



RECOVERY TEAM Annual report

THREATENED SPECIES AND/OR COMMUNITIES RECOVERY TEAM

PROGRAM INFORMATION		
Recovery Team	Albany Threatened Flora	
Reporting Period Submission date 31 March	DATE FROM: 1/1/13	DATE TO: 31/12/13
Current membership		
	Member	Representing
Chair	Sarah Comer	DPAW
Exec Officer	Sarah Barrett	DPAW
Members	Linda Strahan	Albany Wildflower Society
	Libby Sandiford	Albany Wildflower Society
	John Tucker	Community member
	Margaret Pieroni	Community member
	Merle Bennett	Ravensthorpe Wildflower Society
	Andrew Brown	DPAW
	Dave Coates	DPAW
	Anne Cochrane	DPAW
	Judy Lill	Community member
	Rebecca Dillon	DPAW
	Steve Hopper	UWA
Dates meetings were held	9/5/13 & 12/11/13	
Highlights of achievements for the previous 12 months suitable for publication in <i>WATSNU</i> and contribution to DEC annual report. Provide 1-2 paragraphs summarising total number of new populations located, surveys completed, list major management actions etc	<ul style="list-style-type: none"> Fourteen new population / sub-populations of Threatened flora were located. Of particular significance were three new populations of <i>Calectasia cyanea</i> (CR), previously known from some 200 plants in 2 populations. 56 new populations of priority flora were located and nine species removed from the Priority flora list due to survey. 	

	<ul style="list-style-type: none"> Fencing undertaken or commenced in 2013 will be critical for the reproductive success of a number CR taxa and components of the Montane Heath & Thicket TEC. Significant seed collections were made from poorly collected CR taxa such as <i>Latrobea colophona</i> on Bluff Knoll (only 10 mature and 50 juvenile plants). Fencing has enabled heavily grazed plants of this species to grow and set seed. Similarly, fencing has increased the number of plants of <i>Daviesia ovata</i> CR that are now reproductive and increased the number of source individuals for seed collections from six individuals to almost 40, enabling a translocation to be planned.
List of recovery actions coordinated by Recovery Team 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.	
Monitoring and survey of existing and new populations/ occurrences, targeted surveys, critical habitat mapped etc.	<p>New populations and/or sub-populations were located for <i>Calectasia cyanea</i> CR (3 new pops), <i>Grevillea maxwellii</i> CR (1 new pop), <i>Ricinocarpus trichophorus</i> (2 new pops), <i>Darwinia oxylepis</i>, <i>Conostylis misera</i>, <i>Eremophila denticulata</i>, <i>Darwinia nubigena</i>, <i>Sphenotoma drummondii</i> and <i>Xyris exilis</i>.</p> <p>Priority flora: new populations were located for 7x P1, 20x P2, 12x P3 and 17x P4 taxa.</p> <p>Quadrat and demographic monitoring (plant growth & reproduction) of selected Critically Endangered, En and Vu flora was undertaken for species in the phosphite program, where grazing control measures had been implemented or to monitor specific impacts. These species included <i>Banksia montana</i>, <i>Banksia anatona</i>, <i>Isopogon uncinatus</i>, <i>Persoonia micranthera</i>, <i>Darwinia collina</i>, <i>Andersonia pinaster</i>, <i>Lambertia orbifolia</i>, <i>Darwinia witterorum</i>, <i>Lambertia fairallii</i>, <i>Daviesia pseudaphylla</i>, <i>D. glossosema</i>, <i>Calectasia cyanea</i>, <i>Acacia awestoniana</i>, <i>Daviesia ovata</i>, <i>Banksia ionthocarpa</i>, <i>Adenanthos ellipticus</i>, <i>Kunzea similis</i>, <i>Verticordia pityhrops</i>.</p> <p><i>Banksia montana</i>, <i>Banksia anatona</i>, <i>Persoonia micranthera</i>, <i>Darwinia collina</i>, <i>Darwinia witterorum</i>, <i>Lambertia fairallii</i> also occur in the Montane Heath & Thicket TEC or Montane Mallee Thicket TEC.</p> <p>Approximately 150 populations or sub-populations of Threatened flora were monitored (including some repeat visits).</p> <p>PECs: New occurrences of the <i>Melaleuca striata</i> / <i>Banksia</i> spp Coastal heath, <i>Melaleuca spathulata</i> / <i>Melaleuca viminea</i> Swamp heath, Cheynes 1 & Cheynes 2 and <i>Banksia lemanniana</i>/ <i>B. laevigata</i> PECs and Montane Mallee Thicket (NE of Mondurup) were located and the Green Range PEC extended/ mapped.</p>
Threat amelioration eg weed control/mapping, fencing/ repairs, fire management disease management, feral/ introduced animal control, installation of roadside markers	<p>Phytophthora dieback</p> <p>Aerial phosphite was applied to 18 DRF including 12 CR taxa and 2 TECs (Montane Heath & Thicket, Montane Mallee Thicket TECs) in 27 targets in the Stirling Range NP, 260 ha in total.</p> <p>Herbivory</p> <p>5000m² fencing (8 x 25x25m enclosures) was commenced on Bluff Knoll in the Stirling Range to protect <i>Darwinia collina</i>, <i>Leucopogon</i></p>

