



Department of
Environment and Conservation

Our environment, our future



SUMMARY ANNUAL REPORT

THREATENED SPECIES AND/OR COMMUNITIES RECOVERY TEAM

PROGRAM INFORMATION

Recovery Team name	GREAT SOUTHERN DISTRICT THREATENED FLORA RECOVERY TEAM	
Reporting Period (Calendar Year)	Calendar year 2007	
Current membership - See attached list of the former Katanning and Narrogin Teams		
Proposed Membership of the Great Southern Team		
Member		Representing
1. Chair	District Manager	DEC – local
2.	Nature Conservation Officer	DEC – local
3.	1 x	Main Roads WA
4.	1 x	Western Power
5.	1 x	Telstra
6.	1 x	Water Corporation
7.	1 x	Westnet Rail
8.	1 x	Local Government - Shires
9.	2 x	Landowners
10.	1 x	DEC – Species and Communities Branch
11.	1 x	DEC – Science Division
12.	1 x	Botanic Gardens and Parks Authority
13.	2 x	Volunteer Groups
14.	1 x	AVON NRM
15.	1 x	SWCC NRM
Dates meetings were held	NIL in 2007 – currently developing the team’s structure and terms of reference since the merger of the DEC’s former Katanning and Narrogin District’s and thus	

	the two recovery teams.
One to two paragraph summary of achievements suitable for WATSNU	<p>Numerous surveys were undertaken of threatened flora populations throughout 2007 in the Great Southern District, with emphasis on Critically Endangered species and other Declared Rare taxa that had not been surveyed for some time.</p> <p>Successful searches were conducted in an attempt to locate new populations of Critically Endangered species. Overlaying soil and vegetation types, particular to individual species requirements using desktop GIS mapping, identified potential search areas. Two new populations of <i>Caladenia melanema</i> (with more areas of suitable habitat located for further survey in 2008), one population of <i>Caladenia graniticola</i> and one population of <i>Verticordia fimbrilepis</i> subsp. <i>fimbrilepis</i> were located in this way, along with a new population of <i>Adenanthos pungens</i> subsp. <i>pungens</i> (Endangered) and <i>Verticordia staminosa</i> subsp. <i>cylindracea</i> var. <i>cylindracea</i> (Vulnerable).</p> <p>Increasing community involvement and interaction in the recovery and protection of the District's threatened flora was a major component in 2007. Media releases, radio interviews, displays at Agricultural shows and field days, production of posters and postal flyers and presentations given to local schools, volunteers, shires and wildflower groups played an important role in increasing threatened flora awareness in the local community.</p> <p>A highlight of the year after much work and effort, and a day thoroughly enjoyed by all, was the planting of 180 plants of <i>Hemigenia ramosissima</i> near Katanning in the translocation of this Critically Endangered species. Invaluable assistance from a small group of dedicated local DEC Rare Flora Volunteers (coming from as far as Frankland and Newdegate), ensured that the day ran smoothly.</p>
List of actions undertaken by Recovery Team (from actions in Recovery Plan)	
KEY ACTIONS	
Action 1	<p>Surveying/monitoring –</p> <p>Monitored 13 populations of <i>Grevillea scapigera</i>.</p> <p>Surveyed 2 populations of <i>Tetratheca aphylla</i> subsp. <i>megacarpa</i> (from WA Herbarium records).</p> <p>Monitored 4 populations of <i>Dryandra ionthocarpa</i> subsp. <i>chrysophoenix</i>. Searched for new populations without success.</p> <p>Monitored 4 populations of <i>Grevillea dryandroides</i> subsp. <i>hirsute</i>.</p> <p>Surveyed <i>Adenanthos pungens</i> subsp. <i>pungens</i> populations at Lake Chinocup and mapped distribution.</p> <p>Monitored 7 <i>Acacia depressa</i> populations and conducted a desktop search to identify additional suitable habitat.</p> <p>Surveyed 3 <i>Rhizanthella gardneri</i> populations and completed a desktop search to identify suitable habitat.</p> <p>Monitored the 4 <i>Caladenia williamsiae</i> subpopulations and set up a new monitoring program. Searched for new populations of <i>Caladenia williamsiae</i> without success.</p> <p>Monitored <i>Caladenia melanema</i> population and set up a new monitoring program.</p> <p>Monitored the <i>Drakaea isolata</i> population and mapped its boundaries.</p> <p>Monitored the <i>Guichenotia seorsiflora</i> population and surveyed for new populations without success. Looked for other areas of suitable habitat for future survey, none</p>

