## **Annual Recovery Team Report February 2003**

Albany District Threatened Flora Management Plan (Project 6520)

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

The Albany District Rare Flora Recovery team met twice in 2002 on 5/3/02 and 29/8/02, current membership is listed in Table 1.

Table 1. NAME

Andrew Brown Scientific Advisor (Flora), Threatened Species Unit
Dave Coates Principle Research Scientist, Herbarium, CALM
Alan Danks Regional Leader Nature Conservation, 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

Melanie Price City of Albany Representative, Environmental Officer

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

Malcom Grant CALM Environmental Officer Ravensthorpe

The Eastern Stirling Montane TEC Recovery Team met once 6/3/02, this team now also plans to co-ordinate recovery actions for the 'Montane Mallee of the Stirling Range' TEC (ranked Endangered). Team membership is given in Table 2.

Table 2 Name TITLE

Andrew Brown Scientific Advisor (Flora), Threatened Species Unit
Alan Danks Regional Leader Nature Conservation 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
Paul Blechynden Environmental Officer CALM Albany

Martin Lloyd Regional Leader Recreation

## **Summary of Recovery Actions**

# Phosphite application

Phosphite was applied to 154 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 2002 were *Banksia brownii*, *Dryandra anatona*, *Dryandra montana*, *Andersonia axilliflora*, *Daviesia glossosema*, *D. pseudaphylla*, *Leucopogon gnaphalioides* and *Persoonia micranthera*. Phosphite was also applied to *D. glossosema* and *D. anatona* spring 2002. Other threatened taxa sprayed were *Daviesia obovata*, *Darwinia oxylepis*, *D. collina*, *D. squarrosa*, *Darwinia sp Stirling*, *Lambertia fairallii* and *Sphenotoma drummondii*.

## Survey and monitoring

154 taxa of threatened (54) and priority (100) flora were surveyed or monitored in 2002 (389 site visits). New populations or sub-populations were located for threatened taxa (25) and priority taxa (97).

16 CR taxa were monitored once to twice annually (104 site visits). Four new populations of CR taxa were located (*Caladenia bryceana* ssp *bryceana* – 2, *Isopogon uncinatus* – 2). Volunteer assistance was integral to survey and monitoring, several new populations of priority and threatened taxa were located by volunteers including Recovery Team members.

Additional survey was conducted for the Montane mallee TEC.

#### Research studies

'Seed-bank dynamics and response to disturbance of *Grevillea maxwellii* (CR)': this project commenced in May 2002, was monitored in August 2002 and October 2002, and was completed February 2003.

'Demography and population dynamics of *I. uncinatus*': monitoring quadrats were reassessed autumn and spring; seed was collected for the TFSC.

'Demography, biology and reproduction of CR taxa' (*Dryandra montana*, *Leucopogon gnaphalioides*, *Persoonia micranthera*, *Andersonia axilliflora*): these taxa were monitored in autumn and spring.

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

Adenanthos cunninghamii and Eucalyptus bennettiae: a genetic study was conducted by CALM Science Division on these putative hybrids.

### Other recovery actions

Seedlings of *Dryandra montana* were caged to protect them from herbivore grazing. There was on-going liaison with Kings Park Botanical Gardens re tissue culture of *D*.

*montana*. Following the recommendations of the recovery team (August 2002), a seed orchard Proposal (Translocation proposal) was developed for *D. montana*.

Fencing of a private property remnant containing *Grevillea maxwellii* was completed in January 2002

Roadside rare flora markers were installed at eight sites.

A land acquisition assessment was conducted for a private property population of *Lambertia orbifolia* ssp *orbifolia*, negotiations to purchase are underway.

A fire management plan is being developed for the Montane TECs (Recovery Team recommendation August 2002).

A rabbit control program was tried autumn 2002 for the eastern Stirling range TEC. GIS mapping of phosphite targets and monitoring sites of both TECs is underway.

### Communication

Radio Interview with Regional ABC April 2002 – 'Recovery of *Dyrandra montana* and the impact of *Phytophthora* on threatened flora'

Presentation on threatened and endemic mountain flora of the south coast – Greater Mt Lindesay area seminar (Greenskills Denmark) June 2002

Interview for 'Greater Mount Lindesay area" book (Greenskills Denmark)

Presentation at 'Science for plant conservation' conference, Trinity College Dublin July 2002 "Use of the fungicide phosphite to protect flora threatened by the plant pathogen *Phytophthora cinnamomi* Rands in southern Western Australia"

Paper written for the above conference

Produced folder "Threatened flora of the Fitzgerald River National Park' for Park Rangers.

Journal article Australian Journal of Botany:

Barrett SR, Shearer BL, Hardy GEStJ (2002). Root and shoot development in *Corymbia calophylla* and *Banksia brownii* after the application of the fungicide phosphite.

Australian Journal of Botany **50**, 155-161

Article on rare orchids in Albany Wildflower Society newsletter Sept 2002

Rare flora leaflets distributed for *C. bryceana* ssp *bryceana* and *D. confluens* spring 2002 Participated in TV documentary "Totally Wild" promoting flora of the Albany area Presentation on the impact of *P. cinnamomi* on threatened flora at the Mt Barker Wildflower festival Oct 2002

#### Liaison

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