

# **AVON-MORTLOCK DISTRICT THREATENED FLORA AND COMMUNITIES MANAGEMENT PROGRAM**

## **Annual Report 2007**

For the Avon-Mortlock District Threatened Flora and Communities Recovery Team

Prepared By:

Joel Collins (Conservation Officer - Flora) and Lorraine Duffy (Conservation Officer – Flora ACC)

Image 1: Recruitment burn for *Cyphanthera odgersii* subsp *occidentalis*

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Department of Environment and Conservation  
PO Box 354 Northam WA 6401

## 1 SUMMARY OF 2007 KEY RECOVERY ACTIONS

• Flora surveys conducted by DEC Conservation Officers, DEC casual employees, DEC volunteers, external agencies and community members during 2007 have resulted in the discovery of several new populations of rare and priority flora in the Avon Mortlock district. These species are:

Critically Endangered:

- *Acacia volubilis* (population 13)
- *Acacia cochlocarpa* subsp. *velutinos*a (populations 4, 5, 6, 7, 8 and 9)
- *Acacia cochlocarpa* subsp. *cochlocarpa* (Goomalling population)
- *Acacia pharangites* (subpopulation 1D)
- *Eremophila pinnatifida* (population 5)

Endangered:

- *Acacia ataxiphylla* subsp. *magna* (subpopulations 15A, 15B and 15C)
- *Eremophila resinosa* (subpopulation 14C)
- *Grevillea bracteosa* (population 22)
- *Melaleuca sciotostyla* (population 4)
- *Stylidium coroniforme* subsp. *coroniforme* (subpopulations 11A and 11B)
- *Verticordia hughanii* (population 3)

Vulnerable:

- *Acacia aphylla* (subpopulation 21A)
- *Allocasuarina fibrosa* (population 4)
- *Microcorys eremophiloides* (population 20, subpopulations 8A, 8B and several other sub-populations)

Priority Flora:

*Acacia* sp. *Manmanning* (P1), *Acacia drewiana* subsp. *minor* (P2), *Acacia campylophylla* (P3), *Acacia lirellata* subsp. *compressa* (P2), *Acacia lirellata* subsp. *lirellata* (P3), *Acacia dissona* var. *indoloria* (P3), *Acacia phaeocalyx* (P3), *Frankenia glomerata* (P3) and *Calothamnus brevifolius* (P4).

- The first Avon Mortlock Recovery Team Meeting was held in York on 13 June 2007, with the second on 13 December 2007 at Wyalkatchem recreation centre.
- Recruitment trials using fire for *Cyphanthera odgersii* subsp. *occidentalis* (subpopulations 1a and 1c), *Pityrodia scabra* (population 14 and subpopulation 1B) with 44 seedlings surviving as at February 2008 and *Daviesia euphorbioides* (population 2 and subpopulation 1B) with 34 seedlings surviving as at February 2008.
- Back from the Edge 'Threatened Species and Communities' display at the 2007 Dowerin Field Days.
- Poster display at MEDECOS XI conference on 'The role of fire in managing *Daviesia euphorbioides*'.
- 3 issues of the Avon Mortlock 'Rarity' newsletter distributed to Recovery Team members and shires.
- Bird netting erected for *Cyphanthera odgersii* subsp. *occidentalis* (population 1) on rail reserve at Cowcowing. Bird netting was erected to protect plants from structural damage due to parrots cutting branches and removing tomentose covering.

- Fencing was erected around 0.8ha healthy remnant vegetation containing a new population of *Eremophila resinosa* on private property in Koorda. Fencing erected for *Pityrodia scabra* (population 14) on private property, fencing off 20ha remnant.
- Cuttings were collected of *Grevillea dryandroides* subsp. *dryandroides* (CR) and sent to Kings Park for stocking of a translocation.

Cuttings were also collected for *Cyphanthera odgersii* subsp. *occidentalis* and sent to Kings Park for establishment of ex situ clones.

