypress-pine					
Cupressaceae	<i>Callitris gracilis</i>	Southern Cypress Pine					
Cupressaceae	<i>Callitris verrucosa</i>	Scrub Cypress Pine					
Cyperaceae	<i>Cyperus alterniflorus</i>	Umbrella Flat-sedge					
Cyperaceae	<i>Cyperus gymnocaulos</i>	Spiny Flat-sedge					
Cyperaceae	<i>Gahnia lanigera</i>	Black Grass Saw-sedge					
Cyperaceae	<i>Isolepis congrua</i>	Slender Club-rush					
Cyperaceae	<i>Isolepis platycarpa</i>	Flat-fruit Club-rush					
Cyperaceae	<i>Lepidosperma viscidum</i>	Sticky Sword-sedge					
Cyperaceae	<i>Schoenus nanus</i>	Little Bog-rush					
Cyperaceae	<i>Schoenus sculptus</i>	Gimlet Bog-rush				R	
Cyperaceae	<i>Schoenus subaphyllus</i>	Desert Bog-rush					
Dilleniaceae	<i>Hibbertia crispula</i>	Ooldea Guinea-flower			VU	V	
Dilleniaceae	<i>Hibbertia devitata</i>	Smooth Guinea-flower					
Dilleniaceae	<i>Hibbertia virgata</i>	Twiggy Guinea-flower					
Droseraceae	<i>Drosera glanduligera</i>	Scarlet Sundew					
Droseraceae	<i>Drosera macrantha</i> ssp. <i>planchonii</i>	Climbing Sundew					



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Droseraceae	<i>Drosera peltata</i>	Pale Sundew					
Ericaceae	<i>Astroloma conostephioides</i>	Flame Heath					
Ericaceae	<i>Astroloma humifusum</i>	Cranberry Heath					
Ericaceae	<i>Leucopogon cordifolius</i>	Heart-leaf Beard-heath					
Euphorbiaceae	<i>Adriana quadripartita</i>	Coast Bitter-bush					
Euphorbiaceae	<i>Beyeria lechenaultii</i>	Pale Turpentine Bush					
Euphorbiaceae	<i>Euphorbia drummondii</i>						
Euphorbiaceae	<i>Euphorbia tannensis</i> ssp. <i>eremophila</i>	Desert Spurge					
Fabaceae	<i>Acacia ancistrophylla</i> var. <i>lissophylla</i>	Hook-leaf Wattle					
Fabaceae	<i>Acacia beckleri</i> ssp. <i>beckleri</i>	Beckler's Rock Wattle					
Fabaceae	<i>Acacia continua</i>	Thorn Wattle					
Fabaceae	<i>Acacia euthycarpa</i>	Wallowa					
Fabaceae	<i>Acacia halliana</i>	Hall's Wattle					
Fabaceae	<i>Acacia iteaphylla</i>	Flinders Ranges Wattle				R	
Fabaceae	<i>Acacia ligulata</i>	Umbrella Bush					
Fabaceae	<i>Acacia merrallii</i>	Merrall's Wattle					
Fabaceae	<i>Acacia microcarpa</i>	Manna Wattle					
Fabaceae	<i>Acacia notabilis</i>	Notable Wattle					
Fabaceae	<i>Acacia nyssophylla</i>	Spine Bush					
Fabaceae	<i>Acacia oswaldii</i>	Umbrella Wattle					
Fabaceae	<i>Acacia papyrocarpa</i>	Western Myall					
Fabaceae	<i>Acacia rigens</i>	Nealie					
Fabaceae	<i>Acacia rupicola</i>	Rock Wattle					
Fabaceae	<i>Acacia sclerophylla</i> var. <i>sclerophylla</i>	Hard-leaf Wattle					
Fabaceae	<i>Acacia spinescens</i>	Spiny Wattle					
Fabaceae	<i>Acacia tarculensis</i>	Steel Bush					

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Fabaceae	<i>Acacia tetragonophylla</i>	Dead Finish					
Fabaceae	<i>Aotus subspinescens</i>	Mallee Aotus					
Fabaceae	<i>Bossiaea walkeri</i>	Cactus Pea					
Fabaceae	<i>Daviesia benthamii</i> ssp. <i>acanthoclona</i>	Dryland Bitter-pea					
Fabaceae	<i>Daviesia ulicifolia</i> ssp. <i>aridicola</i>	Gorse Bitter-pea					
Fabaceae	<i>Eutaxia microphylla</i>	Common Eutaxia					
Fabaceae	<i>Glycine rubiginosa</i>	Twining Glycine					
Fabaceae	<i>Goodia medicaginea</i>	Western Golden-tip					
Fabaceae	<i>Indigofera australis</i> ssp. <i>hesperia</i>	Austral Indigo					
Fabaceae	<i>Indigofera helmsii</i>	Helm's Indigo					
Fabaceae	<i>Kennedia prostrata</i>	Scarlet Runner					
Fabaceae	<i>Lotus cruentus</i>	Red-flower Lotus					
Fabaceae	<i>Medicago minima</i> var. <i>minima</i>	Little Medic					Y
Fabaceae	<i>Medicago polymorpha</i> var. <i>polymorpha</i>	Burr-medic					Y
Fabaceae	<i>Medicago truncatula</i>	Barrel Medic					Y
Fabaceae	<i>Senna artemisioides</i> ssp. <i>filifolia</i>	Fine-leaf Desert Senna					
Fabaceae	<i>Senna artemisioides</i> ssp. <i>petiolaris</i>						
Fabaceae	<i>Senna artemisioides</i> ssp. <i>X artemisioides</i>	Silver Senna					
Fabaceae	<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna					
Fabaceae	<i>Senna cardiosperma</i> ssp. <i>gawlerensis</i>	Gawler Ranges Senna					
Fabaceae	<i>Senna pleurocarpa</i> var. <i>pleurocarpa</i>	Stripe-pod Senna					
Fabaceae	<i>Swainsona acuticarinata</i>	Burke's Swainson-pea					
Fabaceae	<i>Swainsona microphylla</i>	Small-leaf Swainson-pea					
Fabaceae	<i>Templetonia egena</i>	Broombush Templetonia					
Fabaceae	<i>Trifolium arvense</i> var. <i>arvense</i>	Hare's-foot Clover					Y
Frankeniaceae	<i>Frankenia cordata</i>						

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Frankeniaceae	<i>Frankenia pauciflora</i> var. <i>fruticulosa</i>	Southern Sea-heath					
Frankeniaceae	<i>Frankenia pauciflora</i> var. <i>gunnii</i>	Southern Sea-heath					
Frankeniaceae	<i>Frankenia serpyllifolia</i>	Thyme Sea-heath					
Gentianaceae	<i>Schenkia australis</i>						
Geraniaceae	<i>Erodium carolinianum</i>	Clammy Heron's-bill					
Geraniaceae	<i>Erodium cicutarium</i>	Cut-leaf Heron's-bill					Y
Geraniaceae	<i>Erodium crinitum</i>	Blue Heron's-bill					
Geraniaceae	<i>Erodium cygnorum</i>	Blue Heron's-bill					
Geraniaceae	<i>Erodium janszii</i>	Clammy Heron's-bill					
Geraniaceae	<i>Geranium retrorsum</i>	Grassland Geranium					
Geraniaceae	<i>Geranium solanderi</i> var. <i>solanderi</i>	Austral Geranium					
Geraniaceae	<i>Pelargonium littorale</i>	Native Pelargonium					
Goodeniaceae	<i>Dampiera lanceolata</i> var. <i>lanceolata</i>	Grooved Dampiera					
Goodeniaceae	<i>Dampiera rosmarinifolia</i>	Rosemary Dampiera					
Goodeniaceae	<i>Goodenia glabra</i>	Smooth Goodenia					
Goodeniaceae	<i>Goodenia havilandii</i>	Hill Goodenia					
Goodeniaceae	<i>Goodenia pinnatifida</i>	Cut-leaf Goodenia					
Goodeniaceae	<i>Goodenia pusilliflora</i>	Small-flower Goodenia					
Goodeniaceae	<i>Goodenia quasilibera</i>						
Goodeniaceae	<i>Goodenia robusta</i>	Woolly Goodenia					
Goodeniaceae	<i>Goodenia varia</i>	Sticky Goodenia					
Goodeniaceae	<i>Goodenia willisiana</i>	Silver Goodenia					
Goodeniaceae	<i>Scaevola depauperata</i>	Skeleton Fanflower					
Goodeniaceae	<i>Scaevola humilis</i>	Inland Fanflower					
Goodeniaceae	<i>Scaevola spinescens</i>	Spiny Fanflower					
Goodeniaceae	<i>Velleia arguta</i>	Toothed Velleia					

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Goodeniaceae	<i>Velleia cynopotamica</i>					R	
Gyrostemonaceae	<i>Gyrostemon ramulosus</i>	Bushy Wheel-fruit					
Haloragaceae	<i>Glischrocaryon angustifolium</i>	Golden Pennants					
Haloragaceae	<i>Glischrocaryon flavescens</i>	Yellow Pennants					
Haloragaceae	<i>Gonocarpus elatus</i>	Hill Raspwort					
Haloragaceae	<i>Haloragis gossei</i>	Gosse's Raspwort	Y				
Hemerocallidaceae	<i>Dianella revoluta var. divaricata</i>	Broad-leaf Flax-lily					
Hemerocallidaceae	<i>Dianella revoluta var. revoluta</i>	Black-anther Flax-lily					
Hemerocallidaceae	<i>Tricoryne tenella</i>	Tufted Yellow Rush-lily					
Hypoxidaceae	<i>Hypoxis glabella var. glabella</i>	Tiny Star					
Iridaceae	<i>Moraea setifolia</i>	Thread Iris					Y
Juncaceae	<i>Juncus aridicola</i>	Inland Rush	Y				
Juncaceae	<i>Juncus bufonius</i>	Toad Rush					
Juncaginaceae	<i>Triglochin isingiana</i>	Spurred Arrowgrass					
Juncaginaceae	<i>Triglochin mucronata</i>	Prickly Arrowgrass					
Juncaginaceae	<i>Triglochin nana</i>	Dwarf Arrowgrass					
Lamiaceae	<i>Dicrastylis verticillata</i>	Whorled Sand-sage					
Lamiaceae	<i>Marrubium vulgare</i>	Horehound					Y
Lamiaceae	<i>Prostanthera ammophila</i>	Sand Mintbush					
Lamiaceae	<i>Prostanthera florifera</i>	Gawler Ranges Mintbush					
Lamiaceae	<i>Prostanthera serpyllifolia ssp. microphylla</i>	Small-leaf Mintbush					
Lamiaceae	<i>Prostanthera striatiflora</i>	Striated Mintbush					
Lamiaceae	<i>Salvia verbenaca var. verbenaca</i>	Wild Sage					Y
Lamiaceae	<i>Salvia verbenaca var. vernalis</i>	Wild Sage	Y				Y
Lamiaceae	<i>Teucrium corymbosum</i>	Rock Germander					
Lamiaceae	<i>Teucrium racemosum</i>	Grey Germander					

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Lamiaceae	<i>Teucrium sessiliflorum</i>	Mallee Germander					
Lamiaceae	<i>Westringia rigida</i>	Stiff Westringia					
Lauraceae	<i>Cassytha melantha</i>	Coarse Dodder-laurel					
Lauraceae	<i>Cassytha peninsularis</i>	Peninsula Dodder-laurel					
Lauraceae	<i>Cassytha pubescens</i>	Downy Dodder-laurel					
Linaceae	<i>Linum marginale</i>	Native Flax					
Loganiaceae	<i>Logania nuda</i>	Leafless Logania					
Loganiaceae	<i>Logania ovata</i>	Oval-leaf Logania					
Loganiaceae	<i>Phyllangium sulcatum</i>					V	
Loranthaceae	<i>Amyema melaleucae</i>	Tea-tree Mistletoe					
Loranthaceae	<i>Amyema miquelii</i>	Box Mistletoe					
Loranthaceae	<i>Amyema miraculosa ssp. boormanii</i>	Fleshy Mistletoe					
Loranthaceae	<i>Amyema quandang var. quandang</i>	Grey Mistletoe					
Loranthaceae	<i>Lysiana exocarpi ssp. exocarpi</i>	Harlequin Mistletoe					
Malvaceae	<i>Alyogyne hakeifolia</i>	Hakea-leaf Hibiscus					
Malvaceae	<i>Alyogyne huegelii</i>	Native Hibiscus					
Malvaceae	<i>Commersonia tatei</i>	Trailing Commersonia					
Malvaceae	<i>Lasiopetalum behrii</i>	Pink Velvet-bush					
Malvaceae	<i>Lawrenzia glomerata</i>	Clustered Lawrenzia	Y				
Malvaceae	<i>Lawrenzia squamata</i>	Thorny Lawrenzia					
Malvaceae	<i>Malva parviflora</i>	Small-flower Marshmallow					Y
Malvaceae	<i>Sida calyxhymenia</i>	Tall Sida					
Malvaceae	<i>Sida intricata</i>	Twiggy Sida					
Malvaceae	<i>Sida petrophila</i>	Rock Sida					
Malvaceae	<i>Sida phaeotricha</i>	Hill Sida					
Myrtaceae	<i>Babingtonia behrii</i>	Silver Broombush					

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Myrtaceae	<i>Baeckea crassifolia</i>	Desert Baeckea					
Myrtaceae	<i>Calytrix involucreta</i>	Cup Fringe-myrtle					
Myrtaceae	<i>Calytrix tetragona</i>	Common Fringe-myrtle					
Myrtaceae	<i>Darwinia salina</i>	Salt Darwinia					
Myrtaceae	<i>Eucalyptus albopurpurea</i>	Purple-flowered Mallee Box					
Myrtaceae	<i>Eucalyptus brachycalyx</i>	Gilja					
Myrtaceae	<i>Eucalyptus calcareana</i>	Nundroo Mallee					
Myrtaceae	<i>Eucalyptus capitanea</i>	Desert Ridge-fruited Mallee					
Myrtaceae	<i>Eucalyptus concinna</i>	Victoria Desert Mallee					
Myrtaceae	<i>Eucalyptus dumosa</i>	White Mallee					
Myrtaceae	<i>Eucalyptus gracilis</i>	Yorrell					
Myrtaceae	<i>Eucalyptus gypsophila</i>	Kopi Mallee	Y				
Myrtaceae	<i>Eucalyptus incrassata</i>	Ridge-fruited Mallee					
Myrtaceae	<i>Eucalyptus lansdowneana</i>	Crimson Mallee					
Myrtaceae	<i>Eucalyptus leptophylla</i>	Narrow-leaf Red Mallee					
Myrtaceae	<i>Eucalyptus odorata</i>	Peppermint Box					
Myrtaceae	<i>Eucalyptus oleosa</i>	Red Mallee					
Myrtaceae	<i>Eucalyptus phenax ssp. phenax</i>	White Mallee					
Myrtaceae	<i>Eucalyptus porosa</i>	Mallee Box					
Myrtaceae	<i>Eucalyptus socialis</i> -- <i>Eucalyptus yumbarrana ssp. yumbarrana</i>	intergrade	Y				
Myrtaceae	<i>Eucalyptus socialis ssp. eucentrica</i>						
Myrtaceae	<i>Eucalyptus socialis ssp. socialis</i>	Beaked Red Mallee					
Myrtaceae	<i>Eucalyptus socialis ssp. victoriensis</i>						
Myrtaceae	<i>Eucalyptus socialis ssp. viridans</i>	Beaked Red Mallee					
Myrtaceae	<i>Eucalyptus trivalva</i>	Desert Mallee					

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Myrtaceae	<i>Eucalyptus yumbarrana</i>	Yumbarra Mallee					
Myrtaceae	<i>Homoranthus wilhelmii</i>	Wilhelm's Homoranthus					
Myrtaceae	<i>Leptospermum coriaceum</i>	Dune Tea-tree					
Myrtaceae	<i>Melaleuca armillaris ssp. akineta</i>	Needle-leaf Honey-myrtle				R	
Myrtaceae	<i>Melaleuca eleuterostachya</i>	Hummock Honey-myrtle					
Myrtaceae	<i>Melaleuca halmaturorum</i>	Swamp Paper-bark					
Myrtaceae	<i>Melaleuca lanceolata</i>	Dryland Tea-tree					
Myrtaceae	<i>Melaleuca leiocarpa</i>	Pungent Honey-myrtle				R	
Myrtaceae	<i>Melaleuca oxyphylla</i>	Pointed-leaf Honey-myrtle				R	
Myrtaceae	<i>Melaleuca pauperiflora ssp. mutica</i>	Boree					
Myrtaceae	<i>Melaleuca uncinata</i>	Broombush					
Ophioglossaceae	<i>Ophioglossum lusitanicum</i>	Austral Adder's-tongue					
Orchidaceae	<i>Acianthus pusillus</i>	Mosquito Orchid					
Orchidaceae	<i>Caladenia aurulenta</i>	Long Golden Club Spider-orchid					
Orchidaceae	<i>Caladenia bicallata</i>	Limestone Spider-orchid					
Orchidaceae	<i>Caladenia capillata</i>	Wispy Spider-orchid					
Orchidaceae	<i>Caladenia cardiochila</i>	Heart-lip Spider-orchid					
Orchidaceae	<i>Caladenia interanea</i>	Inland Green-comb Spider Orchid					
Orchidaceae	<i>Caladenia septuosa</i>	Eyre Peninsula Spider-orchid					
Orchidaceae	<i>Caladenia stricta</i>	Upright Caladenia					
Orchidaceae	<i>Caladenia tensa</i>	Inland Green-comb Spider-orchid			EN		
Orchidaceae	<i>Caladenia toxochila</i>	Bow-lip Spider-orchid					
Orchidaceae	<i>Hymenochilus muticus</i>	Midget Greenhood					
Orchidaceae	<i>Microtis arenaria</i>	Notched Onion-orchid					
Orchidaceae	<i>Pheladenia deformis</i>	Bluebeard Orchid					
Orchidaceae	<i>Prasophyllum occidentale</i>	Plains Leek-orchid					



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Orchidaceae	<i>Pterostylis excelsa</i>	Tall Rufous-hood					
Orchidaceae	<i>Pterostylis mutica</i>	Midget Greenhood					
Orchidaceae	<i>Pterostylis nana</i>	Dwarf Greenhood					
Orchidaceae	<i>Pterostylis ovata</i>	Gawler Ranges Greenhood					
Orchidaceae	<i>Pterostylis pusilla</i>	Small Rusty-hood					
Orchidaceae	<i>Pterostylis sanguinea</i>	Blood Greenhood					
Orchidaceae	<i>Pterostylis xerophila</i>	Desert Greenhood			VU	V	
Orchidaceae	<i>Thelymitra alcockiae</i>	Alcock's Sun-orchid					
Orchidaceae	<i>Thelymitra antennifera</i>	Lemon Sun-orchid					
Orchidaceae	<i>Thelymitra luteocilium</i>	Yellow-tuft Sun Orchid					
Oxalidaceae	<i>Oxalis perennans</i>	Native Sorrel					
Papaveraceae	<i>Papaver hybridum</i>	Rough Poppy					Y
Phyllanthaceae	<i>Poranthera microphylla</i>	Small Poranthera					
Pittosporaceae	<i>Billardiera cymosa</i>	Sweet Apple-berry					
Pittosporaceae	<i>Bursaria spinosa ssp. spinosa</i>	Sweet Bursaria					
Pittosporaceae	<i>Pittosporum angustifolium</i>	Native Apricot					
Plantaginaceae	<i>Plantago coronopus ssp. commutata</i>	Bucks-horn Plantain	Y				Y
Plantaginaceae	<i>Plantago drummondii</i>	Dark Plantain					
Plantaginaceae	<i>Plantago sp. B (R.Bates 44765)</i>	Little Plantain					
Plumbaginaceae	<i>Limonium lobatum</i>	Winged Sea-lavender					Y
Poaceae	<i>Alopecurus geniculatus</i>	Marsh Fox-tail					Y
Poaceae	<i>Aristida contorta</i>	Curly Wire-grass					
Poaceae	<i>Austrostipa acrociliata</i>	Graceful Spear-grass					
Poaceae	<i>Austrostipa drummondii</i>	Cottony Spear-grass					
Poaceae	<i>Austrostipa elegantissima</i>	Feather Spear-grass					
Poaceae	<i>Austrostipa eremophila</i>	Rusty Spear-grass					

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Poaceae	<i>Austrostipa flavescens</i>	Coast Spear-grass					
Poaceae	<i>Austrostipa hemipogon</i>	Half-beard Spear-grass					
Poaceae	<i>Austrostipa nitida</i>	Balcarra Spear-grass					
Poaceae	<i>Austrostipa nodosa</i>	Tall Spear-grass					
Poaceae	<i>Austrostipa pilata</i>	Prickly Spear-grass				V	
Poaceae	<i>Austrostipa platychaeta</i>	Flat-awn Spear-grass					
Poaceae	<i>Austrostipa puberula</i>	Fine-hairy Spear-grass					
Poaceae	<i>Austrostipa scabra ssp. falcata</i>	Slender Spear-grass					
Poaceae	<i>Austrostipa scabra ssp. scabra</i>	Rough Spear-grass					
Poaceae	<i>Austrostipa trichophylla</i>						
Poaceae	<i>Avellinia michelii</i>	Avellinia					Y
Poaceae	<i>Avena barbata</i>	Bearded Oat					Y
Poaceae	<i>Briza minor</i>	Lesser Quaking-grass					Y
Poaceae	<i>Bromus madritensis</i>	Compact Brome					Y
Poaceae	<i>Bromus rubens</i>	Red Brome					Y
Poaceae	<i>Cymbopogon obtectus</i>	Silky-head Lemon-grass					
Poaceae	<i>Hordeum glaucum</i>	Blue Barley-grass					Y
Poaceae	<i>Hordeum leporinum</i>	Wall Barley-grass					Y
Poaceae	<i>Lachnagrostis filiformis</i>	Common Blown-grass					
Poaceae	<i>Lamarckia aurea</i>	Toothbrush Grass					Y
Poaceae	<i>Neurachne alopecuroides</i>	Foxtail Mulga Grass					
Poaceae	<i>Pentameris airoides ssp. airoides</i>	False Hair-grass					Y
Poaceae	<i>Rostraria cristata</i>	Annual Cat's-tail					Y
Poaceae	<i>Rostraria pumila</i>	Tiny Bristle-grass					Y
Poaceae	<i>Rytidosperma caespitosum</i>	Ringed Wallaby-grass; Common Wallaby-grass					

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Poaceae	<i>Rytidosperma setaceum</i>	Small-flower Wallaby-grass					
Poaceae	<i>Schismus barbatus</i>	Arabian Grass					Y
Poaceae	<i>Themeda triandra</i>	Kangaroo Grass					
Poaceae	<i>Triodia bunicola</i>	Flinders Ranges Spinifex					
Poaceae	<i>Triodia irritans</i>	Spinifex					
Poaceae	<i>Triodia lanata</i>	Woolly Spinifex					
Poaceae	<i>Triodia scariosa</i>	Spinifex					
Poaceae	<i>Tripogon loliiformis</i>	Five-minute Grass					
Poaceae	<i>Vulpia muralis</i>	Wall Fescue					Y
Poaceae	<i>Vulpia myuros f. myuros</i>	Rat's-tail Fescue					Y
Polygalaceae	<i>Comesperma scoparium</i>	Broom Milkwort					
Polygalaceae	<i>Comesperma viscidulum</i>	Varnished Milkwort					
Polygalaceae	<i>Comesperma volubile</i>	Love Creeper					
Polygonaceae	<i>Muehlenbeckia adpressa</i>	Climbing Lignum					
Polygonaceae	<i>Rumex brownii</i>	Slender Dock					
Portulacaceae	<i>Calandrinia calyptrata</i>	Pink Purslane					
Portulacaceae	<i>Calandrinia disperma</i>	Two-seed Purslane					
Portulacaceae	<i>Calandrinia eremaea</i>	Dryland Purslane					
Portulacaceae	<i>Calandrinia granulifera</i>	Pigmy Purslane					
Potamogetonaceae	<i>Lepilaena australis</i>	Austral Water-mat					
Primulaceae	<i>Lysimachia arvensis</i>	Pimpernel					Y
Proteaceae	<i>Grevillea anethifolia</i>					R	
Proteaceae	<i>Grevillea aspera</i>	Rough Grevillea					
Proteaceae	<i>Grevillea huegelii</i>	Comb Grevillea					
Proteaceae	<i>Grevillea juncifolia ssp. juncifolia</i>	Honeysuckle Grevillea					
Proteaceae	<i>Grevillea parallelinervis</i>	Gawler Ranges Grevillea					

