SOUTHERN FOREST REGION
THREATENED FLORA RECOVERY TEAM

ANNUAL REPORT

1994

by

R.W. Hearn

for

The Southern Forest Region Threatened Flora Recovery Team

Property and copyright of this document is vested jointly in the Director, National Parks and Wildlife Service, Australian Nature Conservation Agency, and the Executive Director, WA Department of Conservation and Land Management

The Commonwealth disclaims responsibility for the views expressed

Department of Conservation and Land Management
Southern Forest Region
Brain St, Manjimup

SUMMARY

The Southern Forests Threatened Flora Recovery Team has been established. Work commenced on the review of the status of about 100 taxa in the Region. File information and Herbarium records have been collated for most taxa of interest and field work (relocation, revisit, collection and documentation) has commenced, with many new populations located for several of the taxa. Taxonomic problems are being addressed for a number of taxa, and, at least two new (apparently rare) species discovered; formal descriptions are currently being prepared for both.

INTRODUCTION

As part of ESP Project 440, two Recovery Teams have been formed to prepare Threatened Flora Management Plans for the Southern and Central Forest Regions, CALM WA.

This report deals with the activities of the team preparing the Management plan for the Southern Forest Region (SFR).

Team Membership

Current Team membership is:

Roger Hearn (Chair)	CALM Southern Forest Region Program Leader Nature Conservation.
Andrew Brown	CALM WATSCU/Science and Information, Woodvale.
Terry Macfarlane	CALM Science and Information, Taxonomist, Manjimup.
Tony Annels	CALM Science and Information Division, Manjimup.
Brenda Hammersley	Denmark community, Rare Flora volunteer.
Bill Jackson	Walpole community, Rare Flora volunteer.
Betty Carpenter	Rocky Gully Community, Rare Flora volunteer.
Murray Carter	CALM District Manager, Katanning.
Ian Wilson	CALM Manjimup District.
Simon Watkins	CALM Walpole District.
Rod Annear	CALM Pemberton District.
Brendan Edgar	ANCA.

The team met 4 times during the year.

Progress to 11/1/95

The species as identified at 11/4/94 consisted of:

Eighty three taxa on CALM's *Declared Rare and Priority Flora List* as Declared Rare Flora, Presumed Extinct, and Priorities 1, 2 and 3 were identified as occurring in the SFR as follows:

19 Declared Rare Flora, 1 endemic to the Region;
1 presumed extinct, endemic;
9 priority 1 taxa, 4 endemic;
27 priority 2 taxa, 8 endemic; and
27 priority 3 taxa, 3 endemic.

A further 11 possibly undescribed taxon were identified for further investigation. More are anticipated.

Changes to the list during the year saw one of the DRF dropped to P4, three priority species dropped, and 4 undescribed taxa added to the list.

Other DRF and priority species not recorded for the region at 11/4/94 have also been located or are considered to be possibilities and subsequently have been added to the review. Likewise a number of species not yet on any lists. The species under review now consist of:

97 taxa on CALM's List as DRF, Extinct, and Priorities 1, 2 and 3;

21 DRF; 2 presumed extinct; 11 priority 1; 35 priority 2, and 28 priority 3 taxa.

12 currently unlisted taxa are now included in the investigation.

See appendix for a current list of species under investigation

Fieldwork

Extensive field work has been possible, with considerable input from volunteer members of the recovery team.

Of the 286 records and references (many vague) of collections and possible populations identified at 11/4/94, 155 have been visited/relocated since May. Work is ongoing.

Many new populations have been located and collections made. Of note in this regard are:

Baeckea arbuscula - located extensively across the south eastern parts of the Region in swamps subject to extended periods of inundation, often common in areas of man made disturbance;

Amperea simulans - a common but poorly collected species, very easily overlooked, that occurs over a wide range of landforms;

Gonocarpus simplex - again an apparently common but easily overlooked species within it's range;

Alexgeorgea ganopoda - a half dozen new populations located, all very large;

Hemigenia rigida - a half dozen new populations located, the species appearing to thrive on disturbance (man made and erosional) and removal of competition.

Other taxa are more elusive: attempts to relocate reported and/or collected populations of *Caladenia dorrienii*, *Diuris micrantha*, *Microtis globula*, *Caladenia evanescens*, *Calothamnus pallidifolius*, *Cryptandra arbutiflora* var *pygmaea*, *Dampiera orchardii*, *Euphrasia scabra*, *Gonocarpus trichostachyus*, *Leucopogon interruptus*, *Andersonia setifolia*, *Dicrastylis glauca*, *Lepidium pseudotasmanicum*, and *Platasace haplosciadia* have failed todate. Further work will be done on these taxa over the next 12 months.

Taxonomic Issues

Several taxonomic problems exist and are being addressed.

Andersonia: the Team has established contact with Kristina Lemson at UWA and has been carrying out field work with her to help resolve problems with a number of groups/taxa in the region, several of which will probably be placed on threatened lists during the coming year.

Cyperaceae: a visit by Karen Wilson (Sydney) recently helped clarify problems with a number of Schoenuses and an undescribed Baumea and undescribed Lepidiosperma. Further searches for and collections will be made for each of these taxa.

Restionaceae: a recent visit to Sydney by Terry Macfarlane established contact with Barbara Briggs and the team working on the family for the *Flora of Australia*. Identification and taxonomic problems will be partly resolved by duplicate voucher specimens being sent to Sydney together with other material needed to complete descriptions for the Flora.

