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# **Southern Forest Region Threatened Flora Management Plan**

## **Annual Report 1998**

by  
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for the  
**Southern Forest Region Threatened Flora Recovery Team**

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## SUMMARY

The Southern Forest Region Threatened Flora Recovery Team, volunteers and CALM staff, met once in mid 1998.

The year saw progress on many fronts with the status of many taxa becoming clearer through the contributions of volunteers and CALM staff. Progress on research into some taxa progressing well. Taxonomic work into others still progressing. A comprehensive GIS database is being constructed and photos scanned into a computer environment.

The Recovery Plan should be final drafted in the 1998/1999 financial year

## IMPLEMENTATION OF RECOVERY ACTIONS

### *Caladenia winfieldii* ms - Critically Endangered DRF and subject to IRP action.

Ian Wilson and Brian Whitred, with Andrew Batty (Kings Park and Botanic Garden (KPBG)) hand pollinated within the 2 populations and took seed and new mycorrhizal material to KPBG for cryogenic storage and *ex situ* propagation research. Initial germination and culture work has commenced and will be ongoing over 3 years.

Fencing has proved effective; about 100 plants now recorded inside the fenced area, many outside the *Xanthorrhoea* skirts now flowering. The Population not fenced (Pop 2) showed signs of grazing with some hand pollinated plants losing their flower stems possibly to kangaroos.

Population records are being maintained at the individual member level (each plant individually numbered, tagged, mapped and monitored). Data will be moved into a GIS database environment later this year.

Further searches for new populations of the species were conducted on the first Saturday in February in targeted areas by members of the Native Orchid Group after a group visit to the populations to see and photograph the species. The day was organized by Bill Jackson (volunteer), Rod Annear, Jim Shugg and Ian Wilson and proved highly successful, though no new populations were found.

### *Banksia verticillata* - DRF

Leonie Monks (WA Herbarium) is working with Walpole District establishing fire response plots in a senescing population in the Woolbales. If burns are approved, data gathered should complete work commenced by her during her Honours year on the species and its regeneration and hopefully start regenerating this population.

### *Mezellia trifida* - DRF

A couple of new populations of this species have been located by Walpole District staff and volunteers in the last 12 months and are being monitored.

### *Reedia spathaceae* – P4

Katie Tauss commenced her Masters last year studying the ecology and reproductive process of this species and its associated communities. As part of this an aerial survey for new populations was conducted in the Walpole / Pemberton area. A couple of totally new populations were located and others known extent increased with a few new sub populations recorded.

### *Astartea* sp. Mt Johnston (P3) & *Chamelaucium forrestii* subsp. *forrestii* (P3)

Ted Middleton (volunteer and occasional CALM employee) has searched most granite outcrops within and near the known range of *Astartea* sp. Mt Johnston and *Chamelaucium forrestii* subsp. *forrestii*.

With *Astartea* sp. Mt Johnston is known from less than a dozen populations, 2 of these apparently affected by *Phytophthora cinnamomi* (positive returns on recently dead individuals in populations showing signs of rapid decline), consideration will be given to recommending listing as DRF next year.

*C. forrestii* subsp. *forrestii* also known from few populations doesn't show signs of being under immediate threat, but may likewise be considered given its rarity.

#### **Other Taxa with new populations located during 1998**

While not a comprehensive list, other taxa located during survey work include: *Wurmbea* sp Cranbrook (District Survey work); *Drosera binata* (with *Reedia* work); *Schizaea rupestris* (*Reedia* work); *Euphrasia scabra* (L.Muir SAP survey); *Eryngium* sp L.Muir (L.Muir SAP survey); *Apodasima ceramophila* ms (L.Muir SAP survey); *Phyllangium palustre* (L.Muir SAP survey); *Lilaeopsis polyantha* (L.Muir SAP survey); *Schoenus natans* (L.Muir SAP survey); *Anthocercis sylvicola* (District Bibbulmun Track search); *Chamaexeros longicaulis* (District Bibbulmun Track search); *Alexgeorgea ganopoda* (District Bibbulmun Track search); *Austrofestuca pubinervis* (District Bibbulmun Track search); *Lambertia rariflora* subsp. *lutea* (volunteer searches); *Drepanocladus aduncus* and *D. fluitans* (volunteer searches and Regional survey).

#### **Additions to Priority list recommended and DRF recommendations**

Two taxa have been referred to the TSCC for consideration for addition to the DRF list:

*Verticordia apecta* has not been seen now for 6 years and has been extensively surveyed for by Brenda Hammersley (volunteer) and others.

*Rhacocarpus webbianus* (one of WA's 4 endemic mosses), despite 6 years of survey work, has two known populations, one a severely degraded and threatened population on Mt. Chudalup and one other a very small population north of Walpole.

Four taxa were added to the Priority list as a result of local work: *Hemigenia microphylla*, *Caladenia starteorum*, *Gastrolobium* sp. East Peak, *Tetratheca* sp Kent River with a number added by others as a result of their work.

It is anticipated some major changes will be recommended in 1999 resulting from work over many years.

#### **New Taxa located during survey work**

##### *Grevillea* sp. nov

A *Grevillea* with affinities for *G. ripicolla* (P4) found by Ted Middleton a couple of years ago will probably be described as a new taxon.

Searches for it have failed to find a second population so the taxon will be recommended for listing shortly.

##### *Gastrolobium* sp. East Peak

In the process of searching for the *Astartea* and *Chamelaucium* Ted Middleton also found a new granite *Gastrolobium*.

Known from two populations, this now added to the Priority list (P1).

##### *Lomandra* sp. nov

A new *Lomandra* was found by Terry Macfarlane during survey work in the Perup area.

This will be further searched for later in 1999 and possibly recommended for listing.

### **Research**

Several taxa are subject to current research involving outside bodies and individuals:  
*C. winfieldii* ms (above), *Banksia verticillata* (above), and *Reedia spathaceae* (above).

Others include:

*Laxmannia* sp Mt. Lindesay (*Laxmannia* study including DNA work in CALM, University of Western Australia and James Cook University);

*Hydatella sessilis* ms with B. Briggs (Sydney) studies into *Hydatellaceae* and *Restionaceae*; and various taxa with taxonomic work ongoing, some locally.

### **Caladenia day out**

As well as the *C. winfieldii* day out, Orchid Society members and CALM staff also spent a Saturday in October searching for *C. luteola* ms (P2), *C. erythrochila* (P2) and *C. stართვეorum* (now P2) in the Perup Muir area. Inspections of known populations of *C. harringtoniae* (DRF) and *C. christineae* (DRF) were done on the same day.

### **Mt Lindesay Fire – Woylie Translocations**

Many populations of priority flora were burnt in the December 1997 fire. Recovery will be monitored. Several seed obligate taxa were just starting to reproduce following the 1991 burn and will require special attention.

Release of Woylies into the area may well impact on several of these taxa and their impacts will also be monitored.

### **District monitoring and works associated with the draft Recovery Plan**

The 3 districts have continued monitoring and survey programs, both in house and working with volunteers.

Limited Phosphite work has been done in Walpole in susceptible communities containing rare and priority taxa, and some vulnerable taxa have been specifically targeted, eg *Lambertia rariflora* subsp. *lutea*, a number of *Andersonias* and the *Astartea* sp Mt Johnston.

### **Recovery Plan**

Work ongoing, but intermittent and subject to other commitments. Still targeting the end of the financial year for completing draft and GIS databasing.

Photographs being accumulated, to be scanned for computer access, printing and integration into a CD ROM version of the "final" document for use in districts.

To assist with training a number of priority species and other plants are being established in the RHQ gardens in Manjimup.