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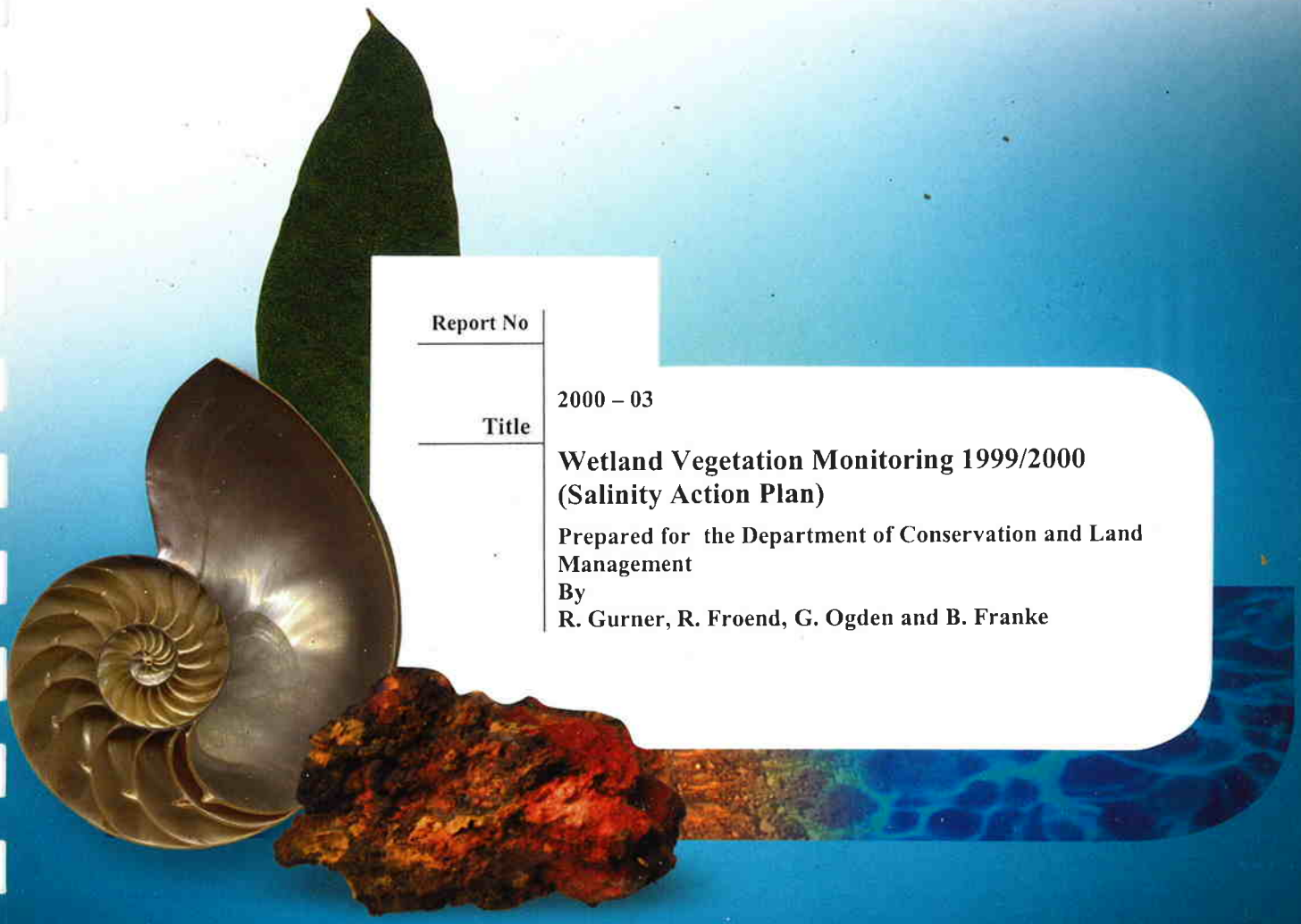

Report No

2000 – 03

Title

# Wetland Vegetation Monitoring 1999/2000 (Salinity Action Plan)

**Prepared for the Department of Conservation and Land Management**

**By**
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CENTRE FOR ECOSYSTEM MANAGEMENT

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# 1.0 INTRODUCTION

## 1.1 OBJECTIVES

This report represents the vegetation component of a project designed to provide on-going monitoring of wetland salinity and biological resources in wetlands of the agricultural zone of south-west Western Australia. Maintenance of wetland biological diversity in the agricultural zone is one of the major objectives of the Salinity Action Plan. Due to their low position in the landscape, wetlands are the habitat most affected by salinisation.

The wetland monitoring project has four specific objectives, only one of which is relevant to this report:

1) Analyse and report trends in salinity and depth of agricultural zone wetlands monitored by CALM since 1978.
2) Monitor salinity, depth and nutrient status of a broad range of wetlands.
3) Monitor waterbirds, fish, frogs and aquatic invertebrates in a sub-set of wetlands to measure any changes in fauna of the wetlands.
4) **Monitor floristic composition and tree health in the same sub-set of wetlands to measure any changes in flora occurring in, and around the wetlands.**

Work presented in this document is an integral part of the overall project and will specifically address the fourth objective. Information from other components of the project that address the remaining objectives, will be used to interpret change in the vegetation and the impact this may have on fauna.

Detailed objectives for the monitoring of wetland vegetation are as follows:

1) Establish permanent monitoring transects at a sub-set of wetlands (as determined by the Wetland Monitoring Project Team).
2) Identify native plant species within transects and monitor change in composition, species richness and diversity.
3) Quantify the importance of overstorey and understorey plant species within monitoring transects by assessing density and foliage cover, and monitor change.
4) Identify the physiognomy of wetland plant communities within the transects and monitor change.
5) Categorise wetland tree health within the transects and monitor change.
6) Monitor wetland plant population dynamics within transects by recording seedling recruitment, survival and population age/size class structure.
7) Identify the distribution of wetland plant populations within the transects relative to hydrological regime and salinity status, and monitor change.

## 1.2 SCOPE AND APPROACH

The plan for vegetation monitoring involves triennial measurements of relevant parameters. Because of the need to incorporate results from the biological survey when selecting monitoring sites, the monitoring program will be phased in over a three year period. This will allow techniques to be validated and refined, if necessary, on a small set of wetlands in the first year. It is intended for the final set of 25 wetlands to represent a range of

salinities and susceptibilities to secondary salinisation. Therefore, the 25 wetlands will consist of 5 categories with respect to salinity, with 5 representative wetlands (or replicates) in each category. This is summarised in the table below.

| Category | Comment | N |
|---|---|---|
| Fresh | Freshwater wetlands with no immediate threat | 5 |
| Brackish↑ (improving) | 'Brackish' wetlands where remedial works likely to improve quality | 5 |
| Brackish↓ (declining) | 'Brackish' wetlands threatened by increased salinisation | 5 |
| 2° saline | 2° saline wetlands with long history of salinity but further change likely | 5 |
| 1° saline | Naturally saline or hypersaline wetlands where change may occur | 5 |

During 1999/2000, vegetation was assessed at 8 wetlands (Figure 1.1) and this work is reported here. This report completes the baseline survey of the 25 monitored wetlands (refer also Ogden and Froend, 1998; Gurner, Froend and Ogden, 1999).

| Site | Category |
|---|---|
| Coomelberrup | Declining |
| Altham | 1° saline |
| Bennetts | 1° saline |
| Dumbleyung | 2° saline |
| Pleasant View | Fresh |
| Parkeyerring | 2° saline |
| Ronnerup | 1° saline |
| Yaalup | Declining |

The methodology used was specifically designed to address change in wetland vegetation floristics, physiognomy, individual plant vigour and population vigour and dynamics in response to long-term changes in hydrology and salinity. The various components of the methodology are as follows (detailed description of these components is given in the Methods section):

1) Transect establishment.

   Between two and five permanently marked transects were established at each wetland. The location of each transect was determined using GPS and marked on maps for future reference. All location markers and tags are metal. Transects are made up of contiguous 20 x 20 m quadrats running perpendicular to the shoreline into upland vegetation. Each of the 20 x 20 m quadrats is divided into five 4 x 20 m quadrats. Photographs are taken each monitoring year from two marked reference points. Site data such as topographic position, slope, aspect, surface soil characteristics, litter and water depth are recorded.

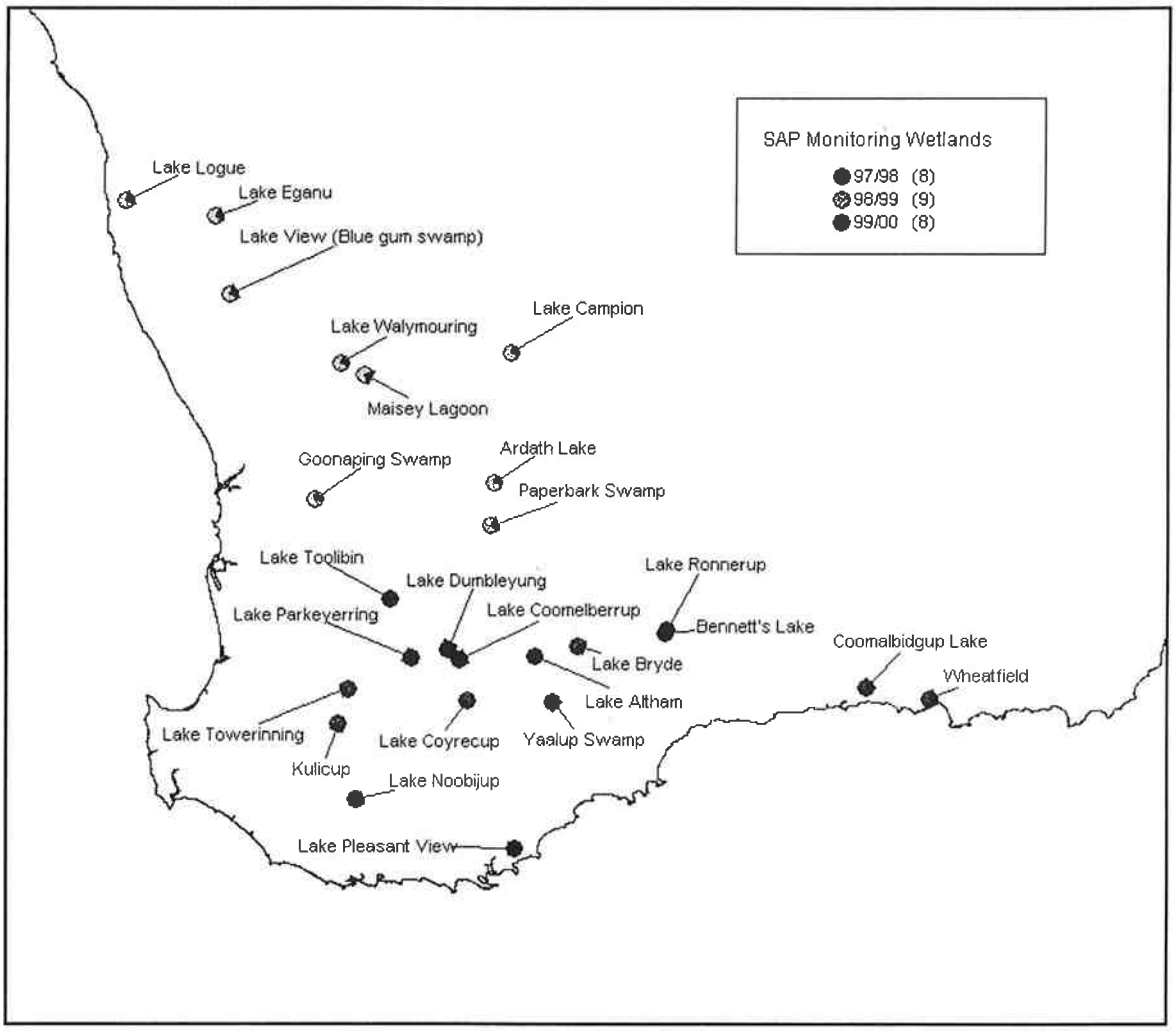



**Figure 1.1:** Location of wetlands assessed in 1999/2000.

2) Floristic composition, species richness and diversity.

