



## RECOVERY TEAM Annual report 2013

### THREATENED SPECIES AND/OR COMMUNITIES RECOVERY TEAM

PROGRAM INFORMATION		
<b>Recovery Team</b>	Great Southern District Threatened Flora and Communities	
<b>Reporting Period</b> Submission date	<b>DATE FROM:</b> 1/01/2013	<b>DATE TO:</b> 31/12/2013
Current membership		
	Member	Representing
<b>Chair</b>	Peter Lacey	Great Southern District, Narrogin
<b>Exec Officer</b>	Marie Edgley	Great Southern District, Narrogin
<b>members</b>	Brett Beecham Greg Durell Andrew Brown Anne Rick Jill Richardson  Val Crowley Judy Williams Anne Cochrane Bob Dixon Wendy Chow Julian Murphy	Wheatbelt Region, Narrogin Great Southern District, Narrogin Species and Communities Branch Lakes District Rare Flora Group, Landholder NRM Groups – Katanning Landcare Zone, Blackwood Basin Group Volunteer/Community Groups Volunteer/Community Groups Science and Conservation Division Botanic Gardens and Parks Authority Species and Communities Branch Local Government Authorities
<b>Dates meetings were held</b>	No meetings held in 2013	
<b>Highlights of achievements</b> for the previous 12 months suitable for publication in <i>WATSNU</i> and contribution to the Department of Parks and Wildlife annual report. Provide 1-2 paragraphs summarising total number of new populations located, surveys completed, list major management actions etc	<p>The Great Southern District and Caring for our Country (CfoC) research project, 'Towards recovery: Reversing the trend of threatened flora habitat senescence', was completed during 2013. All remaining sites were monitored and a final report and field guide have been produced. The project measured the level of senescence in the critical habitat of 28 threatened flora populations. A prioritisation metric, using threatened species attributes and the habitat senescence measures, was developed. This ranks the 28 threatened flora sites to identify those requiring urgent management (introduced fire).</p> <p>On-ground activities commenced in 2013 for the State NRM funded, 'Improving habitat condition and recruitment at a population of the threatened species, <i>Banksia oligantha</i>.' The population is on private property near Toolibin and was historically cleared for agricultural purposes. Weed incursion and grazing by rabbits have been ongoing threats. A rabbit exclusion fence was installed in 2010 and we are now focusing on restoring the habitat.</p> <p>Monitoring, weed management and rehabilitation plans have been developed and various activities are being implemented to increase the density of <i>Banksia oligantha</i> and other native species at the site. The monitoring program will capture trends in the population dynamics of <i>Banksia oligantha</i> and other native species at the site. It will determine if the density of <i>Banksia oligantha</i> increases after weed control activities are implemented. The cover abundance of weeds, bare ground and litter</p>	