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Proteaceae	<i>Grevillea pterosperma</i>	Dune Grevillea					
Proteaceae	<i>Hakea cycloptera</i>	Elm-seed Hakea					
Proteaceae	<i>Hakea francisiana</i>	Bottlebrush Hakea					
Proteaceae	<i>Hakea leucoptera</i> ssp. <i>leucoptera</i>	Silver Needlewood					
Proteaceae	<i>Hakea mitchellii</i>	Heath Needlebush					
Proteaceae	<i>Hakea vittata</i>	Limestone Needlebush					
Pteridaceae	<i>Cheilanthes austrotenuifolia</i>	Annual Rock-fern					
Pteridaceae	<i>Cheilanthes distans</i>	Bristly Cloak-fern					
Pteridaceae	<i>Cheilanthes lasiophylla</i>	Woolly Cloak-fern					
Pteridaceae	<i>Cheilanthes sieberi</i> ssp. <i>sieberi</i>	Narrow Rock-fern					
Ranunculaceae	<i>Clematis microphylla</i>	Old Man's Beard					
Ranunculaceae	<i>Ranunculus hamatosetosus</i>	Hill Buttercup					
Ranunculaceae	<i>Ranunculus sessiliflorus</i> var. <i>sessiliflorus</i>	Annual Buttercup					
Rhamnaceae	<i>Cryptandra myriantha</i>	Heath Cryptandra					
Rhamnaceae	<i>Cryptandra</i> sp. <i>Hiltaba</i> (Anon. NPGA-8100)						
Rhamnaceae	<i>Pomaderris paniculosa</i> ssp. <i>paniculosa</i>	Mallee Pomaderris					
Rhamnaceae	<i>Stenanthemum leucophractum</i>	White Cryptandra					
Rhamnaceae	<i>Stenanthemum notiale</i> ssp. <i>notiale</i>	Trident Spyridium					
Rubiaceae	<i>Galium australe</i>	Tangled Bedstraw					
Rubiaceae	<i>Galium leptogonium</i>	Reflexed Bedstraw					
Rubiaceae	<i>Galium microlobum</i>	Rough Bedstraw					
Rubiaceae	<i>Galium murale</i>	Small Bedstraw					Y
Rubiaceae	<i>Galium spurium</i>	Bedstraw					Y
Rubiaceae	<i>Opercularia turpis</i>	Twiggy Stinkweed					
Rubiaceae	<i>Opercularia varia</i>	Variable Stinkweed					
Rubiaceae	<i>Pomax umbellata</i>	Pomax					

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Rutaceae	<i>Boronia coerulescens ssp. coerulescens</i>	Blue Boronia					
Rutaceae	<i>Correa backhouseana var. coriacea</i>	Thick-leaf Correa					
Rutaceae	<i>Geijera linearifolia</i>	Sheep Bush					
Rutaceae	<i>Microcybe multiflora ssp. multiflora</i>	Small-leaf Microcybe					
Rutaceae	<i>Phebalium bullatum</i>	Silvery Phebalium					
Rutaceae	<i>Philotheca linearis</i>	Narrow-leaf Wax-flower					
Santalaceae	<i>Exocarpos aphyllus</i>	Leafless Cherry					
Santalaceae	<i>Exocarpos sparteus</i>	Slender Cherry					
Santalaceae	<i>Leptomeria preissiana</i>					E	
Santalaceae	<i>Santalum acuminatum</i>	Quandong					
Santalaceae	<i>Santalum murrayanum</i>	Bitter Quandong					
Santalaceae	<i>Santalum spicatum</i>	Sandalwood				V	
Sapindaceae	<i>Alectryon oleifolius ssp. canescens</i>	Bullock Bush					
Sapindaceae	<i>Dodonaea baueri</i>	Crinkled Hop-bush					
Sapindaceae	<i>Dodonaea bursariifolia</i>	Small Hop-bush					
Sapindaceae	<i>Dodonaea hexandra</i>	Horned Hop-bush					
Sapindaceae	<i>Dodonaea intricata</i>	Gawler Ranges Hop-bush					
Sapindaceae	<i>Dodonaea lobulata</i>	Lobed-leaf Hop-bush					
Sapindaceae	<i>Dodonaea stenozyga</i>	Desert Hop-bush					
Sapindaceae	<i>Dodonaea tepperi</i>	Streaked Hop-bush					
Sapindaceae	<i>Dodonaea viscosa ssp. angustissima</i>	Narrow-leaf Hop-bush					
Scrophulariaceae	<i>Eremophila alternifolia</i>	Narrow-leaf Emubush					
Scrophulariaceae	<i>Eremophila behriana</i>	Rough Emubush					
Scrophulariaceae	<i>Eremophila crassifolia</i>	Thick-leaf Emubush					
Scrophulariaceae	<i>Eremophila deserti</i>	Turkey-bush					
Scrophulariaceae	<i>Eremophila glabra ssp. glabra</i>	Tar Bush					

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Scrophulariaceae	<i>Eremophila longifolia</i>	Weeping Emubush					
Scrophulariaceae	<i>Eremophila maculata ssp. maculata</i>	Spotted Emubush					
Scrophulariaceae	<i>Eremophila scoparia</i>	Broom Emubush					
Scrophulariaceae	<i>Eremophila serrulata</i>	Green Emubush					
Scrophulariaceae	<i>Eremophila subfloccosa ssp. lanata</i>	Woolly Emubush					
Scrophulariaceae	<i>Eremophila weldii</i>	Purple Emubush					
Scrophulariaceae	<i>Limosella australis</i>	Australian Mudwort					
Scrophulariaceae	<i>Limosella curdieana var. Long-pedicelled (W.R.Barker 3577)</i>	Large Mudwort					
Scrophulariaceae	<i>Myoporum montanum</i>	Native Myrtle					
Scrophulariaceae	<i>Myoporum platycarpum ssp. platycarpum</i>	False Sandalwood					
Scrophulariaceae	<i>Zaluzianskya divaricata</i>	Spreading Night-phlox					Y
Solanaceae	<i>Anthocercis anisantha ssp. collina</i>	Gawler Ranges Ray-flower					
Solanaceae	<i>Cyphanthera myosotidea</i>	Small-leaf Ray-flower					
Solanaceae	<i>Duboisia hopwoodii</i>	Pituri					
Solanaceae	<i>Grammosolen truncatus</i>	Shrubby Ray-flower					
Solanaceae	<i>Lycium australe</i>	Australian Boxthorn					
Solanaceae	<i>Lycium ferocissimum</i>	African Boxthorn					Y
Solanaceae	<i>Nicotiana glauca</i>	Tree Tobacco					Y
Solanaceae	<i>Nicotiana goodspeedii</i>	Small-flower Tobacco					
Solanaceae	<i>Nicotiana maritima</i>	Coast Tobacco					
Solanaceae	<i>Nicotiana occidentalis ssp. obliqua</i>	Western Tobacco					
Solanaceae	<i>Nicotiana velutina</i>	Velvet Tobacco					
Solanaceae	<i>Solanum coactiliferum</i>	Tomato-bush					
Solanaceae	<i>Solanum nigrum</i>	Black Nightshade					Y
Solanaceae	<i>Solanum petrophilum</i>	Rock Nightshade					

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Solanaceae	<i>Solanum simile</i>	Kangaroo Apple					
Solanaceae	<i>Solanum sturtianum</i>	Sturt's Nightshade					
Stylidiaceae	<i>Levenhookia dubia</i>	Hairy Stylewort					
Thymelaeaceae	<i>Pimelea curviflora</i> var. <i>gracilis</i>	Curved Riceflower					
Thymelaeaceae	<i>Pimelea imbricata</i> var. <i>petraea</i>	Rock Woolly Riceflower					
Thymelaeaceae	<i>Pimelea micrantha</i>	Silky Riceflower					
Thymelaeaceae	<i>Pimelea microcephala</i> ssp. <i>microcephala</i>	Mallee Riceflower					
Thymelaeaceae	<i>Pimelea octophylla</i>	Woolly Riceflower					
Thymelaeaceae	<i>Pimelea petrophila</i>	Rock Riceflower					
Thymelaeaceae	<i>Pimelea simplex</i> ssp. <i>continua</i>	Desert Riceflower					
Thymelaeaceae	<i>Pimelea simplex</i> ssp. <i>simplex</i>	Desert Riceflower					
Thymelaeaceae	<i>Pimelea trichostachya</i>	Spiked Riceflower					
Urticaceae	<i>Parietaria cardiostegia</i>	Mallee Smooth-nettle					
Urticaceae	<i>Parietaria debilis</i>	Smooth-nettle					
Violaceae	<i>Hybanthus floribundus</i> ssp. <i>floribundus</i>	Shrub Violet					
Violaceae	<i>Hybanthus monopetalus</i>	Slender Violet					
Zygophyllaceae	<i>Nitraria billardierei</i>	Nitre-bush					
Zygophyllaceae	<i>Zygophyllum ammophilum</i>	Sand Twinleaf					
Zygophyllaceae	<i>Zygophyllum angustifolium</i>	Scrambling Twinleaf					
Zygophyllaceae	<i>Zygophyllum apiculatum</i>	Pointed Twinleaf					
Zygophyllaceae	<i>Zygophyllum aurantiacum</i> ssp. <i>aurantiacum</i>	Shrubby Twinleaf					
Zygophyllaceae	<i>Zygophyllum aurantiacum</i> ssp. <i>simplicifolium</i>						
Zygophyllaceae	<i>Zygophyllum crenatum</i>	Notched Twinleaf					
Zygophyllaceae	<i>Zygophyllum ermaeum</i>						
Zygophyllaceae	<i>Zygophyllum ermaeum</i> (NC)	Pale-flower Twinleaf					
Zygophyllaceae	<i>Zygophyllum glaucum</i>	Pale Twinleaf					

Family	Taxon	Common Name	New record	Putative new sp.	EPBC Listed	State Listed	Weed
Zygophyllaceae	<i>Zygophyllum iodocarpum</i>	Violet Twinleaf					
Zygophyllaceae	<i>Zygophyllum ovatum</i>	Dwarf Twinleaf					
Zygophyllaceae	<i>Zygophyllum simile</i>	White Twinleaf					



**Table 28. Annotated list of vascular plant taxa recorded for Gawler Ranges National Park.**

X = excluded

Underlined type indicates records from the BB Survey not present in the other sources.

**Prov** = provided list; **AD** = State Herbarium of SA collections; **BS** = Biological Survey records not matching previous;

**PU** = Pastoral Unit sight records; **BBv** = Bush Blitz survey voucher collection; **BBn** = Bush Blitz survey non-vouchered record.

X Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
<u><i>Acacia ancistrophylla</i> var. <i>lissophylla</i></u>	Fabaceae	Y	3	1	4			
X <i>Acacia aneura</i>	Fabaceae	Y						Not definitely recorded within GRNP: a single record on AVH (NSW, G. Gardiner, 5 Aug 1969) has an imprecise location ("Gawler Ranges, Thurlga Road" which is not clearly located within the GRNP.
X <i>Acacia auripila</i>	Fabaceae	Y						Presumed error based on records identified as " <i>Acacia</i> sp. aff. <i>rigens</i> " which in AVH is treated as a synonym of the Western Australian species <i>A. auripila</i> . However, records from the Gawler Ranges identified as " <i>Acacia</i> sp. aff. <i>rigens</i> " would be the atypical flat-phyllode form of <i>A. rigens</i> from Eyre Peninsula which is not currently recognised as a distinct taxon.
<u><i>Acacia beckleri</i> ssp. <i>beckleri</i></u>	Fabaceae	Y	1	14	7		7	All Gawler Ranges occurrences are this subspecies; incorporates BS records as <i>Acacia beckleri</i> (NC) and AD & PU records identified only to species as <i>A. beckleri</i> .
X <i>Acacia calamifolia</i>	Fabaceae	Y	6		1			Presumed misidentification of <i>Acacia euthycarpa</i> ; the related species <i>A. calamifolia</i> does not occur on Eyre Peninsula, although it is often confused with the former.
<u><i>Acacia continua</i></u>	Fabaceae	Y	19	17	4	1	2	
<u><i>Acacia euthycarpa</i></u>	Fabaceae	Y	53	6	1	3	1	Incorporates 6 AD records and 1 PU record as <i>Acacia calamifolia</i> and 4 BS records as the non-current concept " <i>Acacia calamifolia</i> (NC)"; all are presumed to be <i>A. euthycarpa</i> , as <i>A. calamifolia</i> does not occur on Eyre Peninsula. Includes the wispy habit form <i>A. aff. euthycarpa</i> (see section 3.3. in text).
<u><i>Acacia halliana</i></u>	Fabaceae	Y	9					
<u><i>Acacia iteaphylla</i></u>	Fabaceae	Y	18	4	2			
<u><i>Acacia ligulata</i></u>	Fabaceae	Y	18	10	29	1	3	Includes BS records as the non-current concept " <i>Acacia ligulata</i> (NC)"; since <i>Acacia cupularis</i> has not been recorded from Gawler Ranges, these are all presumed to be <i>A. ligulata</i> .
<u><i>Acacia merrallii</i></u>	Fabaceae	Y	1			1	1	
<u><i>Acacia microcarpa</i></u>	Fabaceae	Y	2	3	1		1	
<u><i>Acacia notabilis</i></u>	Fabaceae	Y	9	8	4	1		
<u><i>Acacia nyssophylla</i></u>	Fabaceae	Y	5	5	13	2		
<u><i>Acacia oswaldii</i></u>	Fabaceae	Y	3	16	31	1	1	
<u><i>Acacia papyrocarpa</i></u>	Fabaceae	Y	4	7	18			

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<i>Acacia rigens</i>	Fabaceae	Y	23	5	1	2	1	
	<i>Acacia rupicola</i>	Fabaceae	Y	4					
	<i>Acacia sclerophylla</i> var. <i>sclerophylla</i>	Fabaceae	Y	3	2		1		
	<i>Acacia spinescens</i>	Fabaceae	Y	2	1			1	
	<i>Acacia tarculensis</i>	Fabaceae		3					
	<i>Acacia tetragonophylla</i>	Fabaceae	Y						
	<i>Acianthus pusillus</i>	Orchidaceae	Y	1					
	<i>Actinobole uliginosum</i>	Asteraceae	Y	6	14				
	<i>Adriana quadripartita</i>	Euphorbiaceae	Y	4	1		2		
X	<i>Aira cupaniana</i>	Poaceae			1				Presumed misidentification of <i>Pentameris airoides</i> var. <i>airoides</i> (q.v.) which resembles <i>A. cupaniana</i> ; there are no AVH records of <i>A. cupaniana</i> for GRNP which is well beyond the northern limit of the distribution of <i>A. cupaniana</i> on Eyre Peninsula; based on a single BS record from Oct 2001 with a corresponding AD voucher (BS1-10438) which could not be located and appears to be undatabased and unincorporated probably due to its re-determination.
	<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Sapindaceae	Y	4	29	52	1	2	
	<i>Allocasuarina helmsii</i>	Casuarinaceae		1					
	<i>Allocasuarina muelleriana</i> ssp. <i>muelleriana</i>	Casuarinaceae	Y	11		2	1		
	<i>Allocasuarina verticillata</i>	Casuarinaceae	Y	7	3	1	1		
	<i>Alopecurus geniculatus</i>	Poaceae		1					
	<i>Alyogyne hakeifolia</i>	Malvaceae		2	3				
	<i>Alyogyne huegelii</i>	Malvaceae		6	7				
	<i>Alyssum linifolium</i>	Brassicaceae		1	1				
	<i>Alyxia buxifolia</i>	Apocynaceae		8	10	11	1		
	<i>Amaranthus cuspidifolius</i>	Amaranthaceae	Y	1					
	<i>Amyema melaleucae</i>	Loranthaceae		1			1	1	
	<i>Amyema miquelii</i>	Loranthaceae		1					

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<b><i>Amyema miraculosa</i> ssp. <i>boormanii</i></b>	Loranthaceae			4				Needs confirmation: within the wider range of <i>Amyema miraculosa</i> ssp. <i>boormanii</i> but its occurrence in this area is not supported by incorporated herbarium collections; 2 of the 4 BS records are unvouchered but the other 2 have corresponding AD vouchers which are undatabased and not yet incorporated in the AD collection to enable validation of the field ID; these could not be located to check the ID.
	<b><i>Amyema quandang</i> var. <i>quandang</i></b>	Loranthaceae		1	3	8			
X	<i>Anagallis arvensis</i>	Primulaceae		3	16			1	Now treated as <i>Lysimachia arvensis</i> (q.v.) in APC.
	<b><i>Angianthus tomentosus</i></b>	Asteraceae	Y	3	22	2	1	1	
	<b><i>Anogramma leptophylla</i></b>	Adiantaceae		1					
X	<i>Anthocercis anisantha anisantha</i>	Solanaceae	Y						Presumably in error for ssp. <i>collina</i> ; <i>Anthocercis</i> ssp. <i>anisantha</i> is endemic to southern Eyre Peninsula. However, two collections at AD of ssp. <i>anisantha</i> are outliers from further north on Eyre Peninsula (but not within the study area) and their IDs warrant reassessment; they may represent aberrant forms.
	<b><i>Anthocercis anisantha</i> ssp. <i>collina</i></b>	Solanaceae	Y	13	4			2	Incorporates 3 AD records and 2 BS records not identified to ssp., but presumed to be this subspecies.
	<b><i>Aotus subspinescens</i></b>	Fabaceae	Y	12	1	2	1	1	
	<b><i>Apium annuum</i></b>	Apiaceae		2					
	<b><i>Apium prostratum</i> var. <i>filiforme</i></b>	Apiaceae		1					
	<b><i>Arabidella nasturtium</i></b>	Brassicaceae		2					
	<b><i>Arabidella trisecta</i></b>	Brassicaceae		2					
X	<i>Arachnorchis aff. tentaculata</i>	Orchidaceae	Y						Most likely refers to <i>Caladenia interanea</i> (D.L.Jones) R.J.Bates (syn. <i>Arachnorchis interanea</i> D.L.Jones) (q.v.). The name <i>Caladenia tentaculata</i> has previously been misapplied to this species in the Gawler Ranges, but <i>C. tentaculata</i> s.str. is limited to higher rainfall parts of the Mt Lofty Ranges, the South-Eastern Region and the eastern States (Bates, 2012).
X	<i>Arachnorchis aurulenta</i>	Orchidaceae	Y						<i>Arachnorchis</i> is not recognised as a genus separate from the broader concept of <i>Caladenia</i> in the SA Census, and in accordance with the APC. Although originally described under <i>Arachnorchis</i> , the combination under <i>Caladenia</i> has been published by Barker & Bates (2008).
X	<i>Arachnorchis cardiochila</i>	Orchidaceae	Y						<i>Arachnorchis</i> is not recognised as a genus separate from the broader concept of <i>Caladenia</i> in the SA Census, and in accordance with the APC. The name replicates the taxon's inclusion in the provided list under <i>Caladenia</i> (q.v.).
X	<i>Arachnorchis dilatata</i>	Orchidaceae	Y						Presumably based on past usage of <i>Caladenia dilatata</i> which was misapplied in SA to a variety of species including <i>C. septuosa</i> and <i>C. tensa</i> .
X	<i>Arachnorchis interanea</i>	Orchidaceae	Y						<i>Arachnorchis</i> is not recognised as a genus separate from the broader concept of <i>Caladenia</i> in the SA Census, and in accordance with the APC. The name also replicates the taxon's inclusion in the provided list under <i>Caladenia</i> (q.v.). Although originally described under <i>Arachnorchis</i> , the combination under <i>Caladenia</i> has been published by Barker & Bates (2008).