Within each 4 x 20 m subplot of each 20 x 20 m quadrat all overstorey species and large understorey species (>1.5 m) are identified. All trees are tagged and given a unique reference number. Data for each overstorey subplot are kept distinct to determine gradient transitions. Understorey 4 x 4 m subplots focus on species < 1.5 m. Presence of seedlings of tree and large shrub species is recorded in overstorey sub-plots.

3) Density and foliage cover.

Density of overstorey and understorey species is determined for each subplot. Percentage foliage cover for each understorey species is determined by direct measurement of (two foliage diameter measurements at right angles) each individual within each 4 x 4 m subplot. The foliage cover of understorey species without distinct projected foliage area, such as sedges and rushes, is estimated as a percentage of the subplot area. Percentage canopy cover is determined for each 20 x 20 m quadrat.

4) Physiognomy.

Height ranges for each vegetation strata are measured within quadrats and subplots. Profile diagrams depicting vegetation structure are constructed for each transect.

5) Tree vigour.

The vigour of each individual tree within overstorey subplots is categorised according to a subjective scale of 1 – 5 based on estimations of proportion of live canopy foliage.

6) Population dynamics.

Size class structure of key tree species is determined by measuring height and diameter at breast height (DBH) of each individual in each 20 x 20 m quadrat. Data are combined to develop size class frequency plots and illustrate population structure. Seedling recruitment events are recorded in the field when found.

7) Distribution of wetland plant communities, populations.

The different structural units of vegetation at each wetland are mapped from aerial photography and ground truthing. Historical aerial photographs are examined and vegetation units mapped to determine changes in vegetation cover and distribution. At the transect scale, distribution of plant populations or community types is related to hydrology and salinity. The ground level (in relation to the deepest point in the lake) at each end of each 4 x 20 m overstorey subplot is measured using an auto level and staff. These relative levels will be converted to mAHD when the depth gauges at each wetland are surveyed. The elevational gradient along each transect can then be compared to wetland water levels (information from other CALM and WRC SAP projects) and the water regime determined for different positions on the transect. Where available, historical wetland water levels will be related to vegetation distribution to identify past impacts and explain current distributions.

Once sufficient information has been collected, water regime requirements and salinity tolerances of key wetland plant species will be identified and used to predict impacts and restoration criteria.

8) Physico-chemical parameters.

Transects are located adjacent to piezometers (if present) established as part of the Wetland Monitoring Project. Information on groundwater level and salinity is vital to correct interpretation of vegetation change. Surface soil salinities at each transect are measured each monitoring year using an EM 38 and validated with limited soil sampling and direct measurement (EC of 1:5 soil:water extracts). Information on water salinity and nutrients from other projects, once available, will be related to vegetation vigour and survival.

9) Database

All data collected as part of the wetland vegetation monitoring project will be databased using Microsoft Excel. Original field record forms will be archived and referenced to the digital database.

## 1.3 OUTCOMES

All transects at all 8 1999/2000 wetlands were established and first assessment completed. The floristic and structure data for the vegetation is complete and has been databased. Field work for the 1999/2000 assessment was conducted during early spring and summer. As this is the third year of the vegetation monitoring at these wetlands, multi-temporal analysis of community and population dynamics was not yet possible. The focus of work to-date has been on the establishment of transects and development of an appropriate and effective monitoring structure and procedure. Population structure analysis and in particular seedling establishment monitoring has begun, however, it will not be complete until assessment of seedling presence and survival is reassessed next year. It is proposed that this be conducted during the spring of 2000 for transects. Such reassessment before the triennial monitoring is important to tracking survival, rates of establishment and causal factors such as hydrology and soil conditions.

As discussed in the previous report, the analysis of historical air photographs is to be conducted as part of a separate project. Gary Ogden has commenced a PhD study of wetland vegetation dynamics and seedling recruitment and will assess historical air photographs.

The analysis of vegetation interaction with hydrology was not possible as piezometers and depth gauges have not yet been established at all transects/wetlands. The paucity of lake depth records for some of the lakes will make this analysis impossible in the near future.

# 2.0 METHODS

## 2.1 TRANSECT SITE SELECTION

The number and positioning of transects at each wetland was determined using 1:5000 digital aerial photographs and preliminary site visits. These sites were selected to be representative of both the vegetation communities and the physical characteristics of each wetland. Sites were generally located around the wetland basin, perpendicular to the water body, extending from the terrestrial vegetation to below the high water mark. Two to five transects were established at each wetland.

## 2.2 TRANSECT DESIGN

The transects consist of a series of contiguous 20 x 20m quadrats which are marked at each corner with a steel fence post. Tape measures and an optical square were used to ensure all plots were square and of equal size. For the eight wetlands assessed, the transects consist of one to four contiguous plots depending on the width and composition of the vegetation surrounding the wetland, giving transect lengths of 20 to 80m.

The quadrats are further divided into five 4 x 20m plots for assessment of trees and large shrubs. Within each 4 x 20m plot, a 4 x 4m plot is located at either the left or right side for assessment of all understorey plants (Figure 2.1).

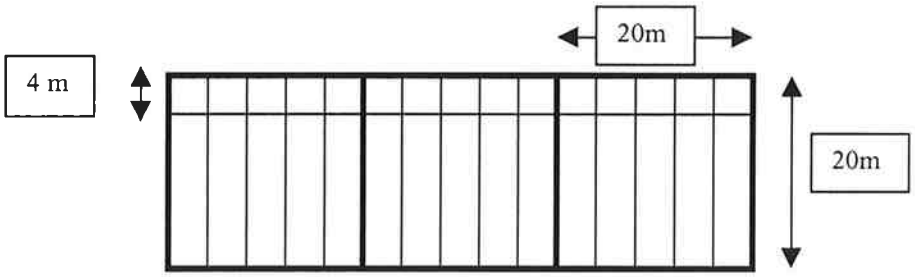



**Figure 2.1**: Transect Design.

To facilitate accurate re-monitoring of the understorey, a fence spreader is located every 20m along the transect, 4m in from the side where the 4 x 4m sub-plots were established. The 4 x 20m and 4 x 4m plots were not individually marked as it was felt that this made the transects too visible. An aluminium tag was attached to the top left fence post of each transect (furthest from the water body) indicating the transect number. Compass bearings were also taken from this point across and down the transect to enable the transect to be re-established in the event of fence posts being stolen. At lake Pleasant View (transect 1 and 5), the middle and lowest picket line (respectively) of each transect was not staked as each was located on the main track and it was felt that the presence of fence posts on the track could be hazardous. These posts can easily be replaced during monitoring by sighting from the upland plots. GPS readings were recorded for each transect at the tagged fence post.

## 2.3 VEGETATION MONITORING

### 2.3.1 Tree Species

Within the 4 x 20m plots, all trees were tagged with an aluminium tag punched with a unique reference number. Tags were attached at breast height (approx. 1.5m) with a galvanised roofing nail or a large loop of galvanised wire if the stem was too narrow to nail. For each tree within each plot the species, diameter at tag height and crown condition was recorded. Stem diameter was measured directly under the tag if nailed or at breast height if the tag was wired onto the tree unless otherwise noted in the data. In the case of individual trees with multiple stems, all stems were measured at the same height as the position of the tag or at breast height. In addition to tracking growth and vigour of trees in the future, stem diameters also permit size class analysis of the populations. In the case of trees with multiple stems, the largest stem was used for the size class diagrams in this report.

Crown assessment was carried out using a subjective three part scale where a score is recorded for crown density, dead branches and epicormic growth. Using diagrams for comparison, crown density is given a score out of nine, dead branches a score out of nine and epicormic growth a score out of five (Ladd, 1996) (Figure 2.2). The higher the overall score the better the condition of the tree. The number, species and height of tall shrubs (>1.5m) and seedlings of trees were also recorded in the 4 x 20m plots. Vigour of tall shrubs such as *Melaleuca* and *Hakea* species was recorded subjectively as either healthy, slightly stressed or stressed. This technique was adopted in preference to the three part scale of Ladd (1996), which does not translate well to tall shrubs.

### 2.3.2 Understorey Species

Within the 4 x 4m sub-plots, all understorey plants were identified and percentage foliage cover determined by direct measurement (two foliage measurements at right angles) for species with a distinct foliage area or percentage estimate for rushes and sedges. Height ranges for each species were also recorded.

Samples of each plant species were collected and returned for identification. Difficult to identify species were identified by CALM Woodvale staff. Species, which are yet to be accurately identified, are noted in the data by a question mark and where necessary, further material will be collected in spring 2000 to assist in identification. Voucher specimens will be lodged with the WA Herbarium.

## 2.4 PHYSICO-CHEMICAL PARAMETERS

Soil properties (field assessment of texture) and litter distribution was subjectively described for each 20 x 20m plot of each transect. Three soil samples were also taken from each plot and analysed in the laboratory for conductivity by 1:5 soil water extraction, agitated for one hour and measured with a bench conductivity meter for calibration of the EM38.

EM38 measurements, which determine soil conductivity over 1-1.5m depths, were taken at three points across each plot, every 4m along the transect. Adequate distance was always allowed when measuring near the fence

posts or other metallic objects in the plots. EM38 data was validated against direct conductivity measurement of the soil samples.

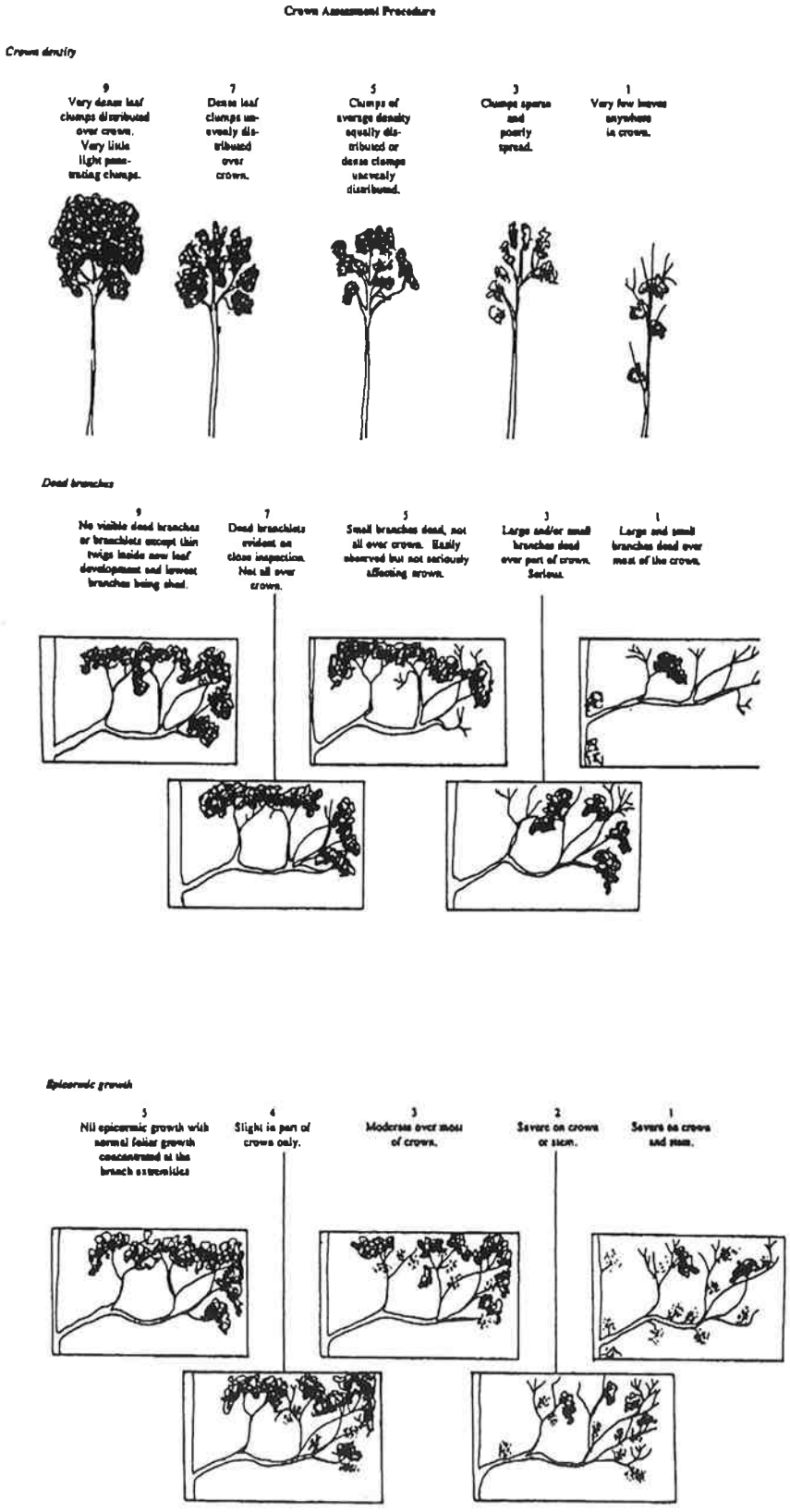



**Figure 2.2:** Crown Assessment Procedure Diagrams (Ladd, 1996).

## 2.5 ELEVATIONS

The gradient of each monitoring plot was measured using an auto level and staff, with measurements being taken every 4m along the transects except in steep areas, where a smaller interval was used. If a wetland had a depth gauge, each transect was tied into the gauge to indicate relative elevation allowing interpretation of the effect of past water levels, where these data are available. Elevation data is recorded relative to the lowest point of each plot (lowest point called 0m), where no depth gauge was present or relative to the depth gauge, where a depth gauge was accessible.

