ROSE MALLEE RECOVERY TEAM

ANNUAL REPORT

1994

by

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for

The Rose Mallee Recovery Team

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Western Australian Herbarium, PO Box 104, como, WA 6152

SUMMARY

Negotiations to acquire land at Watheroo supporting the largest pure stands of the Rose Mallee have been finalised, and the transfer of land to nature reserve status is in progress. Reservation of this area protects habitat that is not otherwise represented in conservation reserves, while allowing appropriate management and rehabilitation of the populations to occur.

In 1994 degraded sites in the "reserve" were planted with Rose Mallee seedlings and direct seeded with local species (eg. *Banksia*, *Calothamnus*, *Hakea* and *Grevillea* species) which support pollinators. The entire boundary of the reserve is being fenced to exclude rabbits and buffer vegetation has been planted in vulnerable areas.

At Three Springs, the landscaped gravel pit in one of the populations has been seeded with local species and is ready for the introduction of *Eucalyptus rhodantha* seedlings in 1995. RGC Mineral Sands Ltd. has continued to cooperate with the project by propagating seedlings and providing advice on weed control and rehabilitation techniques.

The Shire of Three Springs has adopted the Rose Mallee as their floral emblem and intends to plant this and other local rare species in the town gardens.

Collection of seed from all populations for long-term storage at the Threatened Flora Seed Centre has been completed.

INTRODUCTION

Recovery Team membership is currently as follows:

David Rose	Chairman, District Manger, Moora, CALM
Ken Atkins	Senior Botanist, Wildlife Branch, CALM
Ken Borland	Operations Officer, Moora, CALM
Andrew Brown	Technical Officer, WATSCU, CALM
David Coates	Principal Research Scientist, CALM
Geoff Edwards	Shire Clerk, Shire of Three Springs
Steve Hopper	Director, Kings Park and Botanic Garden
Anne Kelly	Consultant Botanist, Recovery Plan Coordinator, CALM
Jane Sampson	Research Scientist, University of Western Australia
Bob Scott	Property Manager, Watheroo
Charles Strahan	Shire Gardener, Shire of Three Springs
Mike O'Donoghue	Wildlife Branch, Recovery Team Secretary, CALM
Matt Warnock	Wildlife Officer, Moora, CALM

The annual meeting of the Recovery Team was held on 23 June 1994 at the CALM District Office in Moora. The next meeting is scheduled for June 1995 at the Shire offices in Three Springs. A field day to inspect rehabilitation works at Watheroo is scheduled for 1995.

RECOVERY PLAN STATUS AND FUNDING

The Recovery Plan is ready for submission to the Corporate Executive for approval.

RECOVERY PLAN ACTIONS - PROGRESS IN 1994

2. ACQUISITION OF CONSERVATION RESERVE

The boundaries of the proposed nature reserve at Watheroo have been surveyed and the transfer of land is in progress.

3. PROTECTION OF HABITAT

Construction of rabbit-proof fencing around the entire boundary of the "reserve" is under way, and due to be completed by February 1995. Further rabbit baiting will be undertaken once the fence is in place.

The unfenced populations discovered in 1993 on private property will be fenced to exclude stock.

4. POPULATION ENHANCEMENT

190 seedlings, propagated by the RGC Mineral Sands Ltd. Nursery at Eneabba, were machine planted into three rehabilitation sites at Watheroo in winter 1994. The number of seedlings available for planting was lower than anticipated due to a problem with fungal infection. Survival of the seedlings is being monitored.

Population enhancement will continue in 1995 at the Watheroo rehabilitation sites and at population 2 at Three Springs. Additional seed was collected from all plants (where possible)

at Three Springs for propagation. The Three Springs Shire is liaising with the owner of land adjoining population 1 regarding re-positioning of the fence to allow for increased planting of *Eucalyptus rhodantha*.

5. HABITAT ENHANCEMENT

Revegetation of degraded habitat by direct seeding of local species which support pollinators was undertaken at the three rehabilitation sites at Watheroo, and at the landscaped gravel pit in population 2 at Three Springs. A variety of species were used in these areas, including *Banksia*, *Calothamnus*, *Hakea* and *Grevillea* species.

Approximately 1.7km of buffer vegetation was installed along the western, southern and northern boundaries of the reserve at Watheroo. Direct seeding of locally collected species (*Allocasuarina*, *Banksia*, *Calothamnus*, *Acacia* species) was supplemented with seedlings propagated by the CALM Nursery at Narrogin.

6. RESEARCH

Monitoring of experimental seedling trials established in 1993 is discussed under Action 9 below.

7. EX SITU CONSERVATION

Seed was collected from population 3 (5 plants), 7 (10 plants), 8 (10 plants), 9 (10 plants) and 11 (20 plants) at Watheroo. The seed has been placed into -18^{0}C storage at the Threatened Flora Seed Centre at the WA Herbarium.

The possibility of establishing a seed orchard from the Three Springs populations is being considered.

8. LIAISON AND PUBLIC EDUCATION

RC Mineral Sands Lt. has continued to cooperate with the project by propagating *Eucalyptus rhodantha* seedlings and providing advice on weed control and rehabilitation techniques. A field day with Recovery Team members and RGC staff to inspect progress of the rehabilitation works is planned for 1995.

The Shire of Three Springs has adopted the Rose Mallee as their floral emblem and intends to plant this and other local rare species in the town gardens.

A brochure detailing information about *Eucalyptus rhodantha* and the recovery plan has been drafted.

9. POPULATION MONITORING AND REPORTING

Survival and growth rates of seedlings in the 1993 trials were monitored quarterly in the first year and will be monitored annually thereafter. At stand 4, survival of the seedlings was 36.6% after 16 months. Better results are expected for the 1994 planting due to improved site preparation and planting techniques.

Photo points have been installed at two of the rehabilitation sites to monitor progress of the population and habitat enhancement over time.

All populations of *Eucalyptus rhodantha* were visited during 1994. Population 3, which had not been accurately surveyed in recent years, was found to be in poor condition. The population has declined (by 40%) from 37 plants in 1985 to 22 plants in 1994.

CONCLUSIONS

The transfer of land at Watheroo to a nature reserve is being finalised. Boundaries of the reserve have been surveyed and construction of rabbit-proof fencing is near completion. Population enhancement and rehabilitation of habitat has been undertaken at selected sites in the "reserve" and will continue in 1995. Weed and rabbit control will continue as necessary. The landscaped gravel pit at Three Springs has been direct seeded with local species. Collection of seed for long-term storage has been completed for all populations. Stock-proof fencing of the most recently discovered populations is still required. The possibility of establishing a seed orchard from the Three Springs populations requires further discussion.