A Survey of Roadside Conservation Values in the Shire of Gnowangerup



and Roadside Management Guidelines



June 1999 - Roadside Conservation Committee

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Introduction

The Shire of Gnowangerup covers an area of 5000 km² and supports a population of approximately 1700 people. The area experiences a mediterranean climate with a mean annual rainfall of 384.2 mm. Seasonal temperatures are characterised by warm summers, with maxima averaging from the mid to high twenties, and mild winters, with maxima in the mid teens. Mean daily maximum and minimum temperatures and rainfalls are shown below.

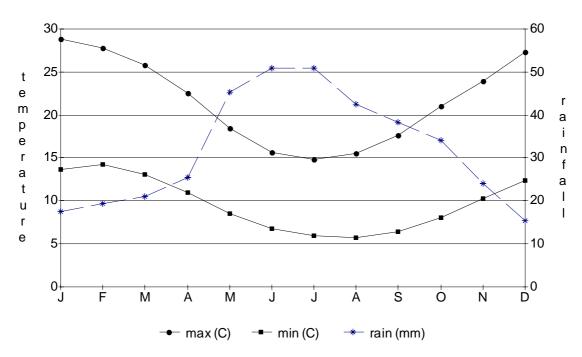


Figure 1. Mean daily maximum and minimum temperature (C) and rainfall (mm) in the Shire of Gnowangerup (measured at Ongerup).

Gnowangerup is located 354 km south east of Perth in Western Australia's south west land division. Typical of the region, the major agricultural pursuits are cereal crops, sheep and cattle. Tourism is also an important industry with the area's spectacular natural resources being a major attraction. Salient features of the area being the Stirling Ranges and the flora and fauna which abound in the area. Each year the Ongerup Wildflower Show provides visitors with easy access to some of the diverse range of unique local flora. Based on WA Herbarium records nearly 2000 species of plants have been recorded from the Shire of Gnowangarup. This includes more than 90 species of acacia, 26 species of boronia, 32 species of spider orchid and a staggering 128 species of eucalypt. By way of comparison, the United Kingdom supports a flora of approximately 2000 species. However, it is of concern to note that 110 species of exotic plants are also recorded within the shire.

Value of Roadsides

Since the settlement of Western Australia by Europeans, large areas of native vegetation in the south west of the state have been cleared to make way for agriculture and other development ventures. The fragmentation of the more or less continuous tracts of native vegetation suites by clearing has resulted in the isolation of plant and animal populations and communities. Populations isolated and restricted to these man made biogeographical islands of small remnants are prone to food shortages, disease and reduced genetic diversity. However the presence of native vegetation along

roadsides can often assist in alleviating this isolation effect by providing corridors between bush remnants, thereby facilitating the movement of biota across the landscape. Unfortunately the protective mantle afforded by the native flora has been badly depleted with now only 5% (approximately 226km²) of the remnant vegetation remaining in the Shire of Gnowangerup. (Beeston *et al*, 1993).

Remnant native vegetation includes more than just trees. Trees, shrubs and ground covers (creepers, grasses and herbs) combine to provide valuable food and shelter for different types of wildlife. Existing native vegetation will require less maintenance if left undisturbed.

Trees are good - bush is better - native trees, shrubs and grasses on the roadside are valuable because they:

- often are the only remaining example of original vegetation within cleared areas;
- are easier to maintain and generally less fire prone than introduced vegetation;
- provide habitat for many native species of plants, mammals, reptiles amphibians and invertebrates;
- provide wildlife corridors linking other areas of native vegetation;
- often contain rare and endangered plants and animals; (Currently, 321 plant species are declared rare under the wildlife conservation act 1950-1979. Of these, more than 100 are known to be from roadside populations. In fact, roadside plants represent more than 80 per cent of the known populations of 40 of the 'declared rare' species and three of these are known only to exist in roadside populations).
- provide the basis for our important wildflower tourism industry; (The aesthetic appeal of well-maintained roadsides should not be overlooked and they have the potential to improve local tourism and provide a sense of place. As well as creating a more favourable impression of an area, roadsides attract tourists who visit specifically to view wildflowers).
- often contain sites of historical or cultural significance;
- provide windbreaks and stock shelter areas for adjoining farmland; (This can help stabilise temperature and reduce evaporation, and thereby providing microhabitat more suitable to higher levels of productivity. Well conserved roadsides also assist with erosion and salinity control. In addition, native vegetation on roadsides is generally far less of a fire threat than annual weeds. Undisturbed roadsides provide a bench mark for the study of soil change during agricultural development).
- are a vital source of local seed for revegetation projects; (In lieu of other alternatives and cognisant of limitations; road reserves can also provide a valuable source of seed for regeneration projects. This is especially pertinent to shrub species, as clearing and grazing beneath farm trees often removes this layer). Approval of the local shire and a CALM permit are required prior to collection.

In a time of rapid change where the demands placed on the natural world are many, it is vital that there is a coordinated management of lands across all tenures to ensure the sustainability and integrity of the natural biota and processes, agricultural lands and service infrastructure. It is somewhat ironic that the reserves established to cater for a transport system in a modern world are now an integral component of this coordinated management approach.

Roadsides are the vital linkand a priceless community asset.

Legislation

Uncertainty often exists in the minds of many with regard to the 'ownership' control and management of the roadside *per se.* When a public road is created, a corridor of land is dedicated for a road, i.e. a road reserve. The road formation and its associated infrastructure are accommodated within the road reserve. The remaining area on each side of the road is called the road verge or roadside. It is in the control and management responsibilities of this area (and flora and fauna residing within it) that the uncertainty exists

Public roads other than main roads are dedicated under the *Local Government Act* (Part XII). Dedication places care and management of the road (street) in the relevant local government authority. However, under Section 286 of the *Local Government Act*, land in a road is the absolute property of the Crown, i.e. still Crown land.

Road reserves may be created in the following ways:

- by approval of a crown subdivisional plans, s.294a of the *local government act*.
- by approval of a freehold subdivisional plan, s.295 (5) of the local government act.
- by approval of a survey plan (crown or freehold), s.28 of the town planning and development act.
- by dedication of crown land (often following acquisition under the **public works act**), ss.287 and 288 of the *local* government act.
- by a local government undertaking work on a private street, s.296 of the *local government act*.

When a street is dedicated to a public use, it becomes Crown land under the *Land Act*, pursuant to s.286 of the *Local Government Act*. Care, control and management rest in the relevant local government (s.300 of the *Local Government Act*) unless the road is declared a highway, main road or secondary road under the *Main Roads Act*. In the latter case, care, control and management vests in the Commissioner of Main Roads (ss.15 and 26 of the *Main Roads Act*). Main Roads Western Australia, rather than DOLA, administers those roads placed under their management responsibility.

The *Local Government Act* appears to be written in an urban context, and does not refer specifically to the management of the roadside; rather it only refers to the road itself. It is therefore difficult to determine to what extent the Act places the care, control and management of the roadside with the local government authority in the case of dedicated roads. It is, however, suggested that where a local government authority is managing a road (reserve) that authority may undertake reasonable management of the roadside to facilitate the roadway, including making the road safe and convenient to use.

With the proclamation of the *Wildlife Conservation Act* 1950 the responsibility for flora conservation, including the control of harvesting of protected flora, this includes seed, was given to the Minister of the Crown responsible for Fisheries and Wildlife and the Department of Fisheries and Wildlife. With the formation of the Department of Conservation and Land Management (CALM) in 1984 and the accompanying *Conservation and Land Management Act* 1984 the conservation and management of all native wildlife passed to the Minister responsible for that Department and the Department itself. As a consequence CALM has the authority to exert controls.

Main Roads Western Australia manages Albany-Lake Grace Rd, Broomehill-Jerramungup Rd and Gnowangerup-Stirling Range Rd, and the Shire of Gnowangerup manages all other roads in this survey.

Assessment Process

Methods

The methods to assess and calculate the conservation value of the roadside reserves are described in Hussey (1991). The process involves scoring a set of pre-selected attributes, which, when combined, represent a roadside's conservation status. A list of these attributes is presented on a standard survey sheet, see Appendix 2. This provides both a convenient and uniform method of scoring. Ideally, the survey is undertaken by a group of local volunteers, who, aided by their knowledge of the area, are able to provide an accurate and cost effective method of data collection. Community participation also ensures a sense of 'ownership' of the end product, which increases the likelihood of its acceptance and use by the local community and road managers. Lamont and Blyth (1995).

Fieldwork was carried out from May 95 to November 98. The surveyors were:

Carolyn Faulkner, Kaye Vaux, Bronwyn Crouch, Beth Gaze, Steve Newbey, Fran Souness, Gary Souness, Lynda Strahan, Ross Strahan, Jenny Ireland, Judy Moir, Jean Brown, Sally Milne, Mary Milne, Beattie Stewart, Sue Oborne, Eunice Faulkner, Len Faulkner, Kath Fisher, Jan House, Susanne Dennings, Alan Dennings, Sandy Vaux, Annabelle Hinkley, Penny Moir, Jan Savage, Kelly O'Neill and Judy O'Neill

The efforts of the Malleefowl Preservation Group, who completed the final stage coordination, and the enthusiastic efforts of the volunteer surveyors ensured that this project was successfully completed. It is now hoped that the data collected will be used by all sectors of the community who have an interest in the roadside environment.

Quantify Conservation Values

The following attributes were used to assess a quantitative measure of conservation value:

- native vegetation on roadside;
- extent of native vegetation along length of roadside;
- number of different native species;
- weed infestation;
- value as a biological corridor;
- predominant adjoining land use.

Each of these attributes was given a score ranging from 0 to 2 points. The combined scores provide a conservation score ranging from 0 to 12. The conservation values, in the form of conservation status categories, are represented by the following colour codes

Conservation Value	Conservation Status	Colour Code
9 - 12	High	Dark Green
7 - 8	Medium High	Light Green
5 - 6	Medium Low	Dark Yellow
0 - 4	Low	Light Yellow

Table 1: Colour codes used to depict the conservation status of roadsides.

The following attributes were also noted but did not contribute to the conservation value score:

- width of road reserve;
- width of vegetated roadside;
- presence of utilities/disturbances;
- dominant native species;
- dominant weeds;
- fauna observed;
- general comments.

It is felt that the recording of these attributes will provide a community database that would provide information useful in many spheres local government and community interest.

Mapping

A computer generated (GIS Arc Info) map, at a scale of 1:100 000, depicting the conservation status of the roadside vegetation and the width of the road reserves within the Shire of Gnowangerup was produced. The data used to produce both the map and the following figures and tables are presented in Appendix 3.

The roadside conservation values map initially provides an inventory of the *status quo* of the condition of the roadside vegetation. This is important as quality of roadside vegetation has far reaching implications for sustaining biodiversity, tourism and Landcare values. Moreover the data and map can be incorporated as a management and planning tool for managing the roadsides *per se*, as it enables the condition of roadside vegetation to be easily assessed. This information can then be used to identify environmentally sensitive areas, high conservation roadsides or strategically important areas, and thus ensure their conservation. Conversely it enables degraded areas to be identified as areas important for strategic rehabilitation, or in need of specific fire management techniquesor regimes and weed control programmes.

The map can also be used as a reference to overlay transparencies of other information relevant to roadside conservation. Data obtained from CALM and the Agricultural Department can been used to produce an overlay map that depicts the location of remnant vegetation on both the Crown estate and privately owned land. This enables the roadside vegetation to be assessed in the context of its importance to the shire's overall conservation network. Other transparencies, such as the degree of weed infestation, or the location of environmentally sensitive areas or future planned developments, could also be produced as an aid to roadside management.

As well as providing a road reserve planning and management tool, the survey data can also be used for:

- regional or district fire management plans;
- tourist routes roads depicted as high conservation value would provide visitors to the district with an insight to the flora of the district;
- landcare/bushcare projects would be able to incorporate the information from this survey into 'whole of' landscape projects.

Survey Data Results

A summary of the general roadside conditions in the Shire of Gnowangerup is presented in Table 2. The survey data have been combined to provide the total kilometres, and percentages, of roadside occupied by each of the conservation status categories and the attributes used to calculate the conservation values (Table 2).

Conservatio	n Status	(km)	Native Vegetation	on Road	Iside (km)	Weed Infesta	tion (km)	
High (9-12)	490.0	21.3%	2 - 3 veg layers	1695.3	73.6%	Light (2)	556.9	24.2%
Med (7-8)	660.7	28.7%	1 veg layer	490.9	21.3%	Medium (1)	1129.3	49.0%
Med (5-6)	564.0	24.5%	0 veg layers	118.1	5.1%	Heavy (0)	618.0	26.8%
Low (0-4)	589.4	25.6%						
			Total	2304.2	100.0%	Total	2304.2	100.0%
Conservatio	n Values ((km)	Extent of Native V	/egetatio	n (km)	Value as Biolo	ogical Corr	idor (km)
0	45.0	2.0%	>80%, Good (2)	556.9	24.2%	High (2)	1208.4	52.4%
1	67.7	2.9%	20-80 % Med (1)	1129.3	49.0%	Medium (1)	739.5	32.1%
2	128.6	5.6%	<20% Low (0)	618.0	26.8%	Low (0)	356.3	15.5%
3	172.2	7.5%						
4	175.9	7.6%	Total	2304.2	100.0%	Total	2304.2	100.0%
5	269.5	11.7%						
6	294.6	12.8%	Number of Native	Species	(km)	Adjoining Lan	d Use (km))
7	355.5	15.4%						
8	305.3	13.2%	Over 20 (2)	586.7	25.5%	Cleared	239.3	10.4%
9	302.6	13.1%	6 - 19 (1)	1016.5	44.1%	Scattered	1840.0	79.9%
10	185.9	8.1%	0 - 5 (0)	701.0	30.4%	Uncleared	184.5	8.0%
11	1.5	0.1%				Other	40.5	1.8%
12	0.0	0.0%	Total	2304.2	100.0%	Urban	3.0	
						Railway	5.0	
Total	2304.2	100.0%				Drain	17.6	
						Plantation	14.9	
Period of su	ırvey: May	/ 1995 to N	lovember 1998.			Total	2304.2	100.0%

Table 2: Summary of roadside conditions along roads in the Shire of Gnowangerup. As roadsides occur on both sides of the road, roadside distances (km) are equal to twice the actual distance of road travelled.

Roadside sections of high conservation value covered 490 km of roadside, 21.3% of the length of roadside surveyed. Medium-high conservation areas accounted for 660.7 km of roadside, 28.7% of the total surveyed. Medium-low conservation roadside covered 564 km, 24.5% of the total surveyed. Areas of low conservation occupied 589.4 km, 25.6% of the roadside surveyed (Table 2, Figure 2).

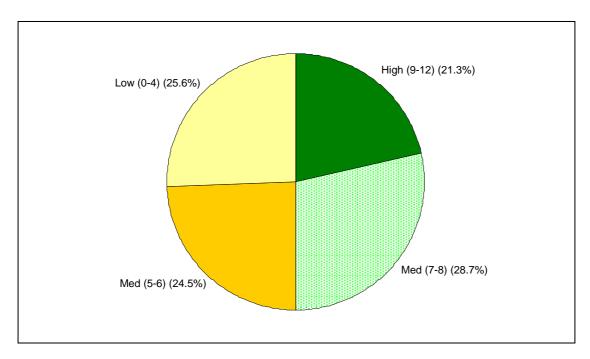


Figure 2: Conservation Status of roadsides in the Shire of Gnowangerup

The *Native Vegetation on Roadside* value is determined from the number of native vegetation layers from either the tree, shrub or ground layers. Sections with at least two layers of native vegetation covered 73.6% of the roadside, 21.3% had only one layer and 5.1% had no layers of native vegetation (Table 2, Figure 3).

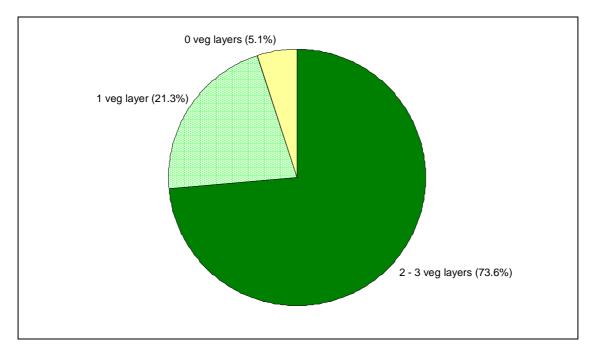


Figure 3: Native Vegetation on Roadside

Roadside vegetation with *Extent of Native Vegetation* value deemed as good, ie with native vegetation cover greater than 80% occurred along 24.2% of the length of roadside surveyed. Survey sections with 20 to 80% cover of native vegetation, accounted for 49% of the roadside. Whilst the remaining 26.8% had less than 20% native vegetation and, therefore, low *Extent of Native Vegetation* value (Table 2, Figure 4).

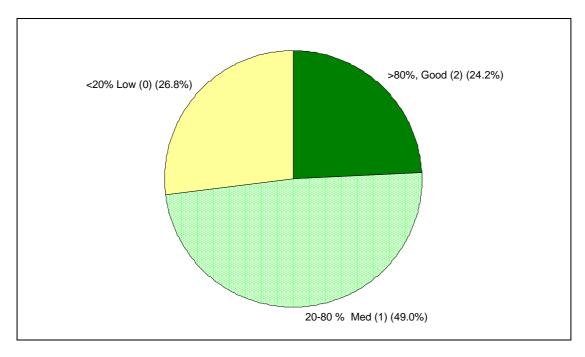


Figure 4: Extent of Native Vegetation

The *Number of Native Species* score provides a measure of the diversity of the vegetation. Survey sections with more than 20 plant species spanned 25.5% of the roadside. Roadside sections with 6 and 19 plant species accounted for 44.1% of the roadside. The remaining 30.4% of roadside had less than 6 plant species and, therefore, nil contribution to the conservation value scores (Table 2, Figure 5).

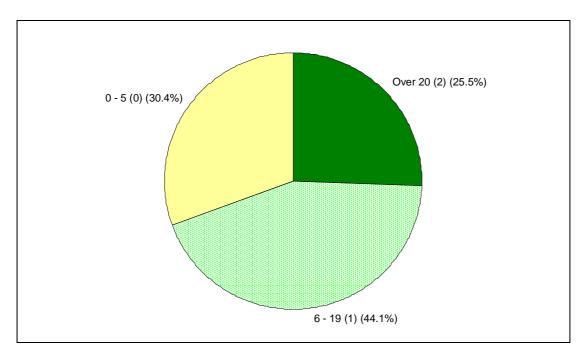


Figure 5: Number of Native Species

24.2% of the roadside surveyed was only lightly affected by weeds. Medium level weed infestation occurred on 49% of the roadside. Whilst 26.8% of the roadside was heavily affected by weeds (Table 2, Figure 6).

