

# Geraldton District Threatened Flora & Ecological Communities Recovery Team, Annual Report 2006

## Summary

This report provides a summary of the progress made by Recovery Team Members and associates in the recovery of threatened flora species and Threatened Ecological Communities (TECs) that occur within the Geraldton District, as per the Threatened Flora Management Plan for Department of Environment and Conservation (DEC) Geraldton District, Project Number 446, Wildlife Management Program No. 26, entitled "Declared Rare and Poorly Known Flora in the Geraldton District," and Interim Recovery Plans (IRPs) for Declared Rare Flora (DRF) and TECs.

At present there are approximately 19 IRPs for threatened flora species and 4 IRPs for TECs that occur within the Geraldton District. The following IRPs were prepared during 2005; *Gyrostemon reticulatus* and *Beyeria lepidopetala*. These are still pending final approval

Each of these plans stipulates criteria for the recovery of the species or community, which aim to quantify the success or failure of the plan and its implementation. The standard criteria are as follows:

**Criteria for success:** The numbers of individuals within populations and/or the number of populations has increased.

**Criteria for failure:** The numbers of individuals within populations and/or the number of populations have decreased

As the implementation of IRPs is long term (i.e. 3-5 years), it is often not possible to quantify their success or failure on an annual basis, however significant increases or decreases in the number of individuals or known populations during 2006 have been noted

In the Geraldton District there are approximately 43 DRF species and 348 Priority species. There are also 3 Vulnerable, 1 Priority and 3 Presumed totally destroyed TECs.

In 2006, the major recovery actions completed included the discovery of three new species, finding new populations of DRF and priority flora, monitoring of DRF and priority species, the completion of research which has resulted in new declared rare taxa, monitoring and maintenance of translocations for two species and site preparation for a third, weed control, feral animal control, liaison with land managers and community education.

## The Recovery Team

Members of the recovery team have a variety interests and areas of expertise and together work towards completing recovery actions to conserve declared rare flora threatened and threatened ecological communities

The recovery team met in July 2006 and is scheduled to meet again in April 2007. Liaison was maintained between members throughout 2006, with members completing recovery actions and providing advice in their areas of expertise. Listed below are both official and associate members. Landholders and interested community members are also encouraged to attend recovery meetings

### **Official Members**

Anthony Desmond	DEC Regional Leader Nature Conservation, (Chair)
Catherine Page	DEC, Conservation Officer, Flora, Geraldton District
Val English	DEC, Principal Ecologist, Species and Communities Branch
Don Bellairs	Volunteer, Wildflower Society, Kalbarri

Ian Hamilton	Main Roads WA, Roadside Management Officer, Geraldton Division
Robin Westlake	DEC Volunteer, Wildflower Society
Anne Carr	Dongara Herbarium Group
Robyn Soulier	Mingenew Herbarium Mingeneu LCDC
Josephine Docherty	Wildflower Society, Mullewa
Phil Docherty	DEC "Bushranger" group leader

#### **Associate Members and Technical Advisors**

Kev Marshall	CALM District Wildlife Officer, Midwest Region
Andrew Brown	DEC, Coordinator, Threatened Flora Recovery
John Stevens	WestNet Rail
Margi Weir	Greening Australia
Representative Rotating	Yamatji Land and Sea Council
Andrew Crawford	DEC, Threatened Flora Seed Centre
Gillian Stack	DEC, Conservation Officer, Flora, Species and Communities Branch
Nigel Rowe	Main Roads WA
Marie Jarvis	Works Infrastructure Pty Ltd
Jenna Brooker	Geraldton Regional Herbarium
Ann Gunness	Geraldton Regional Herbarium
Robyn Nicholas	Northern Agricultural Catchment Council

Don Bellairs, Kalbarri Community Representative and Irene Shepard from Geraldton Regional Herbarium tendered their resignation from the recovery team this year

### **Key Recovery Actions Completed in 2006**

#### **Survey results**

##### **New Species**

- Two new species discovered and a possible third species at a site in Northampton, namely *Leucopogen* sp Port Gregory, *Ozothamnus* sp Northampton and a possible new *Dodonaea* species, pending further examination. These species have been nominated as priority species and surveys have commenced to find additional populations
- A report was recently received from a volunteer that found a new species at Coolcalalaya station late 2005. The new species, *Anacampseros* sp. Eremaean, is a Priority 1 species and is the only member of this genus in Western Australia. Further surveys for this species are planned.

