



**SWAN REGION THREATENED SPECIES  
AND/OR COMMUNITIES RECOVERY TEAM**

**PROGRAM INFORMATION**

<b>Recovery Team name</b>	Swan Region Threatened species and communities Recovery Team	
<b>Reporting Period</b>	Calendar year 2007	
<b>Current membership</b>		
	<b>Member</b>	<b>Representing</b>
<b>1. Chair</b>	David Mitchell	Swan Region
<b>Dates meetings were held</b>	No meetings were held for the team in 2007	
<b>One to two paragraph summary of achievements suitable for WATSNU</b>	See report below (from M Hoskins)	

Declared Rare Flora

Research trials for three species of Declared Rare Flora were established with monitoring undertaken at three-monthly intervals. For *Andersonia gracilis* and *Dryandra mimica* the aim of the trials is to determine the species' response to wildfire and prescribed burning respectively. For *Macarthuria keigheryi* the trial aims to recover a population at a Nature Reserve in Forrestfield by stimulating germination post fire. The trials are being conducted by staff from the Swan Coastal District's Nature Conservation and Fire Management Branches.

Monitoring of research trials set up by Swan Coastal District staff in previous years continued. The trials involved determining species responses to fire and disturbance. Species include *Grevillea curviloba* subsp. *curviloba* and *Darwinia foetida* at Muchea Nature Reserve, *Lasiopetalum pterocarpum* at Serpentine National Park, and *Synaphea* sp. Pinjarra at North Dandalup.

New populations of *Ptychosema pusillum*, *Caladenia huegelii* and *Chamelaucium lullfitzii* were recorded on private property. The landowners contacted DEC initially and the species were confirmed and mapped using a differential GPS during site inspections.

Targeted surveys of the Carousel wetlands and a portion of Melaleuca Park were undertaken for *Eremophila glabra* subsp. *chlorella* and the Priority 1 listed *Calectasia* sp. Pinjar respectively. These surveys resulted in the identification of eight additional plants of *Eremophila* and a new population of *Calectasia*. Volunteers and DEC staff assisted with the survey of Melaleuca Park. Further surveys of this area will be undertaken in 2008.

Surveys were undertaken to locate new populations of *Grevillea althoferorum*. Potential sites were selected based on soils and vegetation mapping. Contact was made with landowners to seek permission to access their properties. No new populations were identified as a result of these surveys.

Monitoring was undertaken for a number of populations of DRF and Priority flora within the Swan Coastal District. Species include *Eleocharis keigheryi*, *Eremophila glabra* subsp. *chlorella*, *Chamelaucium lullfitzii*, *Ptychosema pusillum*, *Macarthuria keigheryi*, *Isotropis cuneifolia* subsp. *glabra* and *Diuris purdiei*. All of these populations have been mapped using a differential GPS and RFRF's, maps and photos submitted.

Seed collection was undertaken for a number of species of DRF including *Eremophila glabra* subsp. *chlorella*, *Macarthuria keigheryi*, *Grevillea althoferorum*, *Grevillea curviloba* subsp. *curviloba*, *G. curviloba* subsp. *incurva*, *Calytrix breviseta* subsp. *breviseta* and *Chamelaucium lullfitzii* with assistance from DEC's Threatened Flora Seed Centre. Plants were monitored for fruit production over the Summer months. The project received funding from the Commonwealth.

Weed control was undertaken at Carousel Swamp and Muchea Nature Reserve to help protect the *Eremophila glabra* subsp. *chlorella*, and *Darwinia foetida* and *Grevillea curviloba* subsp. *curviloba*. Monitoring quadrats were established prior to weed control being undertaken for Tambookie grass at Carousel wetlands in Cannington. The quadrats are monitored quarterly to determine the effectiveness of the weed control implemented and to determine whether native species are reintroduced post weed control. The weed control was implemented by BCI crew.

In conjunction with the City of Swan populations of *Grevillea curviloba* subsp. *curviloba* were fenced and DRF markers installed and/or repositioned along the rail line to ensure protection of the plants. Weed control was undertaken for these populations and for those at Muchea NR. DRF markers were installed for a number of other populations of DRF.

Access control was implemented for a population of *Caladenia huegelii* in Banjup. This outcome involved a large amount of liaison and negotiation with relevant stakeholders.

Information posters were created for two species of DRF: *Grevillea althoferorum* and *Calytrix breviseta* subsp. *breviseta* and drafted for an additional four species. The A4 posters containing information on the species such as threatening processes and recovery actions were distributed to local government and landowners.

Ongoing liaison with relevant stakeholders has continued to ensure the protection of threatened flora.

### Threatened Ecological Communities

Monitoring of the research trial established in 2006 on the 'endangered' limestone ridges community was undertaken in Spring 2007. Six 10m x 10m plots were set up to determine the community's response to prescribed fire. This trial is on-going and plots will be monitored again in Spring 2008.

The installation of 10x10m plots to confirm the FCT for a number of inferred TEC occurrences was established including 26a, 20a, 3a and 2. Each of the plots was surveyed on two occasions over spring. Analysis of the plot data is planned for 2008. Transects were installed at Moore River to monitor changes in the claypan TEC community over time. These will be monitored again in 2008.

Weed control has been undertaken at a number of reserves which has assisted in the protection of occurrences of TECs. These include veldt grass at Muchea NR, tambookie grass at Carousel wetlands, Brixton wetlands, Talbot NR and watsonia at Ellen Brook NR. Rehabilitation has also occurred at the latter three sites with participation from community members at planting days.

Hydrological investigations of the Tumulus mound springs community and monitoring of the caves community has continued with hydrological data collected and reviewed.

Dieback interpretation and mapping was undertaken at a Forrestfield NR and appropriate hygiene management and measures have been implemented. A previously gravel track at a Shire reserve was upgraded to limestone for dieback hygiene measures. This work was funded through Visa Landscape funding.

Fencing of a number of TEC sites was undertaken – these include Lake Richmond; IP14 in East Rockingham and a Forrestfield NR.

A number of guided scientific tours were conducted through the Yanchep Caves and an appearance discussing the cave TEC was broadcast on national TV.

An interpretive information shelter for the TEC at Talbot NR was produced with input from the local 'Friends of' group. The shelter is due for installation in 2008.

Reports were produced and distributed on the wildfire response of the critically endangered 'Perth to Gingin Ironstone Association' TEC and on the impact of Pc on the critically endangered 'Eastern shrublands and woodlands of the eastern side of the Swan Coastal Plain' TEC.

A district herbarium containing species collected from the plot and transect work has been established. Specimens will be added to the collection over time.

Ongoing liaison with relevant stakeholders has continued to ensure the protection of TECs.