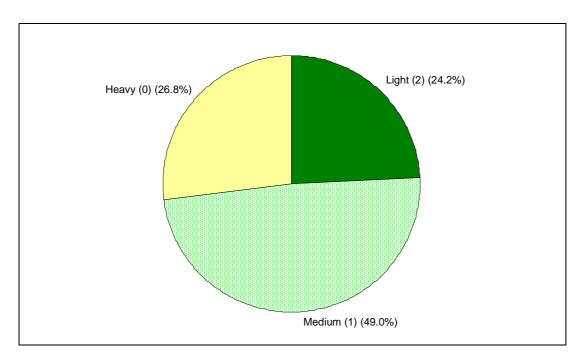


Figure 6: Weed Infestation. Light infestation = weeds less than 20% of ground layer. Medium infestation = weeds 20 to 80% of the ground layer. Heavy infestation = weeds more than 80% of the ground layer.

The *Value as a Biological Corridor* score is largely dependent upon the diversity of habitat and whether the corridor connects areas of uncleared land. High value biological corridor (as determined by the roadside surveyors) was present along 52.4% of the roadside, medium value along 32.1% of the roadside and low value corridor 15.5% (Table 2, Figure 7).

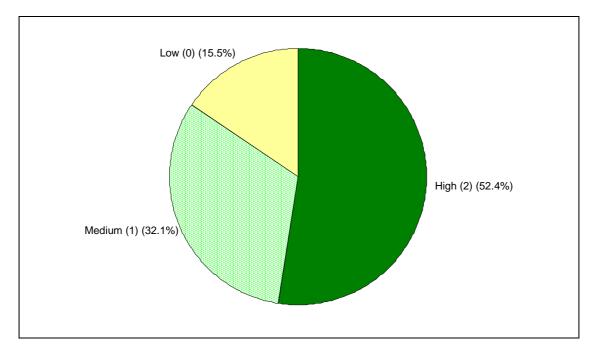


Figure 7: Value as Biological Corridor.

Most land adjoining the roadsides had at least some natural vegetation remaining. A scattered distribution of native vegetation was present on the land adjoining 79.9% of the roadside, whilst 8% of roadside was adjoined by land that had not been cleared. 10.4% of the roadside surveyed was adjoined by land that had been totally cleared of its native

vegetation. Plantations of non-native trees, railway reserve, drain reserve or urban development adjoined the remaining 1.8% of roadside (Table 2, Figure 8).

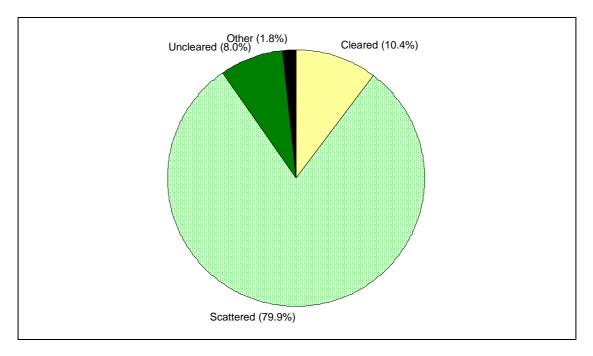


Figure 8: Adjoining Land Use.

Management Techniques

The following section provides management recommendations that will assist in retaining and enhancing roadside conservation value. These guidelines are taken from the Roadside Conservation Committee's Roadside Manual and or the Roadside Handbook. The Executive Officer of the Roadside Conservation Committee is also available to assist on all roadside conservation matters and can be contacted on (08) 9334 0423. The primary aim of road management is the creation and maintenance of a safe, efficient road system. However, the following management procedures should be adopted.

HIGH CONSERVATION VALUE ROADSIDES

Management Goal Maintain and enhance the native plant communities.

Management Guidelines Minimal disturbance to existing vegetation.

because disturbance leads to weed invasion, which downgrades the conservation value, and increases the fire threat.

Minimal disturbance can be achieved by:

- adopting a road design that occupies the minimum space;
- diverting the line of a table drain to avoid disturbing valuable flora;
- pruning branches, rather than removing the whole tree or shrub;
- not dumping spoil on areas of native flora;
- observing dieback control measures as required;

- apply the Fire Threat Assessment (Roadside Manual chapter 9) before burning roadside vegetation;
- use methods other than fuel reduction burns to reduce fire threat; if roadside burning must be undertaken, incorporate it into a district fire management program;
- encourage adjacent landholders to set back fences to allow roadside vegetation to proliferate;

programs.

- encourage adjacent landholders to plant windbreaks or farm tree lots adjacent to roadside vegetation to create a
 denser wind or shelterbelt:
- encourage revegetation projects by adjacent landholders.

Medium Conservation Value Roadsides

Management Goal

Maintain native vegetation wherever possible, and to encourage its regeneration.

Management Guidelines

Minimise disturbance to existing vegetation.

With the information available on weed infestation on roadsides within the Shire of Gnowangerup, consideration could be given to strategic roadside weed control

Low Conservation Value Roadsides

Management Goal

Retain remnant trees and shrubs and encourage their regeneration.

Encourage revegetation projects using indigenous plants.

Minimise soil disturbance to reduce weed invasion.

Encourage revegetation projects by adjacent landholders.

A draft Code of Practice is included in Appendix 4. This document is provided as the basis for developing a Shire of Gnowangerup Code of Practice for roadside conservation and Roadside Management Plans. Development of these documents will provide defined parameters for all roadside management works and also provide the local community with an overview of management practices that will ensure the sustainability of native roadside vegetation.

Tree Roads

Tree roads are defined as those roadsides with a sufficient density of mature trees to create an attractive tunnel effect. Besides the aesthetic benefits, these areas also provide valuable habitat for birds and other arboreal fauna. Since mature trees are slow growing and hard to replace, care should be taken to conserve these avenues wherever possible. The points following should be considered when working on Tree Roads:

- prune offending branches rather than remove the whole tree;
- cut branches off close to limb or tree trunk;
- divert line of table drain to avoid disturbing tree roots;
- import fill to build up formation, rather than using side-borrow from roadside;
- when using herbicide for weed control on the roadside do not use a soil residual type, such as Siomazine or Atrazine. Eucalypts are especially sensitive to these;
- encourage the adjoining landholders to plant shelter belts on their property that will complement the roadside vegetation.

Flora Roads and Roads Important for Conservation

Flora Roads are significant sections of road having a special conservation value due to the vegetation growing on the road reserve. Signs are available to mark these roads as Flora Roads. This has a twofold effect of drawing the attention of tourist to the high conservation roadside and it also alerts all that work in the roadside environment that the marked section of roadside requires due care to protect the values present

In order to plan roadworks so that important areas of roadside vegetation are not disturbed, road managers should know of these areas. It is suggested that the Shire Engineer or Environmental Officer establish a Register of Roads Important for Conservation. The following guidelines should be considered prior to establishing this registrar

- the roadside must contain a significant population of native vegetation, (introduced trees and grasses are not important for conservation.
- the native vegetation must be in as near to its natural condition as possible.
- in undisturbed vegetation several layers of plants occur, i.e. trees, shrubs and groundcovers (herbs or native grasses). if one or more of the expected layers are missing, the conservation value is reduced.
- the roadside may be the only remaining example of original vegetation within a cleared area. it thus assists in vegetation mapping and distribution studies, provides a benchmark for study of soil change during agricultural development, may provide a source of local seed for revegetation projects and acts as a wildlife habitat for the protection of fauna.
- rare or endangered plants may occur on the roadside.
- it may provide nest sites and refuges for native animals. dense vegetation provides habitat for avifauna and invertebrates.

Special Environmental Areas

A 'Special Environmental Area' is a section of roadside which has such significance that it requires special protection. Reasons for establishing 'Special Environmental Areas' can include:

- protection of rare or threatened species of native plants;
- protection of sites that have other high conservation, scientific or aesthetic values;
- Protection of Aboriginal or European cultural sites.

'Special Environmental Areas' can be delineated by the use of site markers. See Figures 9 & 10 for design and placement of SEA markers. Workers who come across a 'Special Environmental Area' marker in the field should not disturb the area between the markers unless specifically instructed. If in doubt, the Supervisor, Shire Engineer or CEO should be contacted.

Western Power and Westrail also have systems for marking sites near power or rail lines. Examples of these are seen in the figure below.

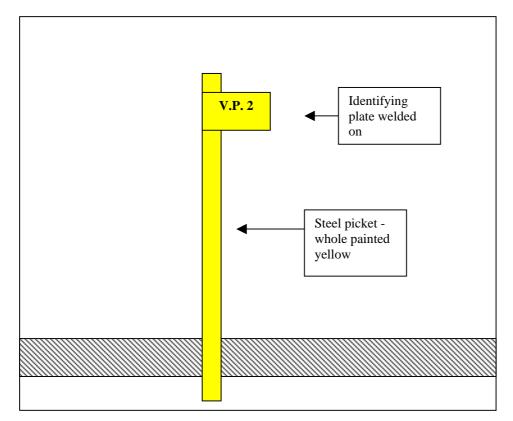


Figure 9. Shire Special Environmental Area site marker

Special Environmental Area Register

To ensure that knowledge of rare flora and other sites does not get lost due, perhaps, to staff changes, a Local Authority should establish a Special Environmental Area Register. This should outline any special treatment, which the site should receive, and be consulted prior to any work in the area being initiated in the area.

The Special Environmental Area Register should be consulted by the appropriate person prior to starting work on any particular road, to ensure that inadvertent damage does not occur. All Special Environment Area sites should be marked on the Shire map, which records Roadside Conservation Value

Local Government is encouraged to permanently mark Special Environmental Areas to prevent inadvertent damage to the rare flora or other values being protected. Markers of a uniform shape and colour will make recognition easier for other authorities using road reserves.

When notified of a population needing marking, the Local Authority should contact the appropriate C.A.L.M. Regional or District office for assistance to ensure the exact site location and correct positioning of marker posts.

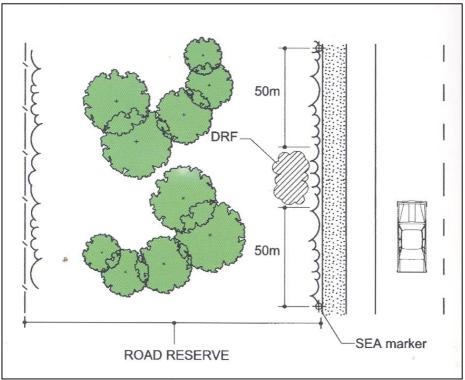


Figure 10. Marking sites in the field. In this case a Declared Rare Flora (DRF) site has been marked.

Roadside Management Strategies

Planning

The RCC is able to provide good models of Roadside Management Plans and encourages all shires to adopt this practice of planning for roadside conservation. The following actions greatly enhance likelihood of a plan that changes behaviour and results in on-ground actions:

*	community support	encourage ongoing community involvement and commitment by establishing a local
		Roadside Advisory Committee or working group within the Shire Environmental
		Committee;
*	contract specifications	maintain roadside values by developing environmental specifications for inclusion in
		all tender documents or work practices;
*	community education	use of innovative and pertinent material can increase community understanding of
		roadside values;
*	training	promote local roadside planning initiatives and gain acceptance and understanding by
		involving shire staff, contractors, utility provider staff and the community in workshops,
		seminars or training days.

Training develops recognition and understanding of roadside values and highlights best work practices. Workshops are developed to ensure that local issues and environments are dealt with and they include site visits to high conservation remnants, current projects and works.

The objective of all roadside management planning should be to:

protect

- native vegetation
- rare or threatened flora or fauna
- cultural and heritage values
- community assets from fire

enhance

- indigenous vegetation communities
- fauna habitats and corridors

maintain

- safe function of the road
- natives vegetation communities
- fauna habitats and corridors
- visual amenity and landscape qualities
- water quality

minimise

- land degradation
- spread of weeds and vermin
- spread of soil borne pathogens
- risk and impact of fire
- disturbance during installation and maintenance of service assets

Strategies

The development of a strategy enables potentially competing uses to coexist and ensures that roadsides have a coordinated approach to management. When producing regional strategies the RCC suggests that:

- organisational support from local government is essential from the outset;
- strategies should take no longer that 12 months to produce (including a period for community comment);
- communities need to be provided with background information to make formal decisions.

Management strategies should be produced to address local issues, rather than be to a standard format. Issues can be categorised as:

Functional

- Firewood collection and timber harvesting
- Fire prevention
- Installation and maintenance of services
- Road construction and road widening
- Road maintenance

- Stockpile and dumpsite management
- Vegetation removal
- Vehicle and machinery activity
- Water Supply Catchments

. Cultural and Recreational

- Cultural and heritage values

- Horse riding

- Visual amenity and landscape values

Wayside stops

Landcare

- Apiculture

Insect Pests

Pest animals

- Ploughing, cultivating or grading
- Revegetation and site rehabilitation
- Weeds

Conservation

- Protecting and conserving remnant native

vegetation

Rare, threatened or significant flora and fauna

- Regeneration of native plant communities

- Roadside marking of special environmental

areas

- Unused road reserves

Wetlands

Wildlife habitat

Wildlife corridors

Roadside Action Plans

A Roadside Action Plan is prepared for an individual road and contains a works program that will enable conservation values and other road uses to be managed compatibly.

Roadside Action Plans are based on the guidelines that are produced as part of the roadside strategy.

The RCC suggests that Roadside Action Plans be:

- short term documents (to be reviewed within 2 years);
- prepared on a need basis;
- prepared after consultation with major stakeholders;
- a maximum of 2 pages per road;
- names a person or agency responsible for implementing the management recommendations.

Weeds

WA Herbarium records indicate that a total of 110 species of weeds have been recorded from within the shire of Gnowangarup. However this should not be considered as a complete list as collectors often over look weed as legitimate botanical specimans.

List of exotic plants (weeds) recorded in the Shire of Gnowangerup

Botanical name Common Name

Acetosella vulgaris sorrel, sheep's sorrel

Amaranthus albus tumbleweed
Asparagus asparagoides bridal creeper
Avena barbata wild oats

Bartsia trixago

Bracteantha bracteata

Briza maxima blowfly grass, quaking grass

Briza minor shivery grass, lesser quaking grass

Bromus diandrus brome grass, great brome

Bromus hordeaceus soft brome grass
Bromus rubens red brome grass

Bupleurum lancifolium

Cakile maritima sea rocket Carduus pycnocephalus slender thistle Carduus tenuiflorus sheep thistle Carthamus lanatus saffron thistle Centaurea melitensis maltese cockspur Centaurium erythraea common century Centaurium tenuiflorum slender centuary Cerastium glomeratum mouse-ear chickweed

Chenopodium album fat hen

Chenopodium murale green fat hen, nettle-leaved fat hen

Chenopodium pumilio goosefoot
Cirsium vulgare spear thistle
Conyza albida tall fleabane
Cotula bipinnata ferny cotula
Cotula turbinata funnel weed

Crassula decumbens

Crassula natans

Cyperus tenellus tiny flat-sedge

Dittrichia viscosa

Ehrharta calycina perennial veldt grass
Ehrharta longiflora annual veldt grass

Emex australis doublegee, spiny emex

Epilobium ciliatum willowherb

Erodium botrys corkscrews, long stoksbill

Euphorbia peplus petty spurge
Fumaria muralis wall fumitory
Galium murale bedstraw
Gamochaeta falcata cudweed
Gynandriris setifolia thread iris
Hibiscus trionum bladder ketmia

Homeria flaccida one leaf cape tulip

Hordeum distichonbarley grassHordeum leporinumbarley grassHordeum marinumsalt barley grass

Juncus bufonius toad rush

Juncus capitatus

Juncus microcephalus

Lactuca saligna wild lettuce
Lamium amplexicaule deadnettle

Lathyrus latifolius

Lavatera arborea tree mallow

Lepidium africanum common peppercress
Limonium sinuatum perrennial statice

Linum usitatissimum flax

Lolium perenne perennial ryegrass

Lolium temulentum darnel

Lythrum hyssopifolia lesser loosestrife

Medicago minima small burr medic

Medicago scutellata snail medic

Melilotus officinalis ribbed meliot

Moluccella laevis molluca balm

Monadenia bracteata South African orchid

Monopsis debilis

Ornithopus pinnatus slender serradella
Orobanche minor lesser broomrape
Osteospermum clandestinum stinking Roger

Oxalis corniculata yellow wood sorrel, creeping oxalis

Oxalis pes-caprae soursob
Papaver hybridum rough poppy
Parapholis incurva coast barbgrass

Parentucellia latifolia red bartsia, common bartsia

Pentaschistis airoides false hair grass

Phalaris minor esser canary grass
Phalaris paradoxa paradoxa grass
Plantago coronopus subsp. Commutata buckshorn plantain

Poa annua winter grass
Polycarpon tetraphyllum fourleaf allseed
Pseudognaphalium luteo-album Jersey cudmore
Raphanus raphanistrum wild radish
Romulea rosea Guildford grass
Romulea rosea var. australis " "
Romulea rosea var. communis " "

Rostraria cristata cats tail
Rumex brownii swamp dock
Rumex crispus curled dock

Sagina apetala common pearlwort

Senecio diaschides ragwort

Sisymbrium orientale

Sonchus asper subsp. Glaucescens prickly sow thistle
Sonchus oleraceus sow thistle
Sorghum halepense Johnson grass
Sorghum x almum Columbus grass
Spergularia rubra red sand spurrey

Spergularia salina

Sporobolus indicus var. capensis

Trifolium angustifolium var. angustifolium narrowleaf clover Trifolium arvense var. arvense hare's foot clover

Trifolium campestre var. campestre hop clover
Trifolium dubium suckling clover
Trifolium hirtum rose clover
Trifolium repens var. repens white clover

Trifolium subterraneum subterraneum clover

Trifolium tomentosum var. tomentosum wooly clover Ursinia anthemoides ursinia

Vellereophyton dealbatum white cudweed Vicia benghalensis purple vetch

Vulpia bromoides squirrel's tail fescue

Vulpia myuros silver grass, rat's tail fescue

References

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Lamont D A (1998) Western Australian Roadside Handbook, Enironmental guidelines for road construction and maintenance workers. Roadside conservation Committee, Kensington, Western Australia.

APPENDIX 1

Definitions of remnant vegetation types, Beeston et al (1993).

Vegetation classed as "remnant vegetation" has one or more of the following characteristics (Beeston et al., 1993):

- * Most closely reflects the natural state of vegetation for a given area.
- * Has an intact understorey (if forest or woodland).
- * Has minimal disturbance by agents of human activity.