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
X	<i>Arachnorchis septuosa</i>	Orchidaceae	Y						<i>Arachnorchis</i> is not recognised as a genus separate from the broader concept of <i>Caladenia</i> in the SA Census, and in accordance with the APC. The name replicates the taxon's inclusion in the provided list under <i>Caladenia</i> (q.v.).
X	<i>Arachnorchis stricta</i>	Orchidaceae	Y						<i>Arachnorchis</i> is not recognised as a genus separate from the broader concept of <i>Caladenia</i> in the SA Census, and in accordance with the APC. The name replicates the taxon's inclusion in the provided list under <i>Caladenia</i> (q.v.).
X	<i>Arachnorchis tensa</i>	Orchidaceae	Y						<i>Arachnorchis</i> is not recognised as a genus separate from the broader concept of <i>Caladenia</i> in the SA Census, and in accordance with the APC. The name replicates the taxon's inclusion in the provided list under <i>Caladenia</i> (q.v.).
X	<i>Arachnorchis toxochila</i>	Orchidaceae	Y						<i>Arachnorchis</i> is not recognised as a genus separate from the broader concept of <i>Caladenia</i> in the SA Census, and in accordance with the APC. The name replicates the taxon's inclusion in the provided list under <i>Caladenia</i> (q.v.).
	<b><i>Arctotheca calendula</i></b>	Asteraceae		2	7	3			
	<b><i>Aristida contorta</i></b>	Poaceae	Y	2	2			1	
	<b><i>Arthropodium minus</i></b>	Asparagaceae		5					
	<b><i>Asteridea athrixioides f. athrixioides</i></b>	Asteraceae	Y	5	13				Only forma <i>athrixioides</i> is recorded from the Gawler Ranges; incorporates 4 BS records not determined to forma.
	<b><i>Astroloma conostephioides</i></b>	Ericaceae	Y	6					
	<b><i>Astroloma humifusum</i></b>	Ericaceae	Y	19	5	1		2	
	<b><i>Atriplex acutibractea ssp. acutibractea</i></b>	Chenopodiaceae	Y	1				1	
	<b><i>Atriplex acutibractea ssp. karoniensis</i></b>	Chenopodiaceae	Y		2				
	<b><i>Atriplex eardleyae</i></b>	Chenopodiaceae		1		2			
	<b><i>Atriplex stipitata</i></b>	Chenopodiaceae	Y	4	39	48	1	2	
	<b><i>Atriplex vesicaria</i></b>	Chenopodiaceae	Y	5	7	8		1	
X	<i>Austrodanthonia caespitosa</i>	Poaceae	Y	18	40	53			Synonym of <i>Rytidosperma caespitosum</i> (q.v.).
X	<i>Austrodanthonia setacea</i>	Poaceae	Y	1	3				Synonym of <i>Rytidosperma setaceum</i> (q.v.).
	<b><i>Austrostipa acrociliata</i></b>	Poaceae	Y	2	6			1	
	<b><i>Austrostipa drummondii</i></b>	Poaceae	Y	6	7				
	<b><i>Austrostipa elegantissima</i></b>	Poaceae	Y	5	34	23	1	1	
	<b><i>Austrostipa eremophila</i></b>	Poaceae	Y	7	9				

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<i>Austrostipa flavescens</i>	Poaceae	Y	1	1				
	<i>Austrostipa hemipogon</i>	Poaceae	Y	3	2		1		
	<i>Austrostipa nitida</i>	Poaceae	Y	7	28	3	1		
	<i>Austrostipa nodosa</i>	Poaceae	Y	1	2	3	1		
	<i>Austrostipa pilata</i>	Poaceae	Y		14				
	<i>Austrostipa platychaeta</i>	Poaceae	Y	4	3		1		
	<i>Austrostipa puberula</i>	Poaceae	Y	2	2				
	<i>Austrostipa scabra ssp. falcata</i>	Poaceae	Y	6	2				
	<i>Austrostipa scabra ssp. scabra</i>	Poaceae	Y	1	14				On provided list merely as <i>Austrostipa scabra</i> (but with <i>A. scabra falcata</i> as a separate record).
	<i>Austrostipa trichophylla</i>	Poaceae	Y	1	24				
	<i>Avellinia michelii</i>	Poaceae		3	8				
	<i>Avena barbata</i>	Poaceae		5	15	6			
	<i>Babingtonia behrii</i>	Myrtaceae	Y	2	1		3		
	<i>Baeckea crassifolia</i>	Myrtaceae	Y	9	7	1			
X	<i>Baeckea ericaea</i>	Myrtaceae	Y		1				Misidentification of <i>Baeckea crassifolia</i> ; <i>B. ericaea</i> does not occur on Eyre Peninsula; its inclusion in the provided list is presumably based on a single AVH record of a CANB duplicate of a BS voucher (SANPWS 7931) that has subsequently been re-determined in AD to <i>B. crassifolia</i> .
	<i>Beyeria lechenaultii</i>	Euphorbiaceae	Y	10	12	8	1		
	<i>Billardiera cymosa</i>	Pittosporaceae		2	3				The 2 AD records have determinations as <i>Billardiera cymosa ssp. pseudocymosa</i> ; however there are problems in applying the subspecies in SA and it is treated here at species level.
	<i>Blennospora drummondii</i>	Asteraceae	Y	3	3				
	<i>Boronia coerulescens ssp. coerulescens</i>	Rutaceae	Y	7	2		1	1	
	<i>Bossiaea walkeri</i>	Fabaceae	Y	3			1		
	<i>Brachyscome ciliaris var. ciliaris</i>	Asteraceae	Y		8				Recorded on provided list merely as <i>B. ciliaris</i> and presumed to be this variety; var. <i>lanuginosa</i> is absent from most of Eyre Peninsula and has not been recorded in the Gawler Ranges.
X	<i>Brachyscome exilis</i>	Asteraceae	Y		1				Presumed misidentification; the single unvouchered BS record is outside the range of this species.
	<i>Brachyscome lineariloba</i>	Asteraceae	Y	5	27				
	<i>Brachyscome perpusilla</i>	Asteraceae	Y	4					

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<i>Brachyscome trachycarpa</i>	Asteraceae	Y	1					
	<i>Brassica tournefortii</i>	Cruciferae		2	13	18			
	<i>Briza minor</i>	Poaceae		1			1		
X	<i>Bromus diandrus</i>	Poaceae			1				Probable misidentification of <i>Bromus madritensis</i> ; there are no AVH records of <i>B. diandrus</i> for GRNP which is beyond the northern limit of its distribution on Eyre Peninsula; the single BS record is unvouchered and regarded as unreliable.
	<i>Bromus madritensis</i>	Poaceae		2	1				
	<i>Bromus rubens</i>	Poaceae		2	33	2			
	<i>Buglossoides arvensis</i>	Boraginaceae		4					
X	<i>Bulbine alata</i>	Asphodelaceae			1				Presumed misidentification; the single unvouchered BS record is outside the range of this species.
	<i>Bulbine semibarbata</i>	Asphodelaceae	Y	5	9			1	Includes 3 BS records and 1 BB record as <i>Bulbine</i> sp. which are presumed to be this species.
	<i>Bupleurum semicompositum</i>	Apiaceae		4	20		1		
	<i>Bursaria spinosa ssp. spinosa</i>	Pittosporaceae		6	6	1			Includes BS records as <i>Bursaria spinosa</i> var. <i>spinosa</i> (NC) and a PU record as <i>B. spinosa</i> as which are equivalent, given the absence of <i>ssp. lasiophylla</i> in this region.
	<i>Caladenia aurulenta</i>	Orchidaceae	Y						The type locality of this species is Scrubby Peak Station [now GRNP]. It was described in 2006 as <i>Arachnorchis aurulenta</i> , and the combination under <i>Caladenia</i> published by Barker & Bates (2008).
	<i>Caladenia bicallata</i>	Orchidaceae	Y	1					Included in provided list as <i>Jonesiopsis bicallata</i> .
	<i>Caladenia capillata</i>	Orchidaceae		6					
	<i>Caladenia cardiochila</i>	Orchidaceae	Y	3	1				
	<i>Caladenia interanea</i>	Orchidaceae	Y						The type locality of this species is Mt Granite [within GRNP]. It has previously been included under <i>Caladenia tentaculata</i> and <i>Arachnorchis</i> aff. <i>tensa</i> . It was described as <i>Arachnorchis interanea</i> , and the combination under <i>Caladenia</i> published by Barker & Bates (2008); included on the provided list under the former name.
	<i>Caladenia septuosa</i>	Orchidaceae	Y	1					
	<i>Caladenia stricta</i>	Orchidaceae	Y	2					
	<i>Caladenia tensa</i>	Orchidaceae	Y	1	1				
X	<i>Caladenia tentaculata</i>	Orchidaceae	Y		2				Most likely refers to <i>Caladenia interanea</i> (D.L.Jones) R.J.Bates (syn. <i>Arachnorchis interanea</i> D.L.Jones) (q.v.). The name <i>Caladenia tentaculata</i> has previously been mis-applied to this species in the Gawler Ranges, but <i>C. tentaculata</i> s.str. is limited to higher rainfall parts of the Mt Lofty Ranges, South East and eastern States (Bates, 2012). Recorded on provided list as <i>Arachnorchis</i> aff. <i>tentaculata</i> .
	<i>Caladenia toxochila</i>	Orchidaceae	Y	3	2				

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<i>Calandrinia calyptrata</i>	Portulacaceae	Y	5	6				
	<i>Calandrinia disperma</i>	Portulacaceae	Y	1	2				
	<i>Calandrinia eremaea</i>	Portulacaceae	Y	8	14	1			Includes 1 BS record mis-identified as <i>Calandrinia volubilis</i> .
	<i>Calandrinia granulifera</i>	Portulacaceae	Y	4	2				
X	<i>Calandrinia volubilis</i>	Portulacaceae			1				Misidentification of <i>Calandrinia eremaea</i> (q.v.); the single BS record of <i>C. volubilis</i> has a corresponding AD voucher (A.K. Ramsay BS679-211) that is undatabased and not yet incorporated in the AD collection to enable validation of the field ID; it was located, examined and re-determined as <i>C. eremaea</i> .
X	<i>Callitris canescens</i>	Cupressaceae			1				Misidentification of <i>Callitris glaucophylla</i> (q.v.); the single BS record has a corresponding undatabased and unincorporated AD voucher (BS587-79) which was located, examined and re-determined to that species; GRNP is beyond the northern limit of <i>C. canescens</i> on Eyre Peninsula.
	<i>Callitris glaucophylla</i>	Cupressaceae	Y	2	1				Includes 1 BS record misidentified as <i>Callitris canescens</i> .
	<i>Callitris gracilis</i>	Cupressaceae	Y	4	10	5	2	1	Incorporates 5 PU records as <i>Callitris preissii</i> (q.v.) a name previously misapplied to <i>C. gracilis</i> in SA.
X	<i>Callitris preissii</i>	Cupressaceae	Y			5			Presumably <i>Callitris gracilis</i> ; <i>C. preissii</i> is a WA species, although the name was previously misapplied to <i>C. gracilis</i> in SA.
	<i>Callitris verrucosa</i>	Cupressaceae	Y	10	6	1	2	1	
	<i>Calotis cymbacantha</i>	Asteraceae	Y	5					
	<i>Calotis hispidula</i>	Asteraceae	Y	9	19	1		1	
	<i>Calytrix involucrata</i>	Myrtaceae	Y	28	11	4	1	4	
	<i>Calytrix tetragona</i>	Myrtaceae	Y	2	1		1	1	
	<i>Carrichtera annua</i>	Brassicaceae		7	86	65		6	
	<i>Carthamus lanatus</i>	Asteraceae		4	12	11			
	<i>Cassinia laevis</i>	Asteraceae		2					Includes 1 AD record misidentified as <i>C. uncata</i> (q.v.).
X	<i>Cassinia uncata</i>	Asteraceae	Y	1					Presumed misidentification of <i>Cassinia laevis</i> (q.v.): the single AD record (K.L. Graham, BS1-10456) from the S slope of Paney Bluff is a BS voucher not yet incorporated in the AD collection to enable validation of the field ID; almost all <i>C. uncata</i> records in SA are now referred to <i>C. complanata</i> , however this occurrence is well outside the range of that taxon on Eyre Peninsula, and, given its location on elevated terrain, is presumed to be <i>C. laevis</i> .
	<i>Cassytha melantha</i>	Lauraceae	Y	5	11		2	1	
	<i>Cassytha peninsularis</i>	Lauraceae	Y	4					
	<i>Cassytha pubescens</i>	Lauraceae	Y	1					

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<i>Casuarina pauper</i>	Casuarinaceae	Y	11	21	47		1	
	<i>Centaurea melitensis</i>	Asteraceae		2	8		1		
X	<i>Centaurium tenuiflorum</i>	Gentianaceae			2				Misidentification of <i>Schenkia australis</i> (q.v.); one of the 2 BS records has a corresponding AD voucher (A.K. Ramsay BS679-200) that is undatabased and not yet incorporated in the AD collection to enable validation of the field ID; it was located, examined and re-determined to that species; the other BS record is unvouchered and from the same area and survey trip, so it is presumed to be a similar misidentification.
X	<i>Centrolepis cephaloformis</i> ssp. <i>cephaloformis</i>	Centrolepidaceae	Y	1					Presumably based on the single AD record, R.J. Bates 20911 from "Around S side of Homestead Lake, Scrubby Peak Station"; this is actually in an area of the station excluded from GRNP.
	<i>Centrolepis polygyna</i>	Centrolepidaceae	Y	3					
	<i>Centrolepis strigosa</i> ssp. <i>strigosa</i>	Centrolepidaceae	Y	1					
	<i>Ceratogyne obionoides</i>	Asteraceae	Y	3					
X	<i>Chamaesyce drummondii</i> (NC)	Euphorbiaceae			4				Equivalent to <i>Euphorbia drummondii</i> (q.v.) in this region.
	<i>Cheilanthes austrotenuifolia</i>	Pteridaceae		10	15				
	<i>Cheilanthes distans</i>	Pteridaceae		4					
	<i>Cheilanthes lasiophylla</i>	Pteridaceae		12	10			2	
	<i>Cheilanthes sieberi</i> ssp. <i>sieberi</i>	Pteridaceae		4	4			1	Includes one BB sight record identified to species only and presumed to be this subspecies
	<i>Chenopodium curvispicatum</i>	Chenopodiaceae	Y	3	3	3			
	<i>Chenopodium desertorum</i> ssp. <i>anidiophyllum</i>	Chenopodiaceae	Y	2	3	8			
	<i>Chenopodium desertorum</i> ssp. <i>desertorum</i>	Chenopodiaceae	Y	2	3		2		
	<i>Chenopodium desertorum</i> ssp. <i>microphyllum</i>	Chenopodiaceae	Y	1					
X	<i>Chenopodium gaudichaudianum</i>	Chenopodiaceae	Y		1				Presumed to be <i>Chenopodium curvispicatum</i> ; <i>C. gaudichaudianum</i> has often been confused with this species in the past and has a more northerly distribution.
	<i>Chenopodium murale</i>	Chenopodiaceae		1					
	<i>Chrysocephalum apiculatum</i>	Asteraceae	Y	19	12	1	1	1	Includes 12 BS records as the non-current concept " <i>Chrysocephalum apiculatum</i> (NC)" which is equivalent to <i>Chrysocephalum apiculatum</i> (q.v.) in this region.
	<i>Chrysocephalum semipapposum</i>	Asteraceae	Y	2	1			1	



X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<i>Chthonocephalus pseudevax</i>	Asteraceae	Y		5				
	<i>Citrullus lanatus</i>	Cucurbitaceae		1					
	<i>Clematis microphylla</i>	Ranunculaceae		1					
	<i>Comesperma scoparium</i>	Polygalaceae		8	5		2		
	<i>Comesperma viscidulum</i>	Polygalaceae		2					
	<i>Comesperma volubile</i>	Polygalaceae		6	2				
	<i>Commersonia tatei</i>	Malvaceae	Y	3					
	<i>Conium maculatum</i>	Apiaceae		3					
	<i>Convolvulus angustissimus ssp. angustissimus</i>	Convolvulaceae	Y	1	1				
	<i>Convolvulus angustissimus ssp. peninsularum</i>	Convolvulaceae		1	3				
X	<i>Convolvulus erubescens</i>	Convolvulaceae	Y			4			Species does not occur in SA; name misapplied previously to a number of SA taxa, but probably refers to <i>Convolvulus angustissimus</i> (q.v.).
	<i>Convolvulus remotus</i>	Convolvulaceae	Y	2	7	3	1		
	<i>Correa backhouseana var. coriacea</i>	Rutaceae	Y	2	2		1		
X	<i>Correa reflexa</i>	Rutaceae	Y						Species does not occur in this region; most likely refers to <i>Correa backhouseana</i> var. <i>coriacea</i> which was previously treated as <i>C. reflexa</i> var. <i>coriacea</i> .
X	<i>Correa reflexa var. reflexa (NC)</i>	Rutaceae			2				Non-current concept for taxa that do not occur in this region; most likely refers to <i>Correa backhouseana</i> var. <i>coriacea</i> which was previously treated as <i>C. reflexa</i> var. <i>coriacea</i> .
	<i>Crassula colligata ssp. lamprosperma</i>	Crassulaceae		1	6				
	<i>Crassula colorata var. acuminata</i>	Crassulaceae		6	5				
	<i>Crassula colorata var. colorata</i>	Crassulaceae		1					
	<i>Crassula extrorsa</i>	Crassulaceae		1					
	<i>Crassula natans var. minus</i>	Crassulaceae		1					
X	<i>Crassula sieberiana ssp. tetramera (NC)</i>	Crassulaceae			7				Species indeterminate: non-current concept which may be either <i>Crassula tetramera</i> or <i>C. extrorsa</i> .
	<i>Crassula tetramera</i>	Crassulaceae		1					

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<i>Cratystylis conocephala</i>	Asteraceae	Y	4	5	8			
	<i>Cryptandra myriantha</i>	Rhamnaceae		1					Some of the 5 BS records as " <i>Cryptandra tomentosa</i> (NC)" (q.v.) may also be this species.
X	<i>Cryptandra</i> sp. <i>Floriferous</i> (W.R.Barker 4131)	Rhamnaceae		10					These records are all likely to be the undescribed taxon " <i>Cryptandra</i> sp. Hiltaba (Anon. NPGA-8100) Kellermann".
	<b><i>Cryptandra</i> sp. <i>Hiltaba</i> (Anon. NPGA-8100)</b>	Rhamnaceae		10					Existing records based on AD collections currently identified as " <i>Cryptandra</i> sp. <i>Floriferous</i> (W.R.Barker 4131)" which are likely to be this species.
X	<i>Cryptandra tomentosa</i> (NC)	Rhamnaceae			5				Species indeterminate: the 5 BS records include one with a corresponding AD voucher subsequently re-determined as " <i>Cryptandra</i> sp. <i>Floriferous</i> (W.R.Barker 4131)" which is actually likely to be <i>Cryptandra</i> sp. <i>Hiltaba</i> (Anon. NPGA-8100) Kellermann; the remaining 4 non-vouchered records thus may either represent this species or <i>C. myriantha</i> as would be inferred from the non-current concept " <i>Cryptandra tomentosa</i> (NC)".
	<i>Cucumis myriocarpus</i>	Cucurbitaceae			1				
	<i>Cymbopogon obtectus</i>	Poaceae	Y	5			1		
	<i>Cyperus alterniflorus</i>	Cyperaceae	Y	1					
	<i>Cyperus gymnocaulos</i>	Cyperaceae	Y	2			1		
X	<i>Cyperus lhotskyanus</i>	Cyperaceae	Y						Misidentification of <i>C. alterniflorus</i> : <i>C. lhotskyanus</i> is confined to the South-Eastern Region in SA; the single record of <i>C. lhotskyanus</i> for GRNP projected on AVH (HO, P. Gibbons 738) is a duplicate of an AD collection identified as <i>C. alterniflorus</i> .
	<i>Cyphanthera myosotidea</i>	Solanaceae	Y	1					
X	<i>Dampiera dysantha</i>	Goodeniaceae			7	1			Presumed misidentifications; well outside the range of <i>Dampiera dysantha</i> which on Eyre Peninsula is confined to the southern end; mostly unvouchered BS records; one BS record corresponds to an AD voucher (Anon. 7734, S.A.NPWS Gawler Ranges Survey) which was re-determined as <i>D. rosmarinifolia</i> in Apr. 2000.
	<b><i>Dampiera lanceolata</i> var. <i>lanceolata</i></b>	Goodeniaceae		3	1				
	<b><i>Dampiera rosmarinifolia</i></b>	Goodeniaceae		11			1		
X	<i>Darwinia micropetala</i>	Myrtaceae	Y						Does not occur in region, in error for <i>Darwinia salina</i> : presumably based on the single BS record as the non-current concept " <i>D. micropetala</i> (NC)", which in this region is equivalent to <i>D. salina</i> .
X	<i>Darwinia micropetala</i> (NC)	Myrtaceae			1				Equivalent to <i>D. salina</i> (q.v.) in this region.
	<b><i>Darwinia salina</i></b>	Myrtaceae	Y	1	1				Includes a single BS record as the non-current concept " <i>D. micropetala</i> (NC)", which in this region is equivalent to <i>D. salina</i> .
	<i>Daucus glochidiatus</i>	Apiaceae		13	34	3		2	
X	<i>Daviesia benthamii benthamii</i>	Fabaceae	Y						In error; <i>Daviesia benthamii</i> ssp. <i>benthamii</i> is endemic to WA, although this name was previously misapplied to <i>D. benthamii</i> ssp. <i>acanthoclona</i> in SA.

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<i>Daviesia benthamii</i> ssp. <i>acanthoclona</i>	Fabaceae	Y	1					
	<i>Daviesia ulicifolia</i> ssp. <i>aridicola</i>	Fabaceae	Y	1		3	3		
X	<i>Daviesia ulicifolia ulicifolia</i>	Fabaceae	Y						In error, presumably <i>Daviesia ulicifolia</i> ssp. <i>aridicola</i> , as ssp. <i>ulicifolia</i> does not occur in this region.
	<i>Dianella revoluta</i> var. <i>divaricata</i>	Hemerocallidaceae		1			1		Added manually based on the AD collection: A.E. Orchard 1797, "c. 40 km N of Minnipa on the road to Yardea, on the hill on the NW corner of the first pass"; this location is within GRNP although the derived co-ordinates are in error in plotting just outside the park; determined by G.W. Carr..
	<i>Dianella revoluta</i> var. <i>revoluta</i>	Hemerocallidaceae	Y	4	16			1	Incorporates 12 BS records as the non-current concept " <i>Dianella revoluta</i> (NC)" and " <i>Dianella revoluta</i> var."
	<i>Dicrastylis verticillata</i>	Lamiaceae		3			1		
	<i>Disphyma crassifolium</i> ssp. <i>clavellatum</i>	Aizoaceae	Y	1	1				
	<i>Dittrichia graveolens</i>	Asteraceae						1	
	<i>Dodonaea baueri</i>	Sapindaceae	Y	10	6	1	1		
	<i>Dodonaea bursariifolia</i>	Sapindaceae	Y	4	3		1		
	<i>Dodonaea hexandra</i>	Sapindaceae	Y	11	2	4			
	<i>Dodonaea intricata</i>	Sapindaceae	Y	22	2		1		
	<i>Dodonaea lobulata</i>	Sapindaceae	Y	4		1			
	<i>Dodonaea stenozyga</i>	Sapindaceae	Y	7	2	2			
	<i>Dodonaea tepperi</i>	Sapindaceae	Y	1	1				
	<i>Dodonaea viscosa</i> ssp. <i>angustissima</i>	Sapindaceae	Y	24	44	19	3	9	
X	<i>Dodonaea viscosa</i> ssp. <i>cuneata</i>	Sapindaceae	Y		1				Uncertain ID; based on AVH, <i>Dodonaea viscosa</i> ssp. <i>cuneata</i> is absent from the Gawler Ranges except for a single occurrence at the eastern end near Siam HS; listing is presumably based on the single BS unvouchered record which is regarded as unreliable.
	<i>Drosera glanduligera</i>	Droseraceae	Y	2					
	<i>Drosera macrantha</i> ssp. <i>planchonii</i>	Droseraceae	Y	2					
	<i>Drosera peltata</i>	Droseraceae	Y	1					
	<i>Duboisia hopwoodii</i>	Solanaceae	Y	5			1		
	<i>Dysphania cristata</i>	Chenopodiaceae	Y		1				

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<i>Echium plantagineum</i>	Boraginaceae		2	16	12			
	<i>Elachanthus pusillus</i>	Asteraceae	Y	4					
	<i>Embadium uncinatum</i>	Boraginaceae	Y	8	3				
	<i>Enchylaena tomentosa var. tomentosa</i>	Chenopodiaceae	Y	1	45	45		3	Incorporates 8 BS records as " <i>Enchylaena tomentosa</i> var." as only var. <i>tomentosa</i> occurs in the region.
	<i>Eremophila alternifolia</i>	Scrophulariaceae		6	8	2	1	1	
	<i>Eremophila behriana</i>	Scrophulariaceae		1					
	<i>Eremophila crassifolia</i>	Scrophulariaceae		3	1		1		
	<i>Eremophila deserti</i>	Scrophulariaceae		2	2	3	1	1	
	<i>Eremophila glabra ssp. glabra</i>	Scrophulariaceae		13	14	18	1	1	Includes 3 BS records as the non-current concept " <i>Eremophila glabra</i> (NC)"; the only subspecies occurring in the region is ssp. <i>glabra</i> .
	<i>Eremophila longifolia</i>	Scrophulariaceae		1			2		
	<i>Eremophila maculata ssp. maculata</i>	Scrophulariaceae		1					
X	<i>Eremophila platythamnus ssp. villosa</i>	Scrophulariaceae		1					Location error: based on the AD collection F.A. Mason, 8 Oct 1972 with the imprecise location of "Gawler Ranges, Kondoolka" which is well removed from GRNP, although the coordinates used plot within the reserve.
	<i>Eremophila scoparia</i>	Scrophulariaceae		7	7	19	2	2	
	<i>Eremophila serrulata</i>	Scrophulariaceae		4					
	<i>Eremophila subfloccosa ssp. lanata</i>	Scrophulariaceae		2					
	<i>Eremophila weldii</i>	Scrophulariaceae		1					
	<i>Eriochiton sclerolaenoides</i>	Chenopodiaceae	Y	12	34	36			
	<i>Eriochlamys behrii</i>	Asteraceae	Y	3	6				Incorporates 2 BS records as the non-current concept " <i>Eriochlamys behrii</i> (NC)" which is equivalent as <i>E. eremaea</i> only occurs further north.
	<i>Erodium carolinianum</i>	Geraniaceae		1					
	<i>Erodium cicutarium</i>	Geraniaceae		2	8				
	<i>Erodium crinitum</i>	Geraniaceae		6	27	1			
	<i>Erodium cygnorum</i>	Geraniaceae		4	3				