	<p>were located.</p> <p>Monitored and mapped the boundary of the <i>Allocasuarina tortiramula</i> population at Lake King NR.</p> <p>Monitored all 6 <i>Caladenia graniticola</i> populations.</p> <p>Monitored population dynamics in detail at one <i>Caladenia graniticola</i> site. This contributes to eight years of detailed data on the biology of this species.</p> <p>Attempted to relocate two herbarium records of <i>Acacia caesariata</i>, one population no longer in existence, second one located and surveyed.</p> <p>Monitored a known population of <i>Verticordia staminosa</i> subsp. <i>cylindracea</i> var. <i>erecta</i>, searched for new populations on private property without success.</p> <p>Monitored <i>Darwinia carnea</i> population.</p> <p>Monitored <i>Conostylis drummondii</i> populations.</p> <p>Monitoring of <i>Caladenia bryceana</i> subsp. <i>bryceana</i>. Searched nearby area for new plants but none found (surveyed as part of 'inland' SWCC funding).</p> <p>Monitoring of all <i>Rulingia</i> sp. Trigwell Bridge populations and translocated populations. Individual plant measurements recorded (surveyed as part of 'inland' SWCC funding).</p> <p>Surveyed <i>Dryandra aurantia</i> population in Hunt forest block.</p> <p>Survey of <i>Adenanthos pungens</i> subsp. <i>effusus</i>, <i>Diuris micrantha</i> and <i>Calectasia pignattiana</i> populations.</p> <p>Monitored 1 population of <i>Verticordia fimbrilepis</i> subsp. <i>fimbrilepis</i> – none found, but one plant discovered just outside previously known area delineated by rare flora markers.</p> <p>Populations of <i>Banksia cuneata</i>, <i>Grevillea elongata</i>, <i>Banksia oligantha</i>, <i>Lasiopetalum rotundifolium</i>, <i>Gastrolobium lehmannii</i>, <i>Tribonanthes purpurea</i> and <i>Conostylis setigera</i> subsp. <i>dasys</i> monitored.</p> <p><i>Diuris drummondii</i> populations monitored by a volunteer who also surveyed a new population identified in 2006 on private property.</p> <p>Collection of a hybrid Sun Orchid (<i>Thelymitra</i> sp.) with pale pink/mauve flowers for identification.</p>
Action 2	<p>New populations –</p> <p>2 new populations of <i>Caladenia melanema</i> were located, with more areas of suitable habitat located for further survey next year.</p> <p>1 new population of <i>Caladenia graniticola</i> located at McGann Rock.</p> <p>Surveyed for new populations of <i>Adenanthos pungens</i> subsp. <i>pungens</i> at Lake Chinocup NR, one new population found.</p> <p>Located a new population of <i>Eremophila veneta</i> (P4) in a NR.</p> <p>Located a new population of <i>Tribonanthes purpurea</i> in a NR.</p> <p>Located an extension to a population of <i>Eremophila veneta</i> (P4) while checking populations requiring installation, transfer or replacement of markers with Main Roads WA.</p> <p>One new subpopulation of <i>Acacia lanuginophylla</i> located.</p> <p>One new population of <i>Verticordia staminosa</i> subsp. <i>cylindracea</i> var. <i>cylindracea</i> located.</p> <p>One new population of <i>Verticordia fimbrilepis</i> subsp. <i>fimbrilepis</i> located.</p> <p>Three new populations of the Priority species <i>Stylidium lepidum</i> located by chance.</p>
Action 3	Rabbit control –