	<p>are also being recorded. Seed collection, rabbit baiting, manual and chemical techniques to control veldt grass, chemical techniques to control bridal creeper and landholder liaison were all completed at the site in 2013.</p> <p>The executive officer, with the assistance of local staff monitored 67 existing populations and one new population of threatened and priority flora during 2013.</p> <p>The threats of grazing and habitat destruction by rabbits continue to be managed with rabbits controlled at 28 threatened flora sites. A new assessment and monitoring program has been introduced and a new database has been developed to manage over 50 rabbit and stock exclusion fences at threatened flora sites in the District.</p> <p>Research into the fire response of our threatened flora continues. Post fire monitoring was carried out for three of our threatened flora species in 2013.</p>
<p><b>List of recovery actions coordinated by Recovery Team</b> Detail under the headings below the recovery actions undertaken during the reporting period. Provide separate detail for each species/community against each action. For species/community-specific recovery teams, the generic activity types below can be replaced by the specific recovery actions from the recovery plan where appropriate.</p>	
<p><b>Monitoring and survey</b> of existing and new populations/ occurrences, targeted surveys, critical habitat mapped etc.</p>	<p><b>Monitor/survey existing populations (67 populations):</b>  <i>Acacia leptalea</i> (VU) 5 populations  <i>Adenanthos pungens</i> subsp. <i>effusus</i> (CR) 1 population  <i>Allocasuarina tortiramula</i> (VU) 1 population  <i>Banksia ionthocarpa</i> subsp. <i>chrysophoenix</i> (CR) 4 populations (4 quadrats)  <i>Caladenia graniticola</i> (CR) 6 populations  <i>Conostylis rogeri</i> (VU) 6 populations  <i>Conostylis seorsiflora</i> subsp. <i>trichophylla</i> (EN) 2 populations  <i>Conostylis seorsiflora</i> subsp. Nyabing (P2) 1 population  <i>Darwinia carnea</i> (CR) 1 population (translocated)  <i>Daviesia crassa</i> (P4) 1 population  <i>Eleocharis kiegheryi</i> (VU) 4 populations  <i>Eremophila subteretifolia</i> (CR) 2 populations (8 quadrats)  <i>Grevillea scapigera</i> (CR) 1 population (post-disturbance)  <i>Jacksonia velveta</i> (EN) 7 populations  <i>Lasiopetalum rotundifolium</i> (EN) 5 populations  <i>Leucopogon</i> sp. Ongerup (P1) 1 population  <i>Thelymitra stellata</i> (EN) 2 populations  <i>Thomasia montana</i> (VU) 17 populations</p> <p><b>Survey new populations (1 population):</b>  <i>Tetratheca aphylla</i> subsp. <i>megacarpa</i> (VU) 1 population</p> <p><b>Targeted surveys:</b>  Surveyed and mapped occurrence of <i>Conostylis rogeri</i> (VU) at Hopkins Nature Reserve  Surveyed three sites for suitable habitat for <i>Leucopogon</i> sp. Ongerup (P1)</p>
<p><b>Threat amelioration</b> eg weed control/mapping, fencing/ repairs, fire management disease management, feral/ introduced animal control, installation of roadside markers</p>	<p>Controlled rabbits using 1080 'one-shot' oats at 28 threatened flora sites to mitigate the threats of grazing and habitat destruction for the following species:  <i>Adenanthos pungens</i> subsp. <i>effusus</i> (CR)  <i>Banksia cuneata</i> (EN)  <i>Banksia ionthocarpa</i> subsp. <i>chrysophoenix</i> (CR)  <i>Banksia oligantha</i> (EN)  <i>Calectasia pignattiana</i> (VU)  <i>Conostylis drummondii</i> (EN)  <i>Conostylis setigera</i> subsp. <i>dasys</i> (CR)</p>

	<p><i>Eremophila subteretifolia</i> (CR)  <i>Gastrolobium lehmanii</i> (VU)  <i>Tribonanthes purpurea</i> (VU)  <i>Verticordia fimbriolepis</i> subsp. <i>fimbriolepis</i> (VU)</p> <p>Visited 27 rabbit and stock exclusion fences at threatened flora populations to assess fence condition and collect data. Developed a threatened flora fence database for the District and repaired five fences to exclude rabbits, eliminating the threats of grazing and habitat destruction.</p> <p>Planned the 2014 rabbit control program for threatened flora in the Great Southern District. 17 populations targeted in January and March 2014.</p> <p>Controlled weeds at <i>Banksia oligantha</i> (EN), Population 4, Toolibin.</p> <p>Controlled weeds at three <i>Grevillea scapigera</i> (CR) translocation sites with the Botanic Gardens and Parks Authority (BGPA).</p> <p>Protected threatened flora populations from maintenance operations - liaised with local government authorities, Western Power and Main Roads WA to reduce the impact of operations on <i>Adenanthos pungens</i> subsp. <i>effusus</i> (CR), <i>Banksia cuneata</i> (EN), <i>Acacia depressa</i> (EN) and <i>Verticordia fimbriolepis</i> subsp. <i>fimbriolepis</i> (VU). Assisted with applications for permits 'to take'.</p> <p>Replaced/repositioned rare flora markers as required</p>
<p><b>Conservation and research</b> e.g. fire research, translocation, ex-situ conservation, revegetation/rehabilitation etc</p>	<p>Completed the Great Southern District and Caring for our Country (CfoC) research project, 'Towards recovery: Reversing the trend of threatened flora habitat senescence'. In 2013, all remaining sites were monitored and a final report and field guide have been produced. The project measured the level of senescence in the critical habitat of 28 threatened flora populations. A prioritisation metric, using threatened species attributes and the habitat senescence measures, was developed. This ranks the 28 threatened flora sites to identify those requiring urgent management through introduced fire.</p> <p>Finalised a review of the Tutanning Adaptive Management Plan and updated the associated monitoring program. As part of this project, fire was introduced to manage biodiversity at one site and some monitoring was carried out in conjunction with the habitat senescence project.</p> <p>Implemented a rehabilitation project for the State NRM, 'Improving habitat condition and recruitment at a population of the threatened species <i>Banksia oligantha</i>'. Numerous activities are being implemented and are outlined in the weed management, rehabilitation and monitoring plans that have been developed to deal with a range of threats at the site.</p> <p>Collected <i>Banksia oligantha</i> (EN) seed from each of the four populations with assistance from the Threatened Flora Seed Centre (TFSC). All collected follicles are now stored at the TFSC.</p> <p>Assisted the TFSC to implement their threatened and priority flora seed collection program. 11 species were targeted in the Great Southern District. These species were new to the TFSC, having never been part of the Department's ex-situ conservation program before.</p> <p>Continued to implement an adaptive management project to investigate the effect of disturbance regimes and rabbit grazing on survival and recruitment of <i>Gastrolobium lehmanii</i> (VU).</p> <p>Continued to implement an adaptive management project to stimulate recruitment/promote regeneration and improve seed production and viability at two <i>Hakea aculeata</i> (EN) populations. 13 quadrats were monitored during 2013.</p>