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
X	<i>Erodium cygnorum</i> ssp. <i>glandulosum</i> (NC)	Geraniaceae			2				Indeterminate non-current concept: may be either <i>Erodium carolinianum</i> or <i>E. janszii</i> .
	<b><i>Erodium janszii</i></b>	Geraniaceae		1					
X	<i>Erophila verna</i> ssp. <i>verna</i>	Brassicaceae		1					Not definitely recorded within GRNP: a single AD record (S.A. White Sep 1912) with the imprecise location "Gawler Range".
	<b><i>Eucalyptus albopurpurea</i></b>	Myrtaceae	Y	2					
	<b><i>Eucalyptus brachycalyx</i></b>	Myrtaceae	Y	8	4	8		2	
	<b><i>Eucalyptus calcareana</i></b>	Myrtaceae	Y	5					
	<b><i>Eucalyptus capitanea</i></b>	Myrtaceae	Y	1					Based on single AD collection (D.E. Symon 8188) as <i>Eucalyptus ceratocorys</i> (q.v.).
X	<i>Eucalyptus ceratocorys</i>	Myrtaceae	Y	1					Name previously misapplied in SA for <i>Eucalyptus capitanea</i> (q.v.); <i>E. ceratocorys</i> now treated as endemic to WA.
	<b><i>Eucalyptus concinna</i></b>	Myrtaceae	Y		2	1			
	<b><i>Eucalyptus dumosa</i></b>	Myrtaceae	Y	14	10	4	1	3	The new treatment for Flora of SA (in prep.) does not recognise <i>Eucalyptus dumosa</i> as occurring on Eyre Peninsula, but material collected on this survey provides strong evidence for its retention, although it clearly intergrades with the allied <i>E. phenax</i> ssp. <i>phenax</i> and <i>E. calcareana</i> .
X	<i>Eucalyptus eucentrica</i>	Myrtaceae	Y						Now treated as <i>Eucalyptus socialis</i> ssp. <i>eucentrica</i> (q.v.).
	<b><i>Eucalyptus gracilis</i></b>	Myrtaceae	Y	14	19	33	1	7	
	<b><i>Eucalyptus gypsophila</i></b>	Myrtaceae	Y				4	1	Not previously recorded with certainty in GRNP (location error): inclusion in provided list presumably based on the single AVH record showing for GRNP (AD, F.A. Mason, 10 Apr 1975) which is actually just S of the GRNP ("On fence line by Petersby Gate (Thurlga st[ation])").
	<b><i>Eucalyptus incrassata</i></b>	Myrtaceae	Y	10	4	1	1	1	The two AD records have determinations as <i>Eucalyptus oleosa</i> ssp. <i>ampliata</i> (q.v.).
	<b><i>Eucalyptus lansdowneana</i></b>	Myrtaceae	Y	57	4	2			
	<b><i>Eucalyptus leptophylla</i></b>	Myrtaceae	Y	1	1				
	<b><i>Eucalyptus odorata</i></b>	Myrtaceae	Y	1					
	<b><i>Eucalyptus oleosa</i></b>	Myrtaceae	Y	3	5	17	2	7	Includes 3 AD and 2 vouchered BB records as <i>Eucalyptus oleosa</i> ssp. <i>ampliata</i> (q.v.); plus 4 BS records as <i>E. oleosa</i> ssp. <i>oleosa</i> (q.v.).
X	<i>Eucalyptus oleosa</i> ssp. <i>ampliata</i>	Myrtaceae		3			2		Subsumed here under <i>Eucalyptus oleosa</i> ; previously ssp. <i>oleosa</i> and ssp. <i>ampliata</i> were separated on operculum shape, but this is reportedly unreliable, and seedling leaves are needed to distinguish subspecies with certainty.
X	<i>Eucalyptus oleosa</i> ssp. <i>oleosa</i>	Myrtaceae			4				Subsumed here under <i>Eucalyptus oleosa</i> ; previously ssp. <i>oleosa</i> and ssp. <i>ampliata</i> were separated on operculum shape, but this is reportedly unreliable, and seedling leaves are needed to distinguish subspecies with certainty.

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
X	<i>Eucalyptus percostata</i>	Myrtaceae	Y	2					Better treated as a form of <i>Eucalyptus calcareana</i> or <i>E. phenax</i> ssp. <i>phenax</i> in this area.
	<b><i>Eucalyptus phenax</i> ssp. <i>phenax</i></b>	Myrtaceae	Y	4			2		On provided list merely as <i>Eucalyptus phenax</i> , but equivalent as only ssp. <i>phenax</i> occurs in this region.
X	<i>Eucalyptus pileata</i>	Myrtaceae	Y	2					Better treated as a form of <i>Eucalyptus calcareana</i> or <i>E. phenax</i> ssp. <i>phenax</i> in this area.
	<b><i>Eucalyptus porosa</i></b>	Myrtaceae	Y	13	18	33	1	1	
X	<i>Eucalyptus rugosa</i>	Myrtaceae	Y						Outside the range of this species and no records showing on AVH; presumably in error for the closely related <i>Eucalyptus brachycalyx</i> .
X	<i>Eucalyptus socialis</i>	Myrtaceae	Y		21	9		1	Indeterminate for subspecies: includes 14 BS records as the non-current concept " <i>Eucalyptus socialis</i> (NC)" and 1 BB sighting record not identified to subspecies.
	<b><i>Eucalyptus socialis</i> -- <i>Eucalyptus yumbarrana</i> ssp. <i>yumbarrana</i></b>	Myrtaceae					1	1	
	<b><i>Eucalyptus socialis</i> ssp. <i>eucentrica</i></b>	Myrtaceae	Y	3					On provided list as <i>Eucalyptus eucentrica</i> .
	<b><i>Eucalyptus socialis</i> ssp. <i>socialis</i></b>	Myrtaceae		13			1	2	
	<b><i>Eucalyptus socialis</i> ssp. <i>victoriensis</i></b>	Myrtaceae		1					
	<b><i>Eucalyptus socialis</i> ssp. <i>viridans</i></b>	Myrtaceae		5					
	<b><i>Eucalyptus trivalva</i></b>	Myrtaceae	Y	1	2				Includes AD and BS records recorded as <i>Eucalyptus trivalva</i> (q.v.).
X	<i>Eucalyptus trivalvis</i>	Myrtaceae		1	2				Orthographic variant of <i>Eucalyptus trivalva</i> (q.v.) rejected by APC.
X	<i>Eucalyptus youngiana</i>	Myrtaceae	Y						Occurs on Kondoolka Station to the west, but no records on AVH for GRNP and considered unlikely to be present there.
	<b><i>Eucalyptus yumbarrana</i></b>	Myrtaceae	Y		3		2		
X	<i>Euchiton involuocratus</i>	Asteraceae	Y		1				Misidentification of <i>Euchiton sphaericus</i> ; the BS record as <i>E. involuocratus</i> (NC) has a corresponding AD voucher (NPWSA 7670 ) that was re-determined as <i>E. sphaericus</i> on 21 Apr 2005; outside the range of this species and no records showing on AVH.
	<b><i>Euchiton sphaericus</i></b>	Asteraceae	Y	2	2				
	<b><i>Euphorbia drummondii</i></b>	Euphorbiaceae	Y		8	19			Includes BS records as the non-current concept " <i>Chamaesyce drummondii</i> (NC)" which is equivalent to <i>Euphorbia drummondii</i> in this region.
	<b><i>Euphorbia tannensis</i> ssp. <i>eremophila</i></b>	Euphorbiaceae	Y	8	11		1		
	<b><i>Eutaxia microphylla</i></b>	Fabaceae	Y	12	15	3	2	3	
	<b><i>Exocarpos aphyllus</i></b>	Santalaceae		6	19	20	1	1	

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<i>Exocarpos sparteus</i>	Santalaceae		2			1		
	<i>Frankenia cordata</i>	Frankeniaceae			2				
	<i>Frankenia pauciflora var. fruticulosa</i>	Frankeniaceae			1				
	<i>Frankenia pauciflora var. gunnii</i>	Frankeniaceae			2				
	<i>Frankenia serpyllifolia</i>	Frankeniaceae		1					
X	<i>Gahnia hystrix</i>	Cyperaceae	Y						Misidentification; this species is endemic to Kangaroo Island.
	<i>Gahnia lanigera</i>	Cyperaceae	Y	2	4		1		
	<i>Galium australe</i>	Rubiaceae		1					
	<i>Galium leptogonium</i>	Rubiaceae		2					
	<i>Galium microlobum</i>	Rubiaceae		3	1				
	<i>Galium murale</i>	Rubiaceae		3	1				
	<i>Galium spurium</i>	Rubiaceae		1					
	<i>Geijera linearifolia</i>	Rutaceae	Y	10	17	31	1	3	
	<i>Geococcus pusillus</i>	Brassicaceae		1					
	<i>Geranium retrorsum</i>	Geraniaceae		1					
	<i>Geranium solanderi var. solanderi</i>	Geraniaceae		3	1				
	<i>Glischrocaryon angustifolium</i>	Haloragaceae	Y	3	1	2			Records for AD, BS and PU as the synonym <i>Glischrocaryon aureum</i> var. <i>angustifolium</i> .
X	<i>Glischrocaryon aureum var. angustifolium</i>	Haloragaceae		3	1	2			Synonym, now recognised at species rank, in accordance with APC.
X	<i>Glischrocaryon behrii</i>	Haloragaceae	Y		2				Misidentification of <i>Glischrocaryon flavescens</i> (q.v.); outside (northwest from) the main species distribution of <i>G. behrii</i> ; presumably based only on 2 BS records both from Oct 2009: one has a corresponding AD voucher (BS1-10403) that is undatabased and not yet incorporated in the AD collection to enable validation of the field ID; this was located, examined and re-determined as <i>G. flavescens</i> ; the other BS record is unvouchered but from a nearby site and is presumed to be a similar misidentification; there is also another unvalidated voucher from the Gawler Ranges Conservation Reserve but this is SW of GRNP.
	<i>Glischrocaryon flavescens</i>	Haloragaceae	Y	10	5		1	1	
X	<i>Glycine clandestina</i>	Fabaceae	Y						Misapplied name synonymous with <i>Glycine rubiginosa</i> (q.v.).

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<i>Glycine rubiginosa</i>	Fabaceae	Y	2	3				
	<i>Gonocarpus elatus</i>	Haloragaceae	Y	10	11		1	2	
X	<i>Goodenia fascicularis</i>	Goodeniaceae			1				Misidentification of an unidentified Boraginaceae species; well south of the main distribution of <i>Goodenia fascicularis</i> ; the single BS record from Sep. 2007 has a corresponding AD voucher (BS587-537) that is undatabased and not yet incorporated in the AD collection to enable validation of the field ID; it was located, and found to comprise small seedlings which were re-determined as Boraginaceae sp.
X	<i>Goodenia geniculata</i>	Goodeniaceae			4				Probable misidentification of <i>Goodenia glabra</i> ; based only on unvouchered records; <i>G. geniculata</i> is confined to more temperate areas, but some Gawler Ranges collections of <i>G. glabra</i> at AD were originally misidentified as that species and may be the basis for the identification of the unvouchered BS records.
	<i>Goodenia glabra</i>	Goodeniaceae		8	8				
	<i>Goodenia havilandii</i>	Goodeniaceae		6	5		1	1	
	<i>Goodenia pinnatifida</i>	Goodeniaceae		6	6	1			
	<i>Goodenia pusilliflora</i>	Goodeniaceae		10	14				
	<i>Goodenia quasilibera</i>	Goodeniaceae		2	2				
	<i>Goodenia robusta</i>	Goodeniaceae		6					
	<i>Goodenia varia</i>	Goodeniaceae		4					
	<i>Goodenia willisiana</i>	Goodeniaceae		7	1				
	<i>Goodia medicaginea</i>	Fabaceae	Y	6	1	1			
X	<i>Grammosolen dixonii</i>	Solanaceae	Y						Misidentification of <i>Grammosolen truncatus</i> : the single record of <i>G. dixonii</i> for GRNP projected on AVH (CANB, L. Haegi 1597) has an earlier determination by Haegi and is a duplicate of an AD collection with a more recent determination by Haegi as <i>G. truncatus</i> .
	<i>Grammosolen truncatus</i>	Solanaceae	Y	14		1	1		
	<i>Gratwickia monochaeta</i>	Asteraceae		2					
	<i>Grevillea anethifolia</i>	Proteaceae	Y	18	2	2	1	1	
	<i>Grevillea aspera</i>	Proteaceae	Y	25	5	2	1	2	
	<i>Grevillea huegelii</i>	Proteaceae	Y	7	4				
	<i>Grevillea juncifolia ssp. juncifolia</i>	Proteaceae	Y	3		2			
	<i>Grevillea parallelinervis</i>	Proteaceae	Y	2			1	1	
	<i>Grevillea pterosperma</i>	Proteaceae	Y	7					



X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
X	<i>Gunniiopsis septifraga</i>	Aizoaceae		1					Location error: the single AD collection (E.H. Ising, 14 Sep 1938) has the imprecise location "S of Gawler Range" which is outside the study area, although the coordinates used plot within GRNP.
	<i>Gyrostemon ramulosus</i>	Gyrostemonaceae		8			1		
	<i>Hakea cycloptera</i>	Proteaceae	Y	7	1	1	1	2	
	<i>Hakea francisiana</i>	Proteaceae	Y	10	2	1	2		
	<i>Hakea leucoptera</i> ssp. <i>leucoptera</i>	Proteaceae	Y	6	2	6			
	<i>Hakea mitchellii</i>	Proteaceae	Y	6	1		1		
	<i>Hakea vittata</i>	Proteaceae	Y	1					An unusual record from sand dunes in the Pine Lodge area (AD, R. Bates, 3 Sep 1986); <i>Hakea vittata</i> is usually associated with limestone and this is the northernmost (and somewhat outlying) record of the species; the identification was checked and is reliable, but the occurrence of the species at this location warrants confirmation.
	<i>Halgania cyanea</i>	Boraginaceae	Y	1	2		1		
	<i>Haloragis gossei</i>	Haloragaceae					1		
	<i>Hedypnois rhagadioloides</i>	Asteraceae		4	18				Includes 1 AD collection determined as <i>Hedypnois rhagadioloides</i> ssp. <i>cretica</i> and 3 as ssp. <i>rhagadioloides</i> .
	<i>Helichrysum leucopsideum</i>	Asteraceae	Y	5	4		1	3	
X	<i>Helichrysum monochaetum</i>	Asteraceae	Y						Synonym of <i>Gratwickia monochaeta</i> (q.v.).
	<i>Heliotropium asperrimum</i>	Boraginaceae	Y	4	3			1	
	<i>Heliotropium europaeum</i>	Boraginaceae	Y		1	14			
	<i>Hemichroa diandra</i>	Amaranthaceae	Y	1					
	<i>Herniaria cinerea</i>	Caryophyllaceae			3				
	<i>Hibbertia crispula</i>	Dilleniaceae	Y				2		Although there are no AD records with determinations currently supporting this record, it is supported by two collections from GRNP made on this Bush Blitz survey which were identified as being intermediate between typical <i>Hibbertia crispula</i> from the Nullarbor Region and <i>H. virgata</i> from the northern Eyre Peninsula; as these specimens have the stiffly erect branches and leaves, and rounded calyx lobes without a distal ridge they were determined as closest to <i>H. crispula</i> .
	<i>Hibbertia devitata</i>	Dilleniaceae			2				
X	<i>Hibbertia fasciculata prostrata</i>	Dilleniaceae	Y						Misidentification: in SA <i>Hibbertia fasciculata</i> is confined to Kangaroo Island and lower South-eastern Regions.
X	<i>Hibbertia riparia</i>	Dilleniaceae	Y		3				Outside the range of this species in SA; presumably mis-applied to <i>Hibbertia devitata</i> (q.v.) in this region; includes 3 BS records as the non-current concept " <i>Hibbertia riparia</i> (NC)" which are also presumed to be <i>H. devitata</i> .

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<i>Hibbertia virgata</i>	Dilleniaceae		9	2		1		May include intergrades with <i>Hibbertia crispula</i> in the western part of the distribution; see notes under that species.
	<i>Homoranthus wilhelmii</i>	Myrtaceae	Y	7		1	2		
	<i>Hordeum glaucum</i>	Poaceae		1	3				
	<i>Hordeum leporinum</i>	Poaceae			19	20			
	<i>Hyalosperma demissum</i>	Asteraceae	Y	2	1				
	<i>Hyalosperma glutinosum ssp. glutinosum</i>	Asteraceae	Y	9	10				
	<i>Hyalosperma semisterile</i>	Asteraceae	Y		12				
	<i>Hybanthus floribundus ssp. floribundus</i>	Violaceae		4			1		
	<i>Hybanthus monopetalus</i>	Violaceae		8	7		1		
	<i>Hydrocotyle callicarpa</i>	Araliaceae		1					
	<i>Hydrocotyle capillaris</i>	Araliaceae		1					
	<i>Hydrocotyle medicaginoides</i>	Araliaceae		1					
	<i>Hydrocotyle pilifera var. glabrata</i>	Araliaceae		4	9				
	<i>Hydrocotyle rugulosa</i>	Araliaceae		2					
	<i>Hydrocotyle trachycarpa</i>	Araliaceae		1	1				
	<i>Hymenochilus muticus</i>	Orchidaceae	Y						Treated in SA as <i>Pterostylis mutica</i> (q.v.) in accordance with CHAH (although awaiting review for the APC).
	<i>Hypochoeris glabra</i>	Asteraceae		7	10	1			
	<i>Hypochoeris radicata</i>	Asteraceae			1				
	<i>Hypoxis glabella var. glabella</i>	Hypoxidaceae	Y	2	6				
X	<i>Indigofera australis</i>	Fabaceae	Y						Taken as equivalent to <i>Indigofera australis ssp. hesperia</i> , as <i>ssp. australis</i> has a more eastern distribution.
	<i>Indigofera australis ssp. hesperia</i>	Fabaceae		2	5				Incorporates 5 BS records as the non-current concept " <i>Indigofera australis var. australis</i> (NC)".
X	<i>Indigofera australis var. australis</i> (NC)	Fabaceae			5				Non-current concept records made prior to the description of <i>ssp. hesperia</i> as a new taxon in 2010; these are taken to be equivalent to <i>ssp. hesperia</i> which has a more westerly distribution than <i>ssp. australis</i> .

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<i>Indigofera helmsii</i>	Fabaceae	Y	4					
	<i>Ipomoea cairica</i>	Convolvulaceae		1					A questionably naturalised occurrence based on the AD collection (R. Bates 31881) of a creeper on the Pine Lodge ruins which is in GRNP (although the coordinates provided are in error and plot on Hiltaba Station).
	<i>Isoetopsis graminifolia</i>	Asteraceae	Y	6	14				
	<i>Isolepis congrua</i>	Cyperaceae		1					
X	<i>Isolepis hookeriana</i>	Cyperaceae	Y						Misidentification: presumably based on a single BS record for GRNP as the non-current concept " <i>Isolepis hookeriana</i> (NC)", however the AD voucher of this record (AD, SANPWS 7952) was re-determined as <i>I. platycarpa</i> in Mar. 1993, and the corresponding BS record needs updating.
	<i>Isolepis platycarpa</i>	Cyperaceae	Y	1					
	<i>Isotoma petraea</i>	Campanulaceae		6	3		1		
X	<i>Jonesiopsis bicallata</i>	Orchidaceae	Y						Treated in SA as <i>Caladenia bicallata</i> (q.v.) in accordance with CHAH (although awaiting review for the APC).
	<i>Juncus aridicola</i>	Juncaceae					1		
	<i>Juncus bufonius</i>	Juncaceae	Y	1				1	
	<i>Kennedia prostrata</i>	Fabaceae		2					Only known in Gawler Ranges by two collections (BS1-10206 & 10639) from a single BS Survey site in GRNP, 1.4 km ENE Paney HS, discovered 16 Aug 2000. These are significant outliers from the species main distribution and a further northerly extension from several early records associated with granite inselbergs across northern Eyre Peninsula.
X	<i>Lachnagrostis aemula</i>	Poaceae	Y						Unsubstantiated record not supported by AVH.
	<i>Lachnagrostis filiformis</i>	Poaceae	Y	3			1		
	<i>Lamarckia aurea</i>	Poaceae			4				
	<i>Lasiopetalum behrii</i>	Malvaceae	Y	5	3	1			
	<i>Lawrenzia glomerata</i>	Malvaceae					1		
	<i>Lawrenzia squamata</i>	Malvaceae		1			1		
	<i>Leiocarpa semicalva</i> ssp. <i>semicalva</i>	Asteraceae	Y	2	1			1	
	<i>Leiocarpa websteri</i>	Asteraceae	Y	1					
X	<i>Lemooria burkittii</i>	Asteraceae		1					Not definitely recorded within GRNP: a single AD record (S.A. White 27 Aug 1912) with the imprecise location "Gawler Ranges".
	<i>Lepidium rotundum</i>	Brassicaceae		1					

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
X	<i>Lepidosperma concavum</i>	Cyperaceae	Y		3	1			Uncertain ID; <i>Lepidosperma concavum</i> is absent from the Gawler Ranges in AVH and the three unvouchered BS records are considered to be unreliable; the status of all the Eyre Peninsula specimens at AD previously identified as <i>L. concavum</i> is currently under review.
	<b><i>Lepidosperma viscidum</i></b>	Cyperaceae	Y	7	10		1	2	
	<b><i>Lepilaena australis</i></b>	Potamogetonaceae	Y	1					
	<b><i>Leptomeria preissiana</i></b>	Santalaceae		3					
	<b><i>Leptorhynchos scaber</i></b>	Asteraceae	Y	2	1				Confirmed: the single BS record has a corresponding AD voucher (A.K. Ramsay BS679-233) that is undatabased and not yet incorporated in the AD collection to enable validation of the field ID; it was located and the ID of <i>Leptorhynchos scaber</i> confirmed; it is supported by another BS record with a corresponding AD voucher (A.C. Robinson BS1-11588) which had a field ID of <i>L. squamatus</i> ssp. <i>squamatus</i> (q.v.), - this was located and re-determined as <i>L. scaber</i> , however, the sole databased AD record (S.A. White, 12 Sep 1912) has the imprecise location "Gawler Range", and is thus not definitely from within GRNP.
X	<i>Leptorhynchos squamatus</i> ssp. <i>squamatus</i>	Asteraceae	Y		2				Misidentification of <i>Leptorhynchos scaber</i> (q.v.); outside the range of this species which on Eyre Peninsula is confined to more temperate habitat in the south; represented by 2 BS records: one has a corresponding AD voucher (A.C. Robinson BS1-11588) that is undatabased and not yet incorporated in the AD collection to enable validation of the field ID, - this was located, examined and re-determined as <i>L. scaber</i> ; the other BS record is unvouchered but from a nearby site and is presumed to be a similar misidentification.
	<b><i>Leptorhynchos waitzia</i></b>	Asteraceae	Y		1				
	<b><i>Leptospermum coriaceum</i></b>	Myrtaceae	Y	7	2	2	3	2	
	<b><i>Leucopogon cordifolius</i></b>	Ericaceae	Y	13	4	4	1		
	<b><i>Levenhookia dubia</i></b>	Stylidiaceae	Y	3					
	<b><i>Limonium lobatum</i></b>	Plumbaginaceae		2	4	2			
	<b><i>Limosella australis</i></b>	Scrophulariaceae	Y	1					
	<b><i>Limosella curdieana</i> var. <i>Long-pedicelled</i> (W.R.Barker 3577)</b>	Scrophulariaceae							Added manually based on the AD collection (D.J. Duval 1596) from lower granite sheet slopes of Mt Centre; this record failed to extract automatically because of variation in the phrase name expression.
X	<i>Linguella nana</i>	Orchidaceae	Y						Treated in SA as <i>Pterostylis nana</i> (q.v.) in accordance with CHAH (although awaiting review for the APC).
	<b><i>Linum marginale</i></b>	Linaceae		1					
	<b><i>Lobelia cleistogamoides</i></b>	Campanulaceae		1					Added based on a single AD collection (R. Bates 21267) from Scrubby Peak sandhills.
	<b><i>Logania nuda</i></b>	Loganiaceae		6	2		1	1	
	<b><i>Logania ovata</i></b>	Loganiaceae		2					

