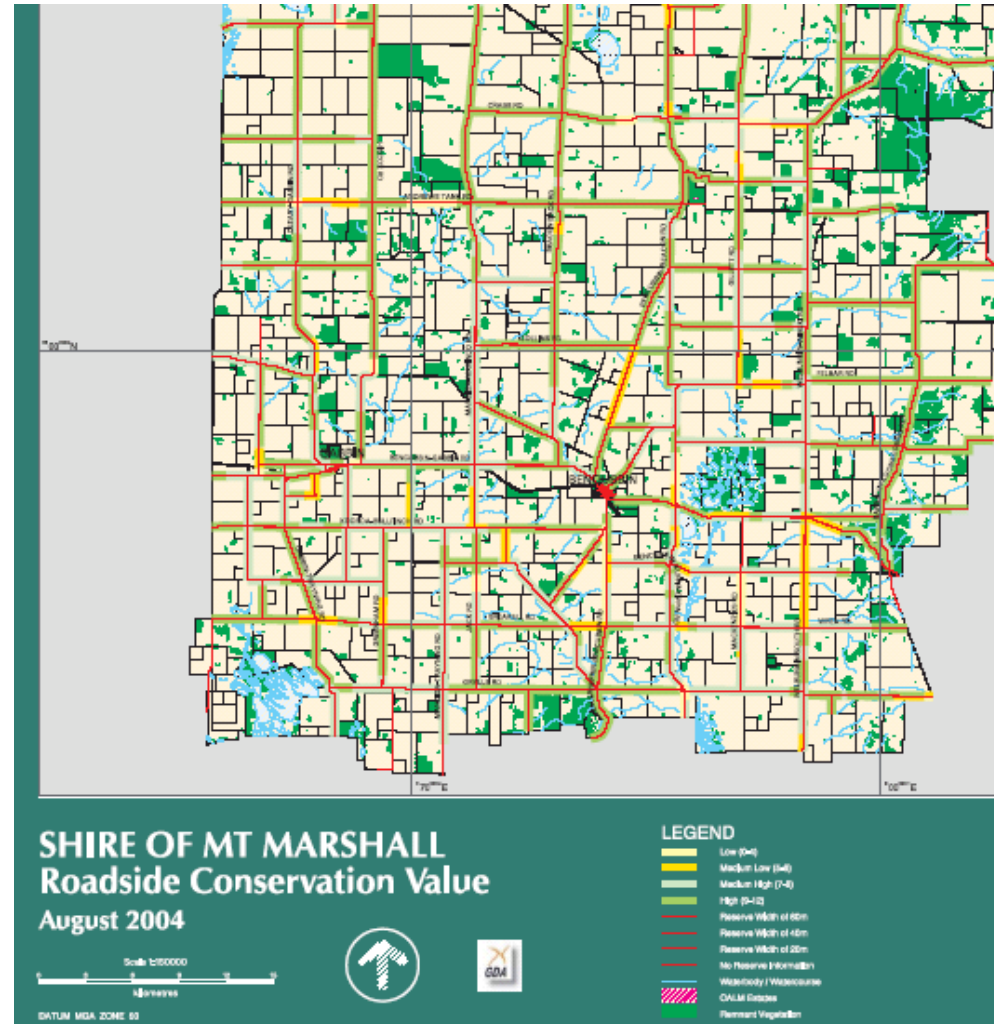


Roadside Vegetation Survey in the Shire of Mt Marshall



The Roadside Conservation Committee

The RCC's terms of reference:

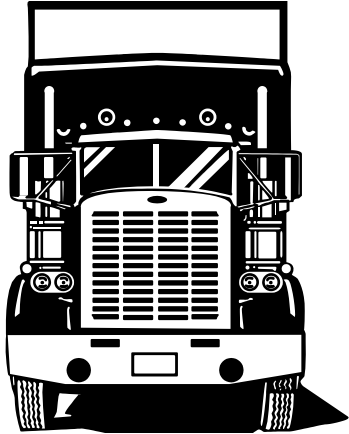
'to coordinate and promote the conservation and effective management of rail and roadside vegetation for the benefit of the environment and the people of WA'

Provide:

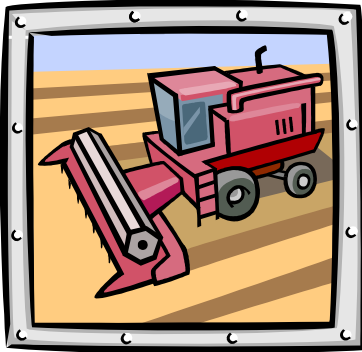
Advice, information, training & mapping.