Vegetation classed as "modified vegetation" has one or more of the following characteristics:

- * Degraded understorey (ie reduction in the number of native species, includes weeds).
- * Obvious human disturbance-clearing, mining, grazing, weeds.
- * Affected by salt.
- * Narrow corridors of vegetation (usually along roads and railway lines or windbreaks), which are more likely to be affected by edge effects.

Vegetation classed as "scattered vegetation" has:

- * No understorey
- * Parkland cleared ie are scattered single trees.
- * No significant signs or chance of regeneration.

APPENDIX 2

Standard Survey Sheet

	_		E		Other	9		Over 80%
R		/////	3 6		Drain Reserve parallel to road			20-80%
					Rallway Reserve parallel to road	0		Less than 20%
					Urban or Industrial	V 100 100 100 100 100 100 100 100 100 10		LENGTH OF ROADSIDE
			-0		Plantation of non-native trees	NG S	TION ALC	EXTENT OF NATIVE VEGETATION ALONG
			N N		lincleared land			
					• scattered trees/shribs			
)		completely cleared	{	ı	Name
					Agricultural crop or pasture:-	3 20		Rare flora known to be present
		GENERAL COMMENTS		ND USE	PREDOMINANT ADJOINING LAND USE			RARE FLORA
								ground layer
						- Cmax		shrub layer
						1)		tree layer
		Reasons					ADSIDE	NATIVE VEGETATION ON ROADSIDE
*		Avenue of trees			FAUNA OBSERVED			over 20m
		Low			Hollow logs			5-20m
		Medlum	-		for birds nests			1.5m
		High	_		Large trees with hollows]	width of Vegetated roadside
		LANDSCAPE VALUE	- Aax		nectar-feeding animals	ngn	Len	
		*	_		Elongary and areas		104	Side of the road
			,	RIDOR	Connects uncleared great			WIDTH OF ROAD RESERVE
								lengin of section
(1	Reasons			Dominant weeds (If known)			Smarth of seatter
		Low	5		Coolid layer totally weeks			odometer reading
		Medium	0		Ground layer totally woods			ending point
		High	2		Mostly weeds (over 80% total)			Cocineral reaching
		CONSERVATION VALUE	30		Half weeds (20-80% total)			odometer reading
			2		Few weeds (under 20% total plants)			starting point
					WEEDS			Section no.
		1300						Direction of travel
		Type			Dominant species (If Known)	-		CIII
		Disturbances absent	u		Over 20			Shire
		Disturbances isolated			6-19			Nearest named place
		Disturbances continuous	0		0.5			Road Name
Mis V. B. Owo	C-PO Box 104 COMO WA 8156	UTILITIES/DISTURBANCES		SECIES	No. OF DIFFERENT NATIVE SPECIES			DateObserver(s)
	Committee	Roadside Conservation Committee	VALUE OF A RO	HVAIION	CONSERVATION VALUE OF A ROAD			
3				DUATION	O DETERMINE THE COUSE	SURVEY		
						The second secon		

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APPENDIX 3

Raw data used to calculate the conservation values

Road Name		Direction of Travel		End Point	Section Length		ns. lue	Nat.	Veg	Wee	eds	Exte		No Spec	-	Val Co		Lan	d Use
						L	R	L	R	L	R	L	R	Ĺ	R	L	R	L	R
ALBANY-LAKE GRACE RD	1	N	SHIRE BOUNDARY		12.77	10	10	2	2	2	2	2	2	2	2	2	2	U	U
ALBANY-LAKE GRACE RD	2	N			1	6	4	2	1	2	1	0	0	0	0	2	2	U	U
ALBANY-LAKE GRACE RD	3	N		NIGHTWELL RD	27.5	5	5	2	2	0	0	0	0	0	0	2	2	S	S
ALBANY-LAKE GRACE RD	4	N	NIGHTWELL RD		1.53	10	8	2	2	2	2	2	1	2	1	2	1	U	S
ALBANY-LAKE GRACE RD	5	N			1	7	7	2	2	2	2	1	1	0	0	1	1	S	S
ALBANY-LAKE GRACE RD	6	N			0.4	9	9	2	2	2	2	1	1	2	2	2	2	U	U
ALBANY-LAKE GRACE RD	7	N			0.3	2	1	0	0	1	0	0	0	0	0	0	0	Р	Р
ALBANY-LAKE GRACE RD	8	N			4.8	8	8	2	2	1	1	1	1	1	1	2	2	S	S
ALBANY-LAKE GRACE RD	9	N			2.47	3	3	1	1	0	0	0	0	0	0	0	0	С	С
ALBANY-LAKE GRACE RD	10	N			0.9	3	3	1	1	0	0	0	0	0	0	0	0	С	С
ALBANY-LAKE GRACE RD	11	N			1.8	4	4	1	1	0	0	0	0	0	0	1	1	С	С
ALBANY-LAKE GRACE RD	12	N			1.2	5	4	2	2	0	0	1	0	0	0	1	1	S	S
ALBANY-LAKE GRACE RD	13	N			3.6	4	4	1	1	0	0	0	0	0	0	1	1	С	С
ALBANY-LAKE GRACE RD	14	N			3.2	11	7	2	2	2	1	1	0	2	0	2	2	С	С
ALBANY-LAKE GRACE RD	15	N			1	2	8	0	2	0	1	0	1	0	1	0	2	С	S
ALBANY-LAKE GRACE RD	16	N			3	10	10	2	2	2	2	2	2	2	2	1	1	S	S
ALBANY-LAKE GRACE RD	17	N			3.2	8	8	2	2	1	1	1	1	1	1	1	1	С	С
ALBANY-LAKE GRACE RD	18	N			3.04	11	11	2	2	2	2	1	1	2	2	2	2	С	С
ALBANY-LAKE GRACE RD	19	N		TIELINE RD	1.26	10	10	2	2	2	2	2	2	2	2	2	2	U	U
BROOMEHILL-JERRAMUNGUP RD	1	E	SHIRE BOUNDARY		0.6	9	3	2	1	2	0	1	0	2	0	2	1	U	S
BROOMEHILL-JERRAMUNGUP RD	2	E			1.7	3	3	1	1	0	0	0	0	0	0	1	1	Р	Р
BROOMEHILL-JERRAMUNGUP RD	3	E			1.8	4	3	1	1	0	0	0	0	0	0	2	1	S	S
BROOMEHILL-JERRAMUNGUP RD	4	E			6.2	4	4	1	1	0	0	0	0	0	0	2	2	S	S
BROOMEHILL-JERRAMUNGUP	5	Е		STUTLEY ST	0.5	9	2	2	1	2	0	1	0	1	0	2	0	S	I

RD																			
BROOMEHILL-JERRAMUNGUP RD	6	Е	STUTLEY ST		0.5	3	3	1	1	1	1	0	0	0	0	0	0	S	S
BROOMEHILL-JERRAMUNGUP RD	7	E			1.09	3	3	0	0	2	2	0	0	0	0	0	0	I	I
BROOMEHILL-JERRAMUNGUP RD	8	Е			0.99	5	5	1	1	2	2	0	0	0	0	1	1	Р	Р
BROOMEHILL-JERRAMUNGUP RD	9	Е			0.3	5	2	1	1	2	0	0	0	0	0	1	0	I	S
BROOMEHILL-JERRAMUNGUP RD	10	Е			0.3	3	2	1	1	0	0	0	0	0	0	1	0	S	S
BROOMEHILL-JERRAMUNGUP RD	11	Е			4.7	4	4	2	2	0	0	0	0	0	0	1	1	S	S
BROOMEHILL-JERRAMUNGUP RD	12	Е			4.1	8	3	2	2	1	0	1	0	1	0	2	0	S	S
BROOMEHILL-JERRAMUNGUP RD	13	E			1	5	6	2	2	1	1	0	0	0	0	1	2	S	S
BROOMEHILL-JERRAMUNGUP RD	14	Е			0.7	2	8	1	2	1	2	0	1	0	2	0	1	U	U
BROOMEHILL-JERRAMUNGUP RD	15	Е			5.4	7	6	2	2	1	1	1	1	0	0	2	1	S	S
BROOMEHILL-JERRAMUNGUP RD	16	Е		SHEPHERDSON RD	0.8	8	1	2	0	1	0	1	0	1	0	2	0	S	S
BROOMEHILL-JERRAMUNGUP RD	17	E	SHEPHERDSON RD		1.6	11	11	2	2	2	2	2	2	2	2	2	2	S	R
BROOMEHILL-JERRAMUNGUP RD	18	Е			0.7	10	11	2	2	2	2	2	2	2	2	2	2	U	R
BROOMEHILL-JERRAMUNGUP RD	19	Е			1.2	2	7	0	1	0	0	0	1	0	2	1	2	S	R
BROOMEHILL-JERRAMUNGUP RD	20	E			0.3	4	10	1	2	1	2	1	1	0	2	1	2	U	R
BROOMEHILL-JERRAMUNGUP RD	21	Е			0.4	3	9	1	2	0	1	0	1	0	2	1	2	S	R
BROOMEHILL-JERRAMUNGUP RD	22	Е		ALBANY-LAKE GRACE RD	7.39	2	2	1	1	0	0	0	0	0	0	0	0	S	S
BROOMEHILL-JERRAMUNGUP RD	23	Е	M1 TURNOFF TO BORDEN	M1 TURNOFF	5.89	5	5	2	2	1	1	0	0	0	0	1	1	S	S
BROOMEHILL-JERRAMUNGUP RD	24	Е	ALBANY-LAKE GRACE	CREEK	0.81	4	3	1	1	0	0	0	0	0	0	1	0	С	С
BROOMEHILL-JERRAMUNGUP RD	25	Е	CREEK		3.46	9	9	2	2	1	1	1	1	1	1	2	2	С	С
BROOMEHILL-JERRAMUNGUP RD	26	Е			0.61	9	8	2	2	1	1	2	1	1	1	2	2	S	S
BROOMEHILL-JERRAMUNGUP RD	27	Е			9.9	4	3	1	1	0	0	0	0	0	0	2	1	S	S

BROOMEHILL-JERRAMUNGUP	28	Е		RUBBISH DUMP SIGN	1.53	7	7	2	2	1	1	1	1	0	0	2	2	S	S
BROOMEHILL-JERRAMUNGUP RD	29	E	RUBBISH DUMP SIGN		1.93	8	11	2	2	1	2	1	2	1	2	2	2	S	S
BROOMEHILL-JERRAMUNGUP RD	30	E		ONGERUP TOWN	0.71	7	7	2	2	1	1	1	1	1	1	2	2	U	U
BROOMEHILL-JERRAMUNGUP RD	31	E	ONGERUP TOWN	ONGERUP PINGRUP RD	0.5	7	7	2	2	1	1	1	1	1	1	2	2	U	U
BROOMEHILL-JERRAMUNGUP RD	32	E	ONGERUP PINGRUP RD	MAGNERS RD	2.29	4	3	1	1	0	0	0	0	0	0	1	0	С	С
BROOMEHILL-JERRAMUNGUP RD	33	E	MAGNERS RD		0.3	8	8	2	2	2	2	1	1	1	1	2	2	U	U
BROOMEHILL-JERRAMUNGUP RD	34	E			1.9	9	9	2	2	2	2	1	1	1	1	2	2	S	S
BROOMEHILL-JERRAMUNGUP RD	35	E			8.0	6	6	2	2	1	1	1	1	1	1	1	1	U	U
BROOMEHILL-JERRAMUNGUP RD	36	E			1.5	10	10	2	2	2	2	1	1	1	1	2	2	С	С
BROOMEHILL-JERRAMUNGUP RD	37	E			0.5	10	12	2	2	2	2	1	2	1	2	2	2	С	С
BROOMEHILL-JERRAMUNGUP RD	38	E		GLEESON RD	3.16	9	10	2	2	1	2	1	2	1	2	2	2	С	U
GNOWANGERUP-STIRLING RANGE RD	1	S	BROOMEHILL- JERRAMUNGUP RD		1	8	3	2	1	1	0	1	0	1	0	2	1	S	S
GNOWANGERUP-STIRLING RANGE RD	2	S			1.2	5	6	2	2	1	1	1	1	0	1	0	0	S	S
GNOWANGERUP-STIRLING RANGE RD	3	S			6.6	6	6	1	1	1	1	1	1	1	1	1	1	S	S
GNOWANGERUP-STIRLING RANGE RD	4	S			1.6	2	2	1	1	0	0	0	0	0	0	0	0	S	S
GNOWANGERUP-STIRLING RANGE RD	5	S			2.1	6	6	1	1	1	1	1	1	1	1	1	1	S	S
GNOWANGERUP-STIRLING RANGE RD	6	S			3.3	2	2	1	1	0	0	0	0	0	0	0	0	S	S
GNOWANGERUP-STIRLING RANGE RD	7	S			2.4	5	4	1	1	1	1	1	1	0	0	1	0	S	S
GNOWANGERUP-STIRLING RANGE RD	8	S			1.3	10	10	2	2	2	2	2	2	2	2	1	1	S	S
GNOWANGERUP-STIRLING RANGE RD	9	S			3.82	9	9	2	2	2	2	2	2	1	1	1	1	S	S
GNOWANGERUP-STIRLING RANGE RD	10	S	NEW COUNTRY RD		0.7	7	2	1	0	1	0	1	0	2	0	1	1	S	S
GNOWANGERUP-STIRLING RANGE RD	11	S			1	3	3	1	1	1	1	0	0	0	0	1	1	U	U
GNOWANGERUP-STIRLING	12	S			4.75	6	4	1	1	2	1	1	0	1	0	0	0	S	С

RANGE RD																			
GNOWANGERUP-STIRLING RANGE RD	13	S			4.93	7	6	1	1	2	1	1	1	1	1	1	1	S	S
GNOWANGERUP-STIRLING RANGE RD	14	S			1.85	3	4	1	2	0	0	0	0	0	0	1	1	S	S
GNOWANGERUP-STIRLING RANGE RD	15	S		MABINUP RD	1.89	1	1	0	0	0	0	0	0	0	0	0	0	S	S
GNOWANGERUP-STIRLING RANGE RD	16	S	MABINUP RD		8.0	4	8	1	1	1	1	0	1	0	2	1	2	S	S
GNOWANGERUP-STIRLING RANGE RD	17	S			0.9	3	3	1	1	0	0	0	0	0	0	1	1	S	S
GNOWANGERUP-STIRLING RANGE RD	18	S			0.7	2	2	1	1	0	0	0	0	0	0	0	0	S	S
GNOWANGERUP-STIRLING RANGE RD	19	S		CHESTER PASS RD	8	9	9	1	1	2	2	2	2	2	2	2	2	U	U
KWOBERUP RD	1	N			0.58	7	7	2	2	2	2	1	1	1	1	1	0	U	Р
KWOBERUP RD	2	N			0.78	5	6	2	2	0	0	1	1	1	1	1	1	U	S
KWOBERUP RD	3	N			1.85	3	4	2	2	0	0	0	0	0	0	0	1	S	S
KWOBERUP RD	4	N			1.95	8	8	2	2	1	1	1	1	1	1	2	2	S	S
KWOBERUP RD	5	N			1.17	5	5	1	1	0	0	1	1	0	0	2	2	S	S
KWOBERUP RD	6	N			1.17	5	5	2	2	0	0	0	0	1	1	1	1	S	S
KWOBERUP RD	7	N			2.14	8	8	2	2	1	1	1	1	1	1	2	2	S	S
KWOBERUP RD	8	N			2.92	7	7	2	2	1	1	1	1	1	1	1	1	S	S
ONGERUP-PINGRUP RD	1	N	BROOMEHILL- JERRAMUNGUP RD	ONGERUP NORTH RD	7	4	4	1	1	2	2	0	0	0	0	0	0	S	S
ONGERUP-PINGRUP RD	2	N	ONGERUP NORTH RD	TIE LINE RD	10	7	7	2	2	2	2	1	1	1	1	0	0	S	S
ONGERUP-PINGRUP RD	3	N		KENT SHIRE BOUNDARY	4.7	6	5	2	2	0	2	2	0	1	0	0	0	S	S
TIELINE RD	1	W	ONGERUP PINGRUP RD	END OF NATURE RESERVE	2.5	8	9	2	2	2	2	2	2	1	1	1	1	U	S
TIELINE RD	2	W	END OF NATURE RESERVE	NATURE RESERVE	5.5	10	10	2	2	2	2	2	2	1	1	2	2	S	S
TIELINE RD	3	W	NATURE RESERVE	END OF NATURE RESERVE	1	9	9	2	2	2	2	2	2	1	1	1	1	S	S
TIELINE RD	4	W		ALBANY - LAKE GRACE RD	1.5	9	9	2	2	2	2	2	2	1	1	1	1	S	S
TIELINE RD	5	W	ALBANY - LAKE GRACE RD	MINDARABIN RD	12.2	9	9	2	2	2	2	2	2	1	1	1	1	S	S
TIELINE RD	6	W	MINDARABIN RD	MOORES DAM RD	11.3	8	8	2	2	2	2	1	1	1	1	1	1	S	S
TIELINE RD	7	W	MOORES DAM RD	KWOBERUP RD	9	6	7	1	2	2	2	1	1	0	0	1	1	S	S