- Translocation proposal refereed and endorsed for *Acacia subflexuosa* subsp. *capillata*. Monitoring data collected for *Daviesia euphorbioides*, *Acacia volubilis* and *Daviesia cunderdin* translocation sites.

## **2 THREATENED FLORA AND COMMUNITIES RECOVERY TEAM**

### **2.1 Roles and Responsibilities**

The Avon-Mortlock District Threatened Flora and Communities Recovery Team's role is to implement relevant Threatened Flora Management Programs and Interim Recovery Plans (IRPs). This is coordinated by the Recovery Teams and is largely implemented by Conservation Officers from the Department of Environment and Conservation's Avon Mortlock district.

For the duration of 2007, the Avon Mortlock district was fortunate to have 2 full time conservation officers, one base recurrent, Joel Collins, and a second Avon Catchment Council contract position, Lorraine Duffy which increased the number of recovery projects and community awareness activities to be undertaken this year.

Two casual DEC employees were also employed during the period and assisted with fulfilling the Avon Mortlock threatened flora works program in the Shire of Wongan-Ballidu.

### **2.2 Members**



Table one lists the members that have participated in the two Avon Mortlock Recovery Team meetings held during 2007. The participation of Recovery Team Members has been paramount in achieving the goals of the Avon-Mortlock District Threatened Flora Management Programs. It has enabled greater flow of information between government and non government agencies, community groups and concerned individuals; facilitating more effective use of resources and resulting in positive outcomes for threatened flora in the district.

<b>Table 1: 2007 Avon-Mortlock District Rare Flora and Communities Recovery Team Members</b>	
Name	Organisation
Alan Kietzmann	District Manager, DEC Avon-Mortlock
Amanda Fairs	Project Officer, DEC Species and Communities branch
Andrew Brown	Threatened Flora Coordinator, DEC Kensington
Andrew Crawford	DEC Threatened Flora Seed Centre
Brett Beecham	Regional Ecologist DEC Narrogin
Brian Jones	Community member (Wyalkatchem)
Bruce Eldridge	WestNet Rail
Fred Hort	DEC Volunteer
Genni Farrelly	WWF Australia Project Officer, Northam
Gillian Stack	DEC, Kensington
Helena Mills	WWF Australia Project Officer, Northam
Ian Smith	Wongan Ballidu Bush Care Group / DEC casual employee
Joel Collins	Conservation Officer, DEC Avon-Mortlock
John Stevens	WestNet Rail
Joy Fleay	York Wildflower Society
Lee Francis	Toodyay Naturalists Club
Leonie Monks	DEC, Science Division
Lorraine Duffy	Conservation Officer (ACC), DEC Avon-Mortlock
Lyn Phillips	Wongan Ballidu Bush Care Group / DEC casual employee
Mick Davis (Resigned late 2007)	WWF Australia Project Officer, Northam
Mike Griffiths	WWF Australia Project Officer, Northam
Nigel Rowe	Main Roads
Paul Tholen	District Nature Conservation Officer, DEC Avon-Mortlock
Peter Smyth	WestNet Rail
Phil Lewis (Replaced Mick Davis late 2007)	WWF Australia Project Officer, Northam
Robert and Beth Boase	Community member (Dowerin)
Sonia Creese	Threatened Ecological Communities Conservation Officer, Species and Communities branch DEC
Sonya Thomas	Wongan Ballidu Bush Care Group / DEC casual employee
Vanessa Slater/ Kezia Pontifex (Commenced 2007)	Goomalling/Dowerin Community Landcare Officer
Wongan-Ballidu Bushcare Group - All Members	Wongan-Ballidu Bushcare Group

### 2.3 Recovery Team Meetings

The Avon-Mortlock Threatened Flora and Communities Recovery Team held its first two meetings in 2007.

The first meeting was held on 13 June 2007 at Settlers house, York and had an attendance of 19 members including Graham Stanley, Deputy CEO for the Shire of York. Project presentations were delivered by DEC project officers and the recently appointed DEC flora casuals on the monitoring and recovery work being implemented in their local Wongan Hills area under the Avon Catchment Councils 'Back from the Edge Project'.