	<p>Rabbit baiting program conducted for 1 population of <i>Adenanthos pungens</i> subsp. <i>effusus</i>, 4 populations of <i>Banksia cuneata</i>, 1 population of <i>Banksia oligantha</i>, 3 populations of <i>Caladenia graniticola</i>, 1 population of <i>Conostylis setigera</i> subsp. <i>dasys</i>, 2 translocated sites of <i>Darwinia carnea</i>, 2 populations of <i>Dryandra ionthocarpa</i> subsp. <i>chrysophoenix</i>, 1 population of <i>Eremophila subteretifolia</i>, 1 population of <i>Goodenia integerrima</i>, 2 populations of <i>Grevillea scapigera</i>, 4 populations of <i>Verticordia fimbrialepis</i> subsp. <i>fimbrialepis</i> and 1 population of <i>Verticordia staminosa</i> subsp. <i>cylindracea</i> var. <i>cylindracea</i></p>
Action 4	<p>Seed collection –</p> <p><i>Acacia auratiflora</i></p> <p><i>Acacia depressa</i></p> <p><i>Acacia lanei</i> (P1)</p> <p><i>Acacia lanuginophylla</i></p> <p><i>Acacia leptalea</i></p> <p><i>Banksia cuneata</i></p> <p><i>Caladenia graniticola</i></p> <p><i>Caladenia melanema</i></p> <p><i>Caladenia williamsiae</i></p> <p><i>Conostylis rogeri</i></p> <p><i>Conostylis seorsiflora</i> subsp. <i>trichophylla</i></p> <p><i>Goodenia integerrima</i></p> <p><i>Grevillea dryandroides</i> subsp. <i>hirsuta</i></p> <p><i>Hemigenia ramosissima</i></p> <p><i>Lasiopetalum rotundifolium</i></p> <p><i>Tetradlea aphylla</i> subsp. <i>megacarpa</i></p>
Action 5	<p>Fencing –</p> <p>Fixed/maintained rabbit-proof fence at Population 2 of <i>Eremophila subteretifolia</i>.</p> <p>Fenced a <i>Caladenia melanema</i> population (approx.20m x 20m) to protect from grazing and trampling.</p> <p>Two translocation sites for <i>Hemigenia ramosissima</i> fenced.</p>
Action 6	<p>Rare flora markers –</p> <p>Erected at two populations of <i>Tetradlea aphylla</i> subsp. <i>megacarpa</i>.</p> <p>Replaced at 10 populations of <i>Grevillea scapigera</i>.</p> <p>Replaced at one population and erected at one population of <i>Verticordia fimbrialepis</i> subsp. <i>fimbrialepis</i>.</p> <p>Replaced at 2 populations of <i>Acacia depressa</i> and 4 populations of <i>Grevillea dryandroides</i> subsp. <i>hirsuta</i>.</p> <p>Assisted Main Roads WA with the identification of rare flora sites requiring yellow rare flora markers.</p> <p>Erected for one population of <i>Baeckea</i> sp. Narrogin (P2).</p>
Action 7	<p>Community engagement/communication –</p> <p>Rare flora display at 'Woolorama' in Wagin (March).</p> <p>Rare flora display at the Newdegate Field Days in Newdegate (September).</p> <p>Rare flora display at the Katanning Agricultural Show including live specimens of</p>