	<p><i>gnaphalioides</i>, <i>Latrobea obovata</i> and <i>Andersonia axilliflora</i> within the Montane Heath & Thicket TEC.</p> <p>Rabbit baiting was implemented over 25 ha to protect <i>Darwinia collina</i>, <i>Leucopogon gnaphalioides</i>, <i>Latrobea obovata</i>, <i>Persoonia micranthera</i>, <i>Banksia montana</i> and <i>Andersonia axilliflora</i> within the Montane Heath & Thicket TEC.</p> <p><i>Acacia awestoniana</i> - small scale fencing to exclude herbivores</p> <p><i>Banksia ionthocarpa</i>, Kamballup - fencing of individual seedlings and groups of seedlings that germinated spring 2013, fortnightly watering.</p> <p><i>Banksia anatona</i>, SRNP - fencing of individual plants to exclude quokka / rabbit.</p> <p><i>Banksia montana</i> - fencing of individuals plants</p> <p><i>Persoonia micranthera</i> - fencing of individuals plants</p> <p><i>Androcalva perlaria</i> – fence upgrade for translocated population</p> <p><i>Calectasia cyanea</i> fencing of individuals plants and groups of plants to exclude kangaroo.</p> <p>Weeds</p> <p>24 ha of weed control for African Boxthorn completed to protect <i>Eremophila denticulata</i> ssp <i>denticulata</i> along the Phillips River, Ravensthorpe</p> <p>Weed control (Dolichos, Blackberry) to protect <i>Apium</i> sp Porongurup Ra and <i>Ornduffia calthifolia</i> Porongurup Range.</p> <p><i>Lambertia orbifolia</i> ssp <i>orbifolia</i> – weed control - removal of <i>*Acacia pycnantha</i> and <i>*Acacia longifolia</i> over 6 ha to protect <i>Lambertia</i> habitat, Narrikup.</p> <p>Seed predation</p> <p>Pesticide application to translocated <i>Banksia montana</i> plants was continued to reduce fruit predation.</p>
<p>Conservation and research e.g. fire research, translocation, ex-situ conservation, revegetation/rehabilitation etc</p>	<p>Seed collection:</p> <p>Some 30 seed collections were made from approximately 13 Threatened flora species including <i>Banksia montana</i>, <i>B. anatona</i>, <i>B. brownii</i>, <i>Persoonia micranthera</i>, <i>Latrobea colophona</i> (1st collection Bluff Knoll), <i>Lambertia fairallii</i>, <i>Leucopogon gnaphalioides</i>, <i>Sphenotoma drummondii</i>, <i>Daviesia ovata</i>, <i>Daviesia obovata</i>, <i>Isopogon uncinatus</i>, <i>Apium</i> sp Porongurup Ra. Several of the species are members of the in the Montane Heath & Thicket TEC or Montane Mallee Thicket TEC.</p> <p>Restoration:</p> <p>64 <i>Banksia oreophila</i> were planted in 8 enclosures to restore habitat of <i>Andersonia axilliflora</i>, <i>Banksia montana</i>, <i>Darwinia collina</i>, <i>Leucopogon gnaphalioides</i>, <i>Persoonia micranthera</i> and <i>Latrobea colophona</i> over 9 ha within the Montane Heath & Thicket TEC.</p>
<p>Liaison, education/provision of advice e.g. promotional material inc newspaper/ magazine articles, liaison with land managers/ owners, input to</p>	<p>Article in Australian Plant Conservation : Combining science with management: Understanding the seed ecology of 'Pearl-like Androcalva' underpins successful <i>in situ</i> regeneration by fire of this threatened species</p>