Roads and Roadsides



The viability of the NEWROC Shires is dependant on the safe and effective movement of people and goods by roads.



**.....BUT
road reserves
have other
values.**



Roadside Conservation

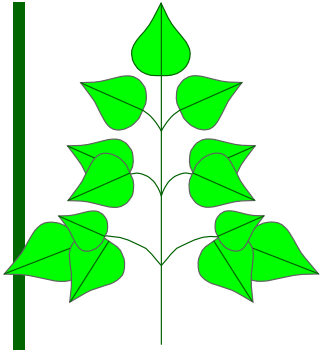
Why is roadside conservation important ?



Because they contain:

- Functional;
- Biodiversity;
- Cultural;
- Tourism; and
- Agricultural/Landcare values.





Biodiversity value of roadsides

Provide habitat (food, shelter, nesting sites, etc) for many native species of plants, mammals, reptiles, amphibia and invertebrates.



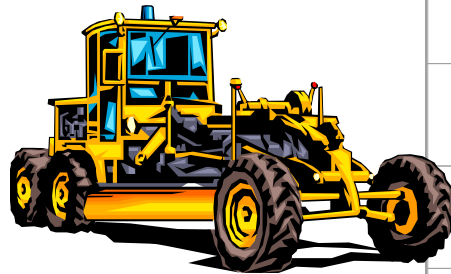
In many parts of south - west Australia, roadside vegetation forms a major part of the remaining remnants.

Mt Marshall retains only 10.6% of original vegetation.

(does not include pastoral land).



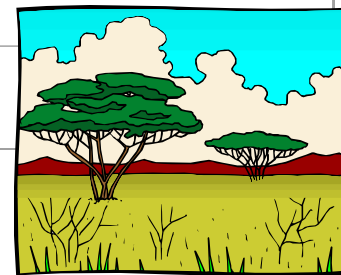
10.6% is higher than some other NEWROC Shires but this priceless resource can eroded if proactive and careful management strategies are not implemented.



| Shire | % Vegetation Remaining |
|-------------|------------------------|
| Mt Marshall | 10.6% |
| Mukinbudin | 14.0% |
| Westonia | 21.5% |
| Wyalkatchem | 4.9% |
| Trayning | 8.4% |
| Koorda | 8.1% |
| Mukinbudin | 15.2% |

Table 1. Remnant vegetation in agricultural areas of the NEWROC Shires.

(Shepherd, Beeston and Hopkins, 2001)



Fauna



The WA Museum records about 100 species of native fauna from the Mt Marshall area:

24 bird, 6 amphibia, 13 mammal and 57 reptile species.

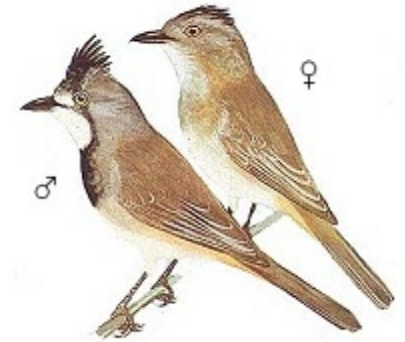
The Clawless gecko, an endemic species, is found in the Shire of Mt Marshall.



Threatened Fauna

8 species of *threatened and priority fauna* have been recorded in the Shire of Mt Marshall:

Bilby, Chuditch, Major Mitchell's Cockatoo, Malleefowl, Numbat....



Crested Bellbird
(*Oreoica gutturalis gutturalis*)

The Tree Stem Trapdoor Spider (*Aganippe castellum*) makes its nest from Sheoak needles.



Declared Rare Flora (DRF)

WA currently has >340 species of DRF; of these more than 100 are known from roadside populations and 3 species are known *only* from roadsides.

14 populations of 6 DRF species are known from roadsides within the Shire of Mt Marshall;

- *Boronia adamsiana*;
- *Eucalyptus synandra*;
- *Eremophila resinosa*;
- *Eremophila virens*;
- *Stylidium merrallii*; and
- *Caladenia drakeoide*.