	<p><i>Hemigenia ramosissima</i> (October).</p> <p>Developed a flora activity and information pack for a teaching staff PD day in Pingelly to promote involvement of schools in flora recovery.</p> <p>Held a Native Flora Identification Training Day in Kulin targeting volunteers and other interested community members with the aim of improving plant recognition and identification skills. Fourteen people attended.</p> <p>Delivered a presentation to various local government representatives on best practice management of rare and threatened flora on roadsides.</p> <p><i>Eremophila verticillata</i> postal flyer developed to increase local community awareness and locate new populations.</p> <p>Commenced development of a poster for <i>Hakea aculeata</i> and a postal flyer for <i>Verticordia staminosa</i> subsp. <i>cylindracea</i> var. <i>erecta</i> and <i>V. staminosa</i> subsp. <i>cylindracea</i> var. <i>cylindracea</i>.</p> <p>Threatened flora signage organised for the Pingaring townsite and the Pingaring Golf Course to raise awareness about threatened flora in the area and to help protect specific populations from recreational damage (<i>Caladenia graniticola</i> and <i>Verticordia staminosa</i> subsp. <i>cylindracea</i> var. <i>cylindracea</i>). Developed in conjunction with the Pingaring Progress Association and other community representatives.</p> <p>Edited <i>Ptilotus fasciculatus</i> poster being developed by another district to raise awareness about the species.</p> <p>Media statement released promoting the recent development of four Interim Recovery Plans for threatened species (initiated by Species and Communities Branch).</p> <p>Radio interview with ABC Albany regarding the above IRPs and species.</p> <p>Media statement released about <i>Hemigenia ramosissima</i> and the translocation being implemented.</p> <p>Radio interview with ABC Wagin regarding the above translocation and <i>Hemigenia ramosissima</i>.</p> <p>Short feature on GWN news regarding the translocation of <i>Hemigenia ramosissima</i>.</p> <p>Article on <i>Rhizanthella gardneri</i> written for the Land for Wildlife publication, 'Western Wildlife' to raise awareness about the species and its habitat.</p> <p>A wildflower walk was conducted through a section of Tarin Rock Nature Reserve with local community members and staff from the Dumbleyung Landcare office, identifying plants of interest. Article featured in the local newspaper about the walk the following week.</p> <p>Began developing guidelines and an information package on rare flora management of Shire-managed land; to be presented to individual Shires with maps and species information specific to each Shire.</p> <p>Gave a talk to Year 5,6,7 class at Dumbleyung Primary School on native plants and how to identify them, to encourage interest in native plants.</p> <p>PowerPoint presentation conducted to the newly formed Katanning Wildflower Society on rare flora in the area and rare flora protection and recovery.</p>
<p>Action 8</p>	<p>Translocations –</p> <p>Site 1 of the <i>Hemigenia ramosissima</i> translocation set up (fenced, reticulated) and planted with the assistance of local volunteers (180 plants, July).</p> <p>Site 2 of the <i>Hemigenia ramosissima</i> translocation fenced ready for planting in 2008.</p> <p>Monitoring of the two <i>Darwinia carnea</i> sites, watering over summer of seedlings and most recent plantings. <i>Grevillea scapigera</i> translocations monitored by the</p>

	Botanic Gardens and Parks Authority.
Action 9	<p>Species review –</p> <p>Summary of information of the district's <i>Tetratheca aphylla</i> subsp. <i>megacarpa</i> populations provided to the Species and Communities Branch for review of the taxon's status.</p>
Action 10	<p>Science & Research –</p> <p>Investigated stem galls on plants of <i>Acacia mutabilis</i> subsp. <i>stipulifera</i> (Priority 1), obtained samples and determined that plants are affected by the Acacia Gall Rust (<i>Uromycladium tepperianum</i>).</p> <p>Organised for genetic analysis of <i>Dryandra ionthocarpa</i> subsp. <i>chrysophoenix</i> by Science Division to determine genetic diversity/clonal variation amongst plants at populations and investigate population dynamics. Work to take place 2008.</p> <p>Began liaison with Science Division researchers to organize <i>Phytophthora cinnamomi</i> susceptibility testing for <i>Grevillea scapigera</i>.</p> <p>Conducted further habitat research, specifically Melaleuca biomass sampling, for <i>Rhizanthella gardneri</i> (CR) with scientists from the Botanic Gardens and Parks Authority (BGPA) and the University of Western Australia (UWA).</p> <p>Investigated plant deaths at Tutanning NR with scientists from Science Division and researchers/dieback interpreters from the Department's Forest Management Branch (<i>Boronia capitata</i> subsp. <i>capitata</i> in vicinity). Samples were taken from some plants to rule out possible infection by <i>Phytophthora cinnamomi</i>.</p>
Action 11	<p>Interim Recovery Plans (IRP) –</p> <p>Edited IRP for <i>Acacia auratiflora</i>, <i>Caladenia melanema</i>, <i>C. williamsiae</i>, <i>Conostylis rogeri</i>, <i>Banksia cuneata</i> and <i>Dryandra ionthocarpa</i> subsp. <i>chrysophoenix</i> and revised IRP for <i>Darwinia carnea</i>.</p>
Action 12	<p>Fire Response Plans –</p> <p>A plan was developed for <i>Rhizanthella gardneri</i> to be distributed to community representatives, local government authorities and fire control officers to raise awareness about the orchids' susceptibility to fire and to assist management of populations in the event of a wildfire.</p>
Criteria for success or failure as described in Recovery Plans or Interim Recovery Plans	