# 3.0 RESULTS

## 3.1 LAKE COOMELBERRUP

### 3.1.1 Description

Lake Coomelberrup is a moderately sized, saline, ephemeral wetland situated in the Coomelberrup Nature Reserve (10472) 10 km SSE of Dumbleyung (33°24' S, 117°47' E). The total lake area is 90.6 hectares with 46% consisting of open water and 54% vegetation (Halse, Pearson and Patrick, 1993). The lake lies predominantly in a flat (very prone to flooding) catchment that is cleared, apart from the narrow band of terrestrial vegetation remaining around the elevated outer lake perimeter and the scattered wetland vegetation existing in the littoral zone. The wetland is characterised by a long steep bank on the SE-E side moderating to gentler slopes on the S-SW and NW-NE sides. The bulk of the water supply to Lake Coomelberrup comes from direct precipitation and runoff with an inflow channel present on the northern section of the lake, which may form/flow from the southern sections of Lake Dumbleyung during high water periods. Another smaller outflow channel exists on the north eastern side of the lake, which seems to feed the floodplains in the area. Lake Coomelberrup has also been recognised as an important refuge for waterbirds with a variety of avifauna utilising the water source of the lake. Grazing history within the surrounding nature reserve and on the lake bed itself is unknown, but there is evidence to suggest that grazing has occurred.

Two 40 metre transects were established on Lake Coomelberrup to sample the outer fringing terrestrial vegetation (*Allocasuarina huegeliana*, *Acacia acuminata*), littoral wetland vegetation (*Casuarina obesa*, *Eucalyptus spathulata*, *Melaleuca hamulosa*, *M. halmaturorum*) and lake bed (*Halosarcia ?indica*, *Sarcocornia* sp). Monitoring was undertaken in September 1999.

**Transect 1:** (GPS: 50 572191 / 6303446) - follow the main access track around to the western side of the lake. Transect 1 is located approximately 50 m further along from where the track veers away from the lake.
**Transect 2:** (GPS: 50 573080 / 6303221) - access through the parkland on the eastern side of the lake off the main access track. Transect 2 is located approximately 100 m north of entry track, on the ESE side of the lake where the topography/elevation is steep.

### 3.1.2 Plant Communities

There is a dense belt of dead trees (50-100 m wide) around most of the lake below the high water mark, with the littoral zone dominated by a narrow ring of *C. obesa*, *M. hamulosa* and *M. halmaturorum* with occasional *E. spathulata* trees close to the shore on the eastern side of the lake (Figures 3.1.1a and b). The littoral vegetation persists further onto the lake bed on the western side, where the topography is slightly elevated. On the elevated ridges the terrestrial vegetation consists of an open woodland of *Eucalyptus loxophleba*, *A. huegeliana* and *A. acuminata*, with common understorey species being *Carpobrotus* sp., *Stip elegantissima*, *Lomandra effusa*, *Dianella revoluta* and *Jacksonia* sp. The health and distribution of the vegetation decreases near the channels, to the north-west and north-east, where beds of *Halosarcia* and *Sarcocornia* species dominate (typically *H. lepidosperma*, *H. pergranulata* and *H. ?indica*).

### 3.1.3 Tree Vigour and Population Structure

The vegetation of Lake Coomelberrup and in the surrounding Nature Reserve was in generally good-moderate condition (Table 3.1), however trees and understorey species associated with the wetland basin (lower ground) and inflow/outflow channels were showing signs of stress (as indicated by the mean crown score) due to increasing salinity and waterlogging. The salt tolerant species such as *C. obesa*, *M. hamulosa* and *M. halmaturorum* are moderately healthy but showing signs of stress, whilst the terrestrial species *E. loxophleba*, *A. huegeliana*, *Jacksonia* sp. and *A. acuminata* appear more vigorous. The vegetation on the elevated south eastern side is in the best condition. The size class distributions (Figure 3.1.2) show the tree populations on Lake Coomelberrup to be relatively mature with few stems in the smaller size classes. Overall, the tree populations show no evidence of recent recruitment (Table 3.1, Figures 3.1.1-2).

**Table 3.1:** Summary of Lake Coomelberrup Tree Data

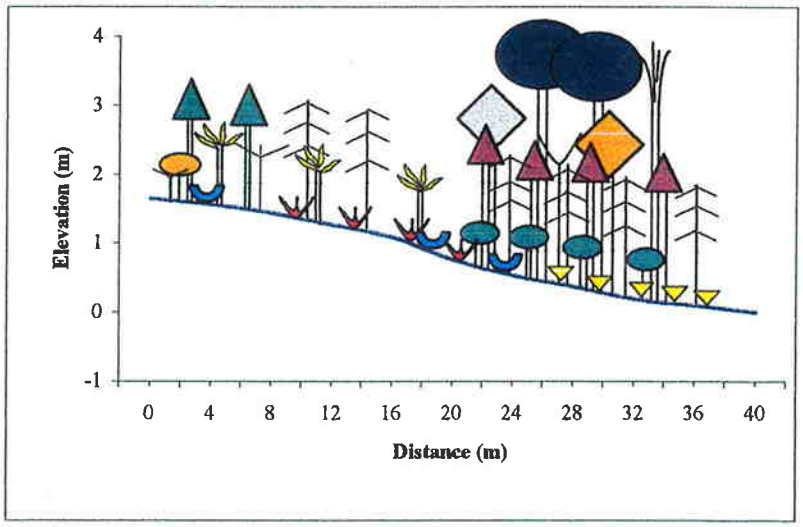
| Species | No. of live trees | No. of dead trees | No. of saplings | No. of seedlings | Mean Crown Score (S.D) |
|---|---|---|---|---|---|
| *Allocasuarina huegeliana* | 9 | 14 | 0 | 0 | 11.4 (4.21) |
| *Jacksonia* sp. | 1 | 1 | 0 | 0 | 15 |
| *Acacia accuminata* | 5 | 1 | 2 | 0 | 12 (3.74) |
| *Melaleuca hamulosa* | 1 | 0 | 0 | 0 | 18 |
| *Casuarina obesa* | 75 | 45 | 3 | 0 | 11.97 (3.61) |
| *Eucalyptus spathulata* | 6 | 1 | 0 | 0 | 17.5 (4.72) |
| *Melaleuca strobophylla* | 0 | 2 | 0 | 0 | |
| *Melaleuca halmaturorum* | 13 | 13 | 0 | 0 | |

### 3.1.4 Soil Characteristics

The EM38 data shows that up-slope on both sides of the lake (west and east) soil salinities were generally quite low (81 - 40 mS/m), however, salinity increased as elevation decreased with soils at the lowest elevations having conductivities as high as 993 mS/m (Appendix 1). On the flatter and less elevated western side of the lake the soil salinity was generally higher. Soil textures of the elevated areas were characterised by clay - white sand overlying grey loamy sand grading down to deep brown sand on the wetland basin.

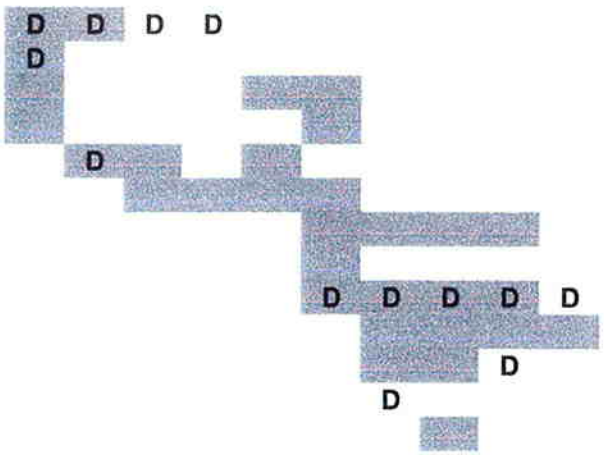
### 3.1.5 Summary

Given the high soil salinities at this lake and the probable increase in lake salinity and waterlogging in the future, the littoral vegetation and the vegetation distributed on the lower elevations is likely to deteriorate. Of particular concern is the vegetation near the drains on the north west and north eastern sides where salinity and waterlogging are predicted to be increasing.




Please note: Species depicted are not to scale.

*Allocasuarina huegeliana*
*Jacksonia* sp.
*Carpobrotus* sp.
*Stipa elegantissima*
*Acacia acuminata*
*Lomandra effusa*
*Halosarcia ?indica*
*Melaleuca hamulosa*
*Casuarina obesa*
*Sarcocornia* sp.
*Eucalyptus spathulata*
*Melaleuca strobophylla*
*Melaleuca halmaturorum*



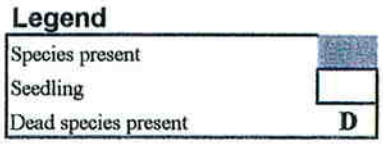
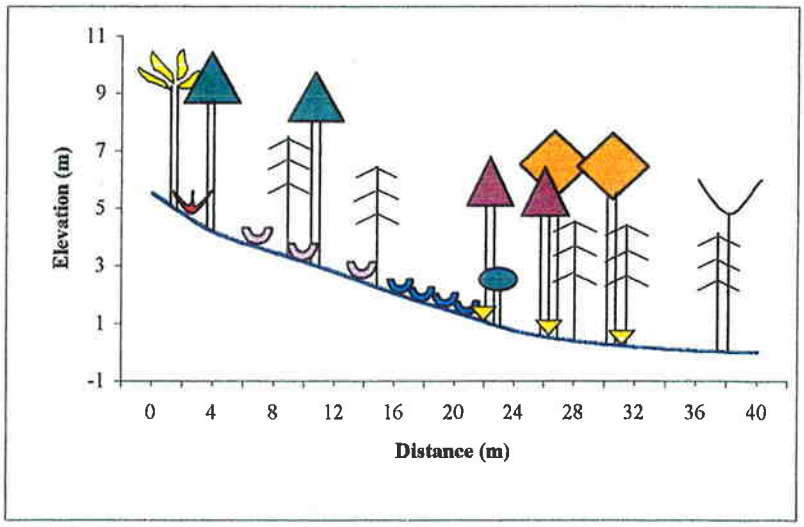
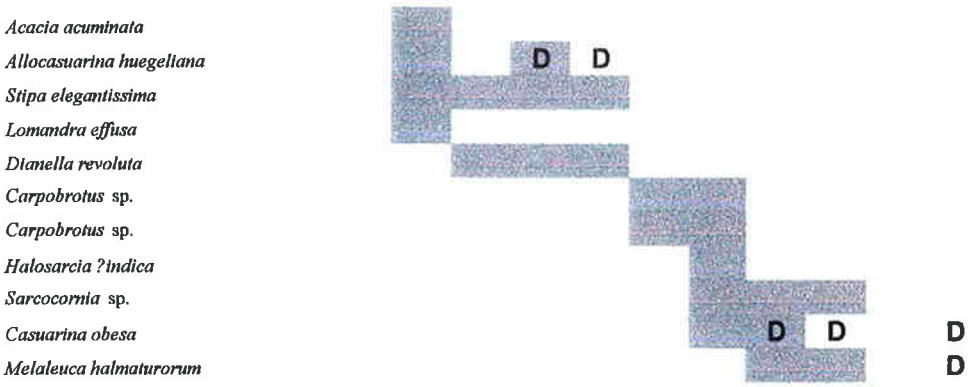




