

MERREDIN DISTRICT THREATENED FLORA AND COMMUNITIES MANAGEMENT PROGRAM

**Annual Report
2004**

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For the Merredin District Threatened Flora Recovery Team



Figure 1: *Verticordia hughanii* (Population 2) Dowerin
(Photo: Joel Collins)

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1.0 Summary of key actions 2004

- The Merredin District Threatened Flora and Communities Recovery Team held one Recovery Team meeting in 2004; this was held on the 30th November at Merredin District Office
- The Avon Catchment Council (ACC) provided funding for the Wheatbelt Region with Merredin District receiving funding for coordination and implementation of the rare flora management program.
- Monitoring of thirteen species and two new surveys were conducted during the period of August to December 2004
- Three Interim Recovery Plans were written and approved for the Merredin District
- Successful translocation of *Acacia volubilis* and *Daviesia cunderdin* on private property in the Shire of Tammin
- Propagation of species for the rare flora gardens at Dowerin and Goomalling
- Merredin District Threatened Flora Display for the Wildflower Society of Western Australia State Conference held in Merredin in June 2004.



Figure 2: Leonie Monks and Gillian Stack at the *Daviesia cunderdin* and *Acacia volubilis* translocation site at Tammin, February 2005 (Photo: Joel Collins)

2.0 Introduction

The following annual report details the rare flora recovery actions undertaken in the Merredin District during 2004 in accordance with the goals of the Merredin District threatened flora and communities recovery team. The recovery team's objective is to ensure and enhance, by appropriate management, the continued survival in the wild of populations of Declared Rare Flora and other plants in need of special protection (Mollemans, Brown and Coates 1993).



Figure 3: *Caladenia drakeoides* (CR) on private property in Dalwallinu. (Photo: Joel Collins)

3.0 Merredin District Threatened Flora and Communities Recovery Team

3.1 Roles and Responsibilities

The Merredin District Threatened Flora and Communities Recovery Teams role is the implementation of the Merredin District Threatened Flora Management Program (MDTFMP), which includes a number of Interim Recovery Plans (IRP's). This is achieved through both the Recovery Team and the Department of Conservation and Land Managements (CALM) Conservation Officer. The Recovery Team links various members of the community and agencies with the Department in order to achieve recovery actions for the Districts Declared Rare Flora (DRF) and the Priority Flora.

3.2 Members

The following are members of the Merredin District Threatened Flora Recovery Team. The participation of Recovery Team Members is essential in achieving the goals of the MDTFMP. They provide invaluable advice, local knowledge and expertise to ensure that the recovery actions are implemented in the most effective and efficient manner.

Table 1: Members of the Merredin District Threatened Flora Recovery Team

Name	Organisation
Paul Blechynden (chair)	District Manager, CALM Merredin
David Jolliffe	District Nature Conservation Officer, CALM Merredin
Joel Collins	Conservation Officer CALM Merredin
Brett Beecham	Regional Ecologist CALM Narrogin
Dr. Ken Atkins	Principal Botanist, CALM
Andrew Brown	Threatened Flora Coordinator, CALM
Rosemarie Rees	CALM, WATSCU
Gillian Stack	CALM, WATSCU
Leonie Monks	CALM Science Division
Andrew Crawford	Threatened Flora Seed Centre
Heather Adamson	LFW/Community Rep.
Mary Squire	Community Rep.
Robert and Beth Boase	Community Rep.
Elaine Hudson	Community Rep.
Hazel King	Community Rep.
Larry Trinder	Main Roads WA
Rob Waller	Water Corporation
Bruce Eldgride	WestNet Rail
John Stevens	WestNet Rail
Vanessa Malcolm	Community Landcare Coordinator Goomalling/Dowerin)
Claire Hamersley	Community Landcare Coordinator (Merredin/Nungarin)
Linda Vernon	Community Landcare Coordinator (Trayning)
Pauline Guest	Community Landcare Coordinator (Westonia)

3.3 Recovery Team Meetings

The Merredin District Threatened Flora and Communities Recovery Team held one Recovery Team meeting in 2004; this was held on the 30th November at Merredin District Office.