##### **DRF**

- 9 new populations. A large population was found of the critically endangered *Beyeria lepidopetala*. New populations of *Hypocalymma longifolium*, *Stachystemon nematophorus*, *Leucopogen marginatus*, *Eucalyptus blaxellii*, *Eucalyptus synandra* and *Eucalyptus beardiana* were also found

### Priority Flora

- 13 new Priority flora populations were found of the following species: *Gastrolobium propinquum*, *Verticordia polytricha*, *Beyeria cygnorum*, *Acanthocarpus parviflorus*, *Chamelaucium marchantii*, *Ptilotus alexandri*, *Melaleuca hugellii* subsp. *pristicensis*, *Triodia bromoides* and *Lepidobolus densus*

### Monitoring Results

#### DRF

- 40 species monitored. Some populations/species were not monitored fully as it was a poor rainfall season and very little was flowering. Existing populations of *Beyeria lepidopetala* and *Stachystemon nematophorus* were found to be much larger than had previously been recorded. The short lived, disturbance respondent species, *Gyrostemon reticulatus*, is no longer present in any of the known populations. Further survey and disturbance trials are planned for this species in 2007.

#### Priority Flora

- 2 priority flora populations were monitored. These were *Stylidium wilroyense* and *Ptilotus chortophyllum*.

### Translocations

Existing translocations of *Eremophila nivea* and *Verticordia spicata squamosa* were monitored.

Site preparation was completed at a reserve where a translocation of *Caladenia elegans* and *Pterostylis* sp. Northampton is proposed. This involved completing weed control and collecting seed from common species to complete habitat planting during 2007.

### Research

Following recent research, a manuscript is to be published later this year that will restrict *Hypocalymma longifolium* to the Kalbarri populations to and the Northampton/Yerina Springs populations will become a new subspecies of *Hypocalymma angustifolium subspecies borealis*.

*Eremophila rostrata* has been split into two subspecies. *E. rostrata* subsp. *rostrata*, (Cue populations) and *E. rostrata* subsp. *trifida* (Perenjori populations) as a result of recent research. This change of name has been published in R.J. Chinnock, (2007) "*Eremophila and Allied Genera – A Monograph of the Myoporaceae.*"

Research completed on *Grevillea phanerophlebia* did not produce any definitive results. As a result, the name and the status of this species have not changed. At this stage, no further work is to be completed on the species.

### Submissions to the Threatened Species Scientific Committee

The following species have been nominated as priority species

- *Leucopogon* sp Moresby
- *Leucopogon* sp Port Gregory
- *Leucopogon* sp Howatharra
- *Ozothamnus* sp Northampton

This has not been approved as yet.

## **Weed control**

Weed control was undertaken at populations of the following DRF species:

- *Caladenia elegans*
- *Pterostylis* sp *Northampton*

## **Feral Animal Control**

A rabbit baiting program was carried out at Burma Road Nature Reserve to protect the various DRF species on site that are regenerating from a wildfire in 2005

A goat control program was undertaken at Kalbarri national park early 2006. Although the aim of this program was not specifically to reduce the threat to DRF species, there are a number of species threatened by heavy grazing from goats in the Kalbarri area that benefited from this program.

## **Liaison with land managers/Industry Consultation**

There are a number of Government, Industry and Private land managers within the Geraldton district who are responsible for populations of DRF and TECs.

There number of local shires within the Geraldton district and liaison has been maintained with staff members from each of these shires, namely the Shire of Perenjori, Chapman Valley, Mingenew, Northampton and Greenough.

Liaison has also occurred with staff from Westnet Rail, Works Infrastructure Pty Ltd and Main Roads. Onsite meetings have also been conducted with land managers where required

Prior to visiting a population of DRF or an occurrence of a TEC, Private landholders were contacted and met with on site where possible

## **Externally funded projects**

DEC, with assistance from the relevant recovery teams from the Geraldton and Moora District, have been responsible for the coordination and implementation of the project "Back from the Brink," since January 2006. The project is administered by the Northern Agricultural Catchment Council (NACC) and funded by Federal and State Government and is due to be completed mid 2008, with possibility of extension.

The project aims to increase the security of the threatened species and communities in the Northern Agricultural Region. Major achievements of the project to date include the discovery of new populations of DRF and monitoring of existing populations, community education, the creation of educational materials and site preparation for a proposed translocation.

## **Community Education and Awareness**

Information sessions and have been held with TAFE students and Green Corps Team members. Technical advice has been provided to the Geraldton Regional Herbarium. Field surveys have been conducted with the Wildflower Society, Green Corps Teams and Geraldton Regional Herbarium.

A Threatened Species and Communities of the Northern Agricultural Region Activity Book has been produced under the Back from the Brink Project. The activity book is aimed at primary school aged children and provides activities and information specific to threatened species and communities in the Northern Agricultural Region. Drafts for a number of new posters for critically endangered species have also been produced under the "Back from the Brink," project and are awaiting final approval prior to printing.