**Figure 3.1.1a** Profile Diagram, Lake Coomelberrup Transect 1



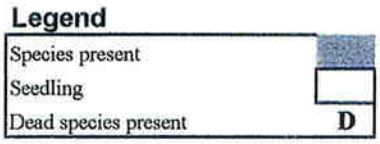
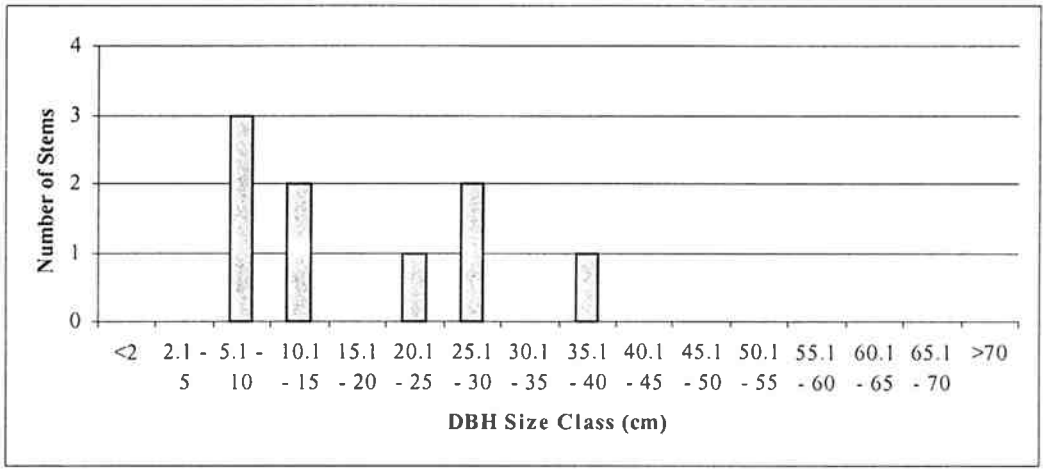
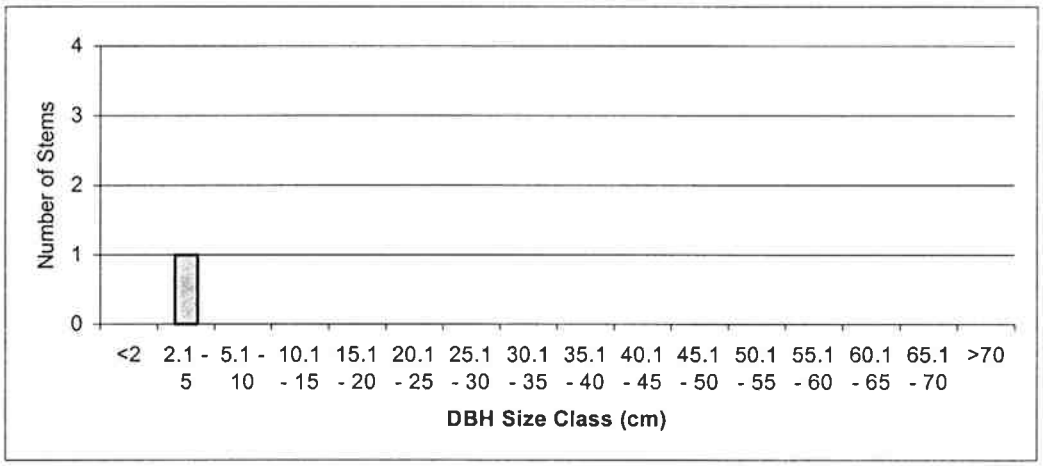




**Figure 3.1.1b** Profile Diagram, Lake Coomelberrup Transect 2

*Allocasuarina huegeliana*




*Jacksonia* sp.




*Acacia accuminata*

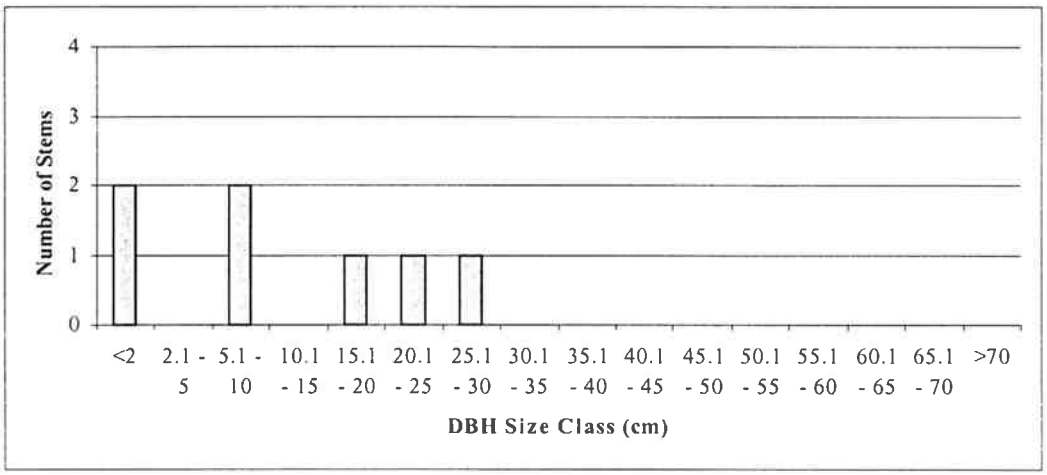



**Figure 3.1.2** Size Class Distributions for Tree Species at Lake Coomelberrup
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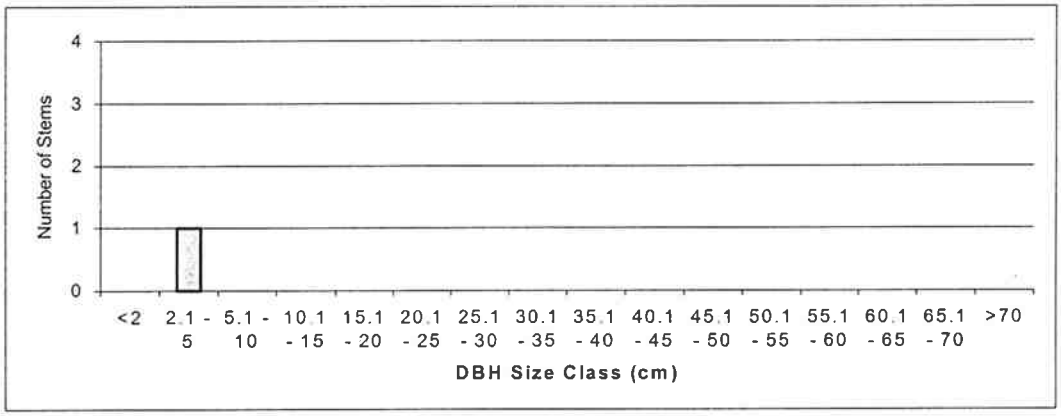
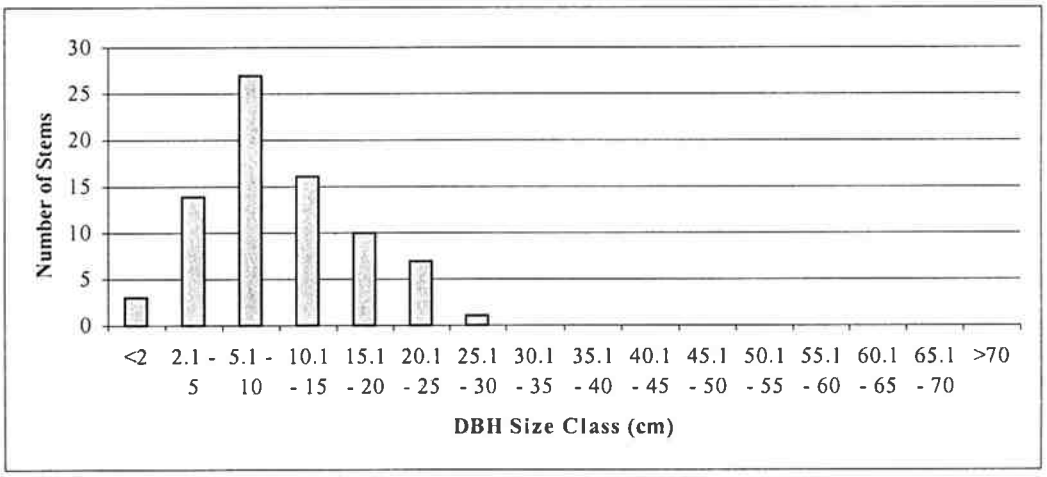
*Melaleuca hamulosa*




*Casuarina obesa*




*Eucalyptus spathulata*

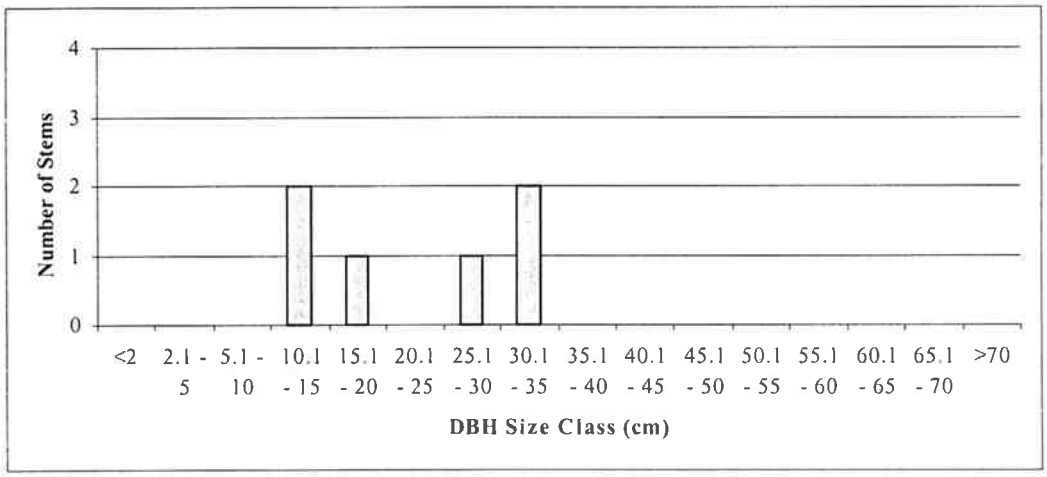



**Figure 3.1.2 cont.** Size Class Distributions for Tree Species at Lake Coomelberrup
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*Melaleuca halmaturorum*