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<i>Lomandra collina</i>	Asparagaceae		13	6	3	2	2	
	<i>Lomandra effusa</i>	Asparagaceae		4	5	2	1	2	
	<i>Lomandra leucocephala ssp. robusta</i>	Asparagaceae		2	2	1	1	2	
X	<i>Lomandra multiflora ssp. dura</i>	Asparagaceae			1				Misidentification of <i>Lomandra leucocephala ssp. robusta</i> (q.v.); <i>L. multiflora ssp. dura</i> is absent on Eyre Peninsula and is confined to the Mt Lofty and Finders Ranges and Yorke Peninsula; the single BS record from Sep 2007 has a corresponding AD voucher (BS587-8) that is undatabased and not yet incorporated in the AD collection to enable validation of the field ID, - it was located and re-determined as <i>L. leucocephala ssp. robusta</i> .
	<i>Lotus cruentus</i>	Fabaceae		3					
	<i>Lycium australe</i>	Solanaceae	Y	2	8	13	1		
	<i>Lycium ferocissimum</i>	Solanaceae		1					
	<i>Lysiana exocarpi ssp. exocarpi</i>	Loranthaceae		3	3	10			
	<i>Lysimachia arvensis</i>	Primulaceae		3	16			1	Based on records as the synonym <i>Anagallis arvensis</i> .
	<i>Maireana brevifolia</i>	Chenopodiaceae	Y	1	10	7		1	
	<i>Maireana enchylaenoides</i>	Chenopodiaceae	Y	4	4			1	
	<i>Maireana erioclada</i>	Chenopodiaceae	Y	5	11	12		1	
	<i>Maireana georgei</i>	Chenopodiaceae	Y	2	15	17			
	<i>Maireana lobiflora</i>	Chenopodiaceae	Y		3	3			
	<i>Maireana oppositifolia</i>	Chenopodiaceae	Y	1					
	<i>Maireana pentatropis</i>	Chenopodiaceae	Y		5	5			
	<i>Maireana pyramidata</i>	Chenopodiaceae	Y	2	2				
	<i>Maireana radiata</i>	Chenopodiaceae	Y	1	4	3			
	<i>Maireana sedifolia</i>	Chenopodiaceae	Y	4	19	16			
	<i>Maireana trichoptera</i>	Chenopodiaceae	Y	3	11	3		4	
	<i>Maireana turbinata</i>	Chenopodiaceae	Y	3	3				
	<i>Malva parviflora</i>	Malvaceae		2	1				
	<i>Marrubium vulgare</i>	Lamiaceae		4	14	11	1	1	

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<i>Medicago minima</i> var. <i>minima</i>	Fabaceae		4	38				
	<i>Medicago polymorpha</i> var. <i>polymorpha</i>	Fabaceae		3	16	40			
	<i>Medicago truncatula</i>	Fabaceae		2	2				
X	<i>Melaleuca adnata</i>	Myrtaceae	Y						Name previously misapplied in SA for <i>Melaleuca eleuterostachya</i> (q.v.).
X	<i>Melaleuca armillaris armillaris</i>	Myrtaceae	Y						Presumably in error for ssp. <i>akineta</i> ; since ssp. <i>armillaris</i> , although widely cultivated in SA, is native to NSW.
	<i>Melaleuca armillaris</i> ssp. <i>akineta</i>	Myrtaceae		22	3	1		4	
	<i>Melaleuca eleuterostachya</i>	Myrtaceae		4	1		2	1	
	<i>Melaleuca halmaturorum</i>	Myrtaceae	Y	2					
	<i>Melaleuca lanceolata</i>	Myrtaceae	Y	8	8	2	4	3	
	<i>Melaleuca leiocarpa</i>	Myrtaceae	Y	3	1		1		
	<i>Melaleuca oxyphylla</i>	Myrtaceae	Y	8	1				
	<i>Melaleuca pauperiflora</i> ssp. <i>mutica</i>	Myrtaceae	Y	4					
X	<i>Melaleuca raphiophylla</i>	Myrtaceae	Y						Name previously misapplied in SA for <i>Melaleuca armillaris</i> ssp. <i>akineta</i> .
	<i>Melaleuca uncinata</i>	Myrtaceae	Y	8	20	7	1	7	Includes 13 BS records as the non-current concept " <i>Melaleuca uncinata</i> (NC)" which is equivalent for this region.
	<i>Menkea australis</i>	Brassicaceae		1					
	<i>Mesembryanthemum crystallinum</i>	Aizoaceae		1	4				
	<i>Mesembryanthemum nodiflorum</i>	Aizoaceae		3	19	9			
	<i>Microcybe multiflora</i> ssp. <i>multiflora</i>	Rutaceae	Y		1				The single non-vouchered NS record is most likely valid; although the location is given as incorrectly as Pinkawillinie CP, the GPS co-ordinates place it within the GRNP which is a contiguous area; included in the provided list as <i>M. multiflora</i> , presumably on the basis of this record.
	<i>Microlepidium pilosulum</i>	Brassicaceae			1				
	<i>Microseris lanceolata</i>	Asteraceae	Y	6	8				
	<i>Microtis arenaria</i>	Orchidaceae	Y	2	1				
X	<i>Microtis unifolia</i>	Orchidaceae	Y						Name previously misapplied in SA for a number of species; here it mostly refers to <i>Microtis arenaria</i> (q.v.).

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<i>Millotia macrocarpa</i>	Asteraceae	Y	2					
	<i>Millotia muelleri</i>	Asteraceae	Y	3	2				
	<i>Millotia myosotidifolia</i>	Asteraceae	Y	7	9				
	<i>Millotia perpusilla</i>	Asteraceae	Y		1				
	<i>Millotia tenuifolia</i> var. <i>tenuifolia</i>	Asteraceae	Y	2	1				
	<i>Minuria leptophylla</i>	Asteraceae	Y	14	24	5			
	<i>Moraea setifolia</i>	Iridaceae			6				
	<i>Muehlenbeckia adpressa</i>	Polygonaceae		3			1		
	<i>Myoporum montanum</i>	Scrophulariaceae		1					
	<i>Myoporum platycarpum</i> ssp. <i>platycarpum</i>	Scrophulariaceae		5	18	39	1	2	Includes 3 BS records as the non-current concept " <i>Myoporum platycarpum</i> (NC)" and 7 BS records and 39 PU records as <i>M. platycarpum</i> ssp., these are equivalent to <i>M. platycarpum</i> ssp. <i>platycarpum</i> for this area which is well beyond the distribution of ssp. <i>perbellum</i> found further east on Eyre Peninsula.
X	<i>Myosurus minimus</i> var. <i>australis</i>	Ranunculaceae		1					Not definitely recorded within GRNP: a single AD record (S.A. White 10 Sep 1912) with the imprecise location "Gawler Range".
X	<i>Myriocephalus rhizocephalus</i>	Asteraceae	Y		3				Misidentification of <i>Isoetopsis graminifolia</i> (q.v.); one of the 3 BS records has a corresponding AD voucher (A.K. Ramsay BS679-98) that is undatabased and not yet incorporated in the AD collection to enable validation of the field ID; it was located, examined and re-determined to that species; the other 2 BS records are from the same area and survey trip and are presumed to be similar misidentifications.
	<i>Neatostema apulum</i>	Boraginaceae		4	21			1	
X	<i>Neurachne alopecuroidea</i>	Poaceae		1	1				Orthographic variant synonymous with <i>Neurachne alopecuroides</i> (q.v.), which is the name is adopted by the APC.
	<i>Neurachne alopecuroides</i>	Poaceae	Y	1	1				
	<i>Nicotiana glauca</i>	Solanaceae		2	1	1			
	<i>Nicotiana goodspeedii</i>	Solanaceae	Y	1					
	<i>Nicotiana maritima</i>	Solanaceae	Y	2					
	<i>Nicotiana occidentalis</i> ssp. <i>obliqua</i>	Solanaceae	Y		2		2	1	A range extension SW from the taxon's main distribution, with the nearest records from the S end of Lake Gairdner; only known in GRNP from two BS records recorded in 2009, one has a corresponding unincorporated and undatabased AD voucher (A.K. Ramsay BS679-167) which was examined and the ID confirmed.
	<i>Nicotiana velutina</i>	Solanaceae	Y	2					
	<i>Nitraria billardierei</i>	Zygophyllaceae	Y		1				

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<i>Olearia calcarea</i>	Asteraceae	Y	2	3	8	2		
	<i>Olearia calcarea</i> X <i>Olearia muelleri</i>	Asteraceae					1		
	<i>Olearia ciliata</i>	Asteraceae	Y	2					Plants from this area are treated as <i>Olearia ciliata</i> var. <i>ciliata</i> in SA.
	<i>Olearia decurrens</i>	Asteraceae	Y	10	27	7		4	
	<i>Olearia exiguifolia</i>	Asteraceae					1		
	<i>Olearia floribunda</i>	Asteraceae					2		
	<i>Olearia lepidophylla</i>	Asteraceae	Y	4	1		2		
	<i>Olearia magniflora</i>	Asteraceae	Y		1				
	<i>Olearia muelleri</i>	Asteraceae	Y	7	8	5	1		
	<i>Olearia pimeleoides</i>	Asteraceae	Y	1			1		
X	<i>Oligochaetochilus excelsus</i>	Orchidaceae	Y						Treated in SA as <i>Pterostylis excelsa</i> (q.v.) in accordance with CHAH (although awaiting review for the APC).
X	<i>Oligochaetochilus ovatus</i>	Orchidaceae	Y						Treated in SA as <i>Pterostylis ovata</i> (q.v.) in accordance with CHAH (although awaiting review for the APC).
X	<i>Oligochaetochilus pusillus</i>	Orchidaceae	Y						Treated in SA as <i>Pterostylis pusilla</i> (q.v.) in accordance with CHAH (although awaiting review for the APC).
X	<i>Oligochaetochilus rufus</i>	Orchidaceae	Y						Misapplied name; <i>Oligochaetochilus</i> is treated in SA as <i>Pterostylis</i> , in accordance with CHAH (although awaiting review for the APC), however, <i>P. rufa</i> is no longer recognised as occurring in SA although it has been applied to several taxa in the past.
	<i>Omphalolappula concava</i>	Boraginaceae	Y	5	1				
	<i>Opercularia turpis</i>	Rubiaceae		8	3				
	<i>Opercularia varia</i>	Rubiaceae		1					
	<i>Ophioglossum lusitanicum</i>	Ophioglossaceae		5	1	1			
X	<i>Osteocarpum salsuginosum</i>	Chenopodiaceae	Y						Presumably based on the single AD record, P.G. Wilson 546 from "S of Scrubby Peak, c. 8 km W of Petersby [Petersby] Tanks"; this is actually in an area of the Scrubby Peak station excluded from GRNP.
	<i>Oxalis perennans</i>	Oxalidaceae		6	16				Incorporates BS records which were all recorded as " <i>Oxalis perennans</i> (NC)".
	<i>Ozothamnus decurrens</i>	Asteraceae	Y	1		1			
	<i>Ozothamnus retusus</i>	Asteraceae	Y	2	1				



X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<i>Papaver hybridum</i>	Papaveraceae		3	3				
	<i>Parietaria cardiostegia</i>	Urticaceae		4	2				
	<i>Parietaria debilis</i>	Urticaceae		4	3				Incorporates BS records which were all recorded as " <i>Parietaria debilis</i> (NC)" and are likely to refer to this species as <i>P. australis</i> has a more coastal distribution.
	<i>Pelargonium littorale</i>	Geraniaceae		1					
	<i>Pentameris airoides</i> ssp. <i>airoides</i>	Poaceae		5	16			2	Based on records extracted as the synonym <i>Pentaschistis airoides</i> (q.v.).
X	<i>Pentaschistis airoides</i>	Poaceae		5	16				Synonym, now treated as <i>Pentameris airoides</i> ssp. <i>airoides</i> in accordance with APC.
	<i>Phebalium bullatum</i>	Rutaceae	Y	12	5		1	1	
	<i>Pheladenia deformis</i>	Orchidaceae	Y	3	1				
	<i>Philothea linearis</i>	Rutaceae	Y	2					
X	<i>Phyllangium divergens</i>	Loganiaceae			1				Misidentification of <i>Phyllangium sulcatum</i> (q.v.); well outside (NW) of the known range of <i>P. divergens</i> (after the correction of 1 AD collection from Kondoolka Station which was examined and re-determined as <i>P. sulcatum</i> ), and recorded on a rocky hill which also suggests <i>P. sulcatum</i> ; the single BS record has a corresponding AD voucher (BS1-11654) which is undatabased and not yet incorporated in the AD collection to enable validation of the field ID; it was located, examined and re-determined as <i>P. sulcatum</i> .
	<i>Phyllangium sulcatum</i>	Loganiaceae		2					
X	<i>Pimelea curviflora curviflora</i>	Thymelaeaceae	Y						In error: <i>Pimelea curviflora</i> var. <i>curviflora</i> is confined to NSW.
	<i>Pimelea curviflora</i> var. <i>gracilis</i>	Thymelaeaceae	Y	1					Included on the provided list as " <i>Pimelea curviflora</i> ", presumably based on the single AD collection as this variety.
X	<i>Pimelea curviflora</i> var. <i>sericea</i>	Thymelaeaceae			1				Based on an unvouchered BS record and the ID is not considered to be reliable at the variety level.
X	<i>Pimelea glauca</i>	Thymelaeaceae	Y	1		1			Location error: well north of the known species distribution and the single AD collection (A.R.R.Higginson, prior 16 May 1958) has the imprecise location "S and SW of Gawler Range area" which is outside the study area, although the coordinates used plot within GRNP.
X	<i>Pimelea humilis</i>	Thymelaeaceae			1				Misidentification of <i>Pimelea petrophila</i> (q.v.); outside the range of <i>P. humilis</i> which is confined to more temperate areas; the single BS record from Oct. 2009 has a corresponding AD voucher (A.K. Ramsay BS679-235) that is undatabased and not yet incorporated in the AD collection to enable validation of the field ID; it was located, examined and re-determined as <i>P. petrophila</i> .
	<i>Pimelea imbricata</i> var. <i>petraea</i>	Thymelaeaceae	Y	7	2				Includes 2 BS records as the synonym <i>Pimelea octophylla</i> ssp. <i>petraea</i> .
	<i>Pimelea micrantha</i>	Thymelaeaceae	Y	4				1	
	<i>Pimelea microcephala</i> ssp. <i>microcephala</i>	Thymelaeaceae	Y	13	13	10	1	2	

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<b><i>Pimelea octophylla</i></b>	Thymelaeaceae	Y	2					
X	<i>Pimelea octophylla</i> ssp. <i>petraea</i> (NC)	Thymelaeaceae			2				Non-current name equivalent to <i>Pimelea imbricata</i> var. <i>petraea</i> (q.v.).
	<b><i>Pimelea petrophila</i></b>	Thymelaeaceae	Y	25	5	2	1		
X	<i>Pimelea simplex</i>	Thymelaeaceae	Y		3	2			Indeterminate for subspecies.
	<b><i>Pimelea simplex</i> ssp. <i>continua</i></b>	Thymelaeaceae		1					
	<b><i>Pimelea simplex</i> ssp. <i>simplex</i></b>	Thymelaeaceae		6	5				
X	<i>Pimelea subvillifera</i>	Thymelaeaceae	Y						Record source unknown, possibly only included as "expected to occur" or based on an imprecise record; there are no AVH records from GRNP, possibly based on AD collection R.J. Chinnock 2914 from "23 km NE of Poochera directly N of Karcultaby" which is near to, although not definitely within, the Gawler Ranges Conservation Reserve and to the south of GRNP.
	<b><i>Pimelea trichostachya</i></b>	Thymelaeaceae	Y	3	4		2	1	
	<b><i>Pittosporum angustifolium</i></b>	Pittosporaceae		8	23	17	1	1	
	<b><i>Plagiobothrys plurisepaleus</i></b>	Boraginaceae		1					
	<b><i>Plantago coronopus</i> ssp. <i>commutata</i></b>	Plantaginaceae					1		
	<b><i>Plantago drummondii</i></b>	Plantaginaceae		2	1				
	<b><i>Plantago</i> sp. <i>B</i> (R.Bates 44765)</b>	Plantaginaceae		3	1				Taxon added manually; omitted from AVH and AD data extract because the AD collections are databased under a manuscript name.
	<b><i>Pleurosorus rutifolius</i></b>	Aspleniaceae		4	3				
	<b><i>Pleurosorus subglandulosus</i></b>	Aspleniaceae		1					
	<b><i>Podolepis canescens</i></b>	Asteraceae	Y	1	3				
	<b><i>Podolepis capillaris</i></b>	Asteraceae	Y	12	42	14		6	
	<b><i>Podolepis jaceoides</i></b>	Asteraceae	Y	3	1				Includes 1 BS record misidentified as <i>P. rugata</i> var. <i>rugata</i> (q.v.).
X	<i>Podolepis rugata</i> var. <i>rugata</i>	Asteraceae	Y		1				Misidentification of <i>Podolepis jaceoides</i> (q.v.); the inclusion in the provided list (as <i>P. rugata</i> ) is presumably based on the single BS record from Oct 2001 which has a corresponding AD voucher (BS1-10454) that is undatabased and not yet incorporated in the AD collection to enable validation of the field ID; it was located and found to have been subsequently re-determined (correctly) as <i>P. jaceoides</i> on 28 Nov 2001.
	<b><i>Podolepis tepperi</i></b>	Asteraceae	Y	2	7				
	<b><i>Podotheca angustifolia</i></b>	Asteraceae	Y	1	3		1	2	

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<i>Pogonolepis muelleriana</i>	Asteraceae	Y	3	13	1			
	<i>Polycarpon tetraphyllum</i>	Caryophyllaceae		1					
X	<i>Pomaderris oraria</i> (NC)	Rhamnaceae			2				Non-current concept and misapplied name equivalent to <i>Pomaderris paniculosa</i> ssp. <i>paniculosa</i> in this area.
	<i>Pomaderris paniculosa</i> ssp. <i>paniculosa</i>	Rhamnaceae		4	2				Includes 2 BS records as " <i>Pomaderris oraria</i> (NC)".
	<i>Pomax umbellata</i>	Rubiaceae		10	3	1		1	
	<i>Poranthera microphylla</i>	Phyllanthaceae	Y	2	2		1		
	<i>Prasophyllum occidentale</i>	Orchidaceae		1					
	<i>Prostanthera ammophila</i>	Lamiaceae		1					
	<i>Prostanthera florifera</i>	Lamiaceae		17	6	1			
	<i>Prostanthera serpyllifolia</i> ssp. <i>microphylla</i>	Lamiaceae			1				
X	<i>Prostanthera serpyllifolia</i> ssp. <i>serpyllifolia</i>	Lamiaceae			1				Unreliable ID; the single BS record is unvouchered and beyond the northern limit of the subspecies distribution; not regarded as a reliable record given the absence of any voucher from the property and the difficulty in separating some specimens of this subspecies from ssp. <i>microphylla</i> .
	<i>Prostanthera striatiflora</i>	Lamiaceae		11	2			1	
	<i>Pterostylis excelsa</i>	Orchidaceae			3				Incorporates two BS records as " <i>Pterostylis</i> aff. <i>excelsa</i> (NC)" and one as " <i>Pterostylis excelsa</i> (NC)"; these non-current usages appear to be equivalent to Bates (2012) concept of <i>P. excelsa</i> which is given as occurring in the Gawler Ranges; recorded in the provided list as <i>Oligochaetochilus excelsus</i> .
	<i>Pterostylis mutica</i>	Orchidaceae	Y	1	2				Included in provided list as <i>Hymenochilus muticus</i> .
	<i>Pterostylis nana</i>	Orchidaceae	Y	4		1			Included in provided list as <i>Linguella nana</i> .
	<i>Pterostylis ovata</i>	Orchidaceae	Y	2	2				Included in provided list as <i>Oligochaetochilus ovatus</i> .
	<i>Pterostylis pusilla</i>	Orchidaceae	Y	1					Included in provided list as <i>Oligochaetochilus pusillus</i> .
	<i>Pterostylis sanguinea</i>	Orchidaceae		2					Included in provided list as <i>Urochilus sanguineus</i> .
	<i>Pterostylis xerophila</i>	Orchidaceae	Y	1					
X	<i>Ptilotus exaltatus</i> var. <i>exaltatus</i>	Amaranthaceae		1					Non-current taxonomy: now included in <i>P. nobilis</i> ssp. <i>nobilis</i> (q.v.).
	<i>Ptilotus nobilis</i> ssp. <i>nobilis</i>	Amaranthaceae		1					Based on 1 AD collection (H. Eichler 20464) as the synonym <i>Ptilotus exaltatus</i> var. <i>exaltatus</i> (q.v.).
	<i>Ptilotus seminudus</i>	Amaranthaceae	Y	6	14		1	1	
	<i>Ptilotus sessilifolius</i>	Amaranthaceae	Y	2	2	1		2	

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<i>Ptilotus spathulatus</i>	Amaranthaceae	Y	6	28	1	1		
	<i>Pycnosorus pleiocephalus</i>	Asteraceae	Y	5	16	1			
X	<i>Quinetia urvillei</i>	Asteraceae	Y	1					Not definitely recorded within GRNP: a single AD record (E.H.Ising, s.dat.) with the imprecise location "Gawler Range".
	<i>Ranunculus hamatosestosus</i>	Ranunculaceae		2					
X	<i>Ranunculus sessiliflorus</i> var.	Ranunculaceae			1				Indeterminate for variety: may be either ssp. <i>sessiliflorus</i> (a collection exists from GRNP) or ssp. <i>pilulifer</i> (a collection exists from Hiltaba).
	<i>Ranunculus sessiliflorus</i> var. <i>sessiliflorus</i>	Ranunculaceae		1	1				
	<i>Reichardia tingitana</i>	Asteraceae		1	7		1		
	<i>Rhagodia candolleana</i> ssp. <i>candolleana</i>	Chenopodiaceae	Y	1	2				
	<i>Rhagodia crassifolia</i>	Chenopodiaceae	Y	2	3	9			
	<i>Rhagodia parabolica</i>	Chenopodiaceae	Y	10	43	57		3	
	<i>Rhagodia preissii</i> ssp. <i>preissii</i>	Chenopodiaceae	Y	6	7	6	3	3	
	<i>Rhagodia spinescens</i>	Chenopodiaceae	Y	1	1	13			
	<i>Rhagodia ulicina</i>	Chenopodiaceae	Y	2	4	8			
X	<i>Rhodanthe chlorocephala</i> ssp. <i>rosea</i>	Asteraceae			1				Misidentification of <i>Rhodanthe stuartiana</i> (q.v.); the eastern limit of this species known distribution is to the west of the Gawler Ranges; the single BS record from Oct 2001 has a corresponding AD voucher (BS1-10403) that is undatabased and not yet incorporated in the AD collection to enable validation of the field ID; it was located and found to have been subsequently re-determined by P.J. Lang as <i>R. stuartiana</i> on 24 Nov 2005.
	<i>Rhodanthe corymbiflora</i>	Asteraceae		1					
	<i>Rhodanthe floribunda</i>	Asteraceae	Y	2	4	4			
	<i>Rhodanthe laevis</i>	Asteraceae	Y		2				
	<i>Rhodanthe moschata</i>	Asteraceae	Y	1	2	1			
	<i>Rhodanthe oppositifolia</i> ssp. <i>oppositifolia</i>	Asteraceae	Y	3					
	<i>Rhodanthe polygalifolia</i>	Asteraceae	Y	6	20			1	
	<i>Rhodanthe pygmaea</i>	Asteraceae	Y	5	16				
	<i>Rhodanthe stricta</i>	Asteraceae		1					

