Department of Environment and Conservation
Our environment, our future

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: 1/4/12 TO: 30/3/13** **DATE**

Current membership

Member		**Representing**
Chair	Sarah Comer	DEC
Exec Officer	Sarah Barrett	DEC
members	Sue Oborne	Ongerup Wildflower Society
	Linda Strahan	Albany Wildflower Society
	Libby Sandiford	Albany Wildflower Society
	John Tucker	Ravensthorpe Wildflower Society
	Margaret Pieroni	Community member
	Merle Bennett	Ravensthorpe Wildflower Society
	Andrew Brown	DEC
	Dave Coates	DEC
	Anne Cochrane	DEC
	Judy Lill	Community member
	Rebecca Dillon	DEC

Dates meetings were held	2/5/12 & 9/11/12
Highlights of achievements for the previous 12 months suitable	Five new populations of three Critically Endangered taxa were located (*Lambertia orbifolia*

for publication in *WATSNU* and contribution to DEC annual report. Provide 1-2 paragraphs summarising total number of new populations located, surveys completed, list major management actions etc	ssp *orbifolia*, *Daviesia pseudaphylla* and *Drakaea confluens*) as well seven new populations of Endangered and Vulnerable taxa. Forty-three new populations of priority flora taxa were located (2 P1, 14 P2, 11 P3 and 16 P4 taxa). Sixteen priority flora were recommended for downgrading in status. Major surveys of *Grevillea maxwellii, Banksia brownii* and *Banksia ionthocarpa* were completed. A trial of fungicide application to protect *Banksia verticillata* plants severely threatened by aerial canker disease was undertaken. Pesticide application to translocated *Banksia montana* plants was trialled to increase seed production. The annual phosphite program was completed autumn 2012 and targeted 19 DRF including 11 CR taxa in 31 targets in the Stirling Range NP and Albany Coastal area, 339 ha in total. Important first seed collections were made for populations of CR taxa *Persoonia micranthera*, which requires seed bags to be left in situ for a year to allow seed to mature, *Daviesia pseudaphylla* and *Latrobea colophona*. First collections (either for the species or population) were completed also for *Daviesia obovata, Darwinia meeboldii, Lambertia fairallii* and *Daviesia ovata*. Several of these collections have been the culmination of years of phosphite application and /or fencing that has enabled plants to survive, mature and set-seed. A planned burn spring 2012 was implemented to successfully recruit plants of *Androcalvia perlaria* from a sub-population with no above ground plants. Results suggest that the species has a long-lived soil seed bank and is fire responsive with a short- to medium life span. Flowering occurred within six months of the burn. Translocated populations of *Banksia montana* and *B. brownii* were used as recipients for the first invertebrate translocation for species considered to be host-dependent and vulnerable to co-extinction.
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.	Five new populations of CR taxa were located: *Lambertia orbifolia* ssp *orbifolia, Daviesia pseudaphylla* and *Drakaea confluens* (3 populations). New populations of Endangered/Vulnerable taxa were also located: *Adenanthos ellipticus* (Mt Bland), *Coopernookia georgei*, *Thelymitra psammophila* (1st population within SRNP), *Eremophila denticulata* ssp *denticulata, Grevillea infundibularis* and

	Conostylis misera (sub-population). The new populations of *Lambertia orbifolia ssp orbifolia* and *Daviesia pseudaphylla* are highly significant, *D. pseudaphylla* was previously only known from 1 population 43 new populations of priority flora taxa were located (2 P1, 14 P2, 11 P3 and 16 P4 taxa). Considerably more priority flora populations were located as part of the FRNP Improvement Project (FRNP IP) Flora and vegetation survey (D Rathbone). Approximately 90 populations or sub-populations of Threatened flora were monitored. Annual monitoring of Critically Endangered Flora (including quadrat and demographic monitoring), and selected En and Vu flora, was undertaken for species in the phosphite program and where grazing control measures have been implemented. Monitoring of Threatened flora (*Verticordia pityhrops, Kunzea similis, Adenanthos ellipticus*) impacted by the FRNPIP Hamersley Rd upgrade was conducted in Feb 2013. Survival, health and growth within monitoring quadrats were monitored. UWA Conservation Biology students undertook detailed transect monitoring of CR *Grevillea maxwellii* on private property and UCL, which will provide detailed population estimates as well as reproductive and demographic information. UWA data for *Banksia brownii* populations in the Stirling Range National Park and Albany Coastal population was used to provide revised population estimates.
Threat amelioration e.g. weed control/mapping, fencing/ repairs, fire management disease management, feral/ introduced animal control, installation of roadside markers	Aerial phosphite was applied to 19 DRF including 11 CR taxa in 31 targets in the Stirling Range NP and Albany Coastal area, 339 ha in total. Fencing was undertaken for either individual plants, clusters of plants or sub-populations of the CR taxa *Acacia awestoniana, Calectasia cyanea, Daviesia ovata* and *Banksia anatona* Hand baiting of Bluff Knoll, East Bluff and Pyungoorup with 1080 oats was undertaken to protect CR taxa *Banksia montana, Persoonia micranthera, Leucopogon gnaphalioides, Darwinia collina, Latrobea colophona* as well as other members of the Montane Thicket TEC *Acacia longifolia** was removed from private property adjacent to *Calectasia cyanea* (CR) *population* 1. Rare Flora markers were installed for *Calochilus*