Boronia adamsiana

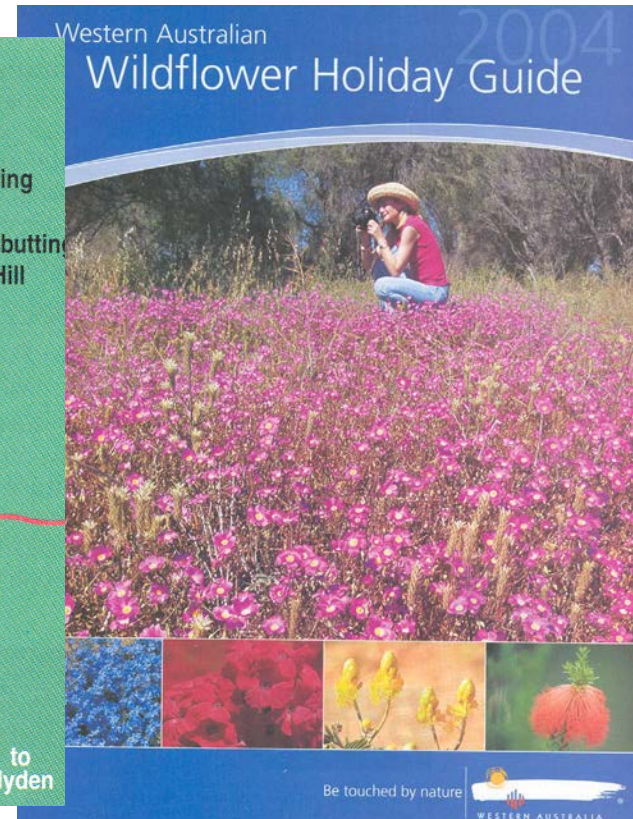
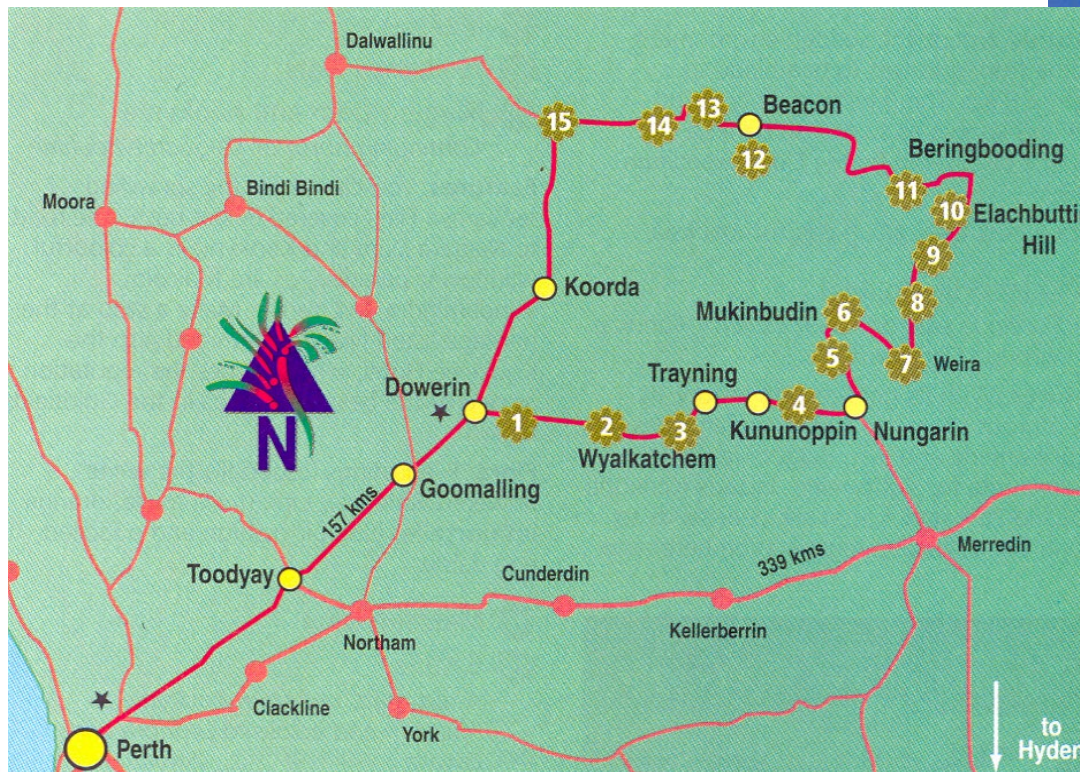
Photos: M. Hancock

Rare: Barbalin Boronia



Tourism Values of Roadsides

Nature reserves and roadsides in Mt Marshall were featured in 'Wildflower Holiday Guide' (WATC, 2004). See p.26 *The Granite Rock Loop*.