Mike Griffiths, a WWF Australia project officer also gave a presentation on the discovery of rare and priority species encountered during the Woodland Watch project and discussed the possibility of information sharing with DEC where landholders have given consent.

The second Threatened Flora and Communities Recovery Team meeting was held on 13 December 2007 at the Wyalkatchem recreation hall with 15 recovery team members in attendance.

Dr Peter Adams of Murdoch University filled the role of guest speaker on this occasion with a fascinating presentation on 'Risks to human health and the ecosystem from feral pigs' in the Perth Metropolitan region.

DEC project staff delivered presentations on current recovery projects with TEC officer Sonia Creese delivering an update on new Threatened Ecological Community (TEC) and Priority Ecological Community (PEC) occurrences in the district.

These included a new listing of *Banksia prionotes* and *Xylomelum angustifolium* PEC in Dowerin. The vegetation *Allocasuarina huegeliana* woodland over *Lepidosperma tuberculatum* near granite outcrops was also discussed as a possible new PEC.



Image 2: Quadrat survey at the new PEC occurrence in Dowerin



Image 3: Feral pig habitat disturbance. Photo Dr Peter Adams



### 3 FUNDING

#### 3.1 Avon Catchment Council Funding 'Back from the Edge' Project

The Avon Catchment Council (ACC) has provided Commonwealth funding to the DEC Wheatbelt Region to implement a range of conservation projects throughout the Avon Basin. This funding is over three year period with the first round of funding allocated in October 2005. DEC has joined the Avon Natural Diversity Alliance (ANDA) which includes WWF Australia, Greening Australia and the Department of Water.

Threatened species and communities have received funding through the project 'Back from the Edge: Saving Native Species and Communities Most at Risk'. The aim of this project is to develop a strategic approach to threatened species and community management and to carry out urgent recovery actions. This funding has seen the employment of 1 additional FTE (Conservation Officer) in the Avon-Mortlock District.

### 4 SPECIES AND COMMUNITIES BRANCH – INTERIM RECOVERY PLANS

#### 4.1 IRPs for regional approval

- *Acacia pharangites*
- *Pityrodia scabra*
- *Frankenia conferta*

#### 4.2 IRPs for regional editing

- *Cyphanthera odgersii* subsp. *occidentalis*
- *Daviesia cunderdin*
- *Eremophila resinosa*
- *Gastrolobium glaucum*
- *Haloragis platycarpa*

#### 4.3 IRPs for district comment

- *Darwinia carnea*

- *Hemiandra rutilans*
- *Lysiosepalum abollatum*

#### 4.4 IRPs in draft

- *Melaleuca sciotostyla*

## 5 AVON-MORTLOCK DISTRICT THREATENED FLORA MANAGEMENT PROGRAM

### 5.1 Avon-Mortlock Threatened Flora Schedule

DRF and Priority taxa currently listed in the Avon-Mortlock District;

**Table 2: Threatened Flora Taxa Number in the Avon-Mortlock District**

DRF	Number of Taxa
CR	26
EN	22
VU	19
Total	67
Priority	
1	53
2	64
3	118
4	63
Total	298

(Please refer to Appendix 1 for the complete list of threatened taxa for the Avon-Mortlock District).

## 7 IMPLIMENTATION OF RECOVERY ACTIONS

### 7.1 Critically Endangered

*Acacia cochlocarpa* subsp. *cochlocarpa*

- 1 new population surveyed and collected in the shire of Goomalling

*Acacia cochlocarpa* subsp. *velutinos*

- 5 new populations surveyed and recorded, markers installed (populations 4, 5, 6, 7, 8, 9)

*Acacia pharangites*

- 1 new sub-population surveyed and recorded
- Monitored populations 1A and 1B

*Acacia subflexuosa* subsp. *capillata*

- Translocation proposal sent to referees for comment, implementation in 2008. Seed collection from sub-populations for translocation proposal, germinants sent to Kings Park.
- Weed control at sub-populations