The meeting discussed various issues concerning rare flora in the district and allowed key stakeholders the opportunities to discuss current and future projects. Bob Dixon and Amanda Shade from Botanical Gardens and Parks Authority discussed the *Eremophila resinosa* translocation partnership with Westonia Mines, Rosemarie Rees discussed the threatened ecological communities (TEC) monitoring in the District, Andrew Brown and Gillian Stack provided an update from the Western Australia Threatened Species and Communities Unit (WATSCU) and a Perth Herbarium presentation was delivered by Neville Marchant and Nicholas Lander with information provided on the Regional Herbarium program.

This meeting was also used to introduce the new Merredin District Flora Conservation Officer and discuss the upcoming works program, planned interim recovery actions and goals for the MDTFMP in 2005.

3.4 Conservation Officer

The Conservation Officers role as part of the Recovery Team is to implement the majority of the recovery actions outlined in the IRP's, access funding for the implementation of the recovery actions, organise the Recovery Team meetings and produce the quarterly MDTFRT newsletter "Diversity".

4.0 Merredin District Staffing

During 2004 staff changes have resulted in the appointment of Joel Collins as the Conservation Officer (Flora) on the 19th August 2004 and David Joliffe as District Nature Conservation Officer on the 3rd December 2004. During the interim period Heather Adamson carried out 'acting' duties for the Conservation Officer role for the period April to August 2004.

5.0 Funding

5.1 Avon Catchment Council Funding

The Avon Catchment Council (ACC) provided threatened flora funding for the Wheatbelt Region with Merredin District receiving funding for coordination and implementation of the rare flora management program. These programmed works will contribute to several programs established by ACC including the Avon River Basin Biodiversity Conservation Sub-program. Please refer to Appendix 1 for more information on the funding activities highlighted for the Merredin District.

5.2 WATSCU IRP Funding

WATSCU was successful in receiving funding for the writing of a number of IRP's for the Merredin District. Nine new species have been funded for the next twelve months.

During 2004 three Interim Recovery Plans were written and approved for the Merredin District:

- *Philotheca basistyla* (CR)
- *Verticordia hughanii* (EN)
- *Acacia volubilis* (CR)

The following IRP's are currently being developed or are awaiting approval:

- *Acacia ataxiphylla* subsp. *magna* (EN)
- *Acacia lobulata* (EN)
- *Eremophila virens* (EN)
- *Grevillea dryandroides* subsp. *hirsuta* (VUN)
- *Myriophyllum lapidicola* (VUN)

Posters have been developed for the following species:

- *Verticordia hughanii* (EN)
- *Philotheca basistyla* (EN)

6.0 Merredin District Threatened Flora Management Program

The following information provides a summary of recovery actions implemented in line with the MDTFMP.

6.1 Merredin District Threatened Flora Schedule

Taxa currently listed in the Merredin District as at 19th July 2004 are as follows:

1. Declared Rare Flora

- 29 Critical
- 20 Endangered
- 18 Vulnerable

2. Priority Flora

- 53 Priority 1
- 54 Priority 2
- 85 Priority 3
- 34 Priority 4

6.2 Acting Conservation Officer Recovery Actions

During the period between April to August the Conservation Officer roles and responsibilities were carried out by Heather Adamson. A summary of key recovery actions implemented during this period are listed below.

Table 2: Acting Conservation Officer Key Recovery Actions

Work Activity	Recovery Action
Flora monitoring and surveys	<p>Monitored <i>Eremophila virens</i>, population 12A, on private property with surveys conducted in the Chiddarcooping area.</p> <p>Surveyed <i>Eremophila virens</i> and <i>Boronia adamsiana</i> populations along Beacon-Wialki railway line.</p> <p>Monitored <i>Acacia vassalii</i> populations at Wongan Hills.</p>
Funding Applications	Funding applied for fencing of <i>Eremophila viscida</i> on private property through the Auction for Landscape Recovery Program (WWF).
Rare Flora Gardens	Planning of rare flora gardens at Dowerin and Goomalling.
Application to Take Rare Flora	Liaison with WestNet Rail in conjunction with disused railway line Beacon-Wialki and re-sleeping along Cadoux-Amery railway line.
Community Liaison	Merredin District Threatened Flora Display for the Wildflower Society of Western Australia State Conference held in Merredin.