Road Infrastructure

- Roadside vegetation can help prevent wash-outs in high rainfall events.
- Mitigates against salinity impacts locally.
- Reduces wind erosion of soil and subsequent soil deposits in other areas.
- Reduces the expense and time commitment required to maintain roads and control weeds.



Sustainability of Roadside Values

The future of high value roadsides depends on the current management practices.

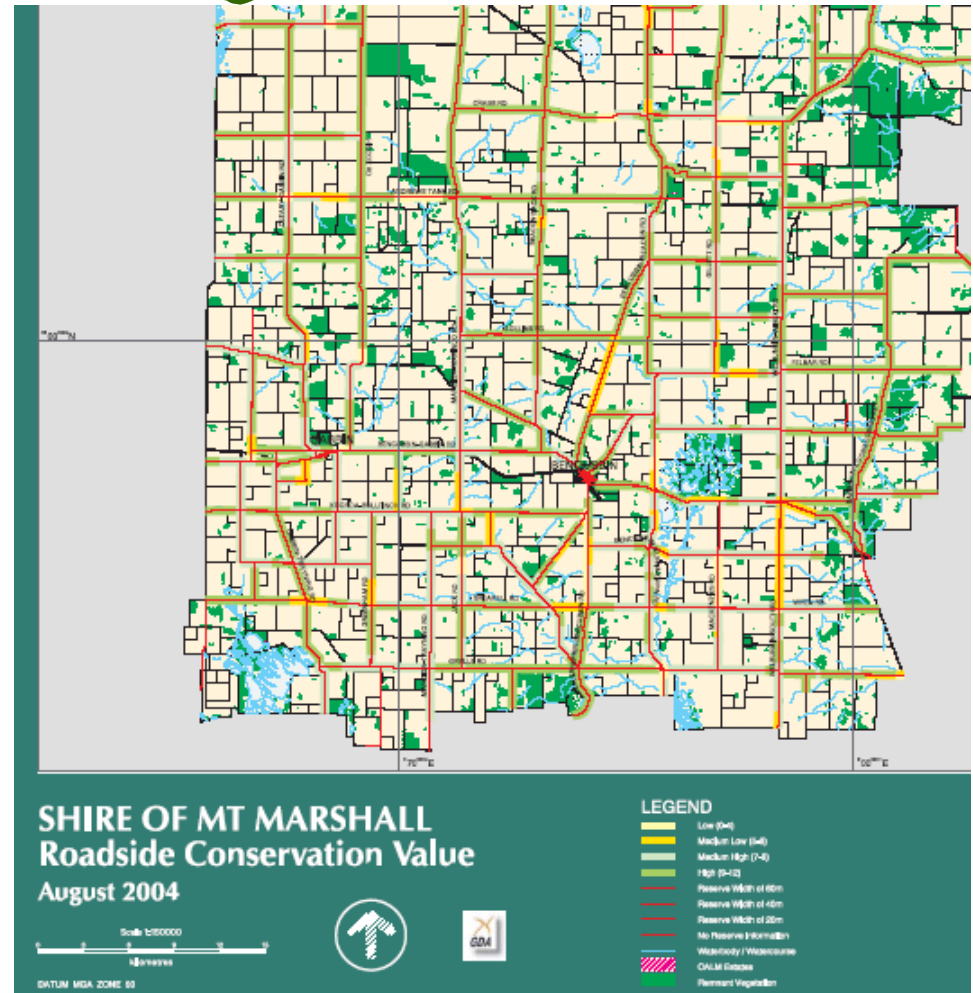
It is crucial that Managers maintain their road reserves in a manner that is sensitive to the values present.



Good management requires that all issues are considered and balanced.



Results of a Roadside Vegetation Survey in the Shire of Mt Marshall



Roadside Surveys...