TIELINE RD	8	W	KWOBERUP RD	EASTWOOD RD	6.5	6	6	2	2	1	1	1	1	0	0	1	1	S	S
TIELINE RD	9	W	EASTWOOD RD		2.5	4	4	2	2	1	1	0	0	0	0	0	0	S	S
TOOMPUP SOUTH RD	1	S	BROOMEHILL- JERRAMINGUP RD		2.4	9	9	2	2	2	2	1	1	1	1	1	1	С	С
TOOMPUP SOUTH RD	2	S			2.2	9	9	2	2	2	2	1	1	1	1	1	1	С	С
TOOMPUP SOUTH RD	3	S			5.7	9	9	2	2	2	2	1	1	1	1	1	1	С	С
TOOMPUP SOUTH RD	4	S			2.8	10	10	2	2	2	2	1	1	2	2	1	1	С	С
TOOMPUP SOUTH RD	5	S			4.9	10	10	2	2	2	2	1	1	1	1	2	2	С	С
TOOMPUP SOUTH RD	6	S			5	10	8	2	2	2	2	1	0	2	1	1	1	С	С
TOOMPUP SOUTH RD	7	S			4.7	4	4	2	2	0	0	0	0	0	0	1	1	S	S
TOOMPUP SOUTH RD	8	S			0.4	4	8	1	2	2	0	0	2	0	2	0	2	S	U
TOOMPUP SOUTH RD	9	S			2	4	4	1	1	0	0	0	0	1	1	0	0	С	С
BOXWOOD HILL ONGERUP RD	1	W	CRAKERUP RESERVE		3.6	11	11	2	2	2	2	2	2	2	2	2	2	S	S
BOXWOOD HILL ONGERUP RD	2	W			1.6	7	8	2	2	2	2	0	0	2	2	0	0	S	С
BOXWOOD HILL ONGERUP RD	3	N	OAKDALE & BOXWOOI	O RD	3.6	8	8	2	2	1	1	1	1	1	1	2	2	S	S
BOXWOOD HILL ONGERUP RD	4	N			0.5	12	12	2	2	2	2	2	2	2	2	2	2	С	С
BOXWOOD HILL ONGERUP RD	5	N		FARMGATE KENT LOC 1338	1.5	11	11	2	2	2	2	2	2	2	2	2	2	S	S
BOXWOOD HILL ONGERUP RD	6	N	FARMGATE KENT LOC	1338	5	11	11	2	2	2	2	2	2	2	2	2	2	S	S
BOXWOOD HILL ONGERUP RD	7	N	COWELLUP RD		2.17	11	11	2	2	2	2	2	2	2	2	2	2	S	S
BOXWOOD HILL ONGERUP RD	8	N	GRAVEL PIT	PINNACLE RD	2.17	8	9	2	2	2	2	0	1	1	1	2	2	S	S
BOXWOOD HILL ONGERUP RD	9	N	PINNACLE RD		2.06	10	10	2	2	2	2	1	1	2	2	2	2	S	S
BOXWOOD HILL ONGERUP RD	10	N			1.19	5	6	1	1	1	2	0	0	1	1	1	1	S	S
BOXWOOD HILL ONGERUP RD	11	N			0.54	8	8	2	2	2	2	1	1	1	1	1	1	S	S
BOXWOOD HILL ONGERUP RD	12	N			2.49	11	11	2	2	2	2	2	2	2	2	2	2	S	S
BOXWOOD HILL ONGERUP RD	13	N			1.98	8	8	2	2	1	1	1	1	1	1	2	2	S	S
BOXWOOD HILL ONGERUP RD	14	N	HOLDEN RD	END OF ONG GOLF COURSE	4.1	5	5	1	1	1	1	0	0	1	1	1	1	S	S
GNOWELLEN RD	1	NW	E SHIRE BOUNDARY	SANDALWOOD RD	2.4	10	10	2	2	2	2	2	2	2	2	2	2	U	U
CHILLINUP RD	1	S	BORDEN-BREMER BAY RD		2.5	3	3	2	2	0	0	0	0	0	0	0	0	S	S
CHILLINUP RD	2	S			0.1	6	6	2	2	0	0	1	1	0	0	2	2	S	S
JACKITUP NORTH RD	1	N	JACKITUP WEST RD		0.3	8	6	2	1	2	1	1	1	1	0	2	2	U	Р
JACKITUP NORTH RD	2	N			2.4	8	8	1	1	2	2	1	1	1	1	2	2	S	S
JACKITUP NORTH RD	3	N			1.3	7	7	2	2	1	1	1	1	1	1	1	1	S	S

JACKITUP NORTH RD	4	N			1.9	1	1	0	0	0	0	0	0	0	0	0	0	S	S
JACKITUP NORTH RD	4	N			0.3	7	7	2	2	2	2	1	1	1	1	1	1	U	U
JACKITUP NORTH RD	5	N		TIELINE RD	2.5	7	7	2	2	1	1	1	1	1	1	1	1	S	S
OLD ONGERUP RD	1	E	BROOMEHILL- JERRAMUNGUP RD		2.85	7	7	2	2	1	1	1	1	1	1	1	1	S	S
OLD ONGERUP RD	2	Е			5.1	8	8	2	2	1	1	1	1	1	1	2	2	S	S
OLD ONGERUP RD	3	Е			3.05	6	6	2	2	1	1	1	1	1	1	0	0	S	S
OLD ONGERUP RD	4	Е			2.45	11	11	2	2	2	2	2	2	2	2	2	2	S	S
OLD ONGERUP RD	5	Е			3.15	9	9	2	2	2	2	1	1	2	1	1	2	S	S
OLD ONGERUP RD	6	Е			1.5	9	9	2	2	2	2	2	2	2	2	0	0	S	S
OLD ONGERUP RD	7	Е			2.55	1	1	0	0	0	0	0	0	0	0	0	0	S	S
OLD ONGERUP RD	8	Е		LAKE GRACE RD	5.1	5	5	1	1	1	1	1	1	0	0	1	1	S	S
JACKITUP RD	1	Е	KWOBERUP RD		2.5	7	7	1	1	1	1	1	1	1	1	2	2	S	S
JACKITUP RD	2	Е			1	7	7	2	2	1	1	0	0	1	1	2	2	S	S
JACKITUP RD	3	Е			5.3	4	3	2	1	1	1	0	0	0	0	0	0	S	S
JACKITUP RD	4	Е			0.3	3	3	1	1	0	0	0	0	0	0	1	1	S	S
JACKITUP RD	5	Е			0.9	9	9	2	2	2	2	2	2	1	1	1	1	S	S
JACKITUP RD	6	Е			2.1	7	7	2	2	1	1	1	1	1	1	1	1	S	S
HINKLEY RD	1	E	GNOWANGERUP TOWN		1.3	5	5	2	2	1	1	0	0	0	0	1	1	S	S
HINKLEY RD	2	E			1.3	6	7	2	2	2	2	1	1	0	0	0	1	S	S
HINKLEY RD	3	Е			4.3	1	2	0	1	0	0	0	0	0	0	0	0	S	S
HINKLEY RD	4	Е	STUTLEY RD		16.4	7	8	2	2	1	1	1	1	1	1	1	2	S	S
HINKLEY RD	5	Е			0.5	1	2	0	1	0	0	0	0	0	0	0	0	S	S
HINKLEY RD	6	Е			1.1	8	10	2	2	1	2	1	2	1	1	2	2	S	S
MINDARABIN RD	1	N	OLD ONGERUP RD		8.2	10	11	2	2	2	2	2	2	2	2	1	2	S	S
MINDARABIN RD	2	N			5.7	10	10	2	2	2	2	2	2	2	2	1	1	S	S
MINDARABIN RD	3	N		SHIRE BOUNDARY	3	9 9) 2		2	2	2	2	2	2	2	0	0	S	S
MAGITUP RD	1	W	ALBANY - LAKE GRACE RD		1.5	4	1	2	2	0	0	1	1	0	0	0	0	S	S
MAGITUP RD	2	W			0.4	1	4	0	2	0	0	0	1	0	0	0	0	S	S
MAGITUP RD	3	N			1	3	3	2	2	0	0	0	0	0	0	0	0	S	S
MAGITUP RD	4	N			1.3	4	4	2	2	0	0	1	1	0	0	0	0	S	S
MAGITUP RD	5	N			1.8	5	5	2	2	0	0	1	1	1	1	0	0	S	S
MAGITUP RD	6	N			1.8	2	2	1	1	0	0	0	0	0	0	0	0	S	S

MAGITUP RD	7	N	APPROACH TO FLOODWAY		1.4	5	5	1	1	0	0	2	2	1	1	0	0	S	S
MAGITUP RD	8	N			0.5	8	8	2	2	2	2	2	2	1	1	0	0	S	S
MAGITUP RD	9	N		MAILEEUP RD	4.1	6	6	2	2	1	1	1	1	1	1	0	0	S	S
MAGITUP RD	10	N	MAILEEUP RD		2.13	6	7	2	2	1	1	1	1	1	1	0	1	S	S
STIRLING NORTH RD	1	W	ALBANY - LAKE GRACE RD		7.68	6	6	2	2	0	0	1	1	0	0	2	2	S	S
STIRLING NORTH RD	2	W			9.23	6	7	2	2	0	1	1	1	1	1	1	1	S	S
STIRLING NORTH RD	3	W		EASTERN SHIRE BOUNDARY	6.8	7	7	2	2	1	1	1	1	1	1	1	1	S	S
MABINUP RD	1	Е	BOUNDARY	START OF STG RANGE NAT PARK	5.43	10	10	2	2	2	2	2	2	2	2	2	2	U	U
MABINUP RD	2	E	START OF STG RANGE NAT PARK		2	6	8	1	2	1	1	1	1	1	1	1	2	S	S
MABINUP RD	3	Е			0.7	4	6	1	1	1	1	0	1	0	1	1	2	S	U
MABINUP RD	4	E			2.1	5	5	1	1	1	1	0	0	0	0	2	2	S	S
MABINUP RD	5	Е			1	6	6	1	1	1	1	1	1	1	1	1	1	S	S
MABINUP RD	6	Е			9.4	7	7	2	2	1	1	0	0	1	1	2	2	S	S
MABINUP RD	7	Е			1.9	6	6	1	1	1	1	0	0	1	1	2	2	S	S
STRATHAVEN RD	1	SE	BROONEHILL- JERRAMUNGUP RD		7.16	8	6	2	2	1	1	1	1	1	1	2	0	S	S
BLUFF KNOLL RD	1	S	CHESTER PASS RD	CAR PARK	8	10	10	2	2	2	2	2	2	2	2	2	2	U	U
LAURIER RD	1	Е	ALBANY LAKE GRACE RD		3	7	7	1	1	1	1	1	1	1	1	2	2	S	S
LAURIER RD	2	Е			1.1	9	9	2	2	2	2	1	1	1	1	2	2	S	S
LAURIER RD	3	E			1.1	8	8	2	2	1	1	1	1	1	1	2	2	S	S
LAURIER RD	4	E			3	9	9	2	2	2	2	1	1	1	1	2	2	S	S
LAURIER RD	5	Е		LAURIER SOUTH RD	0.81	9	9	2	2	2	2	1	1	1	1	2	2	S	S
SHEPHERDSON RD	1	SE	NEAR BROOMEHILL- JERRAMUNGUP RD		0.8	11	11	2	2	2	2	2	2	2	2	2	2	R	S
SHEPHERDSON RD	12	SE			1.13	8	9	2	2	1	2	1	1	1	1	2	2	S	S
TELYARUP RD	3	S		JACKITUP RD	5.79	5	5	0	0	1	1	1	1	0	0	2	2	S	S
NORTH BOUNDARY RD	1	W	GNOWANGERUP RD		0.43	8	8	2	2	1	1	2	2	1	1	2	1	U	S
NORTH BOUNDARY RD	2	W			4.23	7	6	2	2	0	0	1	1	1	1	2	1	S	S
NORTH BOUNDARY RD	3	W			0.64	11	10	2	2	2	1	2	2	2	2	2	2	S	S
NORTH BOUNDARY RD	4	W		TELYARUP NORTH RD	0.33	8	8	2	2	2	2	1	1	1	1	2	2	U	U
TELYARUP RD	1	S	TIELINE RD		1.76	7	7	2	2	1	1	1	1	0	0	2	2	S	S

TELYARUP RD	2	S			0.5	1	1	0	0	0	0	0	0	0	0	0	0	S	S
TELYARUP RD	3	S		JACKITUP RD	4.5	5	5	0	0	1	1	1	1	0	0	2	2	S	S
JACKITUP WEST RD	1	Е	BROOMEHILL- JERRAMUNGUP RD		2.1	6	7	1	1	1	1	1	1	0	1	2	2	S	S
JACKITUP WEST RD	2	Е			1.2	7	7	1	1	1	1	1	1	1	1	2	2	S	S
JACKITUP WEST RD	3	Е			2.1	6	7	1	1	1	1	1	1	0	1	2	2	S	S
JACKITUP WEST RD	4	Е		KWOBERUP RD	1.8	10	10	2	2	2	2	1	1	2	2	2	2	S	S
JACKITUP WEST RD	5	Е	KWOBERUP RD		1.6	7	7	1	1	1	1	1	1	1	1	2	2	S	S
JACKITUP WEST RD	6	Е		JACKITUP RD	0.5	8	8	2	2	2	2	1	1	1	0	2	2	U	S
GNOWANGERUP RD	1	N	TIELINE RD		3.2	6	6	1	1	1	1	1	1	1	1	1	1	S	S
GNOWANGERUP RD	2	N		NORTH BOUNDARY RD	0.4	8	8	2	2	2	2	2	2	1	1	1	1	U	U
MOORE DAM WEST RD	1	NE	TIELINE RD		0.53	5	5	1	2	0	0	1	1	0	0	2	2	S	U
MOORE DAM WEST RD	2	NE			0.74	8	8	2	2	1	1	1	1	1	1	2	2	S	S
MOORE DAM WEST RD	3	NE			1.68	7	7	2	2	0	0	1	1	1	1	2	2	S	S
MOORE DAM WEST RD	4	NE			1.05	9	8	2	2	1	1	2	1	1	1	2	2	S	S
MOORE DAM WEST RD	5	NE			0.95	9	9	2	2	2	2	1	1	1	1	2	2	S	S
MOORE DAM WEST RD	6	NE			1.05	9	9	2	2	1	1	2	2	1	1	2	2	S	S
MOORE DAM WEST RD	7	NE			2	8	8	2	2	1	1	1	1	1	1	2	2	S	S
MOORE DAM WEST RD	8	NE			2.74	8	9	2	2	1	2	1	1	1	1	2	2	S	S
MOORE DAM WEST RD	9	NE			1.17	8	9	2	2	2	2	1	2	1	1	2	2	U	U
PEERUP RD	1	SE	LAKE GRACE RD	BROOMEHILL- JERRAMUNGUP RD	11.1	6	6	1	1	0	0	1	1	1	1	2	2	S	S
FREEGARDS RD	1	N	MOORE DAM RD		0.97	9	10	2	2	2	2	2	2	1	1	1	2	S	S
STUTLEY RD	1	S	HINKLEY RD		2.25	5	5	1	1	1	1	0	0	0	0	2	2	S	S
JONES RD	1	W			0.7	8	6	2	2	2	1	1	1	1	1	1	0	S	S
JONES RD	2	W			3.1	1	1	0	0	0	0	0	0	0	0	0	0	S	S
JONES RD	3	W			1.03	8	5	2	1	1	1	1	0	1	0	2	2	S	S
JAM RD	1	N	OLD ONGERUP RD		2.8	6	6	2	2	1	1	1	1	1	1	0	0	S	S
ARALUEN RD	1	Е	BROOMEHILL- JERRAMUNGUP RD		2.3	2	2	1	1	0	0	0	0	0	0	0	0	S	S
ARALUEN RD	2	Е		GATES	5.6	7	3	2	1	1	0	1	0	1	0	1	1	S	S
ARALUEN RD	3	Е			0.4	8	8	2	2	1	1	1	1	1	1	2	2	S	S
ARALUEN RD	4	Е			1.1	10	10	2	2	2	2	2	2	1	1	2	2	S	S
COROMUP RD	1	N	BROOMEHILL-JERRAN	UNGUP RD	1	8	8	2	2	2	2	2	2	1	1	1	0	U	S

COROMUP RD	2	N		4.3	9	8	2	2	2	1	2	2	2	2	0	0	S	S
COROMUP RD	3	N		1.6	4	4	1	1	1	1	1	1	0	0	0	0	S	S
COROMUP RD	4	N		2.8	9	7	2	2	2	1	2	1	2	1	0	0	S	С
COROMUP RD	5	N		1.7	8	7	2	2	2	1	1	1	2	2	0	0	S	S
ROUT RD	1	W	ALBANY LAKE GRACE RD	0.3	8	6	2	2	1	1	1	1	1	0	2	1	S	S
ROUT RD	2	W		1.79	7	7	1	1	1	1	1	1	1	1	2	2	S	S
HART RD	1	N	BROOMEHILL-JERRAMUNGUP RD	1.41	4	4	1	1	1	1	0	0	0	0	1	1	S	S
HART RD	2	N		1.41	9	9	2	2	2	2	1	1	1	1	2	2	S	S
HART RD	3	N	NORTH ONGERUP RD	8.93	10	10	2	2	2	2	1	1	2	2	2	2	S	S
ONGERUP NORTH RD	1	Ε	ALBANY - LAKE GRACE RD	1.1	1	1	0	0	0	0	0	0	0	0	0	0	S	S
ONGERUP NORTH RD	2	Ε	ONGERUP ROCKS RESERVE	1.6	3	2	1	1	0	0	0	0	0	0	1	1	S	U
ONGERUP NORTH RD	3	Ε	PLEASANT PASTURES GATE	4.3	8	8	2	2	1	1	1	1	1	1	2	2	S	S
ONGERUP NORTH RD	4	Е		0.4	4	4	2	2	0	0	1	1	0	0	0	0	S	S
ONGERUP NORTH RD	5	Е		0.7	10	9	2	2	2	2	2	1	1	1	2	2	S	S
ONGERUP NORTH RD	6	Е		0.9	9	9	2	2	2	2	1	1	1	1	2	2	S	S
ONGERUP NORTH RD	7	Е		1.8	6	6	2	2	0	0	1	1	0	0	2	2	S	S
ONGERUP NORTH RD	8	Е	ONGERUP - PINGRUP RD	1.8	2	4	0	1	0	0	0	1	0	0	1	1	S	S
ONGERUP NORTH RD	9	Е		2.3	2	2	1	1	0	0	0	0	0	0	0	0	S	S
ONGERUP NORTH RD	10	Е		2.16	5	5	2	2	0	0	1	1	0	0	1	1	S	S
BRIDGEMAN RD	1	Ε	HART RD FOSTERED RD	4.35	8	8	2	2	1	1	1	1	1	1	2	2	S	S
FOSTER RD	1	S	TIELINE RD FOSTER RD RESERVE	2.95	8	3	2	2	1	0	1	0	1	0	2	0	S	S
FOSTER RD	2	S	FOSTER RD RESERVE	7.35	10	10	2	2	2	2	1	1	2	2	2	2	S	S
FOSTER RD	3	S		4.2	9	9	2	2	2	2	1	1	1	1	2	2	S	S
FOSTER RD	4	S	BEND IN ROAD ONGERUP-PINGRUP RD	4.33	11	11	2	2	2	2	2	2	2	2	2	2	S	S
GRIMSTER RD	1	E	ONGERUP PINGRUP RD	3.86	3	3	2	2	0	0	0	0	0	0	0	0	S	S
PARK RD	1	W	SHIRE BOUNDARY	2.9	11	11	2	2	2	2	2	2	2	2	2	2	S	S
PARK RD	2	W		3.5	11	11	2	2	2	2	2	2	2	2	2	2	S	S
PARK RD	3	W		2.5	3	8	1	2	1	2	0	1	0	1	0	1	S	S
PARK RD	4	W		3.9	11	8	2	2	2	1	2	1	2	1	2	2	S	S
PARK RD	5	W		7.6	11	11	2	2	2	2	2	2	2	2	2	2	S	S
PARK RD	6	W	ONGERUP PINGRUP	1	8	1	2	0	1	0	1	0	1	0	2	0	S	S