*Acacia vassalii*

- Liaison with Shire of Wongan-Ballidu regarding works impacting upon population 6A
- FESA request for upgrading fire breaks in UCL in Wongan Hills, surveyed area for potential new populations



*Acacia volubilis*

- 1 new population surveyed in Quairading shire (population 13)
- Weed control at several populations, including population 7, 12 & translocation
- Maintenance at translocation site (water, weed control, collection of plant measurement data, installation of shade cloth to protect against locusts)
- Harris Road verge revegetation proposal written and approved
- Seed collected and processed for revegetation of Harris Rd

*Caladenia drakeoides*

- Monitoring of population 8B (Cail's property, Dalwallinu), no plants due to drought conditions.
- Attempted survey of population 5a and b (September 2007), no plants evident

*Calothamnus accedens*

- Installed markers at population 4 (this species has now been formally downgraded from DRF to priority 4)

*Cyphanthera odgersii* subsp. *occidentalis*

- Surveyed all populations in March 2007
- Critical habitat survey (September 07) on Private Property located 5 additional plants
- Specimens collected for District and Perth herbarium
- Conducted 4 recruitment burns, 2 at subpopulation 1a and 2 at 1c
- Bird netting erected around individual plants to protect from parrot damage
- Cuttings collected and sent to Kings Park for ex situ establishment
- Rabbit baiting conducted of population 1 and adjoining rail reserve

*Darwinia carnea*

- Monitoring of subpopulations 3A and 3C with plant measurement data collected for translocation

*Daviesia cunderdin*

- Maintenance at translocation site (water, weed control, collection of plant measurement data, installation of shade cloth to protect against locusts)
- Weed control at population 1

*Daviesia euphorbioides*

- Three recruitment burns at subpopulation 1B and population 2 (Wongan Hills) on 29 May 2007 with rabbit proof fencing erected. Monitoring of sites conducted during the year with a total of 34 seedlings surviving as at February 2008
- Maintenance at translocation site (water, weed control, collection of plant measurement data)
- Weed control at several populations, including population 10 and translocation site
- Rabbit proof fencing erected at population 7
- Seed collection at population 7
- Replaced markers at subpopulation 1A
- Monitoring of subpopulations 1A and 1B and populations 7 and 12
- Rabbit control at population 8 and 10 (April 07).

*Eremophila pinnatifida*

- Surveyed and recorded new population in Wongan-Ballidu, contacted shire and installed markers (population 5)
- Weed control at population 4 (Bell road)
- Population 4 monitored (May 07) and fenced to protect plants from stock movement.

#### *Gastrolobium glaucum*

- Monitored populations 3 and 2
- Liaison with contractor (Woodman Environmental Consulting) regarding powerline maintenance at Environmental Sensitive Areas in Wongan Hills

#### *Grevillea dryandroides* subsp. *dryandroides*

- Surveyed subpopulations 1b and 3b (May 07), and 5a and 5b (September 07)
- Cuttings collected from populations 1, 2, 3, 4 and 5 and sent to Kings Park for propagation for translocation restocking 2008.

#### *Grevillea pythara*

- Weed control at population 1

#### *Gyrostemon reticulatus*

- Monitored population 3 (Mollerin)

#### *Haloragis platycarpa*

- Monitored population 1, in-situ plants not located

#### *Lysiosepalum abollatum*

- Subpopulation 1a surveyed December 2007

#### *Pityrodia axillaris*

- Monitored populations 1 and 2, and subpopulations 3A and 3C

#### *Pityrodia scabra*

- 2 recruitments burns at subpopulation 1B and population 14 on 14 June 2007 with rabbit proof netting erected. Reticulation and tank installed at population 14. Monitoring of sites conducted during the year with a total of 44 seedlings surviving as at February 2008
- Surveyed for new populations on private property in Wyalkatchem (Wallabin road), remnant had been recently burnt and contained similar soil type and vegetation, no populations located
- Ringlock fencing erected (500m) to fence off 20 ha remnant that contains population 14 on private property
- Collected seed of subpopulation 1T