- ✓ Aim: to assess the conservation values of roadside remnants in Mt Marshall. A snap-shot study.
- ✓ Conducted from September 2003 to March 2004.
- ✓ Roadside locations of 6 nominated weed groups were also recorded.
- ✓ 95% of the Shire's 1,747 km of roadsides were assessed by the RCC for their conservation status and maps produced via a Geographic Information System (GIS).



Roadside Attributes recorded

- Width of road reserve;
- Width of vegetation;
- Structure of native vegetation;
- Extent of native vegetation;
- Number of native plant species;
- Value as a biological corridor;
- Degree of weed infestation;
- 6 Nominated weeds;
- Adjoining land use;
- Presence of utilities (eg. water, power, phone).



RESULTS



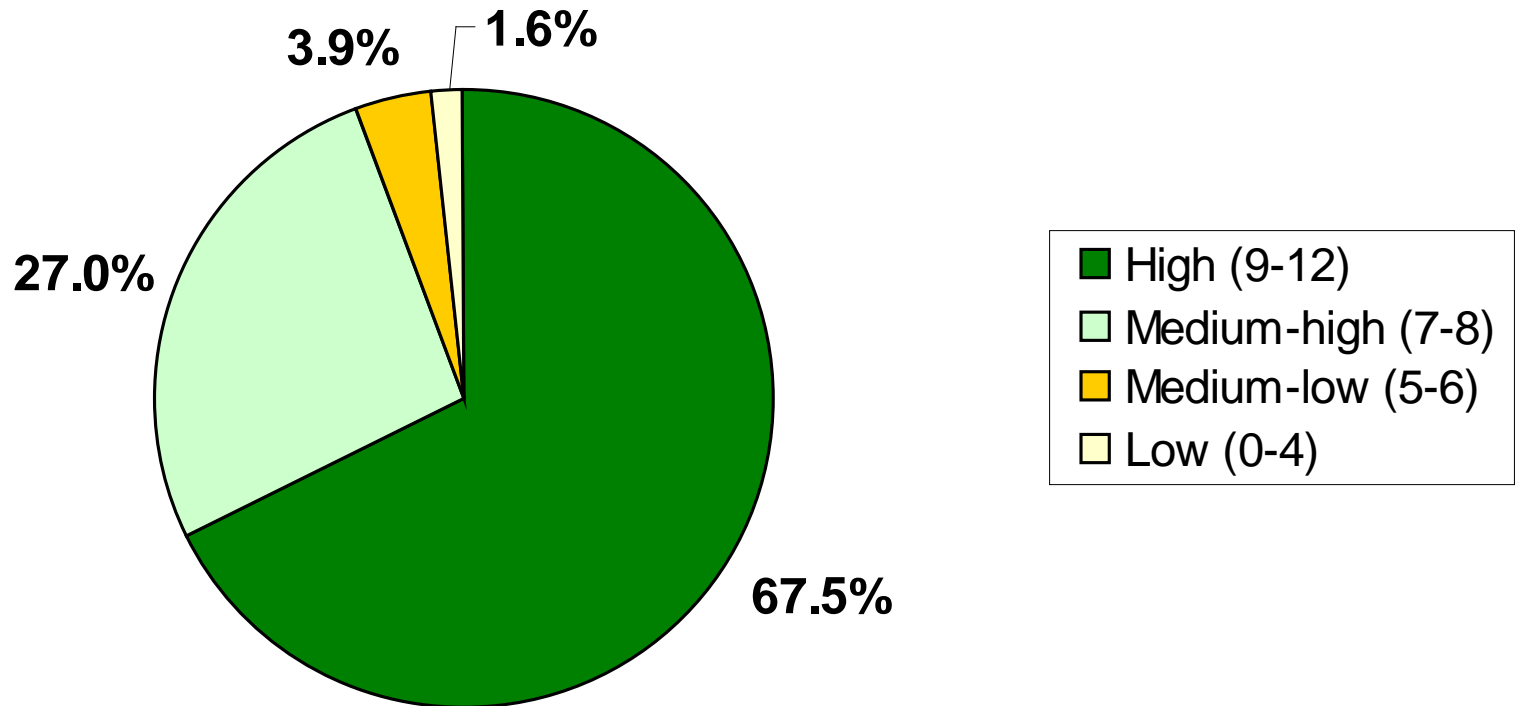
Ok

So what did we find?



Conservation status of roadsides

Conservation Status of Roadsides: Shire of Mt Marshall



Examples...

