Albany District Rare Flora Recovery Team Eastern Stirling Range Montane Heath & Thicket Recovery Team

Recovery Team Annual Report

2003

By Sarah Barrett for the South West Threatened Flora and Communities Recovery Team The Albany District Rare Flora Recovery team met twice in 2003 on 11/3/02 and 5/9/03, field trips were incorporated into both meetings. Current membership is listed in Table 1.

Table 1.	
NAME	TITLE
Andrew Brown	Scientific Advisor (Flora), Threatened Species Unit
Dave Coates	Principle Research Scientist, Herbarium, CALM
Sarah Comer (Chair)	Ecologist, CALM, Albany
Sarah Barrett	Threatened Flora Officer
Sue Oborne	Community Representative, Ongerup, WFS
Linda Strahan	Community Representative, Ongerup
Merle Bennett	Community Representative, WFS Ravensthorpe
Barbara Miller	Community Representative, Bremer Bay
Libby Sandiford	Albany Wildflower Society Representative
Anne Cochrane	WA Threatened Flora Seed Centre
Wendy Bradshaw	Bushcare Support Officer
Sylvia Leighton	Land for Wildlife Officer
Ann Burchell	Community Rep Porongorup Herbarium
Elsie Baesjou	Friends of the Stirling Range NP
Lawrie Anderson	Wildlife Office (Flora), CALM Albany
Greg Freebury	CALM Environmental Officer, Albany
Malcom Grant	CALM Environmental Officer Ravensthorpe

The Eastern Stirling Montane TEC Recovery Team met once 6/3/03, this team also coordinates recovery actions for the 'Montane Mallee of the Stirling Range' TEC (Endangered). Team membership is given in Table 2.

Table 2

Name	TITLE
Andrew Brown	Scientific Advisor (Flora), Threatened Species Unit
Sarah Comer (Chair)	Ecologist, CALM, Albany
Sarah Barrett	Threatened Flora Officer
Russell Smith	Phosphite Program Coordinator
Geoff Harnett	RIC SRNP
Dave McNamara	Community Representative, Greenskills
Joan Finlay	Albany Bushwalkers Group
Colin Yates	Plant Ecologist, CALM Science
Greg Freebury	CALM Environmental Officer, Albany
Martin Lloyd	Regional Leader Recreation

Summary of Recovery Actions

Survey and monitoring

One hundred and eight taxa of threatened (44) and priority (64) flora were surveyed or monitored in 2002 (approximately 350 site visits). Forty-two new populations or sub-populations were located of threatened taxa (14 species) and 93 of priority taxa (44 species).

15 CR taxa were monitored once to twice annually (77 site visits). Several new populations of priority and threatened taxa were located by Recovery Team members including a significant new population of *Caladenia bryceana* ssp *bryceana* in September. A survey of remnant vegetation on tree farms (ITC) by L. Sandiford resulted in new populations of threatened and priority flora, in particular *Centrolepis caespitosa*.

Due to survey efforts eight P2 or P3 species were downgraded to P4. These were: Acacia dictyoneura, Actinotus rhomboideus, Calothamnus crassus, Hakea hookeriana, Grevillea fistulosa, Grevillea coccinea ssp lanata, Velleia foliosa and Melaleuca papillosa.

Pleurophascum occidentale, "the Two -Peoples Bay moss" has been found to be widespread and was recommended to P4 Adenanthos *cunninghamii* and *Eucalyptus bennettiae* have been recommended from DRF to P4 based on genetic studies. *Daviesia obovata* and *Dryandra pseudoplumosa* have been formally listed as DRF.

Phosphite application

Phosphite was applied to 150 ha of *Phytophthora cinnamomi*- affected vegetation targeting threatened flora populations many of which were in either the Eastern Stirling Range TEC or Montane Mallee TEC. All of these sites were monitored to assess the effectiveness of phosphite applications. Critically endangered (CR) threatened flora sprayed in autumn 2003 were *Banksia brownii*, *Dryandra anatona*, *Dryandra montana*, *Andersonia axilliflora*, *Daviesia glossosema*, *D. pseudaphylla*, *Leucopogon gnaphalioides* and *Persoonia micranthera*. Other threatened taxa sprayed were *Daviesia obovata*, *Darwinia oxylepis*, *D. collina*, *D. squarrosa*, *Darwinia sp Stirling*, *Lambertia fairallii* and *Sphenotoma drummondii*.

Research studies

A study investigating seedbanks, effects of disturbance, recruitment and seedling survival of *Dryandra ionthocarpa* EN was undertaken (Landscope visa funding).

'Demography and population dynamics of *I. uncinatus*': monitoring quadrats were reassessed autumn and spring.

Eastern Stirling Montane TEC: fire ecology and impact of grazing research project continued in 2002, monitoring was conducted autumn and spring.

Other recovery actions

Seed orchard for *Dryandra montana* (CR): In August 2003 initial plantings were made and all plants caged. In December 2003 plants were monitored and all appeared healthy. Further plantings to be completed June 2004

Draft of bushbook for Stirling Range Flora featuring many endemic and priority taxa has been produced with Anne Cochrane TFSC

Two flora IRPs were written (*Villarsia calthifolia, Centrolepis caespitosa* EN). Additional survey for *C. caespitosa* has located 18 new populations.

Draft IRP for Montane mallee TEC has been written, seven occurrences of this TEC were surveyed and the impact of *P. cinnamomi* assessed; threatened and priority flora surveyed

A fire management strategy for the Stirling Range National Park has been produced. This identifies priority areas (TECs, threatened flora and fauna) for protection from fire and recommends the strategic use of planned fire to protect these areas. Data collection on juvenile period and cone production for key fire sensitive species in montane mallee TEC was commenced.

Communication

- Journal article Australasian Plant Pathology:
- Barrett SR, Shearer BL, Hardy GEStJ (2s003). The efficacy of phosphite applied post-inoculation on the colonisation of Banksia *brownii* stems by *Phytophthora cinnamomi Australasian Plant Pathology* **32**, 1-7
- Rare flora leaflets distributed for *D. confluens* spring 2003
- Participated in TV documentary for Japanese TV on the impact of *P. cinnamomi* on threatened flora in the Stirling Range Nov 2004
- Gave presentation on to CALM graduate recruits on the impact of *P. cinnamomi* on threatened flora and the use to phosphite to protect threatened flora populations
- ABC radio interview on *Dryandra montana* seed orchard and new population of *Caladenia bryceana*.
- Presentation given to Dieback Consultative Committee on the impact of *P. cinnamomi* on threatened flora and TECs August 2003.
- Presentation given to the Stirling Range Fire Advisory Working Group on the impact of fire and P. *cinnamomi* on threatened flora and TECs in the SRNP

<u>Liaison</u>

Ongoing liaison regarding threatened flora issues with Shires, Main Roads WA, Western Power, Fire and Emergency Services.