				RD															
P JONES RD	1	S	ONGERUP NORTH RD		1.9	11	11	2	2	2	2	2	2	2	2	2	2	S	S
P JONES RD	2	S			2.6	3	7	0	2	0	1	0	0	0	1	2	2	S	S
P JONES RD	3	S		PARK RD	3.05	9	8	2	2	1	1	1	1	2	1	2	2	S	S
P JONES RD	4	S			4.35	2	8	0	0	0	2	0	1	1	2	0	2	S	S
P JONES RD	5	S			0.4	11	11	2	2	2	2	2	2	2	2	2	2	S	S
P JONES RD	6	N		RABBIT PROOF FENCE RD	1.9	11	11	2	2	2	2	2	2	2	2	2	2	S	S
GLEESON RD	1	S	FENCE RD	BROOMEHILL- JERRAMUNGUP RD	15.61	9	9	2	2	1	1	1	1	2	2	2	2	S	S
COWCHER RD	1	N	RABBIT PROOF FENCE RD		1.6	10	10	2	2	2	2	2	2	2	2	2	2	U	U
COWCHER RD	2	N		SHIRE BOUNDARY	0.8	11	10	2	2	2	2	2	2	2	2	2	2	S	U
RABBIT PROOF FENCE RD	1	ESE		FENCE ON LHS	5.85	10	11	2	2	2	2	2	2	2	2	2	2	U	S
RABBIT PROOF FENCE RD	2	ESE	FENCE ON LHS		0.6	7	10	2	2	2	2	1	2	0	1	1	2	S	S
RABBIT PROOF FENCE RD	3	ESE			1.1	4	11	1	2	0	2	0	2	1	2	1	2	S	S
RABBIT PROOF FENCE RD	4	ESE		GLEESON RD	0.3	6	11	2	2	1	2	0	2	1	2	1	2	S	S
RABBIT PROOF FENCE RD	5	ESE	GLEESON RD		5	11	11	2	2	2	2	2	2	2	2	2	2	S	S
RABBIT PROOF FENCE RD	6	ESE		SHIRE BOUNDARY	4.8	11	11	2	2	2	2	2	2	2	2	2	2	S	S
DAY RD	1	NE	DAY RD		1.61	9	10	2	2	1	2	1	1	2	2	2	2	S	S
DAY RD	2	NE			1.97	11	11	2	2	2	2	2	2	2	2	2	2	S	S
DAY RD	3	NE		RABBIT PROOF FENCE RD	0.44	11	11	2	2	2	2	2	2	2	2	2	2	S	S
SHILLINGS RD	1	W	BROOMEHILL- JERRAMUNGUP RD	ROAD CLOSED	0.3	4	4	1	1	1	1	0	0	0	0	1	1	S	S
WHITE RD	1	N	CLEAR HILLS RD		5.15	8	8	2	2	1	1	1	1	1	1	2	2	S	S
CLEAR HILLS RD	1	E			8.1	7	8	2	2	1	1	1	1	1	1	1	2	S	S
D STEWART RD	1	E	PALLINUP BOUNDARY RD		0.4	1	1	0	0	0	0	0	0	0	0	0	0	S	S
PALLINUP BOUNDARY RD	1	N	CLEAR HILLS RD	D STEWARTS RD	1.3	2	3	1	1	0	0	0	0	0	0	0	1	S	S
PALLINUP BOUNDARY RD	2	N	D STEWARTS RD		0.6	5	5	2	2	0	0	0	0	0	0	2	2	S	S
PALLINUP BOUNDARY RD	3	N		GILLESPIE RD	1.9	4	4	2	2	0	0	0	0	0	0	1	1	S	S
PALLINUP BOUNDARY RD	4	N	GILLESPIE RD		1	6	5	2	2	1	1	0	0	0	0	2	1	S	S
PALLINUP BOUNDARY RD	5	N			1.9	6	6	2	2	1	1	0	0	0	0	2	2	S	S
XMAS FARM	1	E	WILLEMMENUP RD	GNOWANGERUP- TAMBELLUP RD	5.79	8	8	2	2	1	1	1	1	1	1	2	2	S	S
WILLEMMENUP RD	1	N	GNOWANGERUP-	CLEAR HILLS RD	4.02	9	9	2	2	1	1	2	2	1	1	2	2	S	S

			TAMBELLUP RD																
AIRPORT RD	1	W	STRATHAVEN RD		2.9	9	2	2	1	2	0	2	0	2	0	1	0	U	S
AIRPORT RD	2	W		GNOWANGERUP TAMBELLUP RD	0.7	9	9	2	2	2	2	2	2	1	1	1	1	S	S
RICHARDSON RD	1	S	AIRPORT RD		0.8	8	8	2	2	1	1	1	1	1	1	2	2	S	S
GLENGARRY RD	1	Е	CAMBALLUP RD		0.8	3	3	1	1	0	0	0	0	0	0	1	1	S	S
CAMBELLUP RD	1	S	WILLAMENUP RD		3.7	6	6	2	2	0	0	1	1	1	1	1	1	S	S
CAMBELLUP RD	2	S			0.9	6	6	2	2	0	0	1	1	1	1	1	1	S	S
CAMBELLUP RD	3	S			5.22	8	8	2	2	1	1	1	1	1	1	2	2	S	S
KYBELUP RD	1	W	GNOWANGERUP - STIRLING RANGE RD	LOT 559	3.54	10	10	2	2	2	2	2	2	1	1	2	2	S	S
DAWSON RD	1	W		NE CORNER OF LOT 4844	1.13	7	7	2	2	1	1	1	1	1	1	1	1	S	S
KELLY RD	1	W	GNOWANGERUP - STII	RLING RANGE RD	8.85	10	10	2	2	2	2	2	2	2	2	1	1	S	S
HYDENUP RD	1	E	GNOWANGERUP - STII	RLING RANGE RD	2.5	7	7	2	2	1	1	1	1	1	1	1	1	S	S
HYDENUP RD	2	SE			1.3	7	7	2	2	1	1	1	1	1	1	1	1	S	S
HYDENUP RD	3	SE			2.2	7	8	2	2	1	1	1	1	1	1	1	2	S	S
HYDENUP RD	4	SE			1.65	7	7	2	2	1	1	1	1	1	1	1	1	S	Р
HYDENUP RD	5	SE			3.3	5	4	2	2	1	1	1	0	0	0	0	0	S	S
HYDENUP RD	6	SE			0.5	3	3	1	1	1	1	0	0	0	0	0	0	S	S
HYDENUP RD	7	SE			6.15	8	8	2	2	1	1	1	1	1	1	2	2	Р	S
MAILEEUP RD	1	W	MAGITUP RD		1.7	3	3	1	1	0	0	1	1	0	0	0	0	S	S
MAILEEUP RD	2	W			1.05	5	5	2	2	0	0	1	1	0	0	1	1	S	S
MAILEEUP RD	3	W			0.75	4	4	2	2	0	0	1	1	0	0	0	0	S	S
MAILEEUP RD	4	W			1.4	3	5	2	2	0	0	0	1	0	1	0	0	S	S
MAILEEUP RD	5	W			2.4	4	6	2	2	0	0	1	2	0	1	0	0	S	S
MAILEEUP RD	6	W			1.5	8	5	2	2	2	0	2	1	1	1	0	0	S	S
MAILEEUP RD	7	W			3.9	8	8	2	2	1	1	1	1	1	1	2	2	S	S
NEW COUNTRY RD	1	E	GNOWANGERUP - STII	RLING RANGE RD	7.9	7	7	2	2	1	1	1	1	0	0	2	2	S	S
NEW COUNTRY RD	2	Е		HYDENUP RD	2.56	7	7	2	2	1	1	1	1	0	0	2	2	S	S
SIX MILE RD	1	S	MAGITUP RD		1.77	3	3	1	1	0	0	0	0	0	0	1	1	S	S
SIX MILE RD	2	S			1.77	3	3	1	1	0	0	0	0	0	0	1	1	S	S
SIX MILE RD	3	S			1.96	6	6	2	2	1	1	0	0	0	0	2	2	S	S
SIX MILE RD	4	S			2.71	7	7	1	1	1	1	1	1	1	1	2	2	S	S
DEJAGERS RD	1	S	STIRLING ROAD		4	9	9	1	1	2	2	1	1	2	2	2	2	S	S

			NORTH																
DEJAGERS RD	2	S			1	6	6	1	1	1	1	1	1	1	1	1	1	S	S
DEJAGERS RD	3	S			1.2	6	6	1	1	1	1	1	1	1	1	1	1	S	S
DEJAGERS RD	4	S			0.3	6	6	1	1	1	1	1	1	0	0	2	2	S	S
DEJAGERS RD	5	S			0.6	6	6	1	1	1	1	1	1	1	1	1	1	S	S
DEJAGERS RD	6	S			0.8	5	5	1	1	1	1	0	0	0	0	2	2	S	S
DEJAGERS RD	7	S			1.11	6	6	1	1	1	1	1	1	1	1	1	1	S	S
HOBBS RD	1	N	MABINUP RD		1.9	7	7	1	1	1	1	1	1	1	1	2	2	S	S
HOBBS RD	2	N			1.8	4	4	1	1	0	0	0	0	0	0	2	2	S	S
STIRLING RANGE DR	1	W	CHESTER PASS RD		16.7	10	10	2	2	2	2	2	2	2	2	2	2	U	U
TOOLBRUNUP RD	1	W	CHESTER PASS RD		4.83	10	10	2	2	2	2	2	2	2	2	2	2	U	U
GULLY RD	1	S	MABINUP RD		0.64	3	3	1	1	0	0	0	0	0	0	1	1	S	S
NIGHTWELL RD	1	N	TOOMPUP SOUTH RD	NIGHTWELL RD	10.6	9	9	2	2	2	2	1	1	1	1	2	2	S	S
NIGHTWELL RD	2	N	NIGHTWELL RD		5	8	8	2	2	1	1	1	1	1	1	2	2	S	S
NIGHTWELL RD	3	N			5.7	8	8	2	2	1	1	1	1	1	1	2	2	S	S
NIGHTWELL RD	4	N		ALBANY-LAKE GRACE RD	8.31	8	8	2	2	1	1	1	1	1	1	2	2	S	S
LAURIER RD	1	S	LAURIER RD		0.9	8	8	2	2	1	1	1	1	1	1	2	2	S	S
LAURIER RD	2	S			2.1	10	9	2	2	2	2	1	1	2	1	2	2	S	S
LAURIER RD	3	S			1.5	7	7	2	2	1	1	0	0	1	1	2	2	S	S
LAURIER RD	4	S			0.2	5	10	2	2	0	2	0	2	0	2	2	2	S	U
LAURIER RD	5	S			0.6	3	10	2	2	0	2	0	2	0	2	0	2	S	U
LAURIER RD	6	S			0.4	4	7	2	2	1	2	0	1	0	2	0	0	S	U
LAURIER RD	7	S		NIGHTWELL RD	0.3	5	5	2	2	1	1	0	0	0	0	1	1	S	S
LAURIER RD	8	S	NIGHTWELL RD		1.47	6	6	2	2	1	1	0	0	0	0	2	2	S	S
LAURIER RD	9	S			1.25	1	1	0	0	0	0	0	0	0	0	0	0	S	S
LAURIER RD	10	S			1.35	9	6	2	2	2	1	1	0	2	0	2	2	U	S
LAURIER RD	11	S			2.61	6	6	2	2	1	1	0	0	0	0	2	2	S	S
LAURIER RD	12	S			0.79	1	1	0	0	0	0	0	0	0	0	0	0	S	S
LAURIER RD	13	S			0.12	3	3	1	1	0	0	0	0	0	0	1	1	S	S
LAURIER RD	14	S		BORDEN RD	2.5	5	4	1	1	1	1	0	0	0	0	2	2	S	U
PENDALUP RD	1	S	BOXHILL RD		1.3	9	9	2	2	2	2	2	2	1	1	1	1	S	S
PENDALUP RD	2	S			2.4	9	9	2	2	2	2	1	1	1	1	2	2	S	S

PENDALUP RD	3	S			5.47	9	9	2	2	2	2	1	1	1	1	2	2	S	S
PINNACLE	1	Е	TOOMPUP SOUTH RD		1.7	3	11	1	2	0	2	0	2	0	2	0	2	С	S
PINNACLE	2	Е			3.77	8	10	2	2	2	2	1	2	1	1	1	2	S	S
HOLDEN RD	1	Е	STEWART RD		1.5	10	10	2	2	2	2	1	1	2	2	2	2	S	S
HOLDEN RD	2	Е			0.5	10	10	2	2	2	2	1	1	2	2	2	2	S	S
HOLDEN RD	3	Е			7.5	10	10	2	2	2	2	2	2	2	2	1	1	S	S
HOLDEN RD	4	Е		CORACKORUP RD	2.89	11	11	2	2	2	2	2	2	2	2	2	2	S	S
COWELLUP RD	1	W	SHIRE BOUNDARY		3.9	11	11	2	2	2	2	2	2	2	2	2	2	S	S
COWELLUP RD	2	W			1.8	9	9	2	2	1	1	1	1	2	2	2	2	S	S
COWELLUP RD	3	W			3.4	11	11	2	2	2	2	2	2	2	2	2	2	S	S
ROBERT WELLSTEAD	1	S	BREMER BAY RD		2.25	2	2	0	0	0	0	0	0	0	0	0	0	С	С
J SMITH RD	1	N	BORDEN-BREMER BAY RD		1.2	11	10	2	2	2	2	2	2	2	2	2	2	S	U
MUNGUP SOUTH RD	1	SW	BORDEN BREMER BAY RD	O MEEHANS RD	2.95	6	6	1	1	1	1	0	0	1	1	1	1	С	С
SANDALWOOD RD	1	Е	AMELUP		10.1	4	4	2	2	0	0	0	0	0	0	1	1	S	S
SANDALWOOD RD	2	Е			8.8	6	6	2	2	0	0	1	1	0	0	2	2	D	D
SANDALWOOD RD	3	Е			4.8	8	8	2	2	1	1	1	1	1	1	1	1	С	С
SANDALWOOD RD	4	Е			6.72	10	10	2	2	1	1	2	2	2	2	2	2	S	S
GLENELG RD	1	S	SANDALWOOD RD		0.3	6	6	2	2	0	0	1	1	0	0	1	1	С	С
GLENELG RD	2	S			0.99	7	7	2	2	1	1	1	1	0	0	1	1	С	С
GREAVES HILL RD	1	W	BORDEN BREMER BAY RD		0.2	10	10	2	2	2	2	2	2	2	2	2	2	U	U
GREAVES HILL RD	2	W			1.5	10	10	2	2	2	2	2	2	2	2	2	2	U	U
GREAVES HILL RD	3	W			1.1	4	4	1	1	0	0	0	0	0	0	2	2	S	S
JAMVALE RD	1	N	GREAVES HILL RD	BORDEN-BREMER BAY RD	1.61	6	9	2	2	1	1	1	2	0	2	1	2	S	U
O MEEHAN RD	1	S			2.1	7	7	1	1	2	2	0	0	1	1	1	1	С	С
O MEEHAN RD	2	S			6.5	6	6	2	2	0	0	0	0	1	1	1	1	С	С
SMITH RD	1	E	ALBANY LAKE GRACE RD		1.79	4	4	1	1	1	1	0	0	0	0	1	1	S	S
SMITH RD	2	Е			0.27	6	6	1	1	1	1	0	0	0	0	2	2	С	С
SMITH RD	3	Е			1.64	4	4	1	1	1	1	0	0	0	0	1	1	S	S
MAGNERS RD	1	S	ONGERUP NORTH RD		4.1	8	3	2	1	2	0	1	0	1	1	1	0	S	S
MAGNERS RD	2	S			1.69	5	5	1	1	1	1	0	0	1	1	1	1	S	S
OAKDALE RD	1	Е	TOOMUP SOUTH RD		2.4	9	10	2	2	2	2	2	2	2	2	1	0	U	С

OAKDALE RD	2	Е			0.7	6	5	1	1	0	0	0	0	1	2	2	2	С	U
OAKDALE RD	3	Е			0.3	4	5	2	2	1	1	0	0	0	0	0	1	S	S
OAKDALE RD	4	Е		BOXHILL ONGERUP RD	1.44	9	7	2	2	2	0	2	2	1	1	1	1	S	S
STEWARTS RD	1	S	BROOMEHILL-JERRAM	IUNGUP RD	0.3	5	7	1	2	1	0	1	0	1	2	0	2	S	S
STEWARTS RD	2	S			0.2	4	10	1	2	2	2	0	1	0	2	0	2	S	S
STEWARTS RD	3	S			0.2	3	3	1	1	1	1	0	0	0	0	0	0	S	S
STEWARTS RD	4	S		STEWARTS GATE	1.3	6	8	1	1	2	2	2	2	0	0	0	2	S	S
STEWARTS RD	5	S	STEWARTS GATE	GATEWAY	0.5	7	2	1	1	1	0	1	0	1	0	2	0	S	S
STEWARTS RD	6	S	GATEWAY		0.7	2	2	1	1	0	0	0	0	0	0	0	0	S	S
STEWARTS RD	7	S			0.5	5	1	1	0	1	0	1	0	0	0	1	0	S	S
STEWARTS RD	8	S			2.09	9	9	2	2	2	2	1	1	1	1	2	2	S	S
DOLLEYS RD	1	Е	JACKITUP NORTH RD		0.4	7	7	2	2	0	0	2	2	1	1	1	1	S	S
DOLLEYS RD	2	Е			2.2	8	8	1	1	1	1	2	2	1	1	2	2	S	S
DOLLEYS RD	3	Е			1.42	1	6	0	1	0	1	0	1	0	1	0	1	S	S
PALLINUP RD	1	NW	GNOWANGERUP- TAMBELLUP RD	SHITE BOUNDARY	2.2	11	11	2	2	2	2	2	2	2	2	2	2	S	S
WOODLAND RD	1	N	BROOMEHILL GERRAN	JUNGUP RD	2.74	4	3	1	1	1	1	0	0	0	0	1	0	S	S
BLACK RD	1	N	BROOMEHILL- JERRAMUNGUP RD	HINKLEY RD	8.0	3	3	1	1	0	0	0	0	0	0	1	1	S	S
MCDONALD RD	1	N	JACKITUP RD		0.64	6	7	1	1	2	2	2	2	0	0	1	1	U	S
MOORES DAM RD	1	N	JACKITUP RD		3.3	8	8	2	2	2	2	0	0	1	1	2	2	S	S
MOORES DAM RD	2	N			1.8	8	8	2	2	2	2	1	1	1	1	1	1	S	S
MOORES DAM RD	3	N			1	9	9	2	2	2	2	1	1	1	1	2	2	S	S
MOORES DAM RD	4	N			1.3	6	6	1	1	1	1	1	1	1	1	1	1	S	S
MOORES DAM RD	5	N			1.4	9	9	2	2	2	2	2	2	1	1	1	1	S	S
MOORES DAM RD	6	N			1.6	6	6	1	1	2	2	1	1	0	0	1	1	S	S
MOORES DAM RD	7	N			1.3	9	9	2	2	2	2	2	2	1	1	1	1	S	S
MOORES DAM RD	8	N			2.4	8	9	2	2	2	2	2	2	1	1	1	1	U	S
MOORES DAM RD	9	N			0.5	9	9	2	2	2	2	2	2	1	1	2	2	U	U
DOUGLAS RD	1	N	RABBIT PROOF FENCE RD		4	11	11	2	2	2	2	2	2	2	2	2	2	S	S
SCHMEDJE RD	1	S	OAKDALE RD		0.8	6	6	2	2	1	1	0	0	1	1	1	1	S	S
SCHMEDJE RD	2	S			1.6	2	1	1	0	0	0	0	0	0	0	0	0	S	S
SCHMEDJE RD	3	S		END OF ROAD	1	5	5	2	2	1	1	0	0	0	0	1	1	S	S