<p>impact assessment, development of specific management plans, volunteers assisting with surveys/ monitoring etc.</p>	<p>by Dr Shane Turner, Christine Best and Sarah Barrett.....</p> <p>Volunteers assisted with survey, monitoring and fencing.</p> <p>Liaison with Mining Operations/ Proposal – Ravensthorpe Nickel, Southdowns</p> <p>Input to Albany Regional Vegetation Survey Phase 2 – Conservation Planning Tool.</p> <p>Input to land-use planning issues in Albany District in relation to PECS, Threatened & Priority Flora.</p> <p>Input to State NRM Project Dieback re susceptibility of TECS & PECs to <i>P. cinnamomi</i>.</p> <p>Liaison with landowners in relation to populations of <i>Gastrolobium humile</i>, <i>Grevillea maxwellii</i>, <i>Tetradlea pilata</i>, <i>Hibbertia priceana</i>, <i>Banksia pseudoplumosa</i>, <i>Ricinocarpus trichophorus</i> <i>Leucopogon</i> sp Ongerup</p>
<p>Land use/tenure changes e.g. covenants, acquisitions, changes in land use or listed purpose etc.</p>	<p>A private property near Manypeaks was assessed for its flora conservation values as a potential land acquisition or offset.</p>
<p>Conservation status reviews for taxa/TECs e.g. nominations for additions, deletions or change in status to state threatened or priority lists; changes to EPBC list</p>	<p>The conservation status of <i>Leucopogon</i> sp Ongerup P1 was reviewed, populations surveyed and the species was nominated as Threatened.</p> <p>The conservation status of <i>Banksia verticillata</i> was reviewed due to the increased threat posed by aerial canker that was quantified during monitoring 2010-2013, the species was nominated for upgrading from Vu to CR.</p> <p>Removed from Priority List through survey: <i>Agonis undulata</i> P3, <i>Adenanthos labillardieri</i> P4, <i>Grevillea fistulosa</i> P4, <i>Jacksonia compressa</i> P4 <i>Hakea hookeriana</i> P4, <i>Eucalyptus acies</i> , <i>Stylidium clavatum</i> P3, <i>Acacia empelioclada</i> P4, <i>Melaleuca diosmifolia</i></p> <p>Priority flora additions: <i>Conostephium prolatum</i> P2, <i>Lasiopetalum</i> sp Fitzgerald P2; <i>Petrophile carduacea</i> P2.</p> <p>Input to SCNRM nomination of Kwongkan PEC</p>
<p>Recovery plans e.g. recovery plans/ IRPs drafted, approved, reviewed or updated</p>	<p>The implementation of <i>Andersonia axilliflora</i>, <i>Banksia ionthocarpa</i> & <i>B. brownii</i> IRPs was reviewed as well as the Montane Heath & Thicket TEC IRP.</p>
<p>Other actions completed</p>	<p>Flora Survey of the Coastal catchments and Ranges of the Fitzgerald River National park was completed by Damien Rathbone. This survey resulted in several new populations of Threatened flora (<i>Adenanthos ellipticus</i>, <i>Grevillea infundibularis</i>, <i>Cooperhookeya georgei</i>), numerous new populations of priority flora and located several undescribed species.</p>