#### *Verticordia staminosa* subsp. *staminosa*

- Monitoring of subpopulations 1A, 1B, 1C and 1D

#### 4.2 Endangered

#### *Acacia ataxiphylla* subsp. *magna*

- New subpopulations surveyed and recorded (subpopulations 15A, 15B and 15C).
- Community survey 8 June 2007 to record extent of new population in nature reserve 47490 – Dowerin, 12 participants.
- Surveyed subpopulation 2a and population 8 (February 2007), monitored population 12
- Weed control at population 8

*Acacia chapmanii* subsp. *australis*

- Monitored populations 2 and 3
- Installed markers at population 3

*Acacia pygmaea*

- Monitoring of subpopulation 2B

*Banksia cuneata*

- Seed collection for Quairading populations (1, 6, 2 and 13) in conjunction with Great Southern District and Threatened Flora Seed Centre
- Completed rabbit proof fencing of 7 plants from pop 2 (20m x 15m area) with liaison and assistance from Badjaling Aboriginal Community, Quairading.
- Survey of population 2 (Badjaling NR), subpopulations 6A & B (Community reserve), 7 (May 07), and subpopulations 1A, 1T (Stacey's).
- Rabbit control (1080 baiting, gas and burrow disturbance), subpopulation 1A and populations 7 and 10.
- Specimens collected for District and Perth herbarium

*Conospermum densiflorum* subsp. *unicephalum*

- Collected specimen for District herbarium

*Conostylis wonganensis*

- Liaison with Telstra contractor regarding subpopulation 1B, application to take was avoided for 1 plant found within vicinity of works
- Liaison with contractor (Woodman Environmental Consulting) regarding powerline maintenance at environmental sensitive areas in Wongan Hills
- Attempted survey of population 5 (July 07) and 6 (September 07) no plants located.

*Eremophila resinosa*

- Surveyed subpopulations 14a, b (May 07).
- New Rare Flora markers installed at subpopulation 14a and b. Shire also contacted and sent map regarding precarious location of plant on spoon drain.
- 1 new subpopulation (14c) of 13 plants located within healthy woodland remnant on private property, Koorda.
- Fencing erected around new *Eremophila resinosa* subpopulation (14c) and surrounding remnant vegetation (0.6ha total).
- 2hr survey of Private Property remnant vegetation

*Eremophila viscida*

- Collected specimen for District herbarium

*Eucalyptus pruiniramis*

- Surveyed population 4 (January 07).

*Grevillea bracteosa*

- Surveyed 1 new population in Shire of Victoria Plains (population 22)

*Grevillea christineae*

- Liaison with the Shire of Goomalling regarding population 1 at Shire reserve 3719. The shire agreed to close an access track to prevent accidental damage of plants close to the track.

*Hakea aculeata*

- Monitored subpopulations 16A, 16B and 22A
- Surveyed populations 1 (January 07), 2, (April 07), subpopulation 3b (February 07), populations 4 (February 07), 7 (January 07), 14 and subpopulation 15a and b (April 07)
- 1 day critical habitat surveys on private property Mawson
- Weed spraying of population 2
- Specimens collected for District and Perth herbarium

*Jacksonia quairading*

- Surveyed new sub-population on cemetery road Quairading
- Surveyed subpopulation 1c (October 07)
- Specimens collected for District and Perth herbarium

*Melaleuca sciotostyla*

- Fencing supplied to private property landholders for population 3 with contracts signed to erect fence
- New population surveyed in the Shire of Cunderdin (population 4)

*Philothea wonganensis*

- Monitoring of subpopulations 2A and 2B (Wongan Hills casual employees)

*Ptilotus fasciculatus*

- Attempted survey for population 7 (November 07), no plants located

*Spirogardnera rubescens*

- Collected specimen for district herbarium

*Stylidium coroniforme* subsp. *coroniforme*

- Surveyed of new population on nature reserve and private property (Wongan Hills casual employees subpopulations 11A and 11B)
- Ringlock fencing of new population on private property and liaison with landholder

*Verticordia hughanii*

- Surveyed new population on private property in the Shire of Goomalling, liaison with landholder (population 3)

#### 4.3 Vulnerable

##### *Acacia aphylla*

- Surveyed subpopulation 2a (September 07), 2c, 2e, 2f (October 07), population 19 (December 07)
- New Rare Flora markers erected for subpopulations 2a, c, e and f.
- Located new population of 15 plants, Northam (November 07).
- Meeting with Department of Defence staff at Northam Army firing range to discuss weed control options for 2008 and establish proposed recruitment burn site/s.