SOLDIERS RD	1	W	GNOWANGERUP TOWN		1.2	1	1	0	0	0	0	0	0	0	0	0	0	S	S
SOLDIERS RD	2	W			2.4	1	1	0	0	0	0	0	0	0	0	0	0	S	S
SOLDIERS RD	3	W			0.4	8	8	2	2	1	1	1	1	1	1	2	2	S	S
SOLDIERS RD	4	W			1.5	6	6	1	1	1	1	1	1	0	0	2	2	S	S
SOLDIERS RD	5	W			8.4	3	3	0	0	0	0	0	0	0	0	2	2	S	S
SOLDIERS RD	6	W			0.3	8	8	2	2	1	1	1	1	1	1	2	2	S	S
SOLDIERS RD	7	W		MARTINUP	1.21	3	3	0	0	0	0	0	0	0	0	2	2	S	S
GNOWANGERUP-TAMBELLUP RD	1	S			2.9	7	6	2	2	1	1	1	1	1	1	1	0	S	S
GNOWANGERUP-TAMBELLUP RD	2	S	AIRFIELD RD	PALLINUP RD	7.8	7	8	2	2	1	1	1	1	1	1	1	2	S	S
GNOWANGERUP-TAMBELLUP RD	3	S	PALLINUP RD	SHIRE BOUNDARY	2	4	5	1	2	0	0	1	1	1	1	0	0	S	S
BREMER BAY RD	1	SE	CHESTER PASS RD		1	6	6	1	1	1	1	0	0	1	1	1	1	С	С
BREMER BAY RD	2	SE			10	9	9	2	2	1	1	1	1	2	2	1	1	С	С
BREMER BAY RD	3	SE			4.2	9	9	2	2	2	2	1	1	1	1	1	1	С	С
BREMER BAY RD	4	SE			11.3	7	8	1	2	1	1	1	1	1	1	1	1	С	С
BREMER BAY RD	5	SE			1.5	4	4	0	0	2	2	0	0	0	0	0	0	С	С
BREMER BAY RD	6	SE			1.6	8	5	0	0	1	2	2	0	2	1	2	1	S	S
BREMER BAY RD	7	SE			2.6	11	8	2	0	2	2	2	2	2	2	2	2	S	U
BREMER BAY RD	8	SE			6	11	11	2	2	2	2	2	2	2	2	2	2	S	S
BREMER BAY RD	9	SE		MONJEBUP RD	2.92	10	3	2	0	0	1	2	0	2	0	2	0	С	С
NIGHTWELL SOUTH RD	1	N	BORDEN-BREMER BAY RD		9.5	8	8	2	2	1	1	1	1	1	1	2	2	S	S

APPENDIX 4

Plant species in the Shire of Gnowangerup

	Acacia maxwellii
Acacia acanthoclada	Acacia microbotrya
Acacia acanthoclada subsp.	Acacia mimica var. angusta
acanthoclada	Acacia moirii subsp. moirii
Acacia acuminata subsp. acuminata	Acacia multispicata
ms	Acacia mutabilis subsp. incurva ms
Acacia acutata	P1
Acacia aemula	Acacia mutabilis subsp. mutabilis
Acacia aemula subsp. muricata	ms
Acacia aff. merrallii	Acacia mutabilis subsp.
Acacia amputa ms	rhynchophylla ms P3
Acacia applanata	Acacia myrtifolia
Acacia arcuatilis ms P2	Acacia newbeyi P3
Acacia assimilis subsp. atroviridis	Acacia octonervia P3
Acacia awestoniana R	Acacia papulosa P2
Acacia baxteri	Acacia patagiata
Acacia bidentata	Acacia pravifolia
Acacia bifaria P3	Acacia pulchella var goadbyi
Acacia biflora	Acacia pulchella var. goadbyi
Acacia binata	Acacia pulviniformis
Acacia browniana var. intermedia	Acacia pycnocephala
Acacia cassicula	Acacia redolens
Acacia chamaeleon	Acacia saligna
Acacia chrysocephala	Acacia shuttleworthii
Acacia cochlearis	Acacia sphacelata subsp. recurva ms
Acacia consobrina	Acacia sphacelata subsp. sphacelata
Acacia coolgardiensis subsp.	ms
coolgardiensis	Acacia spongolitica
Acacia crassistipula	Acacia squamata
Acacia crispula	Acacia subcaerulea
Acacia cupularis	Acacia sulcata var. planoconvexa
Acacia declinata P3	Acacia sulcata var. platyphylla
Acacia delphina	Acacia tetanophylla
Acacia densiflora	Acacia tetragonocarpa
Acacia dictyoneura P2	Acacia triptycha
Acacia dilatata	Acacia trulliformis ms P1
Acacia dissona var. dissona	Acacia varia var. parviflora
Acacia divergens	Acacia veronica P3
Acacia drummondii	Acacia viscifolia
Acacia drummondii subsp. elegans	Acacia willdenowiana
Acacia erinacea	Acaena echinata
Acacia extensa	Acetosella vulgaris
Acacia ferocior	Acrotriche cordata
Acacia glaucoptera	Acrotriche ramiflora
Acacia gonophylla	Actinobole uliginosum
Acacia harveyi	Actinodium calocephalum ms
Acacia hastulata	Actinostrobus pyramidalis
Acacia hilliana	Actinotus glomeratus
Acacia imparilis ms P2	Actinotus leucocephalus
Acacia laricina var. laricina	Actinotus rhomboideus P2
Acacia lasiocalyx	Adenanthos apiculatus
Acacia lasiocarpa var. bracteolata	Adenanthos cuneatus
Acacia lasiocarpa var. sedifolia	Adenanthos filifolius P3
Acacia leioderma	Adenanthos flavidiflorus
Acacia leptalea ms R	Adenanthos linearis P2
Acacia leptospermoides subsp.	Adenanthos meisneri
leptospermoides	Adenanthos obovatus
Acacia lineolata subsp. lineolata	Adenanthos pungens subsp. pungens R
Acacia littorea	Adenanthos velutinus R
Acacia loxophylla	Agonis floribunda
Acacia lullfitziorum ms P3	Agonis hypericifolia
Acacia luteola	Agonis linearifolia
Acacia mackeyana	Agonis marginata

Asplenium aethiopicum P4 Agonis parviceps Agonis spathulata Asplenium flabellifolium Agrostis preissii Astartea ambigua Agrostocrinum scabrum Astartea fascicularis Aira cupaniana Astartea heteranthera Aira elegantissima Asteridea asteroides Allocasuarina campestris Asteridea athrixioides Allocasuarina decussata Asteridea gracilis P1 Allocasuarina huegeliana Asteridea nivea Allocasuarina humilis Astroloma baxteri Allocasuarina lehmanniana Astroloma ciliatum Allocasuarina lehmanniana subsp. Astroloma compactum Astroloma drummondii ecarinata Allocasuarina lehmanniana subsp. Astroloma epacridis lehmanniana Astroloma pallidum Allocasuarina microstachya Astroloma prostratum Allocasuarina scleroclada Astroloma serratifolium Allocasuarina thuyoides Astroloma tectum Allocasuarina trichodon Atriplex exilifolia Alyogyne hakeifolia Atriplex pumilio Alyogyne huegelii Atriplex semibaccata Alyoqyne huegelii var. Austrodanthonia caespitosa grossulariifolia ms Austrodanthonia pilosa Alyogyne huegelii var. wrayae ms Austrodanthonia setacea Amaranthus albus Austrostipa elegantissima Amperea conferta Austrostipa hemipogon Amphibromus nervosus Austrostipa juncifolia Austrostipa macalpinei Amphipogon amphipogonoides Amphipogon debilis var. debilis Austrostipa trichophylla Amphipogon turbinatus Avena barbata Anagallis arvensis Baeckea blackettii Anarthria gracilis Baeckea crispiflora Anarthria humilis Baeckea crispiflora subsp. Anarthria polyphylla Ongerup(A.Scougall & C.Garawanta Anarthria prolifera E35) P1 Anarthria scabra Baeckea latens Andersonia aff. barbata Baeckea preissiana Andersonia aff. caerulea Andersonia aff. lehmanniana Banksia aculeata Banksia attenuata Andersonia axilliflora R Banksia baueri Andersonia caerulea Banksia baxteri Andersonia echinocephala P3 Banksia brownii R Andersonia grandiflora P3 Banksia caleyi Andersonia parvifolia Banksia coccinea Andersonia setifolia P3 Banksia dryandroides Andersonia simplex Banksia gardneri var. brevidentata Angianthus preissianus Banksia gardneri var. gardneri Angianthus tomentosus Banksia grandis Anigozanthos bicolor Banksia laevigata subsp. laevigata Anigozanthos bicolor subsp. Р4 Banksia littoralis decrescens Anigozanthos gabrielae Banksia media Anigozanthos humilis Banksia meisneri subsp. meisneri Anigozanthos humilis subsp. humilis Banksia nutans Anigozanthos onycis Banksia nutans var. cernuella Anigozanthos preissii Banksia oreophila Anigozanthos rufus Banksia repens Anthocercis viscosa subsp. viscosa Banksia solandri P4 Anthotium humile Banksia sphaerocarpa Aotus diffusa ms Banksia sphaerocarpa var. Aotus genistoides sphaerocarpa Aphelia brizula Banksia violacea Aphelia cyperoides Bartsia trixago Apium annuum Baumea acuta Argentipallium niveum Baumea articulata Baumea juncea Aristida contorta Arthropodium curvipes Beaufortia anisandra Asparagus asparagoides Beaufortia bracteosa

Brachysema latifolium Beaufortia cyrtodonta Beaufortia decussata Bracteantha bracteata Beaufortia empetrifolia Briza maxima Beaufortia micrantha Briza minor Beaufortia micrantha var. micrantha Bromus diandrus Beaufortia schaueri Bromus hordeaceus Beaufortia sparsa Bromus rubens Billardiera coriacea Bulbine semibarbata Billardiera sericea Bupleurum lancifolium Billardiera variifolia Burchardia multiflora Blennospora drummondii Caesia micrantha Caesia occidentalis Bolboschoenus caldwellii Boronia albiflora Cakile maritima Boronia busselliana Caladenia aphylla Boronia coerulescens Caladenia barbarossa Boronia crassifolia Caladenia bryceana subsp. bryceana Boronia crenulata ms R Boronia crenulata var. angustifolia Caladenia cairnsiana Caladenia chapmanii ms Caladenia discoidea Boronia crenulata var. crenulata Boronia defoliata Caladenia doutchiae Boronia inconspicua Caladenia falcata Boronia inornata Caladenia filamentosa Boronia inornata subsp. inornata Caladenia flava Boronia inornata subsp. leptophylla Caladenia flava subsp. flava ms Boronia juncea Caladenia graminifolia Boronia nematophylla Caladenia heberleana ms Boronia octandra Caladenia hirta subsp. hirta ms Boronia oxyantha var. brevicalyx P3 Caladenia huegelii R Boronia pulchella Caladenia latifolia Caladenia lobata Boronia ramosa Boronia ramosa subsp. anethifolia Caladenia longicauda subsp. eminens Boronia scabra ms Boronia scabra subsp. scabra ms Caladenia longiclavata Boronia spathulata Caladenia marginata Boronia stricta Caladenia multiclavia Boronia subsessilis Caladenia nana subsp. nana ms Boronia ternata var. austrofoliosa Caladenia pectinata Caladenia plicata P4 Boronia ternata var. foliosa Caladenia polychroma ms Caladenia reptans Borya constricta Borya laciniata Caladenia roei Caladenia saccharata Borya scirpoidea Borya sphaerocephala Caladenia varians subsp. horistes Bossiaea concinna ms Bossiaea divaricata P3 Caladenia vulgata ms Caladenia x ericksoniae Bossiaea eriocarpa Bossiaea linophylla Caladenia x lavandulacea Bossiaea ornata Calandrinia uniflora Bossiaea peduncularis Calectasia cyanea Bossiaea praetermissa Calectasia grandiflora Callistemon phoeniceus Bossiaea preissii Bossiaea rufa Callitris drummondii Bossiaea spinescens Callitris roei Bossiaea walkeri Calothamnus affinis P3 Brachyloma concolor Calothamnus crassus P2 Brachyscome aff. ciliaris Calothamnus gracilis Brachyscome aff. glandulosa Calothamnus huegelii Brachyscome ciliaris Calothamnus lateralis Brachyscome exilis Calothamnus lehmannii Calothamnus microcarpus P2 Brachyscome glandulosa Brachyscome goniocarpa Calothamnus quadrifidus Brachyscome iberidifolia Calothamnus quadrifidus var. Brachyscome perpusilla "unsorted" Brachyscome perpusilla var. tenella Calothamnus sanguineus Calothamnus schaueri Brachyscome pusilla Brachysema bracteolosum Calotis erinacea Brachysema celsianum Calotis lappulacea

Calytrix acutifolia Chorizema carinatum P3 Calytrix asperula Chorizema cytisoides Calytrix breviseta subsp. stipulosa Chorizema glycinifolium Calytrix flavescens Chorizema rhombeum Calytrix leschenaultii Chorizema ulotropis P3 Calytrix pulchella P3 Chorizema uncinatum Calytrix similis Chrysocephalum apiculatum Calytrix tetragona Chrysocoryne drummondii Chrysocoryne tridens Carduus pycnocephalus Carduus tenuiflorus Cirsium vulgare Carex inversa Clematis pubescens Coleanthera coelophylla P1 Carpobrotus modestus Carthamus lanatus Comesperma ciliatum Cassytha aurea var. hirta Comesperma drummondii Cassytha flava Comesperma flavum Cassytha glabella Comesperma lanceolatum P2 Cassytha glabella forma dispar Comesperma scoparium Cassytha melantha Comesperma spinosum Cassytha micrantha Comesperma virgatum Cassytha pomiformis Comesperma volubile Cassytha racemosa Commersonia crispa Cassytha racemosa forma pilosa Conospermum amoenum Casuarina obesa Conospermum bracteosum Caustis dioica Conospermum caeruleum Centaurea melitensis Conospermum caeruleum subsp. Centaurium erythraea caeruleum Centaurium tenuiflorum Conospermum caeruleum subsp. Centipeda cunninghamii oblanceolatum Centrolepis drummondiana Conospermum canaliculatum Centrolepis glabra Conospermum cinereum ms Centrolepis humillima Conospermum coerulescens subsp. Centrolepis pilosa dorrienii ms Centrolepis polygyna Conospermum dorrienii Conospermum filifolium subsp. Centrolepis strigosa subsp. australe ms strigosa Conospermum filifolium subsp. Cerastium glomeratum Ceratogyne obionoides filifolium Chaetanthus tenellus Conospermum flexuosum subsp. Chamaescilla corymbosa flexuosum Chamaescilla spiralis Conospermum floribundum Chamaexeros serra Conospermum petiolare Chamelaucium ciliatum Conospermum spectabile P2 Chamelaucium confertiflorum Conospermum stoechadis Chamelaucium juniperinum ms P2 Conospermum stoechadis subsp. Chamelaucium pauciflorum stoechadis pauciflorum ms Conospermum teretifolium Cheilanthes austrotenuifolia Conospermum triplinervium Cheiranthera filifolia var. Conostylis aculeata brevifolia Conostylis aculeata subsp. aculeata Cheiranthera filifolia var. Conostylis argentea filifolia Conostylis deplexa Conostylis misera R Chenopodium album Chenopodium desertorum subsp. Conostylis pusilla microphyllum Conostylis seorsiflora subsp. seorsiflora Chenopodium giganteum Chenopodium murale Conostylis serrulata Chenopodium pumilio Conostylis setigera Chloris truncata Conostylis setigera subsp. setigera Chordifex capillaceus ms Conostylis vaginata Chordifex laxus ms Conothamnus aureus Chordifex leucoblepharus ms P1 Convolvulus erubescens Chordifex ornatus ms P2 Conyza albida Chordifex serialis ms Coopernookia polygalacea Chordifex sphacelatus ms Coopernookia strophiolata Choretrum glomeratum var. Corybas dilatatus Corybas recurvus glomeratum Chorizema aciculare subsp. Corybas recurvus ms

