

INTERIM RECOVERY PLAN NO 1

formerly
Interim Wildlife Management Guidelines

for the

WYALKATCHEM FOXGLOVE
(Pityrodia scabra)



prepared by

Ken Atkins

INTERIM WILDLIFE MANAGEMENT GUIDELINES

PITYRODIA SCABRA

These Interim Wildlife Management Guidelines have been prepared for the recovery of the declared rare species *Pityrodia scabra*, given its critically endangered status and the lack of detailed information for the preparation of a Wildlife Management Program.

RECOVERY TEAM

A recovery team composing the following personnel has been established to prepare these guidelines, oversee the implementation of recommended actions, and report on implementation to the Director of Nature Conservation, the Endangered Flora Consultative Committee, and the Director of Kings Park and Botanic Garden.

Dr K Atkins	Senior Botanist, Wildlife Branch, CALM (Chairman)
Dr D Coates	Senior Research Scientist, Science and Information Division, CALM
Dr K Dixon	Principal Research Botanist, Kings Park and Botanic Garden
Mr M Fitzgerald	District Manager, Merredin District, CALM

INTRODUCTION

Pityrodia scabra is a shrub about 1m tall in the family Chloanthaceae. It has white flowers arranged in sessile verticillate cymes in the upper leaf axils. The leaves are sessile, in whorls or three, being somewhat viscid, coarsely tomentose, becoming scabrous above and ferruginous underneath.

Endemic to Western Australia, *Pityrodia scabra* has only been recorded from near Cowcowing in the Shire of Wyalkatchem, in the central wheatbelt. The species was first collected in 1959, and was formally described in 1967.

In 1982 the species was included in Departmental records as being poorly known, with initial attention being given to the location of further Herbarium records. In 1987 action was recommended to manage the only known population, on a roadside locality, with only 11 plants that were suffering from stress during the summer months. Six of the plants were found scattered for 450m along the side of the Koorda - Wyalkatchem Road. Five were in a clump covering about 2 sq. metres, in an area that had been excavated for railway ballast, which was an inhospitable habitat being cleared of vegetation and with a clayey substrate. These sites are both on road reserve under the control of Main Roads WA, which has installed roadside markers.

In 1989 two plants were killed by roadside herbicide spraying, one from stress in the excavation area, and 3 were not found, thus only 5 plants were remaining - one in good condition on the edge of the road under a mallee, and four in the excavation area.

In 1990 a new plant was found in adjoining private bush, which was then fenced off under a fencing agreement with CALM. The landowner has indicated that he is willing to sell the area of bushland to CALM.

The species was declared as rare flora on 1 June 1990.

By 1991 all the plants in the excavation area had died, leaving a total population of two plants, one on the road verge, and one in the private bushland. After the summer of 1991/92 only the plant growing in the bush area was still alive.

In 1991 Kings Park successfully propagated the species after some difficulty, but this was only as 5 grafted cuttings from material collected on 18 December 1990. In 1992 several self rooting cuttings were established, but these were all from a single parent source, which has been found to be self-sterile.

In 1992 a new plant was found in the general area of the known population, on the railway reserve. Two plants are thus currently known to exist for this species.

AIMS

1. Maintain *Pityrodia scabra* in the wild by the maintenance of the existing population and/or the establishment of further plants in natural ecosystems.
2. Ensure that the genetic resource of *Pityrodia scabra* is preserved should the species become extinct in the wild.

MANAGEMENT GUIDELINES

1 Location of New Populations

- 1.1 Further survey of suitable habitat in the region for new population locations, particularly within remnant vegetation on private property.

Action: M Fitzgerald, K Atkins

- 1.2 Advertise locally to raise public awareness and encourage the reporting of any further populations.

Action: M Fitzgerald

2. Management of Existing Population

- 2.1 Liaise with Main Roads, Westrail, the Shire of Wyalkatchem and the private landowner involved, to ensure the site is not accidentally disturbed.