##### *Acacia brachypoda*

- Surveyed subpopulations 2b, 2c and d (April 07), 4a (July 07), b (April 07).

##### *Acacia caesariata*

- Surveyed historical WA Herbarium collection from North Bungulla Nature Reserve, awaiting on identification

##### *Allocasuarina fibrosa*

- Surveyed new population and critical habitat on private property in the Shire of Quairading in conjunction with WWF Australia (population 4)
- Surveyed subpopulation 2a (March 07)
- Specimens collected for District and Perth herbarium

##### *Calectasia pignattiana*

- Attempted survey of population 1 (October 07), no plants evident

##### *Dryandra serratuloides* subsp. *serratuloides*

- Liaison with Westnet Rail regarding works at subpopulation 1B.

##### *Eremophila ternifolia*

- Monitoring of population 2 - Mt O'Brien (Wongan Hills casual employees)

##### *Eremophila vernicosa*

- Monitoring of population 3A and liaison with landholders

##### *Eucalyptus recta*

- Liaison with the Shire of Wongan-Ballidu regarding subpopulation 1A and road works. Submitted application to take to gain authority for the shire to prune lower branches of trees close to road
- Installed Rare Flora markers at subpopulation 1B - Dowerin
- Application to take approved for population 3A (Manmanning NR). 2 *Eucalyptus recta* trees successfully removed, unblocking fire access track and clearing neighbouring private property fence of obstructions.
- Surveyed subpopulations 3a, b and c (August 07)
- Specimens collected for District and Perth herbarium

##### *Eucalyptus synandra*

- Monitoring of subpopulation 2A, Koorda

*Frankenia conferta*

- Monitoring of subpopulation 6A, Koorda

*Grevillea dryandroides* subsp. *hirsuta*

- Seed collection from subpopulations 4A and 4B – Cadoux. Several trips funded by Westnet Rail conservation offset.

*Lechenaultia laricina*

- Survey of subpopulation 2a, b and translocation (November 07) and population 8 (December 07).
- Rare Flora markers replaced at subpopulation 2b.
- Liaison with York shire council regarding relocation of spoon drain to reduce threat to verge plants.
- Specimens collected for District and Perth herbarium

*Microcorys eremophiloides*

- Monitoring of several populations at Rogers Nature Reserve, Mt O'Brien, Elphin Nature Reserve and Gathercole Nature Reserve (Wongan Hills casual employees). New sub-populations recorded with an increase in total plant individuals (population 20, subpopulations 8A, 8B and several other subpopulations)
- Located new population of 11 *Microcorys eremophiloides* plants on private property, Uberin area, Dowerin.
- Submission to Threatened Flora Scientific Committee to down grade *Microcorys eremophiloides* from DRF to P4 after recent survey effort

#### 4.4 Priority One

*Acacia* sp. *Manmanning*

- Surveyed 3 new populations in the Shire of Wongan-Ballidu

*Calandrinia* sp. *Piawaning*

- Surveyed population in Wongan Hills

*Conospermum galeatum*

- Possible collection made for District herbarium

*Dampiera glabrescens*

- Specimens collected for District and Perth herbarium

*Guichenotia glandulosa*

- Surveyed subpopulations 1a and 1b (September 07)
- Specimens collected for District and Perth herbarium

