

Esperance District Threatened Flora Recovery Team

Summary

2004/05

by

Ryan Butler

for Esperance District Threatened Flora Recovery Team

Summary

Progress has been made in the writing and implementation of 7 Interim Recovery Plans for Critically Endangered Species for the 2004-05 financial year.

There have been two meetings of the Recovery Team during this year – November 26th 2004 and April 15th 2005.

Fieldwork carried out over the last year has resulted in a DRF-Vuln species being nominated for downgrading to P4 and several Priority species being put up for removal from the list. Several other P1 species are currently being surveyed to determine a more suitable status.

Implementation of Wildlife Management Program No. 21 Declared Rare and Poorly Known Flora in the Esperance District has continued.

Interim Recovery Plans or Draft Plans for the following have been produced and are being implemented, *Lambertia echinata ssp. echinata* 2001-2004, *Daviesia microcarpa* 1996-1999, *Eremophila lactea* 1999-2002, *Myoporum turbinatum* 2002-2007, *Rhizanthella gardneri* 2002-2007, *Anigozanthos bicolor ssp. minor* 2004-2009 and *Eremophila denticulata ssp. trisulcata* 2004-2009.

Recovery Team

There have been two recovery team meetings for the Esperance District Threatened Flora Recovery Team (EDTFRT). These meetings were held on the 26th of November 2004 and the 15th of April 2005. The next meeting has been scheduled for November 2005.

The following names are those people who have attended an EDTFRT meeting in this period:

	No. of meetings attended
• Klaus Tiedemann (CALM Esperance) – Chair	2
• Mike Fitzgerald (CALM Esperance) - Chair (when necessary)	2
• Andrew Brown (WATSCU)	1
• Ryan Butler (CALM Esperance)	2
• Sandra Gilfillan (CALM Albany)	1
• Coral Turley (Esperance Wildflower Society volunteer)	2
• Barbara Archer (Volunteer and Shire of Dundas Rep.)	1
• Anne Cochrane (Herbarium)	1
• Leonie Monks (CALM Science)	1
• Paul Clifton (Shire of Esperance)	1

Surveys, monitoring, recovery actions and general items

DRF Species

1. *Lambertia echinata* ssp. *echinata* (CR)

Surveys & Monitoring:

- In February 2004, three new sub populations were discovered in the population 3 group. This was about 6 extra mature plants.
- Several new seedlings have been found. Most of these were discovered amongst the population 2 sub-populations. This is approximately an extra 30 seedlings. The latest survey in May 2005 has seen a loss of 4 of these seedlings.
- Some dead mature plants have also been recorded.
- Other areas around Cape Le Grand National Park (CLGNP) have been surveyed including a small island off the end of Lucky Bay with no new populations found.

Translocation:

- A trial translocation of just 25 plants was carried out in a new gravel pit site in CLGNP. There are currently still 8 plants alive with some doing very well.
- Ongoing discussion and survey for a site for a full translocation in or out of CLGNP with the possibility of establishing a seed orchard.
- Cuttings have been taken and delivered to Botanic Gardens and Parks (BGPA) staff to determine whether this is a viable way of propagating plants for translocation rather than using the limited seed in storage.

Disease control:

- Dieback control has been undertaken in June 2004 in the form of aerial phosphite spraying of populations 1 and 2 in CLGNP.

Monitoring:

- Monitoring of all the sub-populations has been undertaken three times in the past year. This was done in conjunction with other activities at the sites.
- Monitoring was carried out with the assistance of several volunteers and other government agencies on different occasions.

Outstanding actions:

- Develop and implement fire strategies. This would be best integrated into a full Fire Management Strategy for CLGNP.
- Complete GIS and field analysis of Critical Habitat mapping.

2. *Daviesia microcarpa* (CR)

Surveys:

- A large survey effort of much of the area surrounding Norseman has been undertaken with no new plants found.
- Plans to survey the Dundas hills and further out of Norseman are in process.

Monitoring:

- All Esperance populations were monitored 4 times in the last year.
- Population 3 is now extinct with both mature plants dying in 2004.
- Population 1a is down to only 3 healthy mature plants.
- Population 1c is around 25 healthy mature plants with many deaths appearing to occur due to the drought conditions experienced over the 2004/05 spring and summer.
- Only one seedling was found in all the populations and this was under one of the dead plants in population 1c.

Translocation:

- No plant growth has been observed from the previous translocation. This was seed only.

- It was decided to trial another planting of *Daviesia microcarpa* but this time using seedlings propagated by BPGA.
- Population 1c was again used as a translocation site for 60 seedlings.
- The site is being monitored by a local Norseman volunteer.

Other:

- Fire trials conducted earlier last year. As yet no *Daviesia microcarpa* seedlings identified.
- Plans for smokewater treatment trials being developed.

Outstanding actions:

- Continue monitoring of the translocation site to determine the success of the seedling growth.
- Develop plans for a possible second translocation site.
- Develop fire strategies.
- Possibly conduct a survey in the area between the Norseman populations and the Southern Cross population.
- Complete GIS and field analysis of Critical Habitat mapping.

3. *Eremophila lactea* (CR)

Survey:

- 4 new sites have been found nearby the existing populations. These are pop 5a, 5b, 5c and 6.
- A total of approximately an extra 900 plants found in these new populations.

Monitoring:

- All known populations were monitored twice in the last year.
- No increase in numbers at the populations but some deaths have been recorded.
- Monitoring was carried out with the assistance of volunteers from the Esperance community.

Other:

- Fire and disturbance trials conducted last year has resulted in some seedling growth in one of the plots.
- A larger scale fire trial has been conducted in May 2005 and more smokewater trials are planned near populations containing dead plants.
- GIS and field analysis of Critical Habitat mapping in progress.

4. *Myoporum turbinatum* (CR)

- Seed collecting was undertaken last year.
- All the known populations have been surveyed.
- One new population with ~400 seedlings found.
- Another new population found with 13 large mature plants.
- GIS and field analysis of Critical Habitat mapping in progress.

5. *Rhizanthella gardneri* (CR)

- Most survey work has been carried out by staff from BGPA with assistance from local staff and volunteers.
- Monitoring in July 2004 saw the highest number of plants ever found in this area (>50 flowers).
- Surveys planned for July 2005 of new areas previously unexplored.

6. *Anigozanthos bicolor ssp. minor* (CR)

- Surveys conducted in October 2004.
- New populations found in Lake Shaster NR with up to 270 plants counted.
- Evidence of some flowers from the previous spring on Condingup Hill found in May 2005.

- Surveys planned for more recently burnt areas this spring.

7. *Eremophila denticulata* ssp. *trisulcata* (nominated as Endangered)

- Seed collected from populations in February 2005.
- Surveys extended to surrounding area but no more plants found.
- Plans to extensively search the area north and south of populations 1 and 2.

General Items

- Critical Habitat mapping using GIS and ground surveys is being undertaken for most DRF with an IRP and some other DRF.
- Several species were nominated for DRF status and all were accepted. These were *Eremophila denticulata* ssp. *trisulcata*, *Eremophila ciliata* and *Stachystemon vinosus*.
- Six species from the Esperance District have been removed from the priority list.
- Recent surveys will probably assist in downgrading another DRF species to P4. There may also be more nominations for upgrade of 1 or 2 priority species.
- Writing up basic IRP drafts for two more DRF-CR species (*Eremophila ciliata* and *Marianthus* sp. Bremer).