WYALCATCHEM FOXGLOVE RECOVERY TEAM

ANNUAL REPORT

1994

by

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for

The Wyalcatchem Foxglove Recovery Team

Department of Conservation and Land Management
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SUMMARY

The following major actions were undertaken during 1994 as part of the implementation of the *Pityrodia scabra* Interim Management Guidelines:

- Interim Wildlife Management Guidelines were approved;
- Kings Park and Botanic Garden staff smoke-treated three plots where plants were previously recorded, to try and stimulate seed germination. Monitoring of the plots during the year failed to locate any *Pityrodia* seedlings;
- site inspection of the road verge scarified by Main Roads failed to locate any seedlings;
- a new, young plant was found in the vicinity of one of the other plants. This brings the current known number of wild plants to three. Propagation material was collected from this plant by King Park staff, and has been used to generate further breeding stock;
- monitoring of existing plants revealed that one of the plants showed signs of over-maturity and there was some doubt that it would survive the following summer;
- nature reserve 22176, 14 km from the known population, was inspected and found to contain suitable habitat for the establishment of *Pityrodia scabra*. A report was prepared recommending that the purpose of this reserve be amended to permit the establishment and management of a population of this species. The reserve purpose was amended to Conservation and Site for Re-establishing Native Plant Species;
- funding applications were prepared for the establishment/enhancement of new populations of the species. Funds were obtained from the BankWest Landscope Conservation Visa Card for recovery work; and
- Kings Park and Botanic Garden have received funding to produce 50 plants for establishment in the wild at the existing site, and at reserve 22176. It is anticipated that planting will be able to occur during the winter of 1995.

INTRODUCTION

This Report covers in detail the period since the last report dated 4 July 1994, which was produced on a financial year basis.

In summary, the significant actions that were covered by the previous report and which occurred in the 1994 calendar year, were:

- approval of Interim Management Guidelines in April 1994;
- Kings Park and Botanic Gardens staff smoke-treated three plots where plants were previously recorded on 28 April, to try and stimulate seed germination;
- site inspection of the Main Roads scarification and Kings Park smoked sites for seedlings on 21 June;
- monitoring of existing plants on 21 June revealed that one of the plants showed signs of over-maturity and there was some doubt that it would survive the following summer;
- nature reserve 22176 was inspected on 21 June and found to contain suitable habitat for the establishment of *Pityrodia scabra*. A report was prepared recommending that the purpose of this reserve be amended to permit the establishment and management of a population of this species; and
- funding applications were prepared for the establishment/enhancement of new populations of the species.

THE RECOVERY TEAM

The *Pityrodia scabra* Recovery Team is:

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

The Recovery Team did not meet formally during the year, but the Chairman met separately with the members to discuss various aspects of the Interim Wildlife Management Guidelines, including an on-site inspection with Mr Fitzgerald on 21 June 1994.

STATUS AND FUNDING OF INTERIM WILDLIFE MANAGEMENT GUIDELINES

The Interim Wildlife Management Guidelines were approved by the Director of Nature Conservation in April 1994. Funding for Recovery Actions has come from CALM, Kings Park and Botanic Garden and from a grant from proceeds from the BankWest *Landscope* Conservation Visa Card.

RECOVERY ACTIONS

1. LOCATION OF NEW POPULATIONS

No specific surveys for new populations have been undertaken since 21 June 1994. Claire Welbon has, however, been appointed on contract to implement the Merredin District Threatened Flora Management Plan and is planning to undertake surveys of private property in the vicinity of the known population during 1995.

On 24 August 1994, Andrew Brown, Mike Fitzgerald, Claire Welbon and Elsa Dexter (ANCA) inspected the population and Andrew discovered a third plant within the private property fenced area. This plant was estimated to be only a few years old. The total number of known plants was thus increased to three.

2. MANAGEMENT OF EXISTING POPULATIONS

The existing plants were monitored on 24 August and 8 September 1994. The plants were in flower and native bees were observed transferring pollen during the August inspection. This is the first confirmation of the pollination mechanism for this species.

The older plant in the private property was reported to have several dead branches, indicating that it had further deteriorated since the June inspection. This plant will be inspected again after the summer.

Kings Park and Botanic Garden staff monitored the smoke-treated plots in July, September and November for seedling regeneration. No seedlings were observed. This was believed to be due to either the poor rainfall season last winter, or due to a patchy seed bank which resulted in no seeds being included in the treatment plots. Monitoring of these plots will continue during 1995.

No regeneration of *Pityrodia scabra* has been observed in the areas scarified. This may also be partially attributable to the poor season if viable seed is present.

3. PRESERVATION OF GENETIC RESOURCE

Propagation material was collected from the new (third) plant in September by the Kings Park seed collector, Luke Sweedman. This material has been successfully propagated at Kings Park.

Cross pollination studies have been undertaken at Kings Park between the available clones of the plants. Viable seeds have been produced from these crosses, which have been used to generate new plants through the process of embryo extraction and micropropagation.

4. ESTABLISHMENT OF NEW POPULATIONS IN THE WILD

In August $1500 was made available from the BankWest *Landscope* Conservation Visa Card for recovery action for *Pityrodia scabra*.

$1000 was provided to Kings Park and Botanic Garden for the production of plants to use in the enhancement or establishment of populations in the wild. Kings Park are producing 50 plants from mixed genotypes originating from the three extant genotypes available.

The first batch of plants died during the hot weather encountered in December 1994. The new batch are currently being produced, and final plant numbers that will be available for field establishment should be known in March 1995.

A translocation proposal will be prepared and submitted to the Director of Nature Conservation for the establishment of these plants in the field this coming winter.

There are two potential sites for establishment in the wild. The first is to enhance the population on private property where two of the existing plants are found. It will be recommended that up to half of the plants are established at this site, using plants originating from a mixture of the three parent genotypes.

The second site is a reserve (No 22176) which is about 14 kilometres from the known population. The purpose of this reserve was changed to "Conservation and Site for Re-establishing Native Plant Species" on 30 December 1994, making it now available for the establishment of a population of this species. The remainder of the plants produced by Kings Park are proposed to be used to establish a new population of the species on this reserve.

The remaining $500 will be used to prepare the two sites for the plantings, and to undertake the plantings.