Corymbia calophylla

aciculare

Corymbia ficifolia Daviesia angulata Corynotheca micrantha Daviesia articulata Corynotheca micrantha var. panda Daviesia crenulata Cotula australis Daviesia dilatata Cotula bipinnata Daviesia emarginata Daviesia flexuosa Cotula coronopifolia Cotula cotuloides Daviesia glossosema P2 Cotula turbinata Daviesia gracilis Craspedia variabilis Daviesia hakeoides subsp. subnuda Crassula colorata ms Crassula decumbens Daviesia incrassata Daviesia incrassata subsp. Crassula natans Crassula sieberiana subsp. incrassata ms Daviesia lancifolia tetramera Cryptandra glabriflora P2 Daviesia lancifolia subsp. Cryptandra leucopogon Daviesia mesophylla P2 Cryptandra minutifolia subsp. Daviesia obovata P2 brevistyla Daviesia oppositifolia Cryptandra myriantha Daviesia preissii Cryptandra pungens Daviesia pseudaphylla R Cryptandra spyridioides Daviesia scoparia Daviesia trigonophylla Cryptandra wilsonii Desmocladus castaneus ms Cyanicula caerulea subsp. apertala Desmocladus fasciculatus ms Cyanicula gemmata ms Desmocladus flexuosus ms Cyanicula sericea ms Desmocladus myriocladus ms Cyathochaeta avenacea Desmocladus quiricanus ms Cymbonotus preissianus P2 Desmocladus tenuis ms Cymbopogon ambiguus Deyeuxia drummondii X Cyperochloa hirsuta Deyeuxia quadriseta Dianella brevicaulis Cyperus sanguinolentus Cyperus tenellus Dianella revoluta var. brevicaulis Cypselocarpus haloragoides Dianella revoluta var. divaricata Cvrtostvlis robusta Dianella revoluta var. revoluta Cytogonidium leptocarpoides ms Diaspasis filifolia Damasonium minus Dichelachne crinita Dampiera alata Dichopogon capillipes Dampiera diversifolia Dichopogon fimbriatus Dampiera eriocephala Dillwynia aff. uncinata Dampiera fasciculata Dillwynia sp.A Perth Flora(R.Coveny Dampiera juncea 8036) Dampiera lavandulacea Dillwynia uncinata Dampiera leptoclada Diplopeltis eriocarpa Dampiera linearis Disphyma crassifolium subsp. Dampiera loranthifolia clavellatum Dampiera pedunculata Dittrichia viscosa Diuris laevis Dampiera sacculata Dodonaea aff. concinna Dampiera tenuicaulis Danthonia setacea Dodonaea amblyophylla Darwinia collina R Dodonaea bursariifolia Darwinia diosmoides Dodonaea caespitosa Darwinia halophila ms Dodonaea concinna Darwinia hypericifolia P4 Dodonaea humifusa Darwinia lejostyla P4 Dodonaea inaequifolia Darwinia macrostegia R Dodonaea pinifolia Darwinia meeboldii R Dodonaea ptarmicaefolia Darwinia oxylepis R Dodonaea stenozyga Darwinia sp.Mt Success(G.J.Keighery Dodonaea viscosa subsp. angustissima Darwinia sp.Stirling Range Dodonaea viscosa subsp. spatulata (G.J.Keighery 5732) R Drakaea confluens ms R Darwinia squarrosa R Drakaea glyptodon Darwinia vestita Drakaea gracilis ms Darwinia wittwerorum R Drakaea thynniphila Dasypogon bromeliifolius Drakonorchis barbarossa ms Drosera androsacea Daucus glochidiatus Daviesia abnormis Drosera barbigera

Daviesia alternifolia

Drosera erythrorhiza subsp. Dryandra tenuifolia Dryandra tenuifolia var. reptans erythrorhiza Drosera huegelii Dryandra tenuifolia var. tenuifolia Drosera leucoblasta Ehrharta calycina Drosera macrantha Ehrharta longiflora Drosera macrantha subsp. macrantha Elatine gratioloides Drosera menziesii subsp. Eleocharis acuta penicillaris Elymus scaber Elythranthera brunonis Drosera microphylla Drosera modesta Elythranthera emarginata Drosera neesii subsp. neesii Emex australis Drosera pallida Enchylaena tomentosa var. tomentosa Drosera platypoda Epilobium billardierianum subsp. intermedium Drosera platystigma Drosera pulchella Epilobium ciliatum Drosera scorpioides Eragrostis elongata Drosera stolonifera Eremaea pauciflora Drosera stolonifera monticola Eremaea pauciflora var. pauciflora Drosera stolonifera subsp. compacta Eremaea violacea Drosera stolonifera subsp. Eremophila decipiens subsp. monticola decipiens ms Drosera subhirtella subsp. Eremophila denticulata subhirtella Eremophila drummondii Drummondita hassellii Eremophila glabra Dryandra anatona R Eremophila glabra subsp. albicans Dryandra arctotidis Eremophila lehmanniana Dryandra armata Eremophila oppositifolia subsp. Dryandra armata var. armata angustifolia ms Dryandra armata var. ignicida Eremophila veneta ms R Dryandra baxteri Eriachne ovata Dryandra blechnifolia Eriochilus dilatatus subsp. dilatatus ms Dryandra brownii Dryandra calophylla P3 Eriochilus dilatatus subsp. Drvandra cirsioides multiflorus ms Dryandra concinna P4 Eriochilus helonomos ms Eriochilus scaber Dryandra conferta var. conferta ms Dryandra conferta var. parva P2 Eriochilus scaber subsp. scaber ms Dryandra cuneata Eriostemon brucei subsp. brucei Dryandra drummondii Eriostemon nodiflorus subsp. Dryandra drummondii subsp. lasiocalyx drummondii Eriostemon tomentellus Erodium botrys Dryandra falcata Dryandra ferruginea subsp. pumila Erymophyllum tenellum Eucalyptus aff. lehmannii P2 Dryandra foliolata P4 Eucalyptus aff. medialis Dryandra formosa Eucalyptus aff. pachyloma Dryandra hirsuta P3 Eucalyptus aff. uncinata Dryandra lepidorhiza P1 Eucalyptus angulosa Dryandra meganotia P3 Eucalyptus annulata Dryandra montana R Eucalyptus argyphea Eucalyptus aspratilis Dryandra mucronulata Eucalyptus astringens subsp. Dryandra mucronulata subsp. mucronulata astringens Dryandra nervosa Eucalyptus astringens subsp. Dryandra nivea oligocorma ms Dryandra nivea subsp. nivea Eucalyptus buprestium Dryandra nivea subsp. nivea ms Eucalyptus buprestium x erectifolia Dryandra plumosa Р4 Dryandra plumosa subsp. denticulata Eucalyptus buprestium x liqulata P4 P2 Eucalyptus buprestium x marginata Dryandra plumosa subsp. plumosa Dryandra porrecta P4 Eucalyptus buprestium x staeri P4 Dryandra pseudoplumosa P2 Eucalyptus burdettiana R Eucalyptus calycogona var. Dryandra pteridifolia Dryandra seneciifolia P3 calycogona Dryandra sessilis Eucalyptus captiosa Dryandra sessilis sessilis Eucalyptus celastroides subsp. Dryandra sessilis var. sessilis virella

Eucalyptus redacta ms Eucalyptus clivicola Eucalyptus comitae-vallis Eucalyptus redacta subsp. redacta Eucalyptus conglobata Eucalyptus cornuta Eucalyptus redacta subsp. thamnoides ms Eucalyptus cylindriflora Eucalyptus decipiens subsp. chalara Eucalyptus rudis Eucalyptus decurva Eucalyptus scyphocalyx Eucalyptus densa Eucalyptus spathulata Eucalyptus densa subsp. densa Eucalyptus spathulata subsp. Eucalyptus doratoxylon spathulata Eucalyptus erectifolia P4 Eucalyptus sporadica ms Eucalyptus falcata Eucalyptus staeri Eucalyptus falcata subsp. falcata Eucalyptus subangusta subsp. Eucalyptus flocktoniae pusilla Eucalyptus gardneri Eucalyptus suggrandis subsp. alipes Eucalyptus glomerifera ms Eucalyptus suggrandis subsp. Eucalyptus goniantha subsp. suggrandis goniantha R Eucalyptus talyuberlup Eucalyptus goniantha subsp. Eucalyptus tenera Eucalyptus tetraptera notactites Eucalyptus hypochlamydea subsp. Eucalyptus transcontinentalis hypochlamydea ms Eucalyptus uncinata Eucalyptus incrassata Eucalyptus utilis ms Eucalyptus lehmannii Eucalyptus vegrandis Eucalyptus leptopoda subsp. Eucalyptus vegrandis ms leptopoda Eucalyptus wandoo Eucalyptus ligulata P4 Eucalyptus wandoo subsp. wandoo Eucalyptus longicornis Eucalyptus x erythrandra P4 Eucalyptus loxophleba subsp. Eucalyptus x kalganensis P2 lissophloia Eucalyptus xanthonema subsp. Eucalyptus loxophleba subsp. apposita loxophleba Eucalyptus xanthonema subsp. Eucalyptus macrandra xanthonema Eucalyptus marginata Euchiton sphaericus Eucalyptus marginata subsp. Euphorbia peplus Euphrasia scabra P2 elegantella P2 Eucalyptus marginata subsp. Eutaxia cuneata marginata Eutaxia densifolia Eucalyptus marginata x pachyloma P4 Eutaxia microphylla Eucalyptus medialis Eutaxia microphylla var. Eucalyptus megacarpa microphylla Eucalyptus melanophitra P4 Eutaxia obovata Eucalyptus mesopoda ms Eutaxia parvifolia Eucalyptus occidentalis Eutaxia virgata Eucalyptus oleosa Exocarpos aphyllus Eucalyptus oligocorma ms Exocarpos sparteus Eucalyptus pachyloma Frankenia tetrapetala Eucalyptus perangusta Franklandia fucifolia Eucalyptus petila ms P2 Fumaria muralis Eucalyptus phaenophylla Gahnia ancistrophylla Eucalyptus phaenophylla subsp. Gahnia decomposita interjacens Gahnia lanigera Eucalyptus phaenophylla subsp. Gahnia trifida phaenophylla Galium murale Gamochaeta falcata Eucalyptus phenax Eucalyptus platypus Gastrolobium bilobum Eucalyptus platypus subsp. platypus Gastrolobium crassifolium Eucalyptus platypus var. platypus Gastrolobium parviflorum Eucalyptus pleurocarpa Gastrolobium parvifolium Eucalyptus pluricaulis subsp. Gastrolobium pusillum pluricaulis Gastrolobium spinosum Gastrolobium spinosum var. spinosum Eucalyptus pluricaulis subsp. porphyrea Gastrolobium tetragonophyllum Eucalyptus preissiana Gastrolobium tomentosum P4 Eucalyptus preissiana subsp. Gastrolobium velutinum Genoplesium nigricans ms preissiana Eucalyptus preissiana x staeri P4 Geranium retrorsum Eucalyptus recondita ms Geranium solanderi

Grevillea synapheae Glischrocaryon aureum Grevillea trifida Glischrocaryon aureum var. angustifolium Grevillea tripartita Glischrocaryon flavescens Grevillea umbellulata subsp. Glischrocaryon roei umbellulata Glycine clandestina Grevillea uncinulata subsp. Gnaphalium indutum uncinulata Gnephosis drummondii Gynandriris setifolia Gnephosis tenuissima Haegiela tatei P2 Gnephosis uniflora Haemodorum brevisepalum Gompholobium aff. confertum Haemodorum discolor Haemodorum simplex Gompholobium amplexicaule Gompholobium aristatum Haemodorum spicatum Gompholobium burtonioides Hakea ambigua Hakea baxteri Gompholobium confertum Gompholobium knightianum Hakea ceratophylla Hakea corymbosa Gompholobium marginatum Gompholobium polymorphum Hakea cucullata Gompholobium preissii Hakea denticulata Gompholobium scabrum Hakea erecta Gompholobium tomentosum Hakea falcata Hakea ferruginea Gompholobium venustum Gompholobium villosum Hakea florida Gompholobium viscidulum Hakea lasiantha Gonocarpus benthamii Hakea laurina Gonocarpus benthamii subsp. Hakea lehmanniana Stirling(C.J.Robinson 1080) P2 Hakea lissocarpha Gonocarpus nodulosus Hakea marginata Gonocarpus paniculatus Hakea marginata subsp. marginata Gonocarpus rudis P2 Hakea nitida Goodenia affinis Hakea obliqua subsp. parviflora Goodenia berardiana Hakea oldfieldii P2 Goodenia caerulea Hakea pandanicarpa Goodenia concinna Hakea preissii Goodenia incana Hakea prostrata Goodenia micrantha Hakea rubriflora Goodenia micrantha Hakea sulcata Goodenia pterigosperma Hakea trifurcata Hakea undulata Goodenia pulchella Goodenia scapigera Hakea varia Goodenia tripartita Halosarcia halocnemoides Goodenia viscida Halosarcia halocnemoides subsp. Goodia medicaginea halocnemoides Halosarcia indica subsp. bidens Gratiola pubescens Grevillea acuaria Halosarcia lepidosperma Grevillea anethifolia Halosarcia pergranulata subsp. Grevillea apiciloba subsp. pergranulata apiciloba Halosarcia syncarpa Grevillea decipiens Harperia confertospicata ms P3 Grevillea dolichopoda Harperia lateriflora Grevillea fasciculata Helichrysum leucopsideum Grevillea huegelii Helichrysum macranthum Hemiandra pungens Grevillea maxwellii R Grevillea muelleri Hemigenia platyphylla P4 Grevillea newbeyi P3 Hemigenia podalyrina Grevillea nudiflora Hemigenia sp.Albany(G.J.Keighery Grevillea obtusifolia 8712) Hibbertia acerosa Grevillea oligantha Hibbertia aff. gracilipes Hibbertia aff. recurvifolia Grevillea patentiloba subsp. patentiloba Grevillea pauciflora Hibbertia amplexicaulis Grevillea pectinata Hibbertia argentea P3 Grevillea pulchella subsp. Hibbertia commutata ascendens Hibbertia cunninghamii Grevillea pulchella subsp. Hibbertia enervia Hibbertia gracilipes ascendens ms Grevillea pulchella subsp. Hibbertia helianthemoides pulchella ms Hibbertia hypericoides

Isopogon teretifolius subsp. Hibbertia inconspicua Hibbertia lineata teretifolius ms Hibbertia microphylla Isopogon trilobus Hibbertia pulchra Isotoma hypocrateriformis Hibbertia pungens Isotoma scapigera Hibbertia racemosa Isotropis cuneifolia Hibbertia recurvifolia Isotropis drummondii Hibbertia rupicola Isotropis juncea Hibbertia selkii Jacksonia calycina P4 Hibbertia sp.Price(J.R.Wheeler Jacksonia capitata 2511) Jacksonia condensata Jacksonia debilis ms P1 Hibbertia sp.Stirlings(J.R.Wheeler Jacksonia grevilleoides Hibbertia subvaginata Jacksonia humilis ms Hibiscus trionum Jacksonia racemosa Homalospermum firmum Jacksonia spinosa Homeria flaccida Johnsonia acaulis Hordeum distichon Johnsonia lupulina Hordeum leporinum Johnsonia teretifolia Hordeum marinum Juncus bufonius Hornungia procumbens Juncus caespiticius Hovea chorizemifolia Juncus capitatus Juncus kraussii Hovea elliptica Hovea pungens Juncus kraussii subsp. Hovea trisperma australiensis Hyalochlamys globifera Juncus microcephalus Hyalosperma glutinosum Juncus pallidus Hyalosperma glutinosum subsp. Juncus radula glutinosum Juncus subsecundus Kennedia coccinea Hybanthus epacroides Kennedia eximia Hybanthus floribundus subsp. floribundus Kennedia prostrata Hydrocotyle alata Kingia australis Hydrocotyle callicarpa Kunzea baxteri Hydrocotyle diantha Kunzea micrantha Hydrocotyle diantna Kunzea micranti Hydrocotyle medicaginoides Kunzea microme: Hydrocotyle pilifera var. glabrata Kunzea montana Kunzea micromera Hydrocotyle rugulosa Kunzea preissiana Hypocalymma angustifolium Kunzea recurva Hypocalymma asperum Lactuca saligna Hypocalymma cordifolium Lagenifera huegelii Lambertia ericifolia Hypocalymma myrtifolium Hypocalymma phillipsii P3 Lambertia fairallii R Lambertia inermis Hypocalymma speciosum Hypocalymma strictum Lambertia inermis var. drummondii Hypocalymma strictum subsp. Lambertia inermis var. inermis Lambertia uniflora elongatum ms Hypochaeris glabra Lamium amplexicaule Lasiopetalum dielsii P2 Hypolaena exsulca Hypolaena fastigiata Lasiopetalum fitzgibbonii P3 Hypoxis glabella var. leptantha Lasiopetalum indutum Lasiopetalum microcardium Isolepis congrua Isolepis cyperoides Lasiopetalum monticola P3 Isolepis marginata Lasiopetalum rosmarinifolium Isolepis nodosa Lathyrus latifolius Isolepis stellata Latrobea aff. hirtella Isopogon baxteri Latrobea hirtella Isopogon buxifolius Latrobea tenella Isopogon buxifolius var. obovatus Lavatera arborea Isopogon cuneatus Lawrencella rosea Isopogon formosus subsp. formosus Lawrencia berthae Isopogon heterophyllus Lawrencia diffusa Isopogon latifolius P3 Lawrencia glomerata Isopogon longifolius Lawrencia squamata Isopogon teretifolius subsp. Laxmannia brachyphylla Laxmannia grandiflora subsp. petrophiloides Isopogon teretifolius subsp. stirlingensis P3 petrophiloides ms Laxmannia minor

Leucopogon dielsianus Laxmannia omnifertilis Laxmannia paleacea Leucopogon distans subsp. Laxmannia ramosa subsp. deflexa contractus Laxmannia ramosa subsp. ramosa Leucopogon distans subsp. Laxmannia sessiliflora contractus ms Leucopogon distans subsp. Laxmannia sessiliflora subsp. australis contractus ms Laxmannia squarrosa Leucopogon durus Lechenaultia aff. tubiflora Leucopogon elatior Lechenaultia expansa Leucopogon elegans Lechenaultia formosa Leucopogon fimbriatus Lechenaultia tubiflora Leucopogon flavescens Lepidium africanum Leucopogon florulentus P1 Lepidium aschersonii X Leucopogon gibbosus Leucopogon glaucifolius P2 Lepidium pseudotasmanicum P4 Lepidium rotundum Leucopogon gnaphalioides R Lepidobolus chaetocephalus Leucopogon lasiophyllus P2 Lepidobolus preissianus Leucopogon lasiostachyus Lepidosperma aff. drummondii Leucopogon leptanthus Lepidosperma aff. resinosum Leucopogon minutifolius Lepidosperma aff. tenue Leucopogon mollis Lepidosperma brunonianum Leucopogon obovatus Lepidosperma drummondii Leucopogon opponens Lepidosperma effusum Leucopogon oppositifolius Lepidosperma gracile Leucopogon oxycedrus Leucopogon pendulus Lepidosperma leptostachyum Lepidosperma longitudinale Leucopogon pogonocalyx P1 Leucopogon polymorphus Lepidosperma persecans Lepidosperma pubisquameum Leucopogon propinguus Lepidosperma sp.A2 Island Leucopogon pubescens Flat(G.J.Keighery 7000) Leucopogon pulchellus Lepidosperma squamatum Leucopogon revolutus Lepidosperma striatum Leucopogon rubicundus Lepidosperma tuberculatum Leucopogon sprengelioides Lepidosperma viscidum Leucopogon striatus Leporella fimbriata Leucopogon tamariscinus P2 Leptocarpus coangustatus Leucopogon tamminensis Leptoceras menziesii Leucopogon tenuis Leucopogon tetragonus Leptomeria ericoides Leptomeria lehmannii Leucopogon unilateralis Leptomeria pachyclada Leucopogon woodsii Leptomeria pauciflora Levenhookia dubia Leptomeria preissiana Levenhookia pauciflora Levenhookia pusilla Leptomeria scrobiculata Leptomeria squarrulosa Limonium sinuatum Leptospermum aff. roei Limosella australis Leptospermum erubescens Linum marginale Leptospermum oligandrum Linum usitatissimum Lepyrodia drummondiana Lobelia gibbosa Lobelia heterophylla Leucopogon acicularis Leucopogon aff. conostephioides Lobelia rhombifolia Lobelia tenuior Leucopogon aff. hamulosus Logania buxifolia Leucopogon aff. lasiostachyus Leucopogon aff. polymorphus Logania campanulata Leucopogon atherolepis Logania flaviflora Leucopogon australis Logania micrantha Leucopogon australis subsp. Logania serpyllifolia acutifolius ms Logania serpyllifolia subsp. Leucopogon bracteolaris P2 angustifolia Leucopogon capitellatus Logania serpyllifolia subsp. Leucopogon carinatus serpyllifolia Leucopogon concinnus Logania vaginalis Leucopogon conostephioides Lolium perenne Leucopogon corifolius Lolium temulentum Leucopogon corynocarpus Lomandra effusa Leucopogon cucullatus Lomandra hastilis Leucopogon cymbiformis Lomandra micrantha subsp. micrantha Leucopogon denticulatus P2 Lomandra nigricans