#### 4.5 Priority Two

*Acacia drewiana* subsp. *minor*

- Surveyed 1 new population in the Shire of Wongan-Ballidu

*Acacia lirellata* subsp. *compressa*

- Surveyed 1 new populations in the Shire of Dowerin

*Acacia lirellata* subsp. *lirellata*



- Surveyed 2 new populations in the Shire of Cunderdin and Wongan-Ballidu

*Acacia sclerophylla* var. *pilosa*

- Possible collection made for District herbarium

*Baeckea* sp. *Calingiri*

- Collection made for District herbarium

*Eremophila sargentii*

- Collection made for District herbarium

*Lasiopetalum* sp. *Northam*

- Monitored subpopulation 1B, collection made for District herbarium

*Lepidium genistoides*

- Collection made for District herbarium

*Leucopogon* sp. *Bungulla*

- Surveyed population in Wongan Hills shire reserve

*Verticordia wonganensis*

- Population surveyed in Wongan Hills (Wongan Hills casual employees)

#### 4.6 Priority Three

*Acacia campylophylla*

- New population of a single plant located in Cunderdin.

*Acacia dissona* var. *indoloria*

- New population in the Shire of Koorda

*Acacia filifolia*

- Collection made for District herbarium

*Acacia phaeocalyx*

- New populations surveyed in the Shires of Cunderdin

*Anigozanthos bicolor* subsp. *exstans*

- Collection made for District herbarium

*Blennospora phlegmatocarpa*

- Collection made for District herbarium

*Frankenia glomerata*

- Collections made on several populations

*Grevillea eriobotrya*

- Collections made in the shires of Koorda and Dalwallinu

*Podotheca uniseta*

- Collection made for District herbarium

*Synaphea constricta*

- Collection made for District herbarium

*Verticordia serrata* var. *linearis*

- Population monitored and specimen collected for District and Perth herbarium

*Verticordia venusta*

- Population surveyed in Wongan Hills (Wongan Hills casual employees)

#### 4.7 Priority Four

*Banksia benthamiana*

- Collection made for District herbarium

*Calothamnus brevifolius*

- New population collected in the Shire of Dowerin

*Daviesia oxylobium*

- Monitored population 3 – Cunderdin

*Eremaea blackwelliana*

- Collection made for District herbarium

*Grevillea drummondii*

- Collected specimen for District herbarium

### 5 TRANSLOCATIONS

*Acacia subflexuosa* subsp. *capillata*

- Translocation proposal awaiting final approval, comments received from external referees

*Acacia volubilis* and *Daviesia cunderdin*

- Plant measurement data collected on 3rd August 2007.
- Weed control of translocation undertaken with herbicide application and hand-weeding.
- Organisation of water tank refills with Tammin Shire
- Repairs and maintenance of irrigation system through the year

*Daviesia euphorbioides*

- Weed control and 6 monthly monitoring of translocation at Hind Marsh Nature Reserve (A 14510).
- Monthly watering during summer

*Darwinia carnea*

- Annual translocation monitoring

### 6 INDUCED RECRUITMENT PRESCRIBED BURNS

*Cyphanthera odgersii* subsp. *occidentalis*

- Conduct recruitment trials at populations 1a and 1c on June 14th 2007.
- Erected rabbit proof fencing around recruitment trial sites
- Regular monitoring conducted of recruitment burn sites.
- Installed automatic reticulation systems and water tanks (4500L) at 2 burn sites.

*Daviesia euphorbioides*

- 3 recruitment burns at populations 1B and 2 (Wongan Hills) on 29 May 2007 with rabbit proof fencing erected. Monitoring of sites conducted during the year with a total of 34 seedlings surviving as at February 2008

*Pityrodia scabra*

- 2 recruitments burns at subpopulation 1B and population 14 on 14 June 2007 with rabbit proof netting erected. Reticulation and tank installed at population 14. Monitoring of sites conducted during the year with a total of 44 seedlings surviving as at February 2008

## **7 RARE FLORA GARDENS**

Goomalling and Dowerin

- *Chorizema humile*, *Grevillea dryandroides* subsp. *hirsuta*, *Calothamnus brevifolius* provided to Landcare Officer for Goomalling Dowerin rare flora garden

Wongan Hills

- *Melaleuca sciotostyla*, *Grevillea dryandroides* subsp. *hirsuta* and *Calothamnus brevifolius* seedlings planted