Action: M Fitzgerald

- 2.2 Bi-annual inspections of the site for natural regeneration, weed competition and rabbit threat in autumn and spring each year.

Action: M Fitzgerald

- 2.3 Where required, control weeds and control/exclude rabbits and stock.

Action: M Fitzgerald

- 2.4 Scarify the site where plants previously existed to try and stimulate regeneration. Inspect the scarified area over a two year period to assess regeneration. Treat with selective herbicide where weed competition is evident.

Action: M Fitzgerald

- 2.5 Monitor flowering and seed production on remaining plants.

Action: M Fitzgerald

3 Preservation of Genetic Resource

3.1 Collect propagating material from existing plants.

Action: K Dixon

3.2 Cryostore material.

Action: K Dixon

3.3 Develop propagation methods to provide revegetation stock (or seed supply if a viable option) for possible re-establishment of the species in the wild and/or horticulture.

Action: K Dixon

4 Establish New Populations in the Wild

4.1 Identify recovery sites for the establishment of new populations.

Action: M Fitzgerald

4.2 Develop procedure of establishment of new population and obtain approval of any establishment site from the Director of Nature Conservation.

Action: K Atkins

4.3 Develop revegetation stock.

Action: K Dixon

4.4 Establish new populations after developing procedures and obtaining necessary approvals.

Action: M Fitzgerald, D Coates

TERM OF THESE GUIDELINES

Until 30 June 1995.

RESEARCH REQUIREMENTS

Development of propagation and establishment procedures by CALM Science and Information Division and Kings Park and Botanic Garden.

REPORTING PROCEDURE

The Recovery Team will meet at least once per year. An annual implementation status report will be prepared for the Director of Nature Conservation and the Director of Kings Park and Botanic Garden by 30 June each year, and will also be presented to the Endangered Flora Consultative Committee. Implementation status reports will include details of actions taken to implement these Interim Wildlife Management Guidelines, and in particular will identify any resource constraints, or other problems affecting the implementation of management actions. Furthermore, any problems requiring urgent attention will be reported to the Director of Nature Conservation promptly.

BUDGET

MANAGEMENT ACTION	CALM FUNDS		OTHER FUNDS	
	SALARIES	OTHERS	SALARIES	OTHER
1.1 1992/93	-	-	5,000*	
1993/94	150	50		
1.2 1992/93	100	400		
1993/94	-	200		
2.1 1992/93	150	50		
1993/94	150	50		
2.2 1992/93	150	50		
1993/94	150	50		
2.3 1992/93	150	150		
1993/94	150	150		
2.4 1992/93	100	900		
1993/94	150	50		
2.5 1992/93	800	200		
1993/94	400	100		
3.1 1992/93			250**	
1993/94			-	
3.2 1992/93			3,500**	
1993/94			500**	
3.3 1992/93			1000**	
1993/94			-	
4.1 1992/93	1,500	500		
1993/94	-	-		
4.2 1992/93	500			
1993/94	-			
4.3 1992/93			250**	250**
1993/94			250**	250**
4.4 1992/93	2,500	500		
1993/94	800	200		
TOTAL 1992/93	5,950	2,750	10,000	250
1993/94	1,950	850	750	250

* ANPWS

** Kings Park and Botanic Garden

REFERENCES

George, A.S. (1967) Journal Royal Society of Western Australia. 50 (4), 103.

Munir, A.A. (1979) Revision of *Pityrodia*. J. Adel. Bot. Gardn. 2(1).

Signed by the members of the Recovery Team as agreement to the management strategies, and their implementation:

Dr K Atkins	Date
Dr D Coates	Date
Dr K Dixon	Date
Mr M Fitzgerald	Date

Endorsed by:

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 Mr Keiran McNamara
 Director of Nature Conservation

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 Dr Jim Armstrong
 Director of Science and Information

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 Mr Roger Underwood
 General Manager

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 Dr Steve Hopper
 Director, Kings Park and Botanic Garden