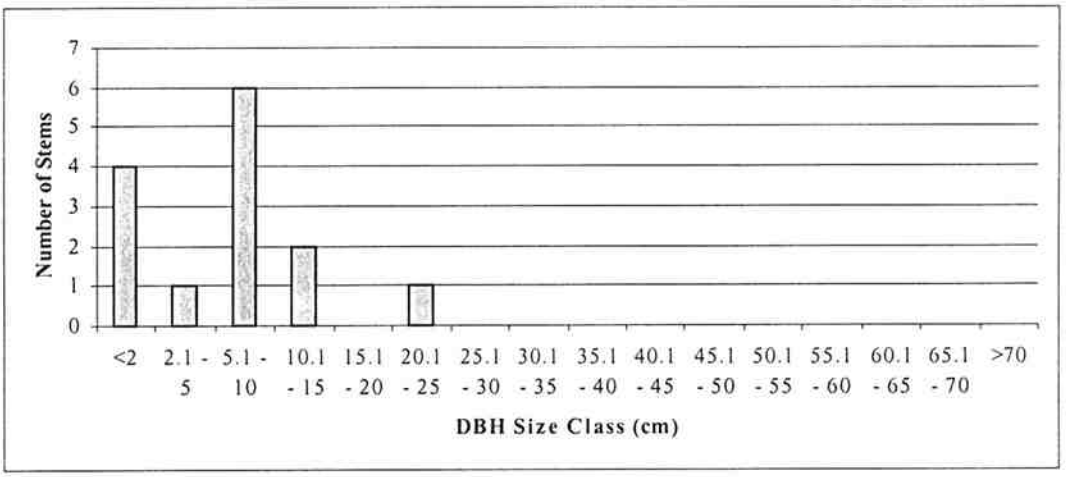



**Figure 3.1.2 cont.** Size Class Distributions for Tree Species at Lake Coomelberrup

## 3.2 LAKE PARKEYERRING

### 3.2.1 Description

Lake Parkeyerring, situated 6 km south of Wagin (33°22' S, 117°20' E) in the Parkeyerring Nature Reserve (24792), is a moderate-sized, semi-permanent saline wetland. The total lake area is 322 hectares with approximately 87 % consisting of open water and 13 % vegetation (Halse, Pearson and Patrick, 1993). The wetland lies in a predominantly cleared landscape, apart from the narrow band of terrestrial vegetation remaining around the elevated outer lake perimeter and the dense remnant woodland of *Casuarina obesa* existing on the southwest side of the lake. The wetland is characterised by a long steep bank on the south east - eastern side moderating to gentler slopes on the south – south-western and north-west - eastern sides. Lake Parkeyerring is part of a larger system, which includes a series of permanent and seasonal wetlands with numerous inlet channels and outflow drains forming the headwaters of the Coblinine River. The hydrology of this chain of wetlands is unknown, but the direction of the flow appears to be in a north westerly direction. The main inflow to Lake Parkeyerring is from Badgarring Creek, originating 11 km north west entering through a broad channel at the south west side of the lake. Lake Parkeyerring has been recognised as an important refuge for waterbirds with a variety of avifauna utilising the water source of the lake. Grazing history within the surrounding nature reserve and on the lake bed itself is unknown, but there is evidence to suggest that grazing has occurred on the south west - south eastern sides of the lake in the *C. obesa* woodland.

Two 40 metre transects were established on Lake Parkeyerring to sample the outer fringing terrestrial and littoral vegetation, in particular the *Melaleuca halmaturorum* regeneration on the northern side of the lake and the *C. obesa* woodland on the south western side. Monitoring was undertaken in August 1999.

**Transect 1:** (GPS: 50 532286 / 6308875) - 200 metres along the main northern gravel access road (leading to the farm house). Transect 1 begins near the road edge sampling the elevated *C. obesa and Eucalyptus rudis* stands and the *M. halmaturorum* regeneration further down-slope, ending near the lake bed (25 m before water mark).
**Transect 2:** (GPS: 50 573080 / 6303221) - access to Transect 2 is possible through the farm house area along the main northern access road (via Transect 1). This transect is located along the western side of the lake in the dense, healthy *C. obesa* woodland approximately 100 metres before the fence line turns away (west) from lake.

### 3.2.2 Plant Communities

An open woodland of *Eucalyptus loxophleba* and *Acacia acuminata* exists on the elevated ridges surrounding the lake on the east - south eastern side. Around the perimeter of the wetland is a narrow belt of live *C. obesa* trees, which are below the maximum water mark. There is a samphire zone (on the less elevated area) consisting of *Halosarcia lepidosperma* and *Sarcocornia* sp. on the lake side of the dense *C. obesa* woodland, but it does not extend far into the dead timber. The northern side of the lake consists of a healthy and in some areas dense woodland of *C. obesa* and *M. halmaturorum* with occasional mature *E. rudis*. In recent years, successful recruitment of *M. halmaturorum* above the high water mark has occurred along the northern littoral zone (this regeneration is probably at or below the high water mark). A healthy, dense woodland of *C. obesa* exists on the

western and south-western side of Lake Parkeyerring, with distinct lines of saplings/seedlings around the edge of the elevated slope (Figures 3.2.1a and b).

### 3.2.3 Tree Vigour and Population Structure

The increasing salinity of the water is reflected in the condition of the *C. obesa* trees in the littoral zone, which are showing some signs of stress (Table 3.2). Up-slope of this area, the vegetation appears relatively unaffected. In general, the health of the vegetation on the western side of the lake was better than on the eastern side. The size class distributions (Figure 3.2.2) show the tree populations on Lake Parkeyerring to be relatively young with many stems in the smaller size classes. The most significant recruitment of trees is evident on the northern banks where 88 seedlings and 85 saplings of *M. halmaturorum* were surveyed with a further 91 seedling/saplings of *C. obesa* surveyed on the western side of the lake. These individuals occur around the fringe of the lake in dense rings suggesting germination and establishment has occurred at one or more past high water marks (Table 3.2, Figure 3.2.2).

**Table 3.2** Summary of Lake Parkeyerring Tree Data

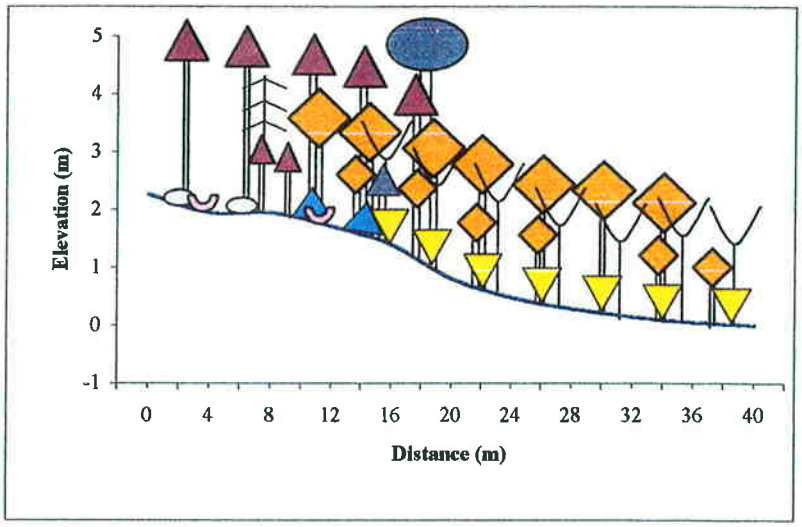
| Species | No. of live trees | No. of dead trees | No. of saplings | No. of seedlings | Mean Crown Score (S.D) |
|---|---|---|---|---|---|
| *Casuarina obesa* | 229 | 26 | 83 | 8 | 10.3 (3.83) |
| *Melaleuca halmaturorum* | 55 | 55 | 85 | 88 | 13.8 (3.33) |
| *Eucalyptus rudis* | 1 | 0 | 0 | 0 | 6 |

### 3.2.4 Soil Characteristics

Highest soil conductivities were on the lake bed at Transect 2 (566 - 540 mS/m). In general the conductivity of the soil in the *C. obesa* woodland was quite high, ranging from 118 - 566mS/m. In contrast the soil salinity of the elevated areas (Transect 1) was generally very low. Soil textures of the elevated areas were characterised by brown organic sands grading down to white coarse sand in the wetland basin and drains.

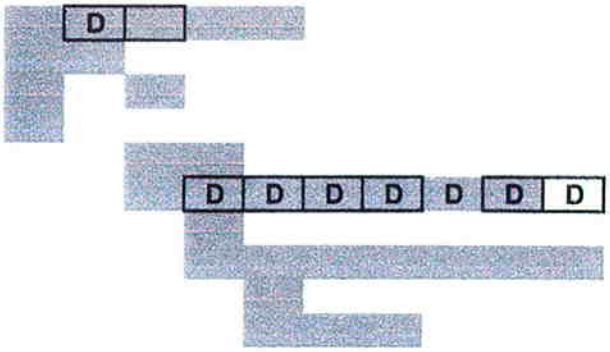
### 3.2.5 Summary

The high number of dead trees and an understorey dominated by samphires in the lower littoral zone of this lake is typical of increasing salinity and possibly of increasing waterlogging. Recruitment of both *Melaleuca* species and *C. obesa* appears to be restricted to areas of higher elevation where the effects of salinity and waterlogging are less severe. The extensive *C. obesa* woodland occupying the 'floodplain' on the western side of the lake remains relatively healthy despite high soil salinities. Future flooding of this area and the consequent evapo-concentration of salts may lead to a decline in this community.




Please note: Species depicted are not to scale.

*Casuarina obesa*
*Enchylaena tomentosa*
*Dianella revoluta*
*Stipa trichophylla*
*Cyperus gymnocaulos*
*Melaleuca halmaturorum*
*Atriplex* sp.
*Sarcocornia* sp.
*Eucalyptus rudis*
*Sporobolus virginicus*



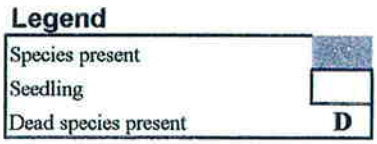
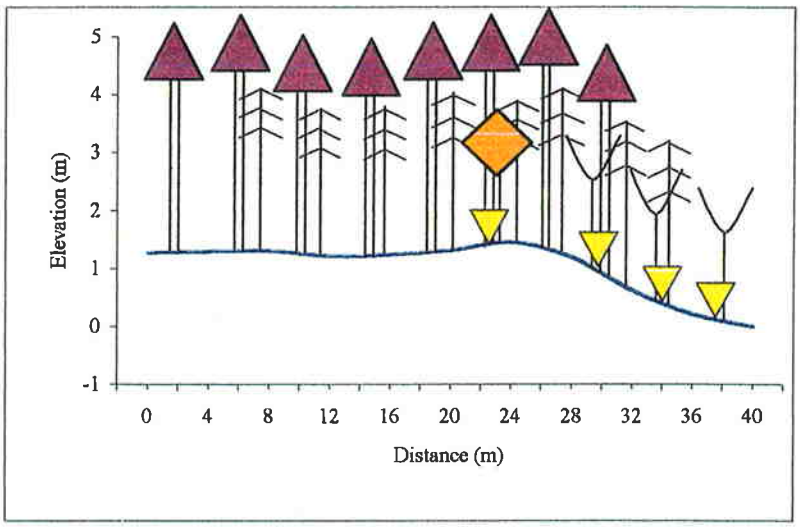
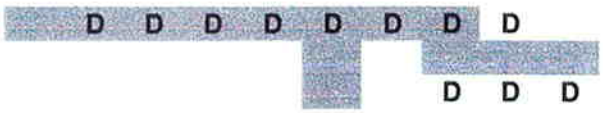




**Figure 3.2.1a** Profile Diagram, Lake Parkeyerring Transect 1




Please note: Species depicted are not to scale.