6.3 Conservation Officer Recovery Actions

The following information provides an outline of recovery actions implemented during the period August to December 2004.

6.3.1. Flora Monitoring and Surveys

Table 3: Rare Flora Populations Monitored August to December 2004

Taxa	Listing	Population Number	Shire
<i>Tetratheca deltoidea</i>	DRF (CR)	1A/B	Kellerberrin
<i>Caladenia drakeoides</i>	DRF (CR)	15	Dalwallinu
<i>Acacia sciophanes</i>	DRF (CR)	1B	Mukinbudin
<i>Eremophila virens</i>	DRF (EN)	3A & 5	Mukinbudin
<i>Daviesia euphorbioides</i>	DRF (CR)	3A	Wongan-Ballidu
<i>Eremophila resinosa</i>	DRF (EN)	17A/B	Nungarin
<i>Acacia subflexuosa subsp capillata</i>	DRF (CR)	1	Tammin
<i>Acacia semicircularis</i>	P4	12	Wongan-Ballidu
<i>Grevillea dryandriodes subsp dryandroides</i>	DRF (CR)	5B	Wongan-Ballidu
<i>Grevillea pythara</i>	DRF (CR)	1A	Dalwallinu
<i>Eremophila pinnatifida</i>	DRF (CR)	3	Dalwallinu
<i>Acacia ataxiphylla subsp magna</i>	DRF (EN)	11	Tammin
<i>Hakea aculeata</i>	DRF (EN)	5	Tammin

Surveying for new rare flora populations was also conducted for two species between August and December 2004. The first survey was conducted for the species *Acacia vassalii* at the town site of Wongan Hills. This survey was conducted with volunteers from the Wongan Ballidu Bushcare Group. The area searched was a bushland block north of the town with no new populations located.

The second survey conducted was for the species *Caladenia drakeoides* in the Shire of Dalwallinu. This survey was conducted as part of a project undertaken by WATSCU and the Botanic Gardens and Parks Authority. The survey area included private property along the west side of Lake Moore in the east of the Shire of Dalwallinu. The survey did not uncover new populations of *Caladenia drakeoides*; however, future surveys are still warranted along Lake Moore.

6.3.2. Recovery Actions for Individual Taxa

a) *Grevillea dryandroides* subsp *hirsuta* (VUN)

- An application to take was approved for population 9 in the Shire of Dowerin in conjunction with WestNet rail operations on the Amery-Kalannie Railway Line. A conservation offset of \$10 000 was agreed upon to be spent on management actions, including seed collection and weed control over the next 3 years.

b) *Acacia vassalii* (CR)

- An application to take was approved for population 6E in the Shire of Wongan-Ballidu in conjunction with the Wongan-Ballidu Development Group Inc and GEHA housing developments in the town of Wongan-Hills.
- All populations monitored in the Merredin District.
- New population survey carried out in Wongan Hills in conjunction with the Wongan Ballidu Bushcare Group.

c) *Caladenia drakeoides* (CR)

- New population survey carried out in conjunction with WATSCU along Lake Moore in the Shire of Dalwallinu.
- Monitoring of population 15 on private property
- Assisted Botanic Gardens and Parks Authority in pollination and seed collection for future translocation.

d) *Grevillea pythara* (CR)

- All populations monitored.
- Removal of shade cloth inclosure around population 1B as it has collapsed and restricting growth and spread of the species.
- Removal of tree guards around revegetation species along road verge.

e) *Conostylis wonganensis* (EN)

- Collection of cutting material for propagation purposes for the rare flora gardens.

f) *Acacia sciophanes* (CR)

- Liaison with the Shire of Mukinbudin regarding conservation management of road verge populations and installation of new rare flora markers.

g). *Acacia ataxiphylla subsp. magna*

- Liaison with the Shire of Tammin with regard to widening of road verge for public safety reasons. Agreed on a course of action which mitigated the need for an application to take.
- Surveyed population no 11 along Rabbit Fence proof road.
- Removed old DRF markers along Rabbit fence proof road, and replaced with new design DRF markers.

h). *Acacia subflexuosa subsp capillata*

- Surveyed population no 11 along Rabbit Fence proof road, Shire of Tammin.
- Removed old DRF markers along Rabbit fence proof road (Tammin), and replaced with new design DRF markers.

i). *Hakea aculeata*

- Surveyed population no 11 along Rabbit Fence Proof road, Shire of Tammin.
- Liaison with the Shire of Tammin with regard to widening of road verge for public safety reasons. Agreed on a course of action which mitigated the need for an application to take.