Melaleuca preissiana Lomandra nutans Lomandra pauciflora Melaleuca pritzelii P2 Lomandra preissii Melaleuca pungens Lomandra rupestris Melaleuca rigidifolia Lomandra sericea Melaleuca scabra Lomandra sonderi Melaleuca sclerophylla P3 Loxocarya striata ms Melaleuca societatis ms Luzula meridionalis Melaleuca spathulata Melaleuca spicigera Lyginia barbata Lysinema ciliatum Melaleuca striata Lysinema ciliatum forma Melaleuca strobophylla Esperance(G.Perry 176) Melaleuca suberosa Lysinema ciliatum forma Mt Melaleuca subfalcata Barren(E.& S.Pignatti 1409) Melaleuca thymoides Lysinema conspicuum Melaleuca thyoides Lysinema fimbriatum Melaleuca torquata Melaleuca trichophylla Lysiosepalum involucratum Lythrum hyssopifolia Melaleuca uncinata Macrozamia riedlei Melaleuca undulata Maireana brevifolia Melaleuca viminea subsp. appressa Maireana georgei Maireana tomentosa subsp. tomentosa Melaleuca viminea subsp. viminea Melaleuca violacea Maireana trichoptera Mallophora globiflora Melilotus officinalis Marianthus erubescens Mesomelaena graciliceps Marsilea drummondii Mesomelaena stygia Medicago minima Mesomelaena stygia subsp. stygia Medicago scutellata Mesomelaena tetragona Meeboldina kraussii ms Microcorys glabra Melaleuca ? citrina Microcorys lenticularis P2 Melaleuca acuminata subsp. Microcorys subcanescens acuminata ms Microcorys virgata P2 Microcybe multiflora subsp. Melaleuca adnata Melaleuca aff. pungens multiflora Melaleuca aff. scabra Microcybe pauciflora subsp. Melaleuca apodocephala subsp. pauciflora apodocephala ms Microcybe pauciflora subsp. pauciflora ms Melaleuca araucarioides P3 Melaleuca blaeriifolia Microlepidium pilosulum Melaleuca bracteosa Microtis alba Melaleuca bromelioides Microtis brownii Microtis media Melaleuca calycina Melaleuca carrii ms Millotia major Millotia myosotidifolia Melaleuca coronicarpa Melaleuca cucullata Millotia tenuifolia Melaleuca cuticularis Millotia tenuifolia var. tenuifolia Mirbelia dilatata Melaleuca densa Mirbelia floribunda Melaleuca depauperata Melaleuca diosmifolia P3 Mirbelia ovata Melaleuca elliptica Mirbelia subcordata Melaleuca glaberrima Mirbelia trichocalyx Melaleuca halmaturorum Mitrasacme ambigua Melaleuca hamulosa Moluccella laevis Melaleuca haplantha Monadenia bracteata Melaleuca lateralis Monopsis debilis Melaleuca lateriflora subsp. Monotaxis grandiflora lateriflora ms Monotoca oligarrhenoides Monotoca tamariscina Melaleuca laxiflora Melaleuca micromera P3 Muiriantha hassellii P2 Melaleuca microphylla Myoporum cordifolium R Myoporum tetrandrum Melaleuca pauciflora Melaleuca pauperiflora subsp. Myriocephalus occidentalis pauperiflora Needhamiella pumilio Melaleuca pentagona Nemcia carinata Melaleuca pentagona var. Nemcia emarginata Nemcia hookeri subulifolia Melaleuca platycalyx Nemcia leakeana

Nemcia luteifolia P2

Melaleuca polycephala P3

Petrophile carduacea Nemcia mondurup ms Petrophile divaricata Nemcia plicata Petrophile ericifolia subsp. Nemcia pulchella Nemcia punctata ericifolia ms Nemcia pyramidalis Petrophile heterophylla Petrophile longifolia Nemcia retusa Nemcia rubra Petrophile media Nemcia sp.crenulata capitate(E.& Petrophile phylicoides S.Pignatti P2 Petrophile rigida Nemcia sp.Ellen Peak(S.Barrett 245) Petrophile semifurcata Petrophile seminuda Petrophile serruriae Nemcia vestita P2 Neurachne alopecuroidea Petrophile squamata Nuytsia floribunda Petrophile squamata subsp. squamata Olax benthamiana Petrophile teretifolia Olax phyllanthi Phalaris minor Olax scalariformis P3 Phalaris paradoxa Olearia brachyphylla Phebalium filifolium Olearia ciliata Phebalium microphyllum Phebalium rude Olearia homolepis Olearia imbricata Phebalium rude subsp. amblycarpum Olearia muelleri Phebalium rude subsp. rude Olearia muricata Phebalium tuberculosum Olearia ramosissima Philydrella pygmaea Oligarrhena micrantha Phlebocarya ciliata Onychosepalum laxiflorum Phyllangium divergens Opercularia hispidula Phyllangium paradoxum ms Opercularia liberiflora Phyllanthus calycinus Opercularia spermacocea Phyllota barbata Opercularia vaginata Phymatocarpus maxwellii Opercularia volubilis Phymatocarpus porphyrocephalus Ophioglossum lusitanicum Pilostyles collina P4 Ornithopus pinnatus Pilularia novae-hollandiae Orobanche minor Pimelea angustifolia Orthrosanthus laxus var. laxus Pimelea argentea Orthrosanthus muelleri R Pimelea brachyphylla Orthrosanthus multiflorus Pimelea brevifolia subsp. Osteospermum clandestinum brevifolia Oxalis corniculata Pimelea cracens subsp. cracens Oxalis perennans Pimelea erecta Oxalis pes-caprae Pimelea hispida Pimelea imbricata Oxylobium microphyllum Ozothamnus lepidophyllus Pimelea imbricata var. piligera Pimelea lehmanniana subsp. Papaver hybridum Paracaleana nigrita lehmanniana Parapholis incurva Pimelea longiflora subsp. Parentucellia latifolia longiflora Patersonia occidentalis Pimelea suaveolens subsp. Patersonia umbrosa var. umbrosa suaveolens
Pimelea sulphurea Pelargonium havlasae Pimelea sylvestris Pelargonium littorale Pelargonium littorale subsp. Pimelea tinctoria littorale Plantago coronopus subsp. commutata Pentapeltis silvatica Plantago debilis Pentaschistis airoides Plantago hispida Pericalymma ellipticum var. Platysace commutata ellipticum ms Platysace compressa Pericalymma ellipticum var. Platysace juncea floridum ms Platysace maxwellii Pericalymma spongiocaule ms Platysace sp.Stirling(J.M.Fox 88/262) P2 Persicaria prostrata Persoonia longifolia Platytheca galioides Platytheca juniperina Persoonia micranthera R Persoonia striata Pleurosorus rutifolius Persoonia teretifolia Poa annua Petrophile anceps Poa drummondiana Petrophile biternata P3 Poa porphyroclados Petrophile brevifolia Poa serpentum

Ranunculus sessiliflorus var. Podolepis canescens Podolepis capillaris sessiliflorus Podolepis lessonii Raphanus raphanistrum Podolepis rugata Regelia inops Podotheca angustifolia Rhagodia drummondii Pogonolepis muelleriana Rhagodia preissii subsp. preissii Pogonolepis stricta Rhodanthe citrina Polycarpon tetraphyllum Rhodanthe laevis Pomaderris brevifolia Rhodanthe manglesii Poranthera ericoides Rhodanthe polycephala Poranthera huegelii Rhodanthe pygmaea Rhodanthe spicata Poranthera microphylla Potamogeton ? javanicus Rinzia communis Praecoxanthus aphyllus ms Rinzia fumana Prasophyllum cucullatum Rinzia longifolia P1 Prasophyllum cyphochilum Rinzia morrisonii Prasophyllum elatum Romulea rosea Prasophyllum gibbosum Romulea rosea var. australis Prasophyllum gracile Romulea rosea var. communis Prasophyllum hians Rostraria cristata Prasophyllum nigricans Rulingia cuneata Prasophyllum plumiforme Rulingia grandiflora Prasophyllum triangulare Rulingia platycalyx Prostanthera serpyllifolia subsp. Rulingia rotundifolia Rumex brownii microphylla Pseudanthus virgatus Rumex crispus Pseudognaphalium luteo-album Sagina apetala Pteridium esculentum Salsola kali Pterochaeta paniculata Samolus junceus Pterostylis ciliata Samolus repens Pterostylis hamiltonii Santalum acuminatum Pterostylis leptochila Santalum murrayanum Pterostylis mutica Sarcocornia quinqueflora Pterostylis recurva Scaevola argentea Pterostylis sargentii Scaevola hamiltonii Pterostylis vittata Scaevola lanceolata Ptilotus drummondii var. drummondii Scaevola nitida Ptilotus humilis subsp. humilis Scaevola phlebopetala Ptilotus manglesii Scaevola pulvinaris Ptilotus polystachyus var. Scaevola striata polystachyus Scaevola striata var. arenaria Scaevola striata var. striata Ptilotus spathulatus Ptilotus spathulatus forma Scaevola thesioides Scaevola thesioides subsp. "unsorted" Ptilotus spathulatus forma filifolia spathulatus Schizaea fistulosa Schoenia cassiniana Pultenaea adunca Pultenaea aff. aspalathoides Schoenolaena tenuior Pultenaea aspalathoides Schoenus aff. subflavus Pultenaea barbata Schoenus armeria Schoenus brevisetis Pultenaea calycina Pultenaea conferta Schoenus caespititius Schoenus curvifolius Pultenaea empetrifolia Pultenaea ericifolia Schoenus efoliatus Pultenaea linearifolia Schoenus humilis Pultenaea neurocalyx Schoenus laevigatus Pultenaea ochreata Schoenus nanus Pultenaea rotundifolia Schoenus obtusifolius Pultenaea strobilifera Schoenus pleiostemoneus Pultenaea verruculosa Schoenus sesquispiculus Pultenaea verruculosa var Schoenus sp.Stirling(G.J.Keighery brachyphylla 3427) P2 Pultenaea verruculosa var. Schoenus subbarbatus brachyphylla Schoenus subfascicularis Pultenaea verruculosa var. pilosa Schoenus subflavus Schoenus subflavus subsp. Hispid Pultenaea vestita Pyrorchis nigricans Culms(K.R.Newbey 8278) Quinetia urvillei Schoenus submicrostachyus

Stylidium amoenum Sclerolaena diacantha Senecio diaschides Stylidium articulatum P2 Senecio glomeratus Stylidium beaugleholei Senecio glossanthus Stylidium brunonianum Senecio hispidulus Stylidium brunonianum subsp. minor Senecio hispidulus var. hispidulus Stylidium carnosum Senecio lautus Stylidium corymbosum Senecio lautus subsp. Stylidium corymbosum var. dissectifolius corymbosum Senecio picridioides Stylidium crassifolium Senecio quadridentatus Stylidium dichotomum Stylidium fasciculatum Senna artemisioides Stylidium guttatum Senna artemisioides subsp. filifolia Stylidium hirsutum Siegfriedia darwinioides P3 Stylidium imbricatum Siloxerus humifusus Stylidium insensitivum Stylidium inundatum Siloxerus multiflorus Siloxerus pygmaeus Stylidium junceum subsp. brevius Sisymbrium orientale Stylidium keigheryi P2 Solanum capsiciforme Stylidium lepidum P3 Solanum nummularium Stylidium leptophyllum Solanum oldfieldii Stylidium luteum Solanum simile Stylidium perpusillum Sollya drummondii P2 Stylidium petiolare Sollya heterophylla Stylidium piliferum Sonchus asper subsp. glaucescens Stylidium piliferum subsp. minor Sonchus hydrophilus Stylidium pilosum Sonchus oleraceus Stylidium plantagineum P4 Sorghum halepense Stylidium preissii Sorghum x almum Stylidium repens var. Spergularia rubra diplectroglossum Spergularia salina Stylidium rupestre Sphaerolobium alatum Stylidium scandens Sphaerolobium drummondii Stylidium schoenoides Sphaerolobium grandiflorum Stylidium spathulatum subsp. glandulosum Sphaerolobium linophyllum Sphaerolobium macranthum Stylidium spinulosum Sphaerolobium medium Stylidium spinulosum subsp. Sphaerolobium nudiflorum montanum Sphaerolobium parviflorum ms Stylidium squamellosum Sphaerolobium scabriusculum Stylidium uniflorum Sphenotoma dracophylloides Stylidium verticillatum P3 Sphenotoma drummondii R Stypandra glauca Sphenotoma gracile Styphelia intertexta Sphenotoma sp.Stirling Styphelia tenuiflora Range(P.G.Wilson 4235) P3 Synaphea favosa Sphenotoma squarrosum Synaphea media Spiculaea ciliata Synaphea petiolaris Sporobolus indicus var. capensis Synaphea petiolaris subsp. Sporobolus virginicus petiolaris Spyridium majoranifolium Synaphea polymorpha Spyridium majoranifolium ms Synaphea preissii P3 Spyridium microcephalum Synaphea reticulata Spyridium montanum P2 Tegicornia uniflora P4 Spyridium mucronatum subsp. Templetonia retusa recurvum P3 Templetonia sulcata Spyridium spadiceum P2 Tetraria capillaris Tetraria octandra Spyridium villosum P2 Stackhousia scoparia Tetrarrhena laevis Stawellia gymnocephala Tetratheca affinis Stenanthemum emarginatum Tetratheca hirsuta Stenanthemum pumilum P3 Tetratheca pubescens Stipa hemipogon Tetratheca setigera Stirlingia anethifolia Tetratheca virgata Stirlingia latifolia Teucrium myriocladum Stirlingia tenuifolia Thelymitra antennifera Stirlingia teretifolia Thelymitra campanulata Stylidium adnatum Thelymitra canaliculata

Trymalium floribundum subsp. Thelymitra cucullata Thelymitra fuscolutea trifidum Trymalium ledifolium Thelymitra macrophylla Thelymitra nuda Trymalium ledifolium var. Thelymitra psammophila R rosmarinifolium Thelymitra spiralis Ursinia anthemoides Thelymitra villosa Utricularia menziesii Thomasia angustifolia Utricularia tenella Thomasia foliosa Velleia exigua P2 Thomasia grandiflora Velleia foliosa P3 Thomasia microphylla Velleia trinervis Thomasia pauciflora Vellereophyton dealbatum Thomasia petalocalyx Verticordia acerosa var. preissii Verticordia brachypoda Thomasia purpurea Thomasia rhynchocarpa Verticordia brevifolia subsp. Thomasia rugosa brevifolia P1 Verticordia brevifolia subsp. Thomasia sarotes Thomasia solanacea P3 stirlingensis P2 Thomasia sp.Toolbrunup(G.J.Keighery Verticordia carinata 9895) P3 Verticordia carinata R Thomasia stelligera Verticordia chrysantha Threlkeldia diffusa Verticordia chrysanthella Verticordia coronata P3 Thryptomene australis Thryptomene saxicola Verticordia densiflora var. Thysanotus anceps P3 cespitosa Verticordia densiflora var. Thysanotus brevifolius P2 Thysanotus dichotomus densiflora Thysanotus gageoides P2 Verticordia endlicheriana var. Thysanotus glaucifolius endlicheriana Thysanotus parviflorus P2 Verticordia endlicheriana var. Thysanotus patersonii major Thysanotus pauciflorus Verticordia eriocephala Verticordia fastigiata Thysanotus pseudojunceus Thysanotus sparteus Verticordia grandiflora Thysanotus thyrsoideus Verticordia habrantha Verticordia harveyi Thysanotus triandrus Trachymene croniniana P2 Verticordia harveyi R Trachymene cyanopetala Verticordia huegelii var. tridens Trachymene ornata Р1 Trachymene pilosa Verticordia humilis Trachymene sp.Walpole(A.S.George Verticordia insignis subsp. compta Verticordia lindleyi subsp. 15063) Tribonanthes australis purpurea P4 Tribonanthes longipetala Verticordia multiflora subsp. Trichocline spathulata multiflora P4 Tricoryne humilis Verticordia pennigera Tricoryne tenella Verticordia plumosa Tricostularia compressa Verticordia plumosa var. Tricostularia neesii var. elatior brachyphylla Tricostularia neesii var. neesii Verticordia plumosa var. Trifolium angustifolium var. grandiflora ${\tt angustifolium}$ Verticordia plumosa var. incrassata Trifolium arvense var. arvense Verticordia plumosa var. plumosa Trifolium campestre var. campestre Verticordia roei subsp. roei Trifolium dubium Verticordia serrata Trifolium hirtum Verticordia serrata var. serrata Trifolium repens var. repens Verticordia sieberi Verticordia sieberi var. lomata Trifolium subterraneum Trifolium tomentosum var. Verticordia subulata tomentosum Vicia benghalensis Villarsia parnassifolia Triglochin centrocarpum Triglochin lineare Viminaria juncea Vittadinia gracilis Triglochin minutissimum Triglochin mucronatum Vulpia bromoides Tripterococcus brunonis Vulpia myuros Triticum aestivum Wahlenbergia gracilenta Trymalium elachophyllum Wahlenbergia multicaulis Wahlenbergia preissii

Waitzia acuminata var. acuminata Waitzia nitida Waitzia suaveolens var. flava Waitzia suaveolens var. suaveolens Westringia cephalantha Westringia rigida Wilsonia humilis Wurmbea dioica Xanthorrhoea preissii Xanthosia collina P3 Xanthosia pusilla Xanthosia rotundifolia Xanthosia rotundifolia var. hypoleuca P3 Xanthosia rotundifolia var. rotundifolia Xanthosia singuliflora Xyris exilis R