*Casuarina obesa*
*Sarcocornia* sp.
*Melaleuca halmaturorum*



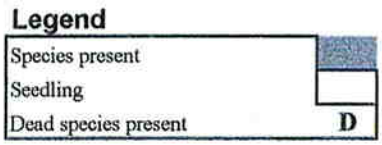
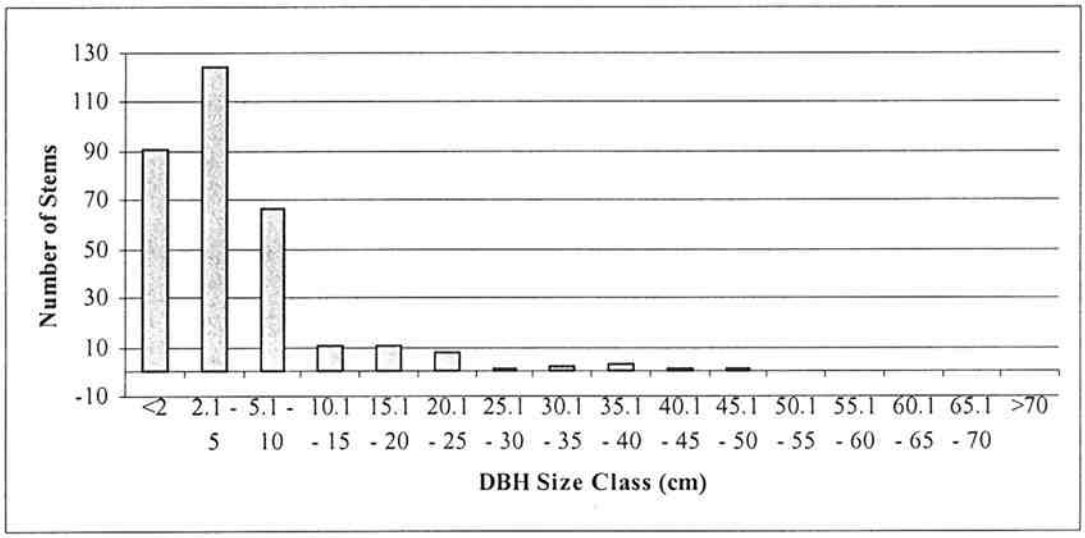




**Figure 3.2.1b** Profile Diagram, Lake Parkeyerring Transect 2

*Casuarina obesa*




*Melaleuca halmaturorum*

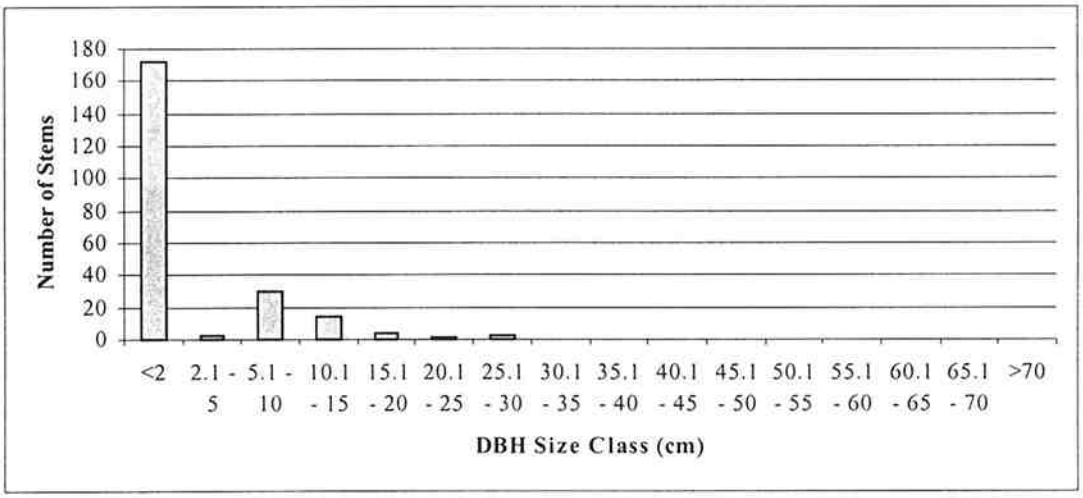



**Figure 3.2.2** Size Class Distributions for Tree Species at Lake Parkeyerring

## 3.3 LAKE DUMBLEYUNG

### 3.3.1 Description

Lake Dumbleyung is a very large, semi-permanent saline lake located at the north end of the Coblinine River system, between the Coblinine Flats and Gundaring Lake in the Dumbleyung Nature Reserve (5999), approximately 4 km west south west of the Dumbleyung town site (33°22' S, 117°38' E). The total lake area is 5560 hectares with approximately 81 % consisting of open water and 19 % vegetation (Halse, Pearson and Patrick, 1993). The ground steeply rises by 10 m near the basin edge, with rounded hills at 280+ m beside the lake to the north and south (Australian Nature Conservation Agency, 1996). The main inflow is from the Coblinine River system, originating more than 50 km north east, east and south, and entering through a broad channel at the south east side of the lake (Australian Nature Conservation Agency, 1996). Six minor inflow creeks, notably Boolanalling Gully and Meinmuggin Gully, originate 3 - 14 km north or south of the lake. All catchments are cleared and highly disturbed. Overflow to the west and into the Blackwood River system has occurred only three times this century. Major filling of the lake occurred in January 1982, winter 1983 and winter 1998 (Australian Nature Conservation Agency, 1996). Being the largest deepwater lake of south western Australia, Lake Dumbleyung has a long history of water gauging and has been recognised as a major drought refuge for waterbirds and in particular waterfowl. The lake is used for power boating and water skiing activities, which are zoned (and monitored) to the south side of the lake. There is an extensive weed problem in the Lake Dumbleyung reserve and a weed control program has been implemented (1994). Additional information on the vegetation in the reserve is documented by Keating and Trudgen (1986).

Two 60m transects and two 40m transects were established on Lake Dumbleyung to sample the outer fringing terrestrial (*Eucalyptus loxophleba, Acacia acuminata*) and littoral/wetland vegetation (*Eucalyptus rudis*, *Casuarina obesa*, *Melaleuca strobophylla/M. halmaturorum*). Monitoring was undertaken in October 1999.

**Transect 1:** (GPS: 50 559773 / 6308362) - located on the west side of the lake 300 m down from the track leading to the ski shed. Transect 1 is located in an *E. rudis* regeneration stand.

**Transect 2:** (GPS: 50 560663 / 6308812) - Transect 2 is located on the west side of the peninsula before the ski club and approximately 50 m before granite outcrop. Access through the ski shed track past Transect 1.

**Transect 3:** (GPS: 50 562302 / 6313437) - situated on the north side of the lake approximately 150 m off the main tourist road (going left) down the granite cliff.

**Transect 4:** (GPS: 50 559042 / 6313253) - Transect 4 is situated on the north side of the lake. Access is via the western most gravel road. Turn right at the junction (across railway track) of the lake. The transect is located approximately 700 - 1000 metres from road junction, down a steep hill turning into the lake. Star pickets and tags are visible from the gravel track. The transect samples a *E. rudis*, *C. obesa* and M. *halmaturorum* woodland.

### 3.3.2 Plant Communities

The living trees are mainly *C. obesa*, *M. strobophylla*, *M. halmaturorum* and *E. rudis*. The understorey includes *Halosarcia pergranulata*, *Sarcocrnia quinqueflora*, *Chenopodium* sp., *Enchylaena tomentosa*, and *Atriplex*

*semibaccata*, with sedges such as *Cyperus vaginatus* and *Juncus pallidus* (Australian Nature Conservation Agency, 1996). Further information on the flora of the Lake Dumbleyung - Coblinine River area is documented by Keating and Trudgen (1986). Transect 1 samples the terrestrial vegetation on an elevated ridge of Lake Dumbleyung (western side) with *Eucalyptus loxophleba* and *Acacia acuminata* forming an open woodland with a moderately dense but species poor understorey of *Templetonia sulcata*, *Atriplex* sp. and *Enchylaena tomentosa*. Gradual movement down-slope on Transect 1 sees the replacement of the terrestrial species with *E. rudis* and *M. strobophylla/M. halmaturorum* and a dense stand of *E. rudis* juveniles located further down-slope on an elevated mound. Dead stems were sampled in the last plot of the transect with the understorey dominated by the samphires (*Halosarcia* sp.). Transect 2 samples the *E. rudis* and *C. obesa* woodland on the west side of the lake, south of the granite outcrop. *C. obesa* regeneration was restricted to the elevated mounds along the transect. The east side of the lake (Transects 3 and 4) is characterised by a dense ring of *E. rudis* on the elevated perimeter of the lake edge, grading to a dense woodland community of *M. strobophylla*, *C. obesa* and *M. halmaturorum*. Further down-slope dense regeneration of *M. halmaturorum* and *C. obesa* is common with an understorey comprised of *Halosarcia* sp. (Figures 3.3.1a to d).

### 3.3.3 Tree Vigour and Population Structure

The vegetation of Lake Dumbleyung was in generally good condition (Table 3.3), however, trees and understorey species associated with the wetland basin and located in less elevated areas were showing signs of stress due to increasing salinity. Both the terrestrial species (*E. loxophleba* and *A. acuminata*) and the littoral salt tolerant vegetation (*E. rudis, C. obesa, M. strobophylla* and *M. halmaturorum*) were in good condition throughout the reserve. Tree recruitment was occurring in many areas around Lake Dumbleyung. The size class distributions (Figure 3.2.2) show the tree populations on Lake Dumbleyung to be relatively young with many stems in the smaller size classes, although some larger *E. rudis* and *C. obesa* individuals recorded. The most significant recruitment of trees is evident on the eastern side of the lake where 241 *M. halmaturorum* seedlings/saplings were surveyed together with 82 *C. obesa* seedling/saplings (Table 3.3). On the western side of the lake *E. rudis* recruitment was sampled together with a visual assessment of other trees recruiting in this area (M. *halmaturorum*). These recruitment stands usually occur around the fringe of the lake (before the samphire zone) in dense rings suggesting germination and establishment has occurred at one or more past high water marks.

**Table 3.3** Summary of Lake Dumbleyung Tree Data

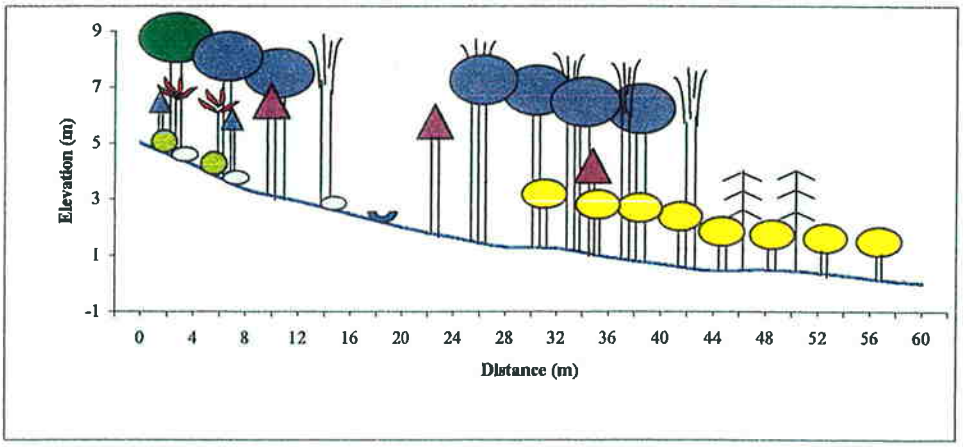
| Species | No. of live trees | No. of dead trees | No. of saplings | No. of seedlings | Mean Crown Score (S.D) |
|---|---|---|---|---|---|
| *Eucalyptus loxophleba* | 1 | 0 | 0 | 0 | 14 |
| *Eucalyptus rudis* | 57 | 114 | 5 | 1 | 15.3 (3.7) |
| *Casuarina obesa* | 131 | 80 | 39 | 43 | 14.3 (2.77) |
| *Acacia accuminata* | 1 | 0 | 0 | 0 | |
| *Melaleuca strobophylla* | 55 | 29 | 1 | 0 | 15.4 (3.06) |
| *Melaleuca halmaturorum* | 38 | 62 | 18 | 223 | 16.6 (2.53) |

### 3.3.4 Soil Characteristics

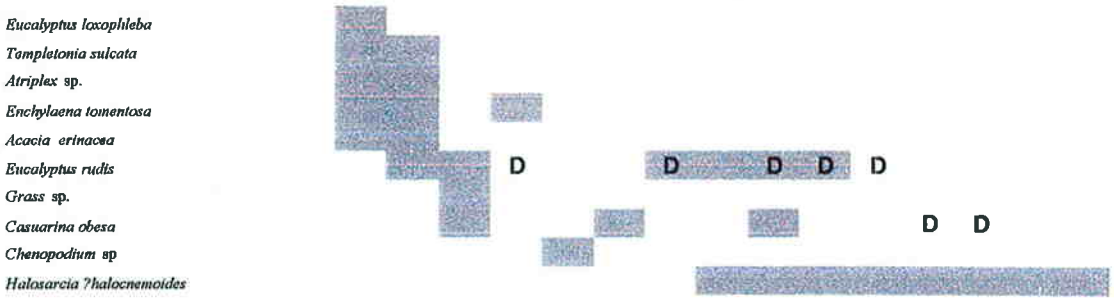
The EM38 data (Appendix 1) shows an increase in soil salinity with a decrease in elevation. The lowest salinities were sampled at Transect 2 on the west side of the lake (22 - 216 mS/m) and the highest on the eastern side of the lake at Transect 3 (302 - 715 mS/m). Soil textures of the upland areas were characterised generally by brown sandy loams grading to coarse grey/white sand in the samphire zones.