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<i>Rhodanthe stuartiana</i>	Asteraceae	Y	5	8				
	<i>Rhyncharrhena linearis</i>	Apocynaceae			1				Confirmed: this species was only represented by 2 BS records, both with corresponding undatabased and unincorporated AD vouchers; one of these (A.K. Ramsay BS679-281) was found to be a misidentification of a <i>Santalum acuminatum</i> seedling and was re-determined, the other (A.C. Robinson BS1-10197) was confirmed as <i>Rhyncharrhena linearis</i> .
	<i>Rostraria cristata</i>	Poaceae		5	6				
	<i>Rostraria pumila</i>	Poaceae		4	16	3			
	<i>Rumex brownii</i>	Polygonaceae		3					
X	<i>Rumex dumosus</i>	Polygonaceae			1				Misidentification of <i>Rumex brownii</i> (q.v.); outside the range of <i>R. dumosus</i> and no records showing on AVH; the single BS record from 1985 (recorded as the non-current concept " <i>Rumex dumosus</i> var. <i>dumosus</i> (NC)" which is equivalent to <i>Rumex dumosus</i> ) has a corresponding AD voucher (NPGA 7945) that was re-determined as <i>R. brownii</i> on Sep 2003.
X	<i>Rutidosia multiflora</i>	Asteraceae	Y						Synonym; now treated as <i>Siloxerus multiflorus</i> (q.v.) on APC.
	<i>Rytidosperma caespitosum</i>	Poaceae	Y	18	40	53	1		On provided list and all BS and AD records as the synonym <i>Austrodanthonia caespitosa</i> .
	<i>Rytidosperma setaceum</i>	Poaceae	Y	1	3				On provided list and all BS and AD records as the synonym <i>Austrodanthonia setacea</i> .
	<i>Sagina apetala</i>	Caryophyllaceae		1					
	<i>Salsola australis</i>	Chenopodiaceae		1	12	17			
X	<i>Salsola kali</i>	Chenopodiaceae		1		17			Synonym; now treated as <i>Salsola australis</i> (q.v.).
	<i>Salvia verbenaca</i> var. <i>verbenaca</i>	Lamiaceae		1					
	<i>Salvia verbenaca</i> var. <i>vernalis</i>	Lamiaceae					1		
	<i>Santalum acuminatum</i>	Santalaceae		6	6	6			
	<i>Santalum murrayanum</i>	Santalaceae		2	2	1			
	<i>Santalum spicatum</i>	Santalaceae		1					
	<i>Sarcostemma viminale</i> ssp. <i>australe</i>	Apocynaceae		1					
	<i>Sarcozona praecox</i>	Aizoaceae	Y		1		1		
X	<i>Scaevola aemula</i>	Goodeniaceae			9				Misidentification of <i>Scaevola humilis</i> : the 9 BS records include three with corresponding AD vouchers and these have all been subsequently re-determined as <i>S. humilis</i> ; the remaining non-vouchered records are presumed to be this also; there is an AD collection of <i>S. aemula</i> from the adjoining Pinkwillinie CP but there are none from GRNP.
	<i>Scaevola depauperata</i>	Goodeniaceae		1					

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<i>Scaevola humilis</i>	Goodeniaceae		18	5		1	2	
	<i>Scaevola spinescens</i>	Goodeniaceae		1		1			
	<i>Schenkia australis</i>	Gentianaceae			2		1		Based on 2 BS records misidentified as <i>Centaurium tenuiflorum</i> (q.v.).
	<i>Schismus barbatus</i>	Poaceae		2	6	1			
	<i>Schoenus nanus</i>	Cyperaceae	Y	2					
	<i>Schoenus sculptus</i>	Cyperaceae	Y	1					
	<i>Schoenus subaphyllus</i>	Cyperaceae	Y	1		1	1		
	<i>Scleranthus pungens</i>	Caryophyllaceae	Y	5	9			1	
	<i>Sclerolaena brevifolia</i>	Chenopodiaceae	Y	2	2		1		
	<i>Sclerolaena diacantha</i>	Chenopodiaceae	Y	2	21	23	2		
	<i>Sclerolaena obliquicuspis</i>	Chenopodiaceae	Y	1	23	22			
	<i>Sclerolaena parviflora</i>	Chenopodiaceae	Y	2	4	3			
	<i>Sclerolaena patenticuspis</i>	Chenopodiaceae	Y	3	10	35	1		
	<i>Sclerolaena uniflora</i>	Chenopodiaceae	Y	1	2				
	<i>Sclerolaena uniflora hybrid</i>	Chenopodiaceae			2				
	<i>Senecio dolichocephalus</i>	Asteraceae	Y	1					
	<i>Senecio gawlerensis</i>	Asteraceae	Y	15	4				
	<i>Senecio glossanthus</i>	Asteraceae	Y	5	16				Incorporates 10 BS records as " <i>Senecio glossanthus</i> (NC)" most likely to be this species.
X	<i>Senecio lautus dissectifolius</i>	Asteraceae	Y						<i>Senecio lautus</i> ssp. <i>dissectifolius</i> is treated as a synonym in SA for several related taxa; its application here is ambiguous.
	<i>Senecio magnificus</i>	Asteraceae	Y	1			1		
X	<i>Senecio pinnatifolius</i>	Asteraceae	Y						Presumably based on BS record as " <i>Senecio pinnatifolius</i> (NC)", q.v.
X	<i>Senecio pinnatifolius</i> (NC)	Asteraceae			1				Non-current concept, most likely refers to <i>Senecio spanomerus</i> (q.v.).
	<i>Senecio quadridentatus</i>	Asteraceae	Y	2	1		1	1	
	<i>Senecio spanomerus</i>	Asteraceae	Y	1	1				Includes 1 BS record as " <i>Senecio pinnatifolius</i> (NC)".
	<i>Senna artemisioides ssp. filifolia</i>	Fabaceae	Y	1	3	1			
	<i>Senna artemisioides ssp.</i>	Fabaceae	Y	17	10	8	1		Includes 4 BS records as " <i>Senna artemisioides ssp. petiolaris</i> (NC)" which is equivalent in this area.

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<i>petiolaris</i>								
	<b><i>Senna artemisioides</i> ssp. X <i>artemisioides</i></b>	Fabaceae		8	2	2			
	<b><i>Senna artemisioides</i> ssp. X <i>coriacea</i></b>	Fabaceae	Y	4	12	18	2		Included on provided list as <i>Senna coriacea</i> .
X	<i>Senna cardiosperma</i> ssp. <i>cardiosperma</i>	Fabaceae			1				Misidentification of <i>Senna cardiosperma</i> ssp. <i>gawlerensis</i> (q.v.); there are no collections ssp. <i>cardiosperma</i> in AVH from the Gawler Ranges; the single BS record from Sep 2007 has a corresponding AD voucher (R. Sinclair BS587-440) that is undatabased and not yet incorporated in the AD collection to enable validation of the field ID, - it was located and found to have been subsequently re-determined as ssp. <i>gawlerensis</i> .
	<b><i>Senna cardiosperma</i> ssp. <i>gawlerensis</i></b>	Fabaceae	Y	6	3	1			Inclusion on provided listing as <i>Senna cardiosperma</i> most likely refers to this subspecies.
X	<i>Senna coriacea</i>	Fabaceae	Y						Treated as <i>Senna artemisioides</i> ssp. X <i>coriacea</i> (q.v.) on APC.
	<b><i>Senna pleurocarpa</i> var. <i>pleurocarpa</i></b>	Fabaceae	Y	3	2		1		
	<b><i>Sida calyxhymania</i></b>	Malvaceae			1				
	<b><i>Sida intricata</i></b>	Malvaceae			1	2			
	<b><i>Sida petrophila</i></b>	Malvaceae		2					
	<b><i>Sida phaeotricha</i></b>	Malvaceae		2					
	<b><i>Sigesbeckia australiensis</i></b>	Asteraceae	Y	3					
X	<i>Sigesbeckia orientalis</i>	Asteraceae	Y						Previous misapplication in this region for <i>Sigesbeckia australiensis</i> (q.v.); in SA, <i>S. orientalis</i> is confined to the Mt Lofty Ranges
	<b><i>Silene apetala</i></b>	Caryophyllaceae			1				
	<b><i>Silene gallica</i> var. <i>gallica</i></b>	Caryophyllaceae		3					
	<b><i>Silene nocturna</i></b>	Caryophyllaceae		3	9				
	<b><i>Silene tridentata</i></b>	Caryophyllaceae		2	5				
	<b><i>Siloxerus multiflorus</i></b>	Asteraceae		3					
	<b><i>Sisymbrium erysimoides</i></b>	Brassicaceae		6	33	3			
	<b><i>Sisymbrium irio</i></b>	Brassicaceae		3	4				
	<b><i>Sisymbrium orientale</i></b>	Brassicaceae		1					

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
X	<i>Sisymbrium sp.</i>	Brassicaceae						1	Species indeterminate.
X	<i>Solanum capsiciforme</i>	Solanaceae		1					Not definitely recorded within GRNP: a single AD record (J.B. Cleland, 5 Sep 1965) with the imprecise location "Gawler Range".
	<b><i>Solanum coactiliferum</i></b>	Solanaceae	Y	6	5	1	2	2	
	<b><i>Solanum nigrum</i></b>	Solanaceae		2	1	3			
	<b><i>Solanum petrophilum</i></b>	Solanaceae	Y	18	16	8		1	
	<b><i>Solanum simile</i></b>	Solanaceae	Y	2					
	<b><i>Solanum sturtianum</i></b>	Solanaceae	Y	1	1				
	<b><i>Sonchus oleraceus</i></b>	Asteraceae		3	30	5	1		
	<b><i>Spergularia bocconeii</i></b>	Caryophyllaceae					1		
	<b><i>Spergularia diandra</i></b>	Caryophyllaceae		5	9				Confirmed: the AD collections were checked to ensure they were not the similar species <i>Spergularia diandroides</i> which has been recorded further west in the Gawler Ranges.
	<b><i>Spergularia marina</i></b>	Caryophyllaceae		1		2			Confirmed: the single AD collection (R. Bates 20748) was checked to ensure that it was not <i>Spergularia bocconeii</i> .
X	<i>Stackhousia clementii</i>	Celastraceae		1					Misidentification of <i>Stackhousia muricata</i> ssp. Perennial (W.R.Barker 3641) (q.v.); south of the main distribution of <i>S. clementii</i> ; the single AD collection (P.J. Lang BS1-10114) is a BS record voucher that was databased but not yet incorporated in the AD collection and had an unvalidated ID; it was located, examined and re-determined as <i>S. muricata</i> ssp. Perennial (W.R.Barker 3641).
X	<i>Stackhousia monogyna</i>	Celastraceae		1					Misidentification of <i>Stackhousia muricata</i> ssp. Perennial (W.R.Barker 3641) (q.v.); the single AD collection (M.J. Thorpe 46, Southern ridge top below Scrubby Peak) was examined and re-determined as <i>S. muricata</i> ssp. Perennial (W.R.Barker 3641).
X	<i>Stackhousia muricata</i> (NC)	Celastraceae			1				Equivalent to <i>Stackhousia muricata</i> ssp. Perennial (W.R.Barker 3641) (q.v.) in this region.
	<b><i>Stackhousia muricata</i> ssp. Perennial (W.R.Barker 3641)</b>	Celastraceae		5					
	<b><i>Stenanthemum leucophractum</i></b>	Rhamnaceae		17	6		3		
	<b><i>Stenanthemum notiale</i> ssp. notiale</b>	Rhamnaceae		4					
	<b><i>Stenopetalum lineare</i></b>	Brassicaceae		4	3				
	<b><i>Stenopetalum sphaerocarpum</i></b>	Brassicaceae		2	2				
X	<i>Stuartina muelleri</i>	Asteraceae	Y		1				Unreliable record: may also be <i>Stuartina hamata</i> or a possibly misidentification of another genus; there are no AVH records of <i>Stuartina</i> from the Gawler Ranges and the record occurs to the north of the <i>S. muelleri</i> distribution on Eyre Peninsula and south of the main distribution of <i>S. hamata</i> ; presumably based on a single BS record with a voucher that has not yet been validated and incorporated in the AD



X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
									collection; - the specimen could not be located.
	<b><i>Swainsona acuticarinata</i></b>	Fabaceae	Y	1					
X	<i>Swainsona affinis</i>	Fabaceae	Y						Misidentification of <i>Swainsona microphylla</i> (q.v.); <i>S. affinis</i> has a more northern distribution; listing is presumably based on the single record of <i>S. affinis</i> for GRNP projected on AVH (MEL, N.N. Donner 3378) which is a duplicate of an AD collection identified by J. Thompson in Sep 1991 as <i>S. microphylla</i> .
X	<i>Swainsona canescens</i>	Fabaceae	Y	1					Not definitely recorded within GRNP: a single AD record (H.W. Caulfield, Oct 1955) with the imprecise location "Gawler Range"; no other AVH records within GRNP.
X	<i>Swainsona colutoides</i>	Fabaceae	Y						Located near, but not within GRNP: presumably based on two AD sheets (T.S. Te 781) from a GPS location which plots 250 m W of GRNP boundary; no AVH records for GRNP.
X	<i>Swainsona microcalyx</i>	Fabaceae	Y	2					Not definitely recorded within GRNP: two AD sheets (J.B. Cleland, Aug 1928 & anon s.dat) with the imprecise locations "C. 64 km E of Wirrulla Railway Station"; and "c. 40 miles E of Wirrulla", respectively, cannot be placed with confidence within GRNP; using a "by road" distance they would fall within Hiltaba Station.
	<b><i>Swainsona microphylla</i></b>	Fabaceae	Y	2	1				
X	<i>Swainsona tenuis</i>	Fabaceae	Y	1					Not definitely recorded within GRNP: a single AD record (K.M. Alcock 34) with the imprecise location "Gawler Ranges"; no other AVH records within GRNP.
	<b><i>Tecticornia indica</i> ssp. <i>leiostachya</i></b>	Chenopodiaceae		1					
X	<i>Tecticornia pergranulata</i>	Chenopodiaceae	Y						There are no records on AVH for GRNP; listing possibly based on AD collection, L.D. Williams 9127 with imprecise locality "30 km E of N of Minnipa", which plots near southern boundary of GRNP and would be associated with salt pans which are outside the reserve.
X	<i>Tecticornia</i> sp.	Chenopodiaceae					1		Species indeterminate
	<b><i>Templetonia egena</i></b>	Fabaceae	Y	2		6	1	1	
	<b><i>Tetragonia eremaea</i></b>	Aizoaceae	Y	3	7				
	<b><i>Teucrium corymbosum</i></b>	Lamiaceae		9	3	1	1		Includes 3 BS records as " <i>Teucrium corymbosum</i> (NC)" which is equivalent in this region.
	<b><i>Teucrium racemosum</i></b>	Lamiaceae		1		1			
	<b><i>Teucrium sessiliflorum</i></b>	Lamiaceae		9	7		2	1	
	<b><i>Thelymitra alcockiae</i></b>	Orchidaceae		1					This species was only recently published (Jeanes, 2013), after the production of these lists; the protologue cites an AD collection (A.E. Orchard 2222) from Yandinga Gorge which is within GRNP. It is a member of the <i>Thelymitra nuda</i> complex and has previously been treated as <i>T. aff. megalyptra</i> ; it is likely that most, if not all, of the Gawler Ranges records of <i>T. megalyptra</i> and <i>T. nuda</i> refer to this new species.
	<b><i>Thelymitra antennifera</i></b>	Orchidaceae	Y	1					
	<b><i>Thelymitra luteocilium</i></b>	Orchidaceae	Y	1					

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
X	<i>Thelymitra megcalyptra</i>	Orchidaceae	Y	1	1				Not definitely recorded within GRNP: the single AD collection (NPGA-7863) from the NE face of Scrubby Peak was determined as <i>T. megcalyptra</i> by J. Jeanes in Jul 2002, but it is probably the more recently described <i>T. alcockiae</i> (q.v.) (Jeanes 2013) based on its habitat; <i>T. megcalyptra</i> is a species of mallee habitats and might occur in GRNP, but there are no definite records based on an application of Jeanes' new treatment of the <i>T. nuda</i> complex, and the map he provides shows the distribution of <i>T. megcalyptra</i> on Eyre Peninsula as confined to the southern end.
X	<i>Thelymitra nuda</i>	Orchidaceae	Y		2				Name previously applied in a wider sense to members of the <i>Thelymitra nuda</i> complex; outside the range of <i>T. nuda</i> which is "a species of higher rainfall districts, from southern Eyre Peninsula [and other regions]" (Bates, 2012) and is "found in more mesic near-coastal forests and heathlands (Jeanes, 2013); most likely refers to <i>T. alcockiae</i> (q.v.).
X	<i>Thelymitra nuda</i> (NC)	Orchidaceae			1				Non-current concept most likely equivalent to <i>Thelymitra alcockiae</i> (q.v.).
	<b><i>Themeda triandra</i></b>	Poaceae	Y	1	2				
	<b><i>Thysanotus baueri</i></b>	Asparagaceae		3	1		1		
	<b><i>Thysanotus exiliflorus</i></b>	Asparagaceae		1					
	<b><i>Thysanotus patersonii</i></b>	Asparagaceae		8	8	2			
X	<i>Thysanotus tenellus</i>	Asparagaceae		1	1				Misidentification of <i>Thysanotus baueri</i> ; the single AD collection (T.S. Te 777) was examined and re-determined as <i>T. baueri</i> ; the BS record is unvouchered and presumably results from a similar error; the distribution of <i>T. tenellus</i> does not extend to Eyre Peninsula.
	<b><i>Trachymene ceratocarpa</i></b>	Araliaceae		2					
	<b><i>Trachymene cyanopetala</i></b>	Araliaceae		1	1				
	<b><i>Trachymene ornata</i></b>	Araliaceae		11	15				
	<b><i>Trachymene pilosa</i></b>	Araliaceae		1	1				
	<b><i>Trichanthodium skirrophorum</i></b>	Asteraceae	Y	2	7				
	<b><i>Tricoryne tenella</i></b>	Hemerocallidaceae	Y		2		1		Confirmed: the 2 BS records have corresponding AD vouchers (BS587-9 and BS587-76) that are undatabased and not yet incorporated in the AD collection to enable validation of the field ID; these were located and their ID was confirmed.
	<b><i>Trifolium arvense</i> var. <i>arvense</i></b>	Fabaceae			2		1		
X	<i>Triglochin calcitrapa</i>	Juncaginaceae	Y						Name of WA species, previously misapplied in SA (as <i>Triglochin calcitrapum</i> ); equivalent to <i>T. isingiana</i> in this region; includes 1 BS record as the non-current concept " <i>Triglochin calcitrapum</i> (NC)"
	<b><i>Triglochin isingiana</i></b>	Juncaginaceae	Y	2	1				
	<b><i>Triglochin mucronata</i></b>	Juncaginaceae	Y	2					Includes 2 AD collections as " <i>Triglochin mucronatum</i> ".
	<b><i>Triglochin nana</i></b>	Juncaginaceae	Y	2					Includes 2 AD collections as " <i>Triglochin nanum</i> ".
	<b><i>Triodia bunicola</i></b>	Poaceae	Y	1					

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<i>Triodia irritans</i>	Poaceae		12	18	10	1	8	
	<i>Triodia lanata</i>	Poaceae	Y	4	5		1	4	
	<i>Triodia scariosa</i>	Poaceae	Y	3					
X	<i>Triodia scariosa</i> ssp. (NC)	Poaceae			3				Species indeterminate: non-current concept that may be either <i>Triodia bunicola</i> or <i>T. scariosa</i> .
X	<i>Triodia</i> sp.	Poaceae						3	Species indeterminate
	<i>Tripogon loliiformis</i>	Poaceae	Y		1				
X	<i>Urochilus sanguineus</i>	Orchidaceae	Y						Treated in SA as <i>Pterostylis sanguinea</i> (q.v.) in accordance with CHAH (although awaiting review for the APC).
	<i>Urospermum picroides</i>	Asteraceae		2	2		1		
	<i>Velleia arguta</i>	Goodeniaceae		6	1				
	<i>Velleia cynopotamica</i>	Goodeniaceae		3					
	<i>Vittadinia australasica</i> var. <i>australasica</i>	Asteraceae					1		
	<i>Vittadinia cervicularis</i> var. <i>cervicularis</i>	Asteraceae	Y	1	1				
	<i>Vittadinia cuneata</i> var. <i>cuneata</i>	Asteraceae	Y	1		1			Includes management guidelines listing as " <i>Vittadinia cuneata</i> " which is equivalent, given the absence of var. <i>morrisii</i> and var. <i>murrayensis</i> in this region.
	<i>Vittadinia dissecta</i> var. <i>hirta</i>	Asteraceae	Y		1				
	<i>Vittadinia gracilis</i>	Asteraceae	Y	10	17	5	1	1	
	<i>Vittadinia megacephala</i>	Asteraceae	Y		2				
X	<i>Vulpia fasciculata</i>	Poaceae			1				Probable misidentification; no AVH records of <i>Vulpia fasciculata</i> from AVH, and the species distribution does not extend N of central Eyre Peninsula in this region; based on a single BS record with a corresponding voucher that has not yet been validated and incorporated in the AD collection.
	<i>Vulpia muralis</i>	Poaceae		1	3				
	<i>Vulpia myuros</i> f. <i>myuros</i>	Poaceae		6	13				
	<i>Wahlenbergia communis</i>	Campanulaceae		2					
	<i>Wahlenbergia gracilentia</i>	Campanulaceae		2	4		1		
	<i>Wahlenbergia luteola</i>	Campanulaceae		1					
	<i>Wahlenbergia preissii</i>	Campanulaceae			2				