Tetratheca elliptica: a couple of possible populations of this presumed extinct species have been located on the upper parts of the Bow River catchment. However a minor discrepancy in the placentation of flowers from these populations and the published description needs resolving. A loan request will put to Sydney shortly seeking to borrow the type specimens to investigate this further.

Hemigenia: problems of confused identification of *H.podalyrina* (pressed herbarium specimens are easily confused with *H.incana*, and some have been variously id'ed as *H.canescens* and *H.sericea*!) are being addressed, and, two apparently undescribed species in the region are being investigated as to whether they are in fact the presumed extinct *H.obtusa* and priority 2 species *H.glabrescens*. Another *Hemigenia* (again possibly different) on Mount Lindesay needs collecting and investigating.

Mitrasacme sp. "Southwest": a fresh collection (new population) made, and subject to detailed measurement and taxanomic assesment. These forwarded to Darwin for inclusion in the review of this group.

Hydatella sp. Perup: a new species located during the project, currently being described by Dr. T.Macfarlane. Despite searches of other likely habitat in the region only the single population is known.

Wurmbea sp. Frankland: as for the *Hydatella*.

Schizaea: some taxanomic questions on three collections to resolve, one or more possibly affecting the project.

Ongoing Work

Field work will be ongoing with a focus on further attempts to locate reputed populations missed todate, and opportunistic and planned searches for new populations, mainly for taxa most at risk.

Report writing will be ongoing.

Priority 3

Andersonia setifolia
Boronia virgata
Calytrix pulchella
Chamelaucium forrestii
* Chorizema reticulatum
Dicrastylis glauca
Drosera enodes
Eriochilus pulchellus ms
Eucalyptus brevistylis
Gastrolobium brownii
Gnaphalium gymnocephalum
Grevillea manglesioides subsp. papillosa (G papillosa)
Hemigenia podalyrina
Jansonia formosa
Lepidium pseudotasmanicum
Leucopogon gilbertii
Lomandra ordii
Loxocarya sp Rosa Brook (Pseudoloxocarya glaucesens)
Melaleuca diosmifolia
Microtis media subsp. quadrata
Platysace haplosciadia
Pultenaea pinifolia
Schoenus multiglumis
Senecio gilbertii
* Sphenatoma drummondii
* Sphenotoma parviflorum
Thelymitra jacksonii
Thysanotus isantherus

Currently not listed

Agonis flexuosa subsp. SCH
Andersonia aff. auriculata
Andersonia aff. setifolia
Andersonia sp Perup (A.annelii ms ?)
Anthocercis sp. Walpole
* Billardiera sp Walpole (ARA 277)
* Chamelaucium floriferum ms (both subsp)
Eucalyptus virginae ms
* Hydatella sp Perup
* Juncus meianthus ms
* Leptocarpus crassipes
* Wurmbea sp Frankland NP (TDM ???)

Taxa no longer being reviewed: these were the included in this project at its inception

Acacia luteola
Grevillea cirsiifolia
Grevillea depauperata
Trymalium villosum

APPENDIX

Taxa the Subject of the Project: * denotes added since 11/4/94

Declared Rare

Asplenium obtusatum
Baeckea arbuscula
Banksia goodii
Banksia verticillata
Caladenia christineae ms (Hopper 3521)
Caladenia dorrienii
Caladenia harringtoniae ms (Hopper 3553)
Caladenia winfieldii ms (Hopper 6305)
* Conostylis misera
Corybas limpidus
Diuris drummondii
Diuris micrantha
Drakaea micrantha ms (Hopper 3566)
Epiblema grandiflorum var.cyanea ms
* Hemiandra rutilans
Kennedia glabrata
Lambertia orbifolia
Laxmannia jamesii
Microtis globula
* Verticordia carinata
Verticordia fimbrilepis subsp. australis

Presumed Extinct

* Hemigenia obtusa
Tetratheca elliptica

Priority 1

Amperea simulans
Caladenia evanescens
Calothamnus pallidifolius
Cryptandra arbutiflora var pygmaea ms
Eriochilus scaber subsp. orbifolia
Gonocarpus simplex
Pterostylis turfosa
Restio jacksonii
Spyridium riparium ms
Stylidium rhipidium
Verticordia endlicheriana var. angustifolia

Priority 2

Alexgeorgea ganopoda
* Amperea micrantha
Amperea protensa
Andersonia auriculata
Andersonia sp. Mt Lindesay
Banksia occidentalis subsp. formosa
Borya longiscapa
Caladenia abbreviata ms
Chamaexeros longicaulis ms
* Cryptandra congesta ms
Dampiera orchardii
Drosera binata
* Diuris heberlei
Euphrasia scabra
Gonocarpus trichostachyus
Grevillea fuscolutea
* Hemigenia glabrescens
Hemigenia rigida
Leptocarpus ceramophilus ms
Leucopogon interruptus
* Leucopogon lasiophyllus
Leucopogon polystachyus
* Leucopogon tamariscinus
* Lysinema lasianthum
Melaleuca ringens
Mitrasacme sp. South west (Kieghery 343)
Platysace filiformis
Restio cracens ms
Rhacocarpus webbianus
* Schizaea sp Lake Williams
Schoenus acuminatus
Sollya drummondii
Thomasia brachystachys
Thomasia quercifolia
Verticordia apecta