## **8 APPLICATION TO TAKE RARE FLORA**

The following species have had applications to take completed in 2007:

*Eucalyptus recta*

- Application to take approved for subpopulation 3A (Manmanning NR). 2 *Eucalyptus recta* trees successfully removed, unblocking fire access track and clearing neighbouring private property fence of obstructions
- Application to take lower limbs of 3 trees at subpopulation 1A for road construction

*Acacia volubilis*

- Application to take 2 plants at subpopulation 6A (Wongan Hills) to allow for the Shire to erect a TV tower in shire reserve

## **9 EDUCATION AND PUBLICITY**

The following activities have taken place in order to increase community awareness of threatened flora within the Avon Mortlock district:

- Rare flora training conducted with the following shire work crews and works supervisors

o Tammin

o Quairading

o Victoria Plains

- Production of pictorial maps for Tammin, Quairading, York, Wyalkatchem and Victoria Plains DRF and Priority Species pictorial map depicting species flowering times, conservation status and location on shire lands.

- Rare flora and Back from the Edge project display at the 2007 Dowerin Field Days. Interactive display with Avon Natural Diversity Alliance partners. Threatened flora and fauna posters, brochure and postcards on display and informative fauna talks and display with by Kanyana wildlife sanctuary.
- One Wongan-Ballidu threatened flora article in the Wongan-Ballidu newspaper 'Wongan Boomer'.
- Two articles printed in the Avon Catchment Council newsletter. One 'Have you seen this plant?' article printed in the Dowerin despatch community newsletter.
- Have you seen this plant? Postcards for 7 species (5 critical, 1 endangered and 1 vulnerable species) delivered via a mail drop to landholders in wheatbelt region. 7500 postcards delivered.
- Production of DEC regional banner displaying regional flora and fauna species to be utilised at community meetings and surveys.
- 'Back from the Edge' threatened species information display at local shopping centre and library, Northam.
- Cunderdin rail museum, Water Sustainer of Life; display of local rare flora pictures and information.
- Three issues of the Avon Mortlock 'Rarity' newsletter produced and distributed to Recovery team members and shires.
- Wongan Hills Flora identification workshop (March 2007), 10 participants.
- Contribution of rare flora information and photos for the 2008 Community Landcare Calender.
- Article published in Australasian Plant Conservation journal (Vol 16 No 2 Sep-Nov 2007) on the Wongan Ballidu Bushcare group and their involvement in threatened flora management. Article written by Sonya Thomas.
- Poster display at MEDECOS XI conference on 'The role of fire in managing *Daviesia euphorbioides*'.
- Two articles in WATSCU newsletter on threatened flora management in the district.

## **10 DISTRICT THREATENED FLORA HERBARIUM**

Currently 138 vouchered specimens have been formally processed at the Perth herbarium with duplicates at Avon Mortlock District and Wongan Hills regional herbariums. Further collections are currently awaiting identification.

## **11 THREATENED ECOLOGICAL COMMUNITIES**

The following sites were inspected/monitored in conjunction with the Species and Communities Branch:

- *Banksia prionotes* and *Xylomelum angustifolium* woodland on yellow sand (Dowerin). A new occurrence was surveyed and recorded in the Shire of Dowerin. 2 quadrats were sampled.

## **12 CONCLUSION**

The increase in flora conservation staff in the Region has meant that the Conservation Officers have been able to implement a much larger number of recovery actions for a wide range of DRF and Priority flora species in the Avon-Mortlock district.

The DEC Avon-Mortlock district recovery team members would like to thank all the agencies, local community members and other DEC staff who have contributed to the implementation of recovery actions within the DEC Avon-Mortlock District throughout 2007.

In particular, assistance from the Wongan Hills casual employees, Lyn Phillips and Sonia Thomas who have made a significant contribution to the location of new rare and priority flora populations in the district, collection and curation of DRF and priority specimens for the Wongan Hills and Avon Mortlock regional herbaria and awareness raising of issues pertaining to rare and or priority flora in the region.