	<p>Monitored the fire response of <i>Calectasia pignattiana</i> (VU) at Population 15 (3 quadrats). Two plants were burnt during a prescribed burn on 06/05/2013.</p> <p>Monitored eight quadrats at 3 populations for <i>Verticordia fimbriolepis</i> subsp. <i>fimbriolepis</i> (VU) recruitment monitoring after smoke water treatment.</p> <p>Monitored two quadrats at Tutanning Nature Reserve for post-fire recruitment of <i>Boronia capitata</i> subsp. <i>capitata</i> (VU).</p> <p>Monitored eight quadrats at two sites for post-fire recruitment of <i>Conostylis drummondii</i> (EN).</p>
<p><b>Liaison, education/provision of advice</b> e.g. promotional material inc newspaper/ magazine articles, liaison with land managers/ owners, input to impact assessment, development of specific management plans, volunteers assisting with surveys/ monitoring etc.</p>	<p>Distributed fridge magnets for <i>Acacia insolita</i> subsp. <i>recurva</i> (CR) to landowners via selected Post Offices in order to increase community awareness and locate new populations.</p> <p>Anne Rick has continued to work with community volunteers throughout the year. Developing and maintaining the interest of the community in flora conservation.</p> <p>Kris Brooks was involved in numerous information, education and training opportunities to present, practice and discuss both the CfoC 'Towards recovery: Reversing the trend of threatened flora habitat senescence' and the Tutanning Adaptive Management Plan and research project. Opportunities included:</p> <ul style="list-style-type: none"> <li>• Field trips to present and discuss the Tutanning Adaptive Management Plan and its application.</li> <li>• A training session for conservation students on the protocol for measuring habitat senescence at Dryandra State Forest.</li> <li>• A training day for Great Southern District staff on data analysis techniques for habitat senescence, fire management and threatened flora projects.</li> <li>• A habitat senescence project presentation to the Central Wheatbelt District Threatened Flora and Communities Recovery Team</li> </ul>
<p><b>Conservation status reviews for taxa/TECs</b> e.g. nominations for additions, deletions or change in status to state threatened or priority lists; changes to EPBC list</p>	<p><i>Acacia insolita</i> subsp. <i>recurva</i> upgraded from EN to CR.</p> <p>Worked with Sarah Barrett (Albany District) and Mike Hislop (WA Herbarium) to complete a nomination for <i>Leucopogon</i> sp. Ongerup (P1) to be listed as threatened.</p>
<p><b>Recovery plans</b> e.g. recovery plans/ IRPs drafted, approved, reviewed or updated</p>	<p>Commenced a recovery plan update and conservation status review for <i>Conostylis seorsiflora</i> subsp. <i>trichophylla</i> (EN).</p>
<p><b>Other actions completed</b></p>	<p>Assisted with Lake Bryde Recovery Catchment vegetation monitoring.</p> <p>Assisted with monitoring for the TEC, Unwooded freshwater wetlands of the southern Wheatbelt of Western Australia, dominated by <i>Muehlenbeckia horrida</i> subsp. <i>abdita</i> and <i>Tecticornia verrucosa</i> across the lake floor (Lake Bryde).</p> <p>Provided expert advice to the WA Biodiversity Audit II on Threatened Flora of the Great Southern District.</p>