High conservation value roadsides:

- ✓ Natural structure with a number of layers, i.e. ground, shrub, tree layers;
- ✓ Little or no disturbance;
- ✓ High diversity of native flora,
 - ✓ Few weeds, and
- ✓ High value as a biological corridor.



Examples...

Low conservation value roadsides:

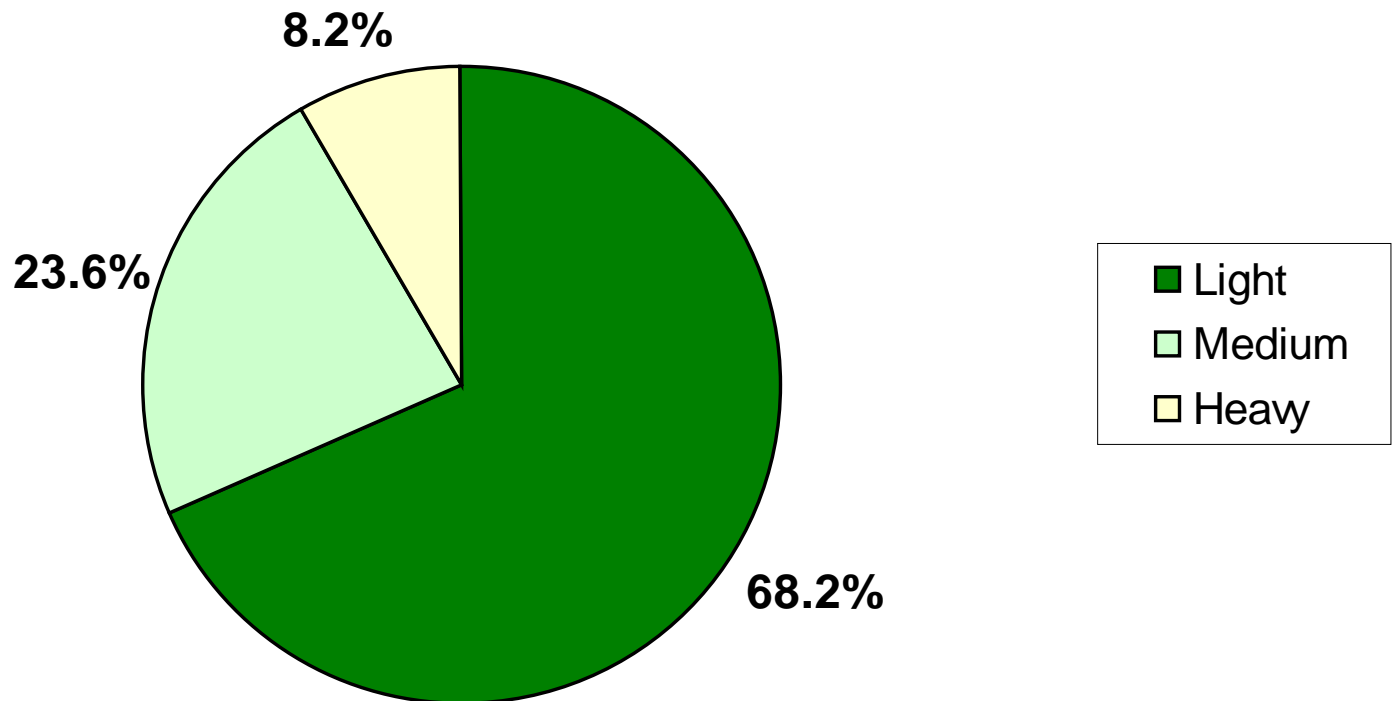


- ✓ no natural structure, i.e. two or more layers absent;
 - ✓ High level of disturbance;
 - ✓ low diversity of native flora;
 - ✓ mostly weeds;
- ✓ low value as a biological corridor.