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<b><i>Wahlenbergia stricta</i> ssp. <i>stricta</i></b>	Campanulaceae		2	7		1		
	<b><i>Wahlenbergia tumidifructa</i></b>	Campanulaceae		1					
	<b><i>Waitzia acuminata</i> var. <i>acuminata</i></b>	Asteraceae	Y	4	2				
	<b><i>Westringia rigida</i></b>	Lamiaceae		15	6	11	1		
	<b><i>Wilsonia humilis</i></b>	Convolvulaceae	Y	1					
	<b><i>Wurmbea australis</i></b>	Colchicaceae	Y	7	4				
	<b><i>Wurmbea decumbens</i></b>	Colchicaceae	Y	3					
	<b><i>Wurmbea dioica</i> ssp. <i>brevifolia</i></b>	Colchicaceae	Y	1	7				Includes 7 BS records as the non-current concept " <i>Wurmbea dioica</i> ssp. <i>dioica</i> (NC)" which are presumed to be ssp. <i>brevifolia</i> , since ssp. <i>dioica</i> probably does not occur in this area; confirmed for 1 BS record with the corresponding AD voucher (K. L. Graham BS1-10366) that is undatabased and not yet incorporated in the AD collection to enable validation of the field ID, - this was located and re-determined as <i>Wurmbea dioica</i> ssp. <i>brevifolia</i> .
X	<i>Wurmbea dioica</i> ssp. <i>dioica</i>	Colchicaceae		2	1				Probable misidentification; based on 2 AD collections with unreliable field IDs that have been databased and projected on AVH, but have not yet been validated and incorporated into the AD collection.
	<b><i>Xerochrysum bracteatum</i></b>	Asteraceae					1	1	
	<b><i>Zaluzianskya divaricata</i></b>	Scrophulariaceae			1				
	<b><i>Zygophyllum ammophilum</i></b>	Zygophyllaceae	Y		2	1			ID confirmed: appears to be based on 2 BS records only, both with vouchers that have not yet been validated and incorporated in the AD collection; these were located and the field ID was checked by R.M. Barker, confirming that they are not the very similar related species <i>Z. simile</i> ; there is also one AD collection (D.E. Murfet BS107-622) with a recent & reliable determination as <i>Z. ammophilum</i> from outside but near the southern boundary of GRNP.
	<b><i>Zygophyllum angustifolium</i></b>	Zygophyllaceae	Y	8	5				
	<b><i>Zygophyllum apiculatum</i></b>	Zygophyllaceae	Y	13	24	39		1	
X	<i>Zygophyllum aurantiacum</i> (NC)	Zygophyllaceae			7	27			Subspecies indeterminate: non-current concept which includes a number of subspecies for this region but is most likely ssp. <i>aurantiacum</i> or ssp. <i>simplicifolium</i> .
	<b><i>Zygophyllum aurantiacum</i> ssp. <i>aurantiacum</i></b>	Zygophyllaceae	Y	6	15		1	3	On provided list as " <i>Zygophyllum aurantiacum</i> " which is presumed to refer to this subspecies; includes 3 BS records as " <i>Z. aurantiacum</i> ssp. <i>aurantiacum</i> (NC)" q.v.
X	<i>Zygophyllum aurantiacum</i> ssp. <i>aurantiacum</i> (NC)	Zygophyllaceae			3				Non-current concept equivalent to <i>Z. aurantiacum</i> ssp. <i>aurantiacum</i> given the absence of <i>Z. reticulatum</i> in this area.
	<b><i>Zygophyllum aurantiacum</i> ssp. <i>simplicifolium</i></b>	Zygophyllaceae		3			1		

X	Taxon	Family	Prov	AD	BS	PU	BBv	BBn	Comment
	<i>Zygophyllum crenatum</i>	Zygophyllaceae	Y	2	4	1			
	<i>Zygophyllum eremaeum</i>	Zygophyllaceae	Y	3	1	3			Includes 1 BS record as " <i>Z. eremaeum</i> (NC)" q.v.
	<i>Zygophyllum eremaeum</i> (NC)	Zygophyllaceae			1				Non-current concept equivalent to <i>Z. eremaeum</i> given the absence of <i>Z. reticulatum</i> in this area.
	<i>Zygophyllum glaucum</i>	Zygophyllaceae	Y	3	1	3			
	<i>Zygophyllum iodocarpum</i>	Zygophyllaceae		2	4				Includes 3 BS records as " <i>Zygophyllum iodocarpum</i> (NC)" q.v.
X	<i>Zygophyllum iodocarpum</i> (NC)	Zygophyllaceae			3				Non-current concept equivalent to <i>Z. iodocarpum</i> given the absence of <i>Z. rowelliae</i> in this area.
	<i>Zygophyllum ovatum</i>	Zygophyllaceae		5	23	9			
	<i>Zygophyllum simile</i>	Zygophyllaceae		2	1				

## Appendix 2. Cryptogams occurring on Hiltaba Station and Gawler Ranges National Park.

The major part of the cryptogam specimens at the State Herbarium of South Australia are not databased, and it is not possible to create a table of previous records easily, i.e. we only can comment on the species that were collected during the Bush Blitz survey, and whether these species have been collected before. Some additional previous records have been added, as there are occasional entries in the Herbarium and BDBSA databases.

None of the bryophytes, fungi or lichens has been listed by State or federal legislation. Common names are not known for these cryptogams. Taxa are listed in the family classifications, as employed by the *Checklist of Australian mosses (AusMoss)*, *Checklist of Australian liverworts and hornworts*, *Interactive catalogue of Australian fungi*, and the *Checklist of the lichens of Australia and its territories* (Klazenga *et al.* 2002-; May 2003-; McCarthy 2006-, 2013-).

**Table 29. Full cryptogam taxon list for Hiltaba Station.**

Cryptogam group	Family	Taxon	New record	Previous record	Putative new sp.
Bryophytes	Bryaceae	<i>Gemmabryum austrosabulosum</i> [syn.: <i>Bryum sabulosum</i> ]	Y		
Bryophytes	Bryaceae	<i>Gemmabryum sp.</i> [syn.: <i>Bryum sp.</i> ]	Y		
Bryophytes	Bryaceae	<i>Rosulabryum campylothecium</i>	Y		
Bryophytes	Cephaloziellaceae	<i>Cephaloziella exiliflora</i>	Y		
Bryophytes	Fissidentaceae	<i>Fissidens megalotis</i>	Y		
Bryophytes	Fossombroniaceae	<i>Fossombronia sp.</i>	Y		
Bryophytes	Funariaceae	<i>Funaria hygrometrica</i>	Y		
Bryophytes	Gigaspermaceae	<i>Gigaspermum repens</i>	Y		
Bryophytes	Grimmiaceae	<i>Grimmia laevigata</i>	Y		
Bryophytes	Grimmiaceae	<i>Grimmia pulvinata var. africana</i>	Y		
Bryophytes	Leucobryaceae	<i>Campylopus introflexus</i>	Y		
Bryophytes	Pottiaceae	<i>Aloina sullivaniana</i>	Y		
Bryophytes	Pottiaceae	<i>Barbula subcalycina</i>	Y		
Bryophytes	Pottiaceae	<i>Crossidium davidai</i>	Y		
Bryophytes	Pottiaceae	<i>Crossidium geheebii</i>	Y		

Cryptogam group	Family	Taxon	New record	Previous record	Putative new sp.
Bryophytes	Pottiaceae	<i>Didymodon torquatus</i>	Y		
Bryophytes	Pottiaceae	<i>Goniomitrium acuminatum ssp. enerve</i>	Y		
Bryophytes	Pottiaceae	<i>Pseudocrossidium crinitum</i> [syn.: <i>Barbula crinita</i> ]	Y	Y	
Bryophytes	Pottiaceae	<i>Pseudocrossidium hornschuchianum</i> [syn.: <i>Barbula hornschuchiana</i> ]	Y		
Bryophytes	Pottiaceae	<i>Pterygoneurum ovatum</i>	Y		
Bryophytes	Pottiaceae	<i>Stonea oleaginoso</i>	Y		
Bryophytes	Pottiaceae	<i>Syntrichia antarctica</i> [syn.: <i>Tortula antarctica</i> ]	Y		
Bryophytes	Pottiaceae	<i>Syntrichia papillosa</i> [syn.: <i>Tortula papillosa</i> ]	Y		
Bryophytes	Pottiaceae	<i>Tortula atrovirens</i>	Y		
Bryophytes	Pottiaceae	? <i>Tortula sp.</i>	Y		Y
Bryophytes	Pottiaceae	<i>Triquetrella papillata</i>	Y		
Bryophytes	Targioniaceae	<i>Targionia hypophylla</i>	Y		
Fungi	Coriolaceae	<i>Pycnoporus sanguineus</i> [sometimes in synonymy under <i>Pycnoporus coccineus</i> ]	Y		
Fungi	Geastraceae	<i>Geastrum aff. javanicum</i>	Y		
Fungi	Geastraceae	<i>Geastrum floriforme</i>	Y		
Fungi	Lycoperdaceae	<i>Lycoperdon glabrescens</i>	Y		
Fungi	Tulostomataceae	<i>Tulostoma albicans</i>	Y		
Lichens	Acarosporaceae	<i>Acarospora citrina</i>	Y		
Lichens	Candelariaceae	<i>Candelaria concolor</i>	Y		
Lichens	Cladoniaceae	<i>Cladia aggregata</i>	Y		
Lichens	Cladoniaceae	<i>Cladia muelleri</i> [syn.: <i>Heterodea muelleri</i> ]	Y		
Lichens	Collemaaceae	<i>Collema sp.</i> [possibly several spp.]	Y		
Lichens	Graphidaceae	<i>Diploschistes sp.</i>	Y		
Lichens	Heppiaceae	? <i>Heppia sp.</i>	Y		
Lichens	Lecanoraceae	? <i>Lecanora sp.</i>	Y		

Cryptogam group	Family	Taxon	New record	Previous record	Putative new sp.
Lichens	Lecideaceae	? <i>Lecidea</i> sp.	Y		
Lichens	Parmeliaceae	<i>Flavoparmelia rutidota</i>	Y	Y	
Lichens	Parmeliaceae	<i>Flavoparmelia</i> sp. [possibly several spp.]	Y	Y	
Lichens	Parmeliaceae	<i>Parmeliaceae</i> sp. [possibly several spp.]	Y		
Lichens	Parmeliaceae	<i>Usnea</i> sp.	Y		
Lichens	Parmeliaceae	<i>Xanthoparmelia convoluta</i>	Y	Y	
Lichens	Parmeliaceae	<i>Xanthoparmelia reptans</i>	Y		
Lichens	Parmeliaceae	<i>Xanthoparmelia semiviridis</i> [syn.: <i>Chondropsis semiviridis</i> ]	Y	Y	
Lichens	Parmeliaceae	<i>Xanthoparmelia ?versicolor</i>	Y		
Lichens	Parmeliaceae	<i>Xanthoparmelia</i> sp. [includes several unidentified spp.]	Y		
Lichens	Physciaceae	? <i>Physcia</i> sp.	Y		
Lichens	Psoraceae	<i>Psora crystallifera</i>	Y		
Lichens	Psoraceae	<i>Psora decipiens</i>	Y	Y	
Lichens	Teloschistaceae	<i>Caloplaca</i> sp.	Y		
Lichens	Teloschistaceae	<i>Fulgensia</i> sp.	Y		
Lichens	Teloschistaceae	<i>Teloschistes chrysophthalmus</i>	Y		
Lichens	Teloschistaceae	<i>Teloschistes spinosus</i>	Y	Y	
Lichens	Teloschistaceae	<i>Xanthoria</i> sp.	Y		
Lichens	Verrucariaceae	? <i>Endocarpon</i> sp.	Y		
Lichens		<b>LICHEN</b> sp. [several unidentified taxa]	Y		



**Table 30. Full cryptogam taxon list for the Gawler Ranges.**

This list combines the collections from the Gawler Ranges National Park (GRNP) that were made during the Bush Blitz survey with Herbarium records that have “Gawler Ranges” as general locality. Often, it was often not specified on the specimen record, whether the collections had been made in the National Park proper or the general Gawler Ranges region.

Cryptogam group	Family	Taxon	New record (GRNP)	Previous record (GR)	Putative new sp.
Bryophytes	Bryaceae	<i>Gemmabryum sp.</i> [syn.: <i>Bryum sp.</i> ]	Y		
Bryophytes	Bryaceae	<i>Rosulabryum campylothecium</i>		Y	
Bryophytes	Bryaceae	<i>Rosulabryum capillare</i>		Y	
Bryophytes	Fissidentaceae	<i>Fissidens megalotis</i>		Y	
Bryophytes	Funariaceae	<i>Funaria hygrometrica</i>		Y	
Bryophytes	Gigaspermaceae	<i>Gigaspermum repens</i>	Y		
Bryophytes	Grimmiaceae	<i>Grimmia laevigata</i>		Y	
Bryophytes	Grimmiaceae	<i>Grimmia pulvinata var. africana</i>		Y	
Bryophytes	Leucobryaceae	<i>Campylopus introflexus</i>		Y	
Bryophytes	Pottiaceae	<i>Aloina sullivaniana</i>		Y	
Bryophytes	Pottiaceae	<i>Crossidium geheebii</i>	Y	Y	
Bryophytes	Pottiaceae	<i>Didymodon torquatus</i>	Y	Y	
Bryophytes	Pottiaceae	<i>Goniomitrium acuminatum ssp. enerve</i>	Y		
Bryophytes	Pottiaceae	<i>Pseudocrossidium crinitum</i> [syn.: <i>Barbula crinita</i> ]		Y	
Bryophytes	Pottiaceae	<i>Syntrichia antarctica</i> [syn.: <i>Tortula antarctica</i> ]	Y	Y	
Bryophytes	Pottiaceae	<i>Tortula atrovirens</i>	Y		
Bryophytes	Pottiaceae	<i>Triquetrella papillata</i>		Y	
Bryophytes	Ricciaceae	<i>Riccia lamellose</i>		Y	
Bryophytes	Ricciaceae	<i>Riccia limbata</i>		Y	
Bryophytes	Ricciaceae	<i>Riccia nigrella</i>		Y	
Bryophytes	Targioniaceae	<i>Targionia hypophylla</i>		Y	

Cryptogam group	Family	Taxon	New record (GRNP)	Previous record (GR)	Putative new sp.
Fungi	Bolbitiaceae	<i>Conocybe crista</i>		Y	
Fungi	Entolomataceae	<i>Entoloma tabacinum</i>		Y	
Fungi	Geastraceae	<i>Geastrum berkeleyi</i>		Y	
Fungi	Geastraceae	<i>Geastrum campestre</i>		Y	
Fungi	Geastraceae	<i>Geastrum clelandii</i>	Y		
Fungi	Geastraceae	<i>Geastrum floriforme</i>		Y	
Fungi	Geastraceae	<i>Geastrum fornicatum</i>		Y	
Fungi	Geastraceae	<i>Geastrum minimum</i>		Y	
Fungi	Lycoperdaceae	<i>Bovista pulyuggeodes</i>		Y	
Fungi	Lycoperdaceae	<i>Disciseda muntacola</i>		Y	
Fungi	Lycoperdaceae	<i>Disciseda verrucosa</i>		Y	
Fungi	Pluteaceae	<i>Volvariella speciosa</i> var. <i>gloiocephala</i>		Y	
Fungi	Tulostomataceae	<i>Tulostoma albicans</i>		Y	
Fungi	Tulostomataceae	<i>Tulostoma australianum</i>		Y	
Fungi	Tulostomataceae	<i>Tulostoma macalpinianum</i>	Y	Y	
Fungi	Tulostomataceae	<i>Tulostoma macrosporum</i>		Y	
Fungi	Tulostomataceae	<i>Tulostoma operculatum</i>	Y		
Fungi	Tulostomataceae	<i>Tulostoma pulchellum</i>		Y	
Fungi	Xylariaceae	<i>Poronia erici</i>		Y	
Lichens	Acarosporaceae	<i>Acarospora citrina</i>	Y		
Lichens	Cladoniaceae	<i>Cladia aggregate</i>		Y	
Lichens	Cladoniaceae	<i>Cladia muelleri</i> [syn.: <i>Heterodea muelleri</i> ]		Y	
Lichens	Collemaaceae	<i>Collema</i> sp. [possibly several spp.]	Y	Y	
Lichens	Graphidaceae	<i>Diploschistes ocellatus</i>		Y	
Lichens	Graphidaceae	<i>Diploschistes scruposus</i>		Y	

Cryptogam group	Family	Taxon	New record (GRNP)	Previous record (GR)	Putative new sp.
Lichens	Graphidaceae	<i>Diploschistes sp.</i>	Y		
Lichens	Lecideaceae	? <i>Lecidea sp.</i>	Y		
Lichens	Parmeliaceae	<i>Flavoparmelia rutidota</i>		Y	
Lichens	Parmeliaceae	<i>Usnea sp.</i>		Y	
Lichens	Parmeliaceae	<i>Xanthoparmelia convoluta</i>		Y	
Lichens	Parmeliaceae	<i>Xanthoparmelia semiviridis</i> [syn.: <i>Chondropsis semiviridis</i> ]	Y	Y	
Lichens	Parmeliaceae	<i>Xanthoparmelia ?versicolor</i>		Y	
Lichens	Pertusariaceae	? <i>Pertusaria sp.</i>		Y	
Lichens	Psoraceae	<i>Psora crystallifera</i>		Y	
Lichens	Psoraceae	<i>Psora decipiens</i>	Y	Y	
Lichens	Teloschistaceae	<i>Caloplaca cinnabarina</i>		Y	
Lichens	Teloschistaceae	<i>Fulgensia bracteata</i>		Y	
Lichens	Teloschistaceae	<i>Teloschistes chrysophthalmus</i>		Y	
Lichens	Verrucariaceae	<i>Endocarpon ?pusillum</i>		Y	
Lichens	Verrucariaceae	<i>Endocarpon simplicatum</i>		Y	
Lichens		<b>LICHEN sp.</b>	Y		

### Appendix 3. Collection sites

**Table 31. Collection sites on Hiltaba Station.**

Latitude	Longitude	Generated location	Location Description
-32.10242	135.20631	7 km WNW of Mount St Mungo (summit)	2 km S of Trump Dam, Hiltaba Station.
-32.10403	135.09157	4.5 km ENE of Mount Hiltaba (summit)	Hiltaba Station.
-32.10408	135.09167	4.5 km ENE of Mount Hiltaba (summit)	ca. 7 km NE from Hiltaba Homestead, Hiltaba Station.
-32.1059	135.17947	7.5 km SSE of Yarna (homestead)	Hiltaba Station.
-32.10598	135.17984	7.5 km SSE of Yarna (homestead)	Track from Trump Dam to North Wall, Hiltaba Station.
-32.10639	135.06711	2.9 km NNE of Mount Hiltaba (summit)	Lilyrocks Wall, Hiltaba Station.
-32.10648	135.18039	7.6 km SSE of Yarna (homestead)	Track from Trump Dam to North Wall, Hiltaba Station.
-32.10835	135.06857	2.8 km NNE of Mount Hiltaba (summit)	Hiltaba Station.
-32.1182	135.21672	6.1 km WSW of Mount St Mungo (summit)	Track from Peeweena to Trump dam, Hiltaba Station.
-32.11848	135.14311	7.3 km SSE of Yarna (homestead)	Top of cliff on S side of summit plateau on hill above (S of) North Wall, Hiltaba Station.
-32.12028	135.24378	3.8 km WSW of Mount St Mungo (summit)	1.4 km S of Peeweena Dam, Hiltaba Station.
-32.12033	135.1436	7.5 km SSE of Yarna (homestead)	Track to North Wall on lower slope of range, mid upper slope of hill above (S of) North Wall, Hiltaba Station.
-32.12042	135.24386	3.8 km WSW of Mount St Mungo (summit)	1.7 km S of Peeweena Dam, Hiltaba Station.
-32.12097	135.2435	3.9 km WSW of Mount St Mungo (summit)	Hiltaba Station.
-32.12193	135.14399	7.7 km SSE of Yarna (homestead)	Track to North Wall on lower slope of range, north side of mid slope, Hiltaba Station.
-32.12215	135.04282	1.7 km WNW of Mount Hiltaba (summit)	West side of hill NW of Mt Hiltaba, pediment near NW boundary of Hiltaba Station.
-32.12253	135.14555	7.8 km SSE of Yarna (homestead)	Lower slope (south facing ) of range above (S) of North Wall, Hiltaba Station.
-32.12282	135.04445	1.5 km WNW of Mount Hiltaba (summit)	Lower NW slope of hill NW of Mt Hiltaba, Hiltaba Station
-32.12291	135.04506	1.5 km WNW of Mount Hiltaba (summit)	Lower NW slope of hill NW of Mt Hiltaba, Hiltaba Station.
-32.12292	135.04701	1.3 km NW of Mount Hiltaba (summit)	Ridge NW of Mt Hiltaba, Hiltaba Station.
-32.12327	135.04813	1.2 km NNW of Mount Hiltaba (summit)	Saddle near ridge NW of Mt Hiltaba, Hiltaba Station.
-32.1234	135.22854	5.3 km WSW of Mount St Mungo (summit)	SW of Mt. St. Mungo on track from Pretty Point, Hiltaba Station.
-32.12386	135.1415	7.7 km ENE of Hiltaba (homestead)	Track to North Wall on lower slope of range, Hiltaba Station.

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Latitude	Longitude	Generated location	Location Description
-32.12388	135.04796	1.2 km NW of Mount Hiltaba (summit)	Ridge line summit on hill NW of Mt Hiltaba, Hiltaba Station.
-32.1239	135.26542	2.5 km SSW of Mount St Mungo (summit)	Peeweena Bore, on track to Mt. St Mungo, along creekline, Hiltaba Station.
-32.12432	135.14114	7.6 km ENE of Hiltaba (homestead)	Track to North Wall on lower slope of range, Hiltaba Station.
-32.12442	135.14417	7.8 km ENE of Hiltaba (homestead)	Slanting creek bed on track towards North Wall, ca. 9 km NE from Hiltaba Shearer's Quarters, Hiltaba Station
-32.12447	135.1415	7.6 km ENE of Hiltaba (homestead)	Hiltaba Station.
-32.12447	135.14434	7.9 km ENE of Hiltaba (homestead)	Track to North Wall on lower slope of range, between hills, E side, Hiltaba Station.
-32.12467	135.24533	3.9 km WSW of Mount St Mungo (summit)	1.5 km S of Peeweena Dam, Hiltaba Station.
-32.12497	135.14431	7.8 km ENE of Hiltaba (homestead)	Track to North Wall on lower slope of range, mid slope, E side, Hiltaba Station.
-32.12498	135.14049	7.5 km ENE of Hiltaba (homestead)	Footslope on side of gully on S side of hills, S of North Wall, Hiltaba Station.
-32.12586	135.04797	1 km WNW of Mount Hiltaba (summit)	Approx. 50 m SE of summit on hill NW of Mt Hiltaba, Hiltaba Station.
-32.12692	135.22594	5.6 km WSW of Mount St Mungo (summit)	Track towards Peeweena Dam, before fork in the road, Hiltaba Station.
-32.1279	135.03375	2.2 km WNW of Mount Hiltaba (summit)	Creek near NW boundary of Hiltaba Station, Chiltadonna Paddock.
-32.12802	135.03446	2.1 km WNW of Mount Hiltaba (summit)	Base of rocky hill near NW boundary of Hiltaba Station, W of Mt Hiltaba, Chiltadonna Paddock.
-32.12895	135.03353	2.2 km WNW of Mount Hiltaba (summit)	Track from Chiltadonna Well to North end of property, foot of Mt Hiltaba, Hiltaba Station.
-32.12988	135.26049	3.3 km SSW of Mount St Mungo (summit)	Patch on S side of hilltop. Just South of summit hill on ridge SW of Peeweena Bore, Hiltaba Station.
-32.12996	135.26063	3.3 km SSW of Mount St Mungo (summit)	Just South of summit hill on ridge SW of Peeweena Bore, Hiltaba Station.
-32.12997	135.26052	3.3 km SSW of Mount St Mungo (summit)	Just South of summit hill on ridge SW of Peeweena Bore, Hiltaba Station.
-32.13012	135.26068	3.3 km SSW of Mount St Mungo (summit)	Just South of summit hill on ridge SW of Peeweena Bore, Hiltaba Station.
-32.13049	135.2612	3.3 km SSW of Mount St Mungo (summit)	Lower slopes of ridge SW of Peeweena Bore, Hiltaba Station.
-32.13069	135.2608	3.4 km SSW of Mount St Mungo (summit)	Upper slope of ridge SW of Peeweena Bore, Hiltaba Station.
-32.13081	135.24122	4.6 km WSW of Mount St Mungo (summit)	2.4 km S of Peeweena Dam, Hiltaba Station.
-32.13098	135.26149	3.4 km SSW of Mount St Mungo (summit)	Mid slope of ridge SW of Peeweena Bore, Hiltaba Station.
-32.13129	135.26246	3.3 km SSW of Mount St Mungo (summit)	Lower slope of ridge SW of Peeweena Bore, Hiltaba Station.
-32.13693	135.11908	5.1 km ENE of Hiltaba (homestead)	East of airstrip, 5 km NE of Hiltaba Homestead, Hiltaba Station.
-32.1379	135.11995	5.1 km ENE of Hiltaba (homestead)	East of airstrip, 5 km NE of Hiltaba Homestead, Hiltaba Station.
-32.13906	135.118	4.9 km ENE of Hiltaba (homestead)	East of airstrip, 5 km NE of Hiltaba Homestead, Hiltaba Station.
-32.1425	135.03569	2.3 km WSW of Mount Hiltaba (summit)	Chiltadonna Paddock, on track north of Chiltadonna Well, 3.9 km WNW of Homestead, Hiltaba Station.