	pruinosus (CR), *Gastrolobium humile* and *Eremophila denticulata* ssp *denticulata*.
Conservation and research e.g. fire research, translocation, ex-situ conservation, revegetation/rehabilitation etc	New translocations were implemented for CR taxa *Lambertia fairallii* and *Leucopogon gnaphalioides* and the Endangered taxa *Androcalvia perlaria.* Additional plantings were undertaken for *Banksia montana, B. ionthocarpa* and *B. brownii.* Survey was undertaken for translocation sites for *Grevillea maxwellii* (CR). Selected translocated *Banksia montana* plants were sprayed with the insecticide "Success" (Spinetoram) from August 2012 and / or given systemic Imidacloprid via soil tablet to reduce invertebrate predation of developing flowers/fruits and shoots. Control plants are being monitored also. Initial observations suggest predation has been reduced. The first invertebrate translocations in WA were undertaken by University of Melbourne project staff, translocating the *Banksia montana* mealybug from *in-situ B. montana* to *ex-situ B. montana*. Similarly a plant louse from *in-situ Banksia brownii* was translocated to translocated plants. Both invertebrate species are considered to dependent on their hosts and vulnerable to co-extinction. Seed collections were made for CR taxa *Banksia montana, B. brownii* (Mt Success 1st collection), *Daviesia pseudaphylla* (new population), *Lambertia fairalli, Latrobea colophona* (Bluff Knoll, 1st collection), *Banksia anatona, Leucopogon gnaphalioides*, *Persoonia micranthera* (first collection from Mt Success), *Daviesia ovata, Calectasia cyanea, Daviesia glossosema* and *B. montana* (translocations) and En/Vu taxa: *Daviesia obovata* (1st collection from population) *Sphenotoma drummondii* (1st collection Mondurup) and *Darwinia meeboldii* (1st collection) . Aerial canker monitoring (including temperature and humidity data) continued for *Banksia verticillata* and *Lambertia orbifolia* populations, as part of larger South Coast aerial canker research project undertaken in conjunction with Science Division. A trial of two fungicides (Switch & Rubigen) used alternatively was undertaken at *B. verticillata* population 3, Stoney Hill to investigate whether canker symptoms could be ameliorated. An experimental burn was undertaken for *Androcalvia perlaria* in long unburnt habitat in September 2013 where one plant was known

	historically. Monitoring in 2013 has recorded some 13+ plants with several flowering within 6 months of the fire confirming that the species has a long-lived soil seed bank, is fire responsive with a short- to medium life span.
Liaison, education/provision of advice 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.	A summary of long-term monitoring of the Montane heath and Thicket TEC and associated Threatened flora was provided for a new book to be published on long-term ecological monitoring. Considerable input has been provided on flora and vegetation values for land-use planning in the Albany area as well as for mining issues (Ravensthorpe Nickel Project) and the FRNP Improvement Project. UWA volunteers assisted with an intensive transect based mapping & monitoring of *Banksia ionthocarpa* CR. Two Albany Wildflower Society volunteers (lichen specialists) undertook survey and monitoring for priority lichens.
Land use/tenure changes e.g. covenants, acquisitions, changes in land use or listed purpose etc.	A number of properties were assessed for their flora conservation value as potential land acquisitions or offsets in the Ravensthorpe, South Stirling and Wellstead areas.
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	Three species were proposed for addition to the Priority flora list (FRNP IP); 16 Priority flora taxa were recommended for downgrading including 10 for potential removal from Priority listing. A previously unknown *Allocasuarina* species located in *Grevillea maxwellii* habitat was added as P1. *Commersonia apella* P2 was nominated as Threatened flora (Carole Wilkins)
Recovery plans e.g. recovery plans/ IRPs drafted, approved, reviewed or updated	IRPs for *Acacia awestoniana* and *Leucopogon gnaphalioides* have been updated. *Drakaea confluens* is in the process of being updated. *Calochilus pruinosus* is awaiting regional approval.
Other actions completed	