6.3.3. Translocations

a) *Acacia volubilis* and *Daviesia cunderdin*

A joint translocation was conducted in 2004 on private property in the Shire of Tammin. The first year's translocation saw a total of 100 seedlings from both species planted with wire netting placed around individual plants. The site is monitored and watered by the landholders. The translocation proposal recommends a second years planting which will be carried out in 2006.

b) *Grevillea dryandroides* susp. *dryandroides*

The translocation implemented in July 2003 for this species was not successful with all seedlings perishing. This proposal requires a detailed investigation into the site selection and implementation process if the proposal will be carried out in the future.

c) *Daviesia euphorbioides*

The translocation for this species has been written and endorsed by the Region in 2003. Amendments have been made to the proposal with the implementation of the translocation set for 2005. The site for the translocation is Hind Marsh Nature Reserve in the north of Dowerin Shire.

6.4 Rare Flora Gardens

Preparations for the new rare flora gardens in Dowerin and Goomalling continued in 2004 with the first planting of propagated species set for 2005. Plants used for these gardens have been propagated at the Botanical Gardens and Parks Authority and Arinya Native Plant Nursery in Dowerin. The sites have been prepared at both Goomalling and Dowerin in 2004.



Figure 4: *Grevillea dryandroides* subsp. *dryandroides* growing at the Rare Flora Garden, Wongan Hills. (Photo: Gillian Stack)

7.0 Education and Publicity

The following activities have taken place in order to increase community awareness of threatened flora within the Merredin District:

- Meeting with the Wongan-Ballidu Bushcare Group to discuss rare flora management actions in the Shire, and promote involvement in future surveys and works.
- Rare flora training session with the Shire of Trayning road worker crew to discuss rare flora management.
- One-on-one meetings with several Shire Works Supervisors.
- Distribution of rare flora posters.
- Merredin District Threatened Flora Display for the Wildflower Society of Western Australia State Conference held in Merredin

8.0 Conclusion

The Merredin District Threatened Flora and Communities Management Program have achieved many positive recovery actions during 2004. The flow-on effects of these actions will no doubt contribute to the overall objective of recovering threatened flora and communities within the Merredin District.

9.0 References

Mollemans F.H., Brown P.H., & Coates D.J. 1993, *Declared Rare Flora and Other Plants in Need of Special Protection in the Merredin District*, Wildlife Management Program No 9, Department of Conservation and Land Management, Wanneroo.

9.0 Appendix 1

Table 4: Avon Catchment Council Funding Projects October 2004 – June 2005

Output Description	Activity
Liaison with Shires and other groups regarding threatened flora management and protection	5 Shires (Dalwallinu, Wongan-Ballidu, Trayning, Koorda & Wyalkatchem)
Improve the capacity of shires to protect threatened flora populations.	Produce a threatened flora 'Information Pack' for 16 Shires. Pack includes maps showing the locations of threatened flora populations to be used for shire road maintenance planning purposes and a copy of WA Threatened Flora Publication.
Survey of DRF populations	Survey private property (south of Ballidu) for DRF in conjunction with Wongan Bush Care Group.
Improve public awareness of Threatened Flora	Produce threatened flora photos/prints for presentations/field days & purchase display materials
Fencing of rare flora populations	Fencing of <i>Grevillea dryandroides</i> subsp <i>dryandroides</i> population. Fencing of translocation site <i>Daviesia euphorbioides</i>
Expand the Merredin District Herbarium	Purchase storage cabinets.
Production of media articles	Publication of Threatened Flora Newsletter to be distributed to shires, community groups.