### 3.3.5 Summary

With increasing saline runoff and groundwater from the surrounding catchment, the vegetation of the wetland basin and littoral zone is deteriorating and is likely to continue to decline. Tree recruitment is occurring around the lake, but only those individuals located on the elevated mounds and lake edge are likely to persist. The understorey is dominated by salt tolerant shrubs with heavy invasion of weeds in areas near farmland. The high soil salinity of the wetland basin and close proximity of farmland in many areas restricts the vegetation to a very narrow band around much of the lake.




Please note: Species depicted are not to scale.



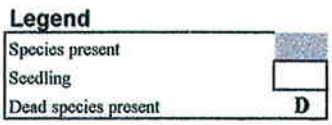
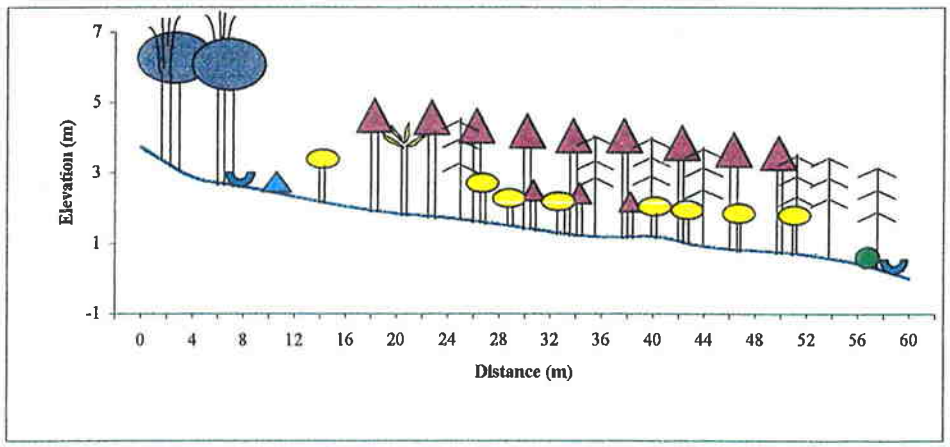




**Figure 3.3.1a** Profile Diagram, Lake Dumbleyung Transect 1




Please note: Species depicted are not to scale.

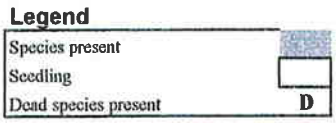
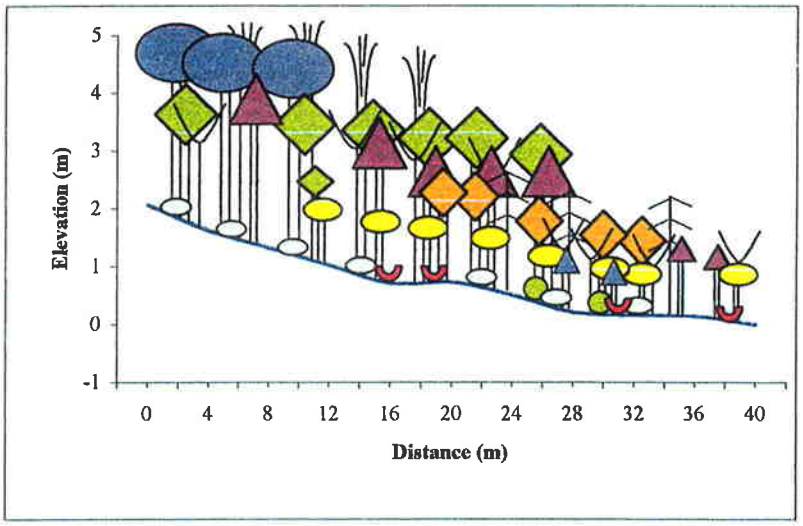
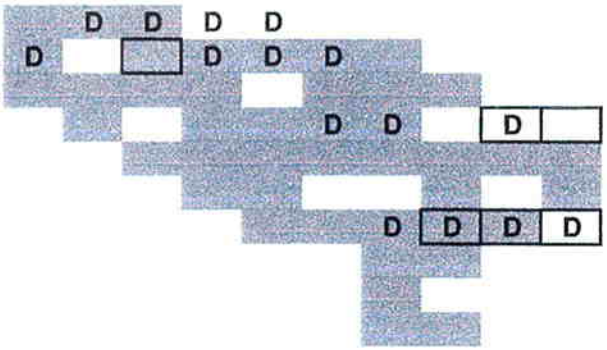




**Figure 3.3.1b** Profile Diagram, Lake Dumbleyung Transect 2



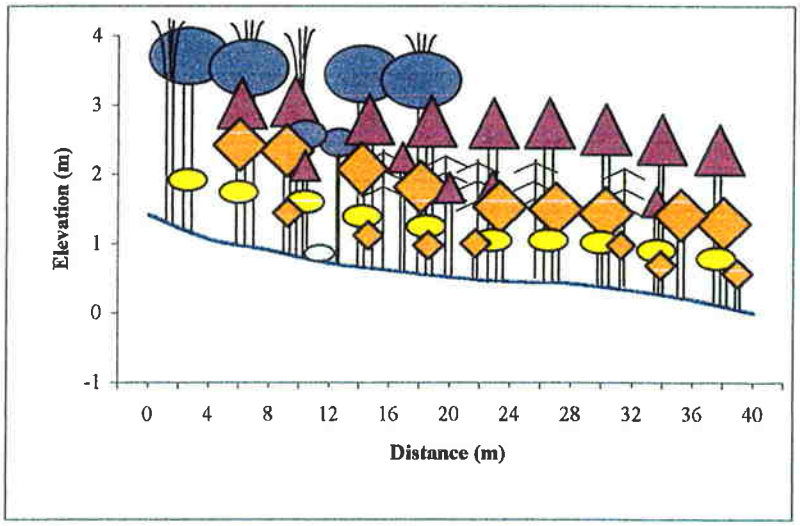

*Eucalyptus rudis*
*Melaleuca strobophylla*
*Enchylaena tomentosa*
*Casuarina obesa*
*Halosarcia ?halocnemoides*
*Disphyma crassifolium*
*Melaleuca halmaturorum*
*Atriplex* sp.
*Alyogyne huegelii*
*Templetonia sulcata*




**Legend**

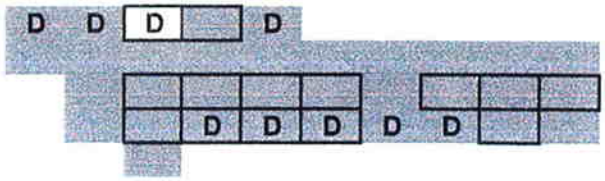
| | |
|---|---|
| Species present | |
| Seedling | |
| Dead species present | D |

**Figure 3.3.1c** Profile Diagram, Lake Dumbleyung Transect 3




Please note: Species depicted are not to scale.

*Eucalyptus rudis*
*Halosarcia ?halocnemoides*
*Melaleuca halmaturorum*
*Casuarina obesa*
*Enchylaena tomentosa*



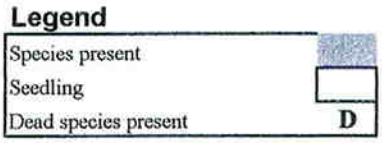
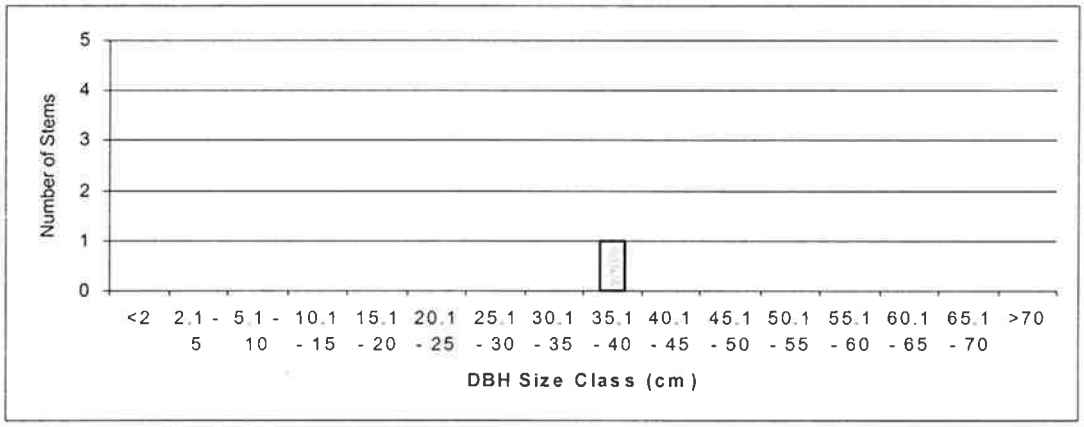
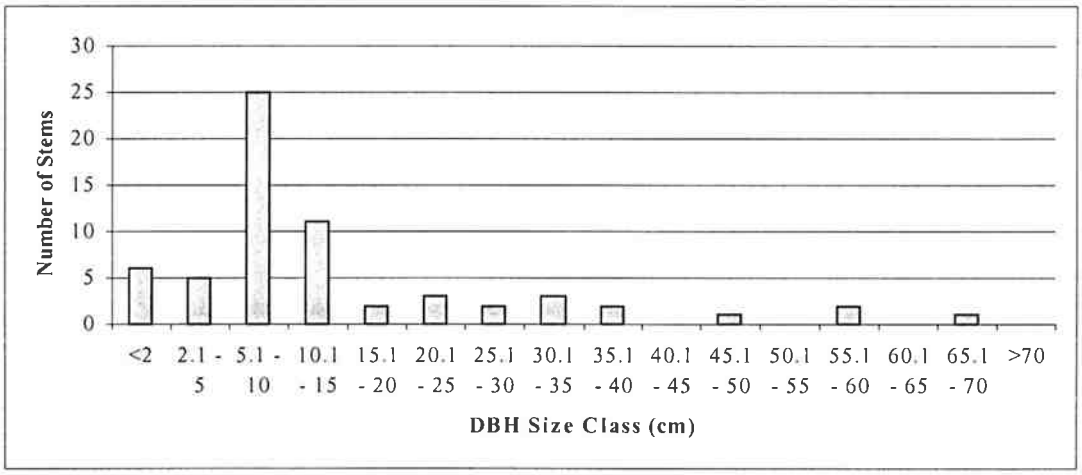