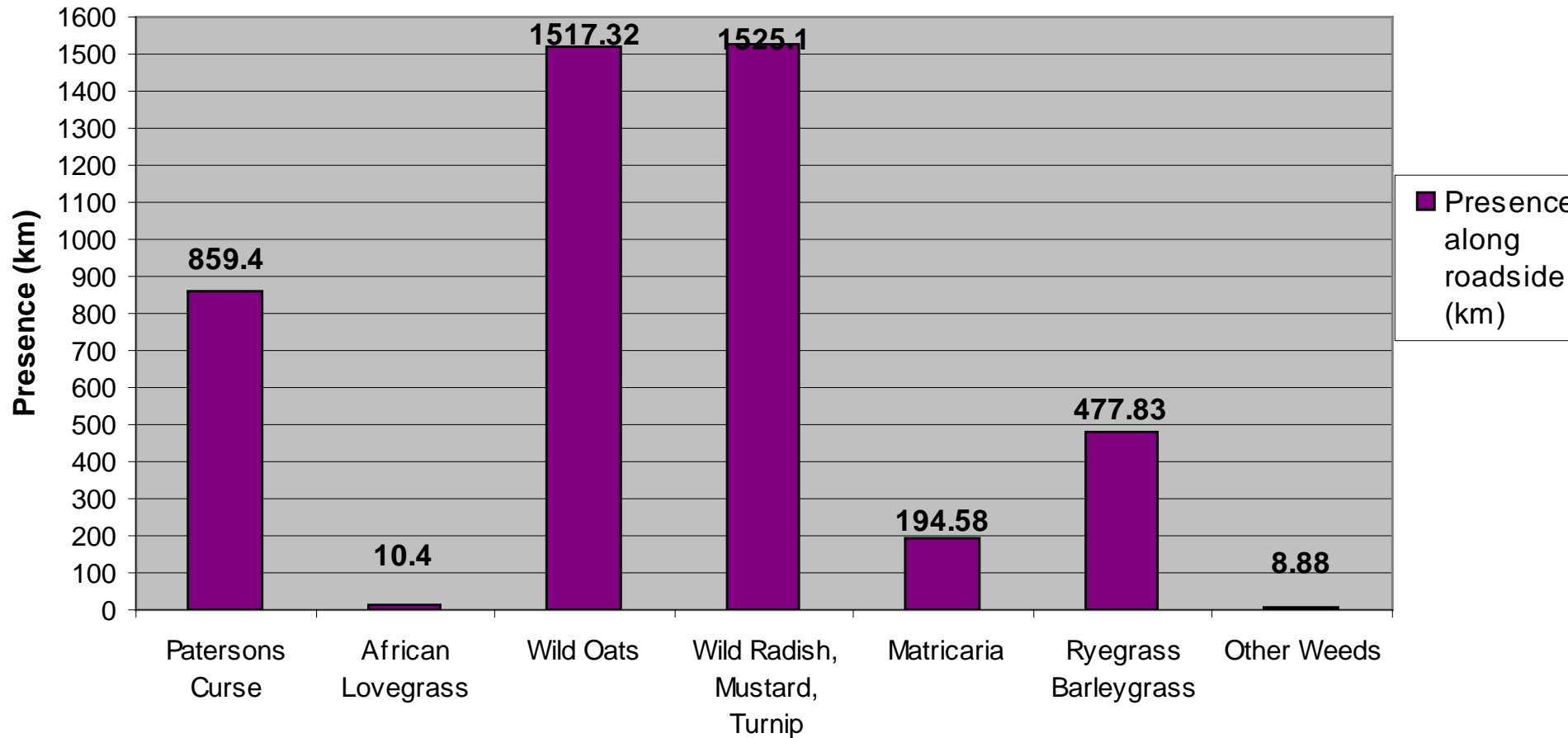
Weed Infestation

Weed Infestation in Roadsides : Shire of Mt Marshall



Weed occurrence

Presence of 6 Nominated Weed Groups along Roadsides (km)



Using the Results...

The results of this survey can be used as a planning & management tool to assist road managers and the community.



Also useful for measuring changes over time.



Using the Results...

A tool for Planning & Management:

- *Weed control,
- *Road works,
- *Revegetation,
- *Wildlife corridors,
- *Tourism,
- *Funding applications – NRM
- * Incorporate into Landcare or other projects.



Flora Roads

A flora road is of special significance because of conservation, cultural or scenic values, and also provides an attractive tourist drive route within a Shire.

Flora Road signs draw attention of both the tourist and anyone working in the road.

Indicates that it is unique and worthy of protection. Raises the profile of roadside vegetation.