Latitude	Longitude	Generated location	Location Description
-32.14558	135.04061	2.2 km SSW of Mount Hiltaba (summit)	Track towards Mount Hiltaba - past Chiltadinna Well N/V, along dried creek bed, Hiltaba Station.
-32.14635	135.04097	2.2 km SSW of Mount Hiltaba (summit)	SE of Chiltadinna Well on track from Four Corners Bore, Hiltaba Station. Creek crossing.
-32.14695	135.1925	8.5 km NNE of Mount Friday (summit)	North Paddock, approx. 5 km NE of Pretty Point on track to Peeweena Dam, Hiltaba Station.
-32.14703	135.19244	8.4 km NNE of Mount Friday (summit)	East of Hiltaba Shearers Quarters, along Pretty Point Road, Hiltaba Station.
-32.14788	135.19189	8.3 km NNE of Mount Friday (summit)	Track north of Pretty Point to Mt. St. Mungo, Hiltaba Station.
-32.14875	135.04203	2.4 km SSW of Mount Hiltaba (summit)	SE of Chiltadinna Well on track from Four Corners Bore, Hiltaba Station.
-32.14999	135.03914	2.4 km NNW of Mount Pyramid (summit)	Chiltadinna Paddock, track N from Chiltadinna Well, Hiltaba Station, approx. 3.3 km WNW of Homestead.
-32.15274	135.18491	7.5 km NNE of Mount Friday (summit)	On track from Pretty Point to Mt Saint Mungo, Hiltaba Station.
-32.15707	135.17055	6.4 km NNE of Barber Hill (summit)	Pretty Point road, Hiltaba Station.
-32.15892	135.04722	1.4 km NNE of Mount Pyramid (summit)	SE of Chiltadinna Well on track from Four Corners Bore, Hiltaba Station.
-32.16001	135.08798	1.7 km ESE of Hiltaba (homestead)	North side of track to Hiltaba Shearers quarters, Hiltaba Station.
-32.16072	135.09247	2.1 km ESE of Hiltaba (homestead)	Hiltaba Station Shearers quarters, at base of rainwater tank.
-32.16183	135.07086	0.5 km SSE of Hiltaba (homestead)	Crest of ridge, rock cliff on North side, over looking Hiltaba Homestead, Hiltaba Station.
-32.16201	135.0928	2.2 km ESE of Hiltaba (homestead)	Hiltaba Station Old Shearing shed yards in weed dusty area.
-32.16235	135.07244	0.6 km SSE of Hiltaba (homestead)	Feeder tank, Hiltaba Homestead, East facing slope, upper slope, West side of Tank, Hiltaba Station.
-32.16258	135.07166	0.6 km SSE of Hiltaba (homestead)	Feeder tank, Hiltaba Homestead, East facing slope, upper slope, West side of Tank, Hiltaba Station.
-32.16302	135.07423	0.8 km SSE of Hiltaba (homestead)	Feeder Tank, on track, south of Hiltaba Homestead, on eastern slope, Hiltaba Station.
-32.16332	135.07422	0.8 km SSE of Hiltaba (homestead)	Approx. 30 m WNW of Feeder Tank on track South from Hiltaba Homestead, Hiltaba Station.
-32.1636	135.07391	0.8 km SSE of Hiltaba (homestead)	At Feeder Tank, south of Hiltaba Homestead, Hiltaba Station.
-32.16374	135.07379	0.8 km SSE of Hiltaba (homestead)	At Feeder Tank, south of Hiltaba Homestead, Hiltaba Station.
-32.16388	135.07401	0.8 km SSE of Hiltaba (homestead)	At Feeder Tank, south of Hiltaba Homestead, Hiltaba Station.
-32.16454	135.07442	0.9 km SSE of Hiltaba (homestead)	West facing hill slope above feeder tank, S of Hiltaba Homestead, Hiltaba Station.
-32.16459	135.07438	0.9 km SSE of Hiltaba (homestead)	Near Feeder Tank, south of Hiltaba Homestead, western slope, Hiltaba Station.
-32.1649	135.07443	1 km SSE of Hiltaba (homestead)	Near Feeder Tank, south of Hiltaba Homestead, western slope, Hiltaba Station.
-32.16601	135.15977	5 km NNE of Barber Hill (summit)	On track from Pretty Point to Mt Saint Mungo, Hiltaba Station.
-32.16795	135.14976	4.2 km NNE of Barber Hill (summit)	Pretty Point, second ridge W of road, Hiltaba Station.
-32.16854	135.15009	4.2 km NNE of Barber Hill (summit)	Pretty Point, second ridge west of road, Hiltaba Station.
-32.16872	135.05683	1.2 km ENE of Mount Pyramid (summit)	7 km SW of Hiltaba Shearers quarters, Hiltaba Station.

Latitude	Longitude	Generated location	Location Description
-32.16986	135.15034	4.1 km NNE of Barber Hill (summit)	Pretty Point, valley west of nearest ridge, Hiltaba Station.
-32.17009	135.15397	4.3 km NNE of Barber Hill (summit)	North of Pretty Point camping area, west of road, above creek, Hiltaba Station.
-32.17032	135.15079	4.1 km NNE of Barber Hill (summit)	Pretty Point, valley west of nearest ridge, Hiltaba Station.
-32.17068	135.15067	4 km NNE of Barber Hill (summit)	Pretty Point, valley west of nearest ridge, Hiltaba Station.
-32.17083	135.15174	4.1 km NNE of Barber Hill (summit)	Pretty Point, west of track, Hiltaba Station
-32.17099	135.15192	4.1 km NNE of Barber Hill (summit)	Pretty Point, east side of track North of pass, Hiltaba Station.
-32.17108	135.15118	4 km NNE of Barber Hill (summit)	Pretty Point, Hiltaba Station.
-32.17142	135.15099	4 km NNE of Barber Hill (summit)	Pretty Point, Hiltaba Station.
-32.17167	135.15	3.9 km NNE of Barber Hill (summit)	Pretty Point road, Hiltaba Station.
-32.17185	135.15249	4 km NNE of Barber Hill (summit)	Pretty Point, east of road, Hiltaba Station.
-32.17237	135.15333	4 km NNE of Barber Hill (summit)	Pretty Point, small creekline/gullies at base of rocky hill, E of road, Hiltaba Station.
-32.17277	135.15326	4 km NNE of Barber Hill (summit)	Pretty Point, ridge east of road, base of slope, north facing, Hiltaba Station.
-32.17325	135.15331	4 km NNE of Barber Hill (summit)	Pretty Point, ridge east of road, upper slopes, north facing, Hiltaba Station.
-32.17688	135.0914	3 km SSE of Hiltaba (homestead)	Hiltaba - Yardea road, W of Barber Hill, Hiltaba Station.
-32.18381	135.28589	5.2 km NNW of Cooria Hill (summit)	ca. 8 km N of Progress Dam, Hiltaba Station.
-32.20993	135.28086	2.7 km NNW of Cooria Hill (summit)	Track N of Mungo Tank, Hiltaba Station.
-32.21422	135.14917	0.3 km ESE of Mount Friday (summit)	Almost on top of Mt Friday, S side, Hiltaba Station.
-32.21433	135.17507	2.7 km ESE of Mount Friday (summit)	Hiltaba Station.
-32.21447	135.17931	3.1 km ESE of Mount Friday (summit)	Hiltaba to Iron Knob road? - Peter Pan loop, Hiltaba Station.
-32.21522	135.14989	0.4 km ESE of Mount Friday (summit)	Mount Friday, towards top end of rocky gorge on south side of mountain, Hiltaba Station.
-32.21545	135.14964	0.4 km SSE of Mount Friday (summit)	Mount Friday, near top end of gorge on S side, Hiltaba Station.
-32.21626	135.14946	0.5 km SSE of Mount Friday (summit)	Mount Friday, in gorge, half way up south side, Hiltaba Station.
-32.21665	135.1488	0.5 km SSE of Mount Friday (summit)	Mount Friday, in gorge, half way up south side, Hiltaba Station.
-32.21743	135.14787	0.5 km SSE of Mount Friday (summit)	Mount Friday, in gorge on South side, Hiltaba Station.
-32.21748	135.14576	0.5 km SSW of Mount Friday (summit)	Mount Friday, below start of gorge on South side, Hiltaba Station.
-32.21748	135.14576	0.5 km SSW of Mount Friday (summit)	Mt Friday, below start of gorge on S side, Hiltaba Station.
-32.22274	135.14331	1.2 km SSW of Mount Friday (summit)	Track to south side of Mt Friday, Hiltaba Station.
-32.22487	135.12146	2.7 km WSW of Mount Friday (summit)	South west of Warner's Bore on track to Nitschke's Gift Dam, Hiltaba Station.

Latitude	Longitude	Generated location	Location Description
-32.22725	135.10904	3.4 km SSW of Barber Hill (summit)	Track from Old Surprise Dam to Brothers Dam at base of ridge W of Waroona Peak, Hiltaba Station.
-32.22758	135.14844	1.6 km SSE of Mount Friday (summit)	On track in pass below Mt Friday and Waroona Hill, Hiltaba Station.
-32.22824	135.14765	1.7 km SSE of Mount Friday (summit)	Foot slope of ridge extending NNE from Waroona Peak, c. 100 m S of track at base of exposed slab, Hiltaba Station.
-32.23493	135.23203	6.1 km WSW of Cooria Hill (summit)	Hiltaba Station.
-32.23613	135.23563	5.8 km WSW of Cooria Hill (summit)	ca. 19 km SW from Hiltaba Shearers Quarters, Hiltaba Station.
-32.23815	135.25721	3.9 km WSW of Cooria Hill (summit)	Track to Mungo Tank (and Mt. St. Mungo), Hiltaba Station.
-32.24244	135.05894	7.8 km WSW of Barber Hill (summit)	ca. 1 km N of southern border of Hiltaba on Gawler Ranges Rd, Hiltaba Station.
-32.24295	135.05899	7.8 km WSW of Barber Hill (summit)	Road from Hiltaba to Wirrulla, Hiltaba Station, near southern boundary.
-32.28122	135.13203	3.9 km SSW of Waroona Peak (summit)	Punkey Paddock just NW of Punkey Plain Dam, Hiltaba Station.
-32.29648	135.14557	5.3 km WNW of Perening Bluff (summit)	Just inside southern boundary of Hiltaba Station, east of intersection of Punkey Plain dam/track and boundary fence.
-32.30073	135.2176	1.5 km ESE of Perening Bluff (summit)	N end of Narlaby Paddock, near fenceline, Hiltaba Station.
-32.3031	135.22977	2.7 km ESE of Perening Bluff (summit)	N end of Narlaby paddock on low hill on SW side of track, Hiltaba Station.
-32.3111	135.26882	0.1 km ESE of Eurilla Hill (summit)	Summit of Eurilla Hill, Hiltaba Station.
-32.31121	135.27023	0.2 km ESE of Eurilla Hill (summit)	Upper eastern slope of Eurilla Hill, Hiltaba Station.
-32.3113	135.26793	0 km SSW of Eurilla Hill (summit)	Hiltaba Station, just SW of summit of Eurilla Hill.
-32.31213	135.24277	2.4 km WSW of Eurilla Hill (summit)	Low hills W of Eurilla Hill, track along fenceline on N boundary of Pine Hill paddock, Hiltaba Station.
-32.31243	135.26752	0.2 km SSW of Eurilla Hill (summit)	Hiltaba Station, mid south-facing slope of Eurilla Hill.
-32.31269	135.27043	0.3 km ESE of Eurilla Hill (summit)	Mid slope of Eurilla Hill, Hiltaba Station.
-32.31309	135.24995	1.7 km WSW of Eurilla Hill (summit)	Track along fenceline approx. 1.7 km WSE from Eurilla Hill summit, Hiltaba Station.
-32.31352	135.27021	0.4 km SSE of Eurilla Hill (summit)	Mid slope of Eurilla Hill, Hiltaba Station.
-32.31451	135.26954	0.4 km SSE of Eurilla Hill (summit)	Lower southern slope of Eurilla Hill, Hiltaba Station.
-32.3154	135.26799	0.5 km S of Eurilla Hill (summit)	South side of Eurilla Hill, Hiltaba Station.
-32.31662	135.26937	0.6 km SSE of Eurilla Hill (summit)	Pediment at abase of S side of Eurilla Hill, Hiltaba Station.
-32.31956	135.26942	1 km SSE of Eurilla Hill (summit)	Plain on S side of Eurilla Hill, Hiltaba Station.
-32.35653	135.23139	3.5 km ENE of Mudlera (summit)	Hiltaba Station, approx. 150 m N of southern boundary where Mt Centre track starts.
-32.59667	135.37583	1.6 km SSE of Kahley Hill (summit)	Hiltaba Station.
-32.69817	135.56225	1.9 km ENE of Waulkinna Hill (summit)	Hiltaba Station.



**Table 32. Collection sites in Gawler Ranges National Park.**

Latitude	Longitude	Generated location	Location Description
-32.1458	135.0407	2.2 km SSW of Mount Hiltaba (summit)	About halfway along track from Paney Ranger Headquarters to Paney Shearers Quarters, Gawler Ranges National Park.
-32.14575	135.04071	2.2 km SSW of Mount Hiltaba (summit)	About halfway along track from Paney Ranger Headquarters to Paney Shearers Quarters, Gawler Ranges National Park.
-32.33742	135.30194	4.3 km ESE of Eurilla Hill (summit)	Pine Well, ca. 38 km SE from Hiltaba Homestead, Gawler Ranges National Park.
-32.35462	135.22761	3.4 km NNE of Mudlera (summit)	Gawler Ranges National Park, just inside its northern boundary with Hiltaba Station, approx. 3.3 km NE of Mt Centre.
-32.35610	135.22910	3.3 km ENE of Mudlera (summit)	Gawler Ranges National Park, just inside its northern boundary with Hiltaba Station, approx. 3.3 km NE of Mt Centre.
-32.35785	135.23106	3.4 km ENE of Mudlera (summit)	Gawler Ranges National Park, northern boundary track near junction of track to Mt Centre.
-32.35912	135.22853	3.1 km ENE of Mudlera (summit)	Track to Mt Centre, near start. Gawler Ranges National Park.
-32.36376	135.22398	2.4 km ENE of Mudlera (summit)	Track to Mt Centre, Gawler Ranges National Park.
-32.36435	135.22275	2.3 km ENE of Mudlera (summit)	Track to Mt Centre, Gawler Ranges National Park.
-32.37013	135.22626	2.3 km ENE of Mudlera (summit)	Track to Mt Centre, Gawler Ranges National Park.
-32.37100	135.22542	2.2 km ENE of Mudlera (summit)	Track towards Ponara from Mt. Centre, Gawler Ranges National Park.
-32.37298	135.22433	2.1 km ENE of Mudlera (summit)	Track to Mt Centre, Gawler Ranges National Park.
-32.37350	135.20174	0.3 km NNW of Mudlera (summit)	Upper northern slope of Mt Centre, Gawler Ranges National Park. On small north-facing escarpment.
-32.37358	135.21992	1.6 km ENE of Mudlera (summit)	Gawler Ranges National Park.
-32.37362	135.22003	1.7 km ENE of Mudlera (summit)	Gawler Ranges National Park.
-32.37365	135.28950	7.2 km SSE of Eurilla Hill (summit)	Gawler Ranges National Park, on northern boundary track near SE corner of Hiltaba Station.
-32.37412	135.20201	0.2 km NNW of Mudlera (summit)	Gawler Ranges National Park, northern boundary track near junction of track to Mt Centre.
-32.37497	135.20167	0.2 km NNW of Mudlera (summit)	Gawler Ranges National Park, northern boundary track near junction of track to Mt Centre.
-32.37532	135.22106	1.7 km ENE of Mudlera (summit)	Track to Mt Centre. Gawler Ranges National Park.
-32.37580	135.20374	0.1 km ENE of Mudlera (summit)	Summit of Mt Centre, Gawler Ranges National Park.
-32.37583	135.20361	0.1 km ENE of Mudlera (summit)	Mt Centre, approx. 40 m down from summit, Gawler Ranges National Park.
-32.37590	135.20360	0.1 km ENE of Mudlera (summit)	Mt Centre summit, Gawler Ranges National Park.
-32.37605	135.20347	0.1 km ENE of Mudlera (summit)	Approx. 30 m SW of cairn on summit of Mt Centre, Gawler Ranges National Park.
-32.37635	135.20192	0.1 km WSW of Mudlera (summit)	Just below summit of Mt Centre on NW side, Gawler Ranges National Park.

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Latitude	Longitude	Generated location	Location Description
-32.37649	135.20348	0.1 km ESE of Mudlera (summit)	Approx. 100 m S of cairn on summit of Mt Centre, Gawler Ranges National Park.
-32.37662	135.29654	7.7 km SSE of Eurilla Hill (summit)	Gawler Ranges National Park, on northern boundary track near SE corner of Hiltaba Station.
-32.37944	135.31803	8.9 km SSE of Eurilla Hill (summit)	ca. 7 km S of Pine Well, Gawler Ranges National Park.
-32.39110	135.31686	9.4 km NNW of Kondondo (summit)	Gawler Ranges National Park, on track heading S from near SE corner of Hiltaba Station.
-32.39214	135.33047	8.9 km NNW of Kondondo (summit)	Northern boundary track of Gawler Ranges National Park near southern boundary of Hiltaba Station, SE from Pine Well.
-32.39716	135.34422	8.2 km NNW of Kondondo (summit)	Northern boundary track of Gawler Ranges National Park near southern boundary of Hiltaba Station, SE from Pine Well.
-32.41075	135.31967	7.3 km NNW of Kondondo (summit)	Gawler Ranges National Park.
-32.41088	135.31983	7.3 km NNW of Kondondo (summit)	Pine Lodge track, Gawler Ranges National Park.
-32.41708	135.32030	6.7 km NNW of Kondondo (summit)	Pine Lodge track, Gawler Ranges National Park.
-32.43294	135.32339	5 km NNW of Kondondo (summit)	ca. 13 km S of Pine Well, Gawler Ranges National Park.
-32.44058	135.32553	4.2 km NNW of Kondondo (summit)	Gawler Ranges National Park.
-32.44062	135.32538	4.3 km NNW of Kondondo (summit)	Pine Lodge track, Gawler Ranges National Park.
-32.44960	135.34558	2.4 km NNW of Kondondo (summit)	Pine Lodge track, Gawler Ranges National Park.
-32.45030	135.33895	2.6 km NNW of Kondondo (summit)	Pine Lodge track, Gawler Ranges National Park.
-32.45032	135.34512	2.4 km NNW of Kondondo (summit)	Pine Lodge track, Gawler Ranges National Park.
-32.47587	135.35404	0.6 km SSW of Kondondo (summit)	W side Kododo Hill, Gawler Ranges National Park.
-32.49667	135.36420	1.2 km WNW of Putamaring Hill (summit)	Sand dune near Kododo Hill, south from camping area, Gawler Ranges National Park.
-32.50308	135.37117	0.8 km SSW of Putamaring Hill (summit)	Sandy dunes ca. 6 km from NP entrance from Yardea, Gawler Ranges National Park.
-32.50356	135.37020	0.9 km SSW of Putamaring Hill (summit)	Yardea - Scrubby Peak Road, red sand dunes NW of Scrubby Peak, Gawler Ranges National Park.
-32.51361	135.34849	2.7 km ENE of Scrubby Peak (summit)	Dune W of road between Kododo Hill and Scrubby Peak, Gawler Ranges National Park.
-32.51371	135.35297	2.9 km WSW of Putamaring Hill (summit)	E side of road Scrubby Peak to Yardea. N of Scrubby Peak and S of Kododo Hill, Gawler Ranges National Park.
-32.53633	135.37211	3.5 km WSW of Buckleburna Hill (summit)	Sandy dunes ca. 6 km from NP entrance from Yardea, Gawler Ranges National Park.
-32.54784	135.64001	1.9 km WSW of Nukay Bluff (summit)	Nukey Creek waterhole, Gawler Ranges National Park.
-32.54980	135.64272	1.8 km WSW of Nukay Bluff (summit)	Tributary of Nukey Creek, Gawler Ranges National Park.
-32.55035	135.64775	1.4 km WSW of Nukay Bluff (summit)	Approx. 300 m SSW of "Wati-ngaru" site, near Nukey Bluff, Gawler Ranges National Park.
-32.55045	135.34254	3.4 km ENE of Yandinga Hill (summit)	Mid NE slope of ridge, 2 km ENE Yandinga Well and 3.7 km SE from Scrubby Peak on W side of Petersby

Latitude	Longitude	Generated location	Location Description
			Yards - Yardea Road, Gawler Ranges National Park.
-32.55046	135.64622	1.6 km WSW of Nukay Bluff (summit)	Gully on SW side of Nukey Bluff, Gawler Ranges National Park.
-32.55053	135.34417	3.5 km ENE of Yandinga Hill (summit)	Footslopes of hill on W side of road from Peterby Yards to Scrubby Peak, Gawler Ranges National Park.
-32.55141	135.64796	1.5 km SSW of Nukay Bluff (summit)	Saddle on S side of Nukey Bluff, Gawler Ranges National Park.
-32.55328	135.65274	1.4 km SSW of Nukay Bluff (summit)	SE slope of Nukey Bluff, Gawler Ranges National Park.
-32.56503	135.33167	2.1 km ESE of Yandinga Hill (summit)	Yandinga, ca. 2 km S from Yandinga Gorge, Gawler Ranges National Park.
-32.58623	135.39044	2.3 km ESE of Kahley Hill (summit)	Scenic Route - Road between Old Paney Homestead and Peterby Yards, Gawler Ranges National Park.
-32.63103	135.63577	3 km NNE of Paney (homestead)	Gawler ranges National Park, track to Nukey Dam heading N from Paney Shearers quarters.
-32.65337	135.63298	0.7 km ENE of Paney (homestead)	Track from Paney Shearers Quarters to Paney Homestead, Gawler Ranges National Park.
-32.65397	135.63403	0.7 km ENE of Paney (homestead)	E of GRNP headquarters, Gawler Ranges National Park.
-32.66808	135.49722	6 km WNW of Waulkinna Hill (summit)	15 km W of Paney Station, Gawler Ranges National Park.
-32.67619	135.43008	6.4 km NNE of Mount Sturt (summit)	Just past "do not enter sign - one way track" on the Mt Sturts track, Gawler Ranges National Park.
-32.71864	135.41933	1.8 km ENE of Mount Sturt (summit)	Along sandy dunes on Sturts track, ca. 5 km from "do not enter" sign, Gawler Ranges National Park.