**Figure 3.3.1d** Profile Diagram, Lake Dumbleyung Transect 4

*Eucalyptus loxophleba*




*Eucalyptus rudis*




*Casuarina obesa*

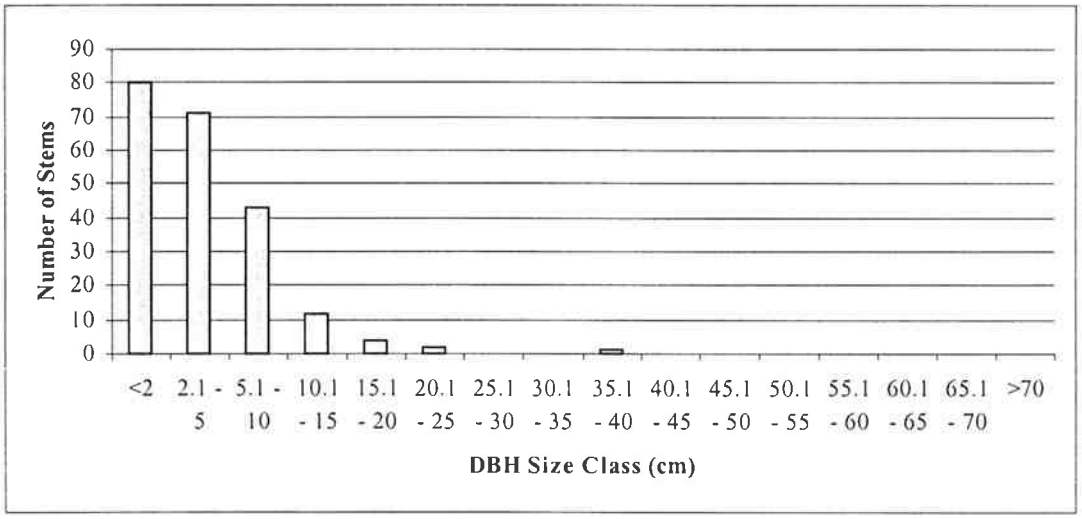
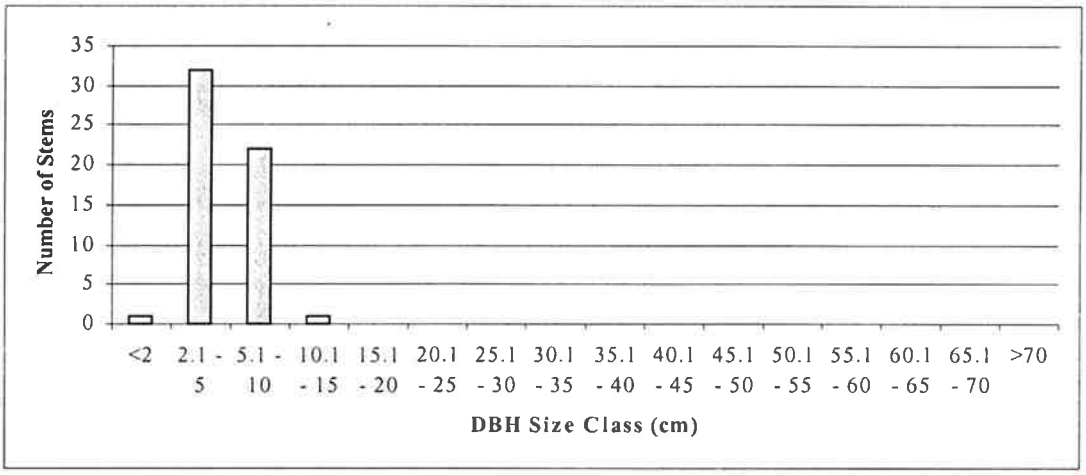



**Figure 3.3.2** Size Class Distributions for Tree Species at Lake Dumbleyung
(continued next page)

*Melaleuca strobophylla*




*Melaleuca halmaturorum*

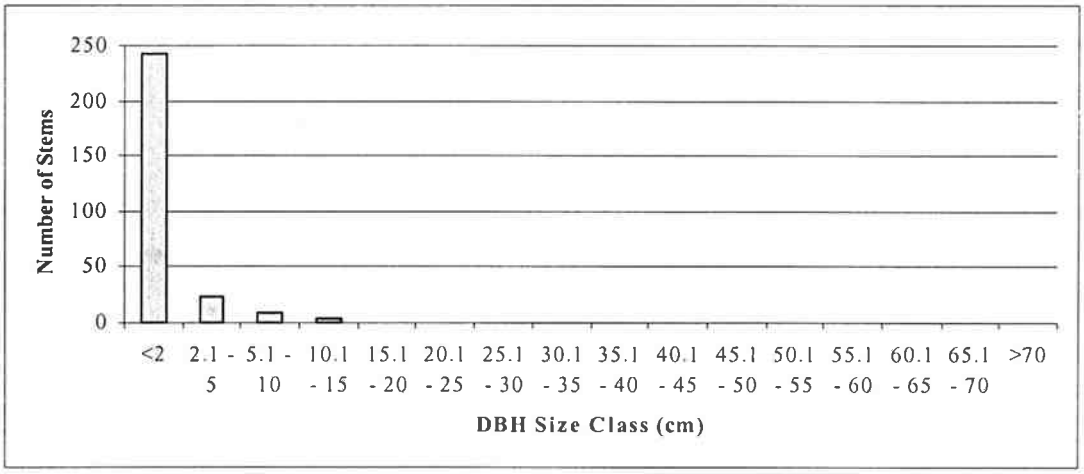



**Figure 3.3.2 cont.** Size Class Distributions for Tree Species at Lake Dumbleyung

## 3.4 LAKE ALTHAM

### 3.4.1 Description

Lake Altham is a large, seasonal, completely open, hypersaline lake located in the Chinocup Nature Reserve (28395), 32.5 km south of the Lake Grace town site (33°24' S, 118°27' E). The total lake area is 243 hectares with 97 % consisting of open water and 3 % vegetation (Halse, Pearson and Patrick, 1993). Agricultural clearing has reduced the health and distribution of the vegetation to a narrow peripheral band, which in turn has been severely affected by increasing soil salinity and flooding. The wetland is characterised by a flat basin with short, steep sloping banks on the western side moderating to gentle-flat slopes on the south - south western and north east - eastern sides. Lake Altham is part of a larger saline drainage system, which includes a series of permanent and seasonal wetlands (Lake Grace, Carinup Lakes, Lake Pingrup, Chinocup Lake and numerous small lakes immediately north and east) that extends more than 200 km from near Ongerup north to Bruce Rock (this section normally not flowing) to connect with the Salt River and ultimately the Avon River (Australian Nature Conservation Agency, 1996). Lake Altham is situated on the Yilgarn Craton in flats of alluvial and lacustrine valley-filled deposits, surrounded by broadly undulating land. Altham is fed by creeks (e.g Deep Creek) originating 1 - 15 km west, and by direct precipitation and runoff with the catchment for Lake Altham extending 25 km south west (Australian Nature Conservation Agency, 1996). A series of saline depressions occur in farmland to the north, east and south of Lake Altham. Lake Altham and the other wetlands in the system are a major breeding area for the Banded Stilt (Australian Nature Conservation Agency, 1996). Grazing history within the surrounding nature reserve and on the lake bed itself is unknown, but there is evidence to suggest that grazing has occurred on the north east - south eastern sides.

One 60m transect and two 40m transects were established on Lake Altham to sample the outer fringing terrestrial (*Melaleuca lateriflora*, *Hakea preissii*, and *Eucalyptus kondininensis*) and littoral/wetland vegetation (*Melaleuca uncinata*, *Melaleuca halmaturorum* and *M. hamulosa*). Monitoring was undertaken in September 1999.

**Transect 1:** (GPS: 50 633572 / 6302192) - located on the south side of the lake, approximately 200 m directly north of the car park through the flooded depressions.
**Transect 2:** (GPS: 50 633279 / 6302789) - Transect 2 is situated in a *Eucalyptus kondininensis* stand, 20 m south of the inflow drain, located on the north west side of Lake Altham.
**Transect 3:** (GPS: 50 634415 / 6304299) - access to Transect 3 is through the north east fence boundary (fence running east-west) off the farmer's property. It lies approximately 150 m around the side of the lake (NW direction), with the transect ending on the lake bed (star pickets visible).

### 3.4.2 Plant Communities

Little vegetation exists on the eastern side of Lake Altham. Transects 1 and 3 begin by sampling the terrestrial species *M. lateriflora* and *H. preissii* forming a low open woodland on the elevated ridges. Movement down slope sees the replacement of the terrestrial species with the wetland trees *M. uncinata*, *M. halmaturorum* and *M. hamulosa*, which form closed low woodlands on the western side of the lake and the north-north-east corner. The shrub like understorey common below these communities includes species such as *Atriplex visicaria*, *Halosarcia pergranulata*, *Lycium astrale*, *Maireana brevifolia* and *Sarcocornia quinqueflora*. Transect 2

samples the stand of *Eucalyptus kondininensis* present on the elevated ridge south of the inflow drain. This community is characterised by an open woodland of *Eucalyptus kondininensis* with a tall shrub understorey of *M. lateriflora* and *Santalum acuminata*. The slope of the ridge and the lake bed is supported by *Melaleuca halmaturorum* with an understorey of *Carpobrotus* sp., *Atriplex* sp., *Enchylaena tomentosa*, and *Halosarcia* species (Figures 3.4.1a to c).

### 3.4.3 Tree Vigour and Population Structure

The vegetation of Lake Altham was generally in good condition (Table 3.4), however, trees and understorey species associated with the wetland basin and inflow channel, including the vegetation on the eastern side of the lake, were showing signs of stress due to increasing salinity and possibly waterlogging. The upland species such as *Melaleuca lateriflora* and *Hakea preissii* together with *Eucalyptus kondininensis* and understorey species such as *Atriplex* sp., *Enchylaena tomentosa*, *Carpobrotus* sp., *Stipa trichophylla* and *Acacia insolita* sub sp. *insolita* were in good health. The wetland communities, dominated by *Melaleuca uncinata*, *Melaleuca halmaturorum* and *M. hamulosa,* were in moderate-poor condition, with many trees on less elevated areas and on the lake basin dead. Tree recruitment at Lake Altham was very low with only 4 seedlings of *Melaleuca halmaturorum* being sampled in the three transects (Table 3.4, Figures 3.4.1-2).

**Table 3.4** Summary of Lake Altham Tree Data

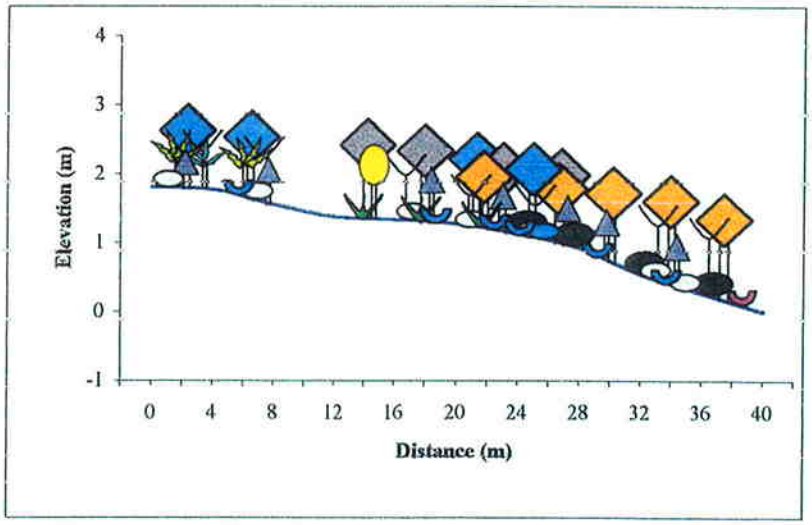
| Species | No. of live trees | No. of dead trees | No. of saplings | No. of seedlings | Mean Crown Score (S.D) |
|---|---|---|---|---|---|
| *Melaleuca lateriflora* | 13 | 33 | 0 | 0 | |
| *Melaleuca uncinata* | 111 | 40 | 0 | 0 | |
| *Melaleuca halmaturorum* | 56 | 39 | 0 | 4 | |
| *Eucalyptus kondininensis* | 27 | 12 | 0 | 0 | 14.9 (2.94) |
| *Melaleuca hamulosa* | 3 | 0 | 0 | 0 | |

### 3.4.4 Soil Characteristics

The EM38 data (Appendix 1) shows an increase in soil salinity with a decrease in elevation. The highest conductivities were on the lake bed at Transect 3 (1296 - 1757 mS/m). Conductivities on and around the lake bed at Transects 1 and 2 were also very high (Transect 1: 1298 - 1728 mS/m, Transect 2: 894 - 1315 mS/m). Soil salinities of the upland areas and elevated mounds were generally low (Appendix 1). Soil textures of the elevated ridges were characterised by brown/grey sand grading to white sand with grey sandy silt at the lake edge.