Flora Roads

Roadsides, or large sections of roadsides, determined as having high conservation value in the Shire of Mt Marshall include:

- AITKEN RD
- ANDREWS TANK RD
- AYRES RD
- BARBALIN KOONKOOBING RD
- BARNEY BORE RD
- BEACON ROCK RD
- BENCUBBIN BEACON RD
- BIMBIJY RD
- BOUNDARY RD
- BREAKELL RD
- BROOKS RD
- BURAKIN WIALKI RD
- CLARK RD
- CRABBE RD
- BURNETT RD
- DALGOURING RD
- EMU PROOF FENCE RD
- GARDNER RD
- GILLETT RD
- GRYLLIS RD
- HAMMOND RD
- HUCKSTEP RD
- INGLETON RD
- JUNK RD
- LANCASTER RD
- LUCKMAN RD
- MARINDO NORTH RD
- MITCHELL WEST RD
- SCOTSMAN RD
- STONE RD
- WALKER RD



Flora Roads



7. Tathra National Park

Tathra is a Nyungar word meaning "beautiful place" and the diversity of wildflowers in this National Park fully justifies the name.

This is a good area to look for the interesting adaptations which help the Kwongan plants survive, especially their leaf size and shape.

Wide, soft leaves would lose too much water, so the plants here have stiff leaves, "sclerophylls", which resist damage due to wilting.

Can you think of reasons why some of these plants have grey woolly leaves? One very lovely grey woolly plant along the roadside is Native Foxglove. It has pink flowers in spring. Pelted Verrucaria has long spikes of small yellow flowers in early summer. Lambwool also occurs here.

8. Eneabba

A small mining town surrounded by low kwongan. In summer, look out for the magnificent magenta flowers of Superb Starflower.

Eneabba - Three-Springs Road 41km

9. White Gums Nature Reserve

Turn off into the Shire gravel pit and wind your way back westwards to find a shady parking spot under wandoo in White Gums Nature Reserve. This small Nature Reserve has an excellent stand of wandoo in the depression, with kwongan on either side of it. There is mostly grassy understorey under the trees, but orchids and everlasting can be found in season.

Touche/Reserve Road 8km

10. Laterite Ridges

Most of the kwongan in this area occurs on sand, and where laterite ridges occur they have a different combination of species.

Here the ridge is dominated by Dryandras and Hakeas, dotted with scarlet-flowered *Bonafortias* in summer. Look for Shell-leaved Hakea, whose clusters of white flowers enclosed in the leaves appear in spring. A prostrate *Banksia* with flower heads emerging from underground runners occurs here, and there are several interesting prostrate *Dryandras* also.

Dookanooka Road 8km, Wilton and Brand

Roads 21km

11. Floral diversity

The magnificent kwongan along this wide road reserve shows very well the great diversity of flowering plants.

First to flower in winter are golden wattles and brown *Daviesias*, then comes the pink of *Myrtles* and the blue of *Dampiera* and



Shell leaved Hakea
Hakea conchifolia

while beneath them are the Bush Cauliflowers, another *Verticordia*.

Come and look!

REMEMBER THE COUNTRY CODE

Take nothing but photographs.
Leave nothing but footprints.

TRAFFIC SAFETY

When stopping by the roadside, signal your intentions in plenty of time to alert the following traffic.

Do not park on crests or curves, or where traffic visibility is poor.

If crossing a road, keep control of children and pets.

FACILITIES AVAILABLE

CARNAMAH: fuel, food, hotel/motel, caravan park, medical service.

ENEABBA: fuel, food, tavern, first aid.

FURTHER INFORMATION

For further information please contact:
Shire of Carnamah, Carnamah 6517.
Ph: (099) 51 1655.



Produced by the Department of Conservation and Land Management in consultation with Carnamah Shire.

Drawings by Margaret Pironi

CARNAMAH- ENEABBA WILDFLOWERS



Superb Starflower
Calytrix superba

Roadside Conservation Committee

© P.O. Box 104 COMO W.A. 6152

Western Australian Wildflower Holiday Guide

2004



Be touched by nature



Roadside Conservation Committee



Good roadside management requires interaction with ALL stakeholders...

Remember the 4 C's !

Communication

Consultation

Co-operation

Compromise



Manage all of the road reserve

It is tempting for managers to take the simple option of managing roads in isolation, and disregard the other values because it appears cheaper at the time.



Plan your work before you begin



Synchronise operations



Timely maintenance



Contacting the RCC

For further information please contact:

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A/Executive Officer

Roadside Conservation Committee

Phone: 9334 0174

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E-mail: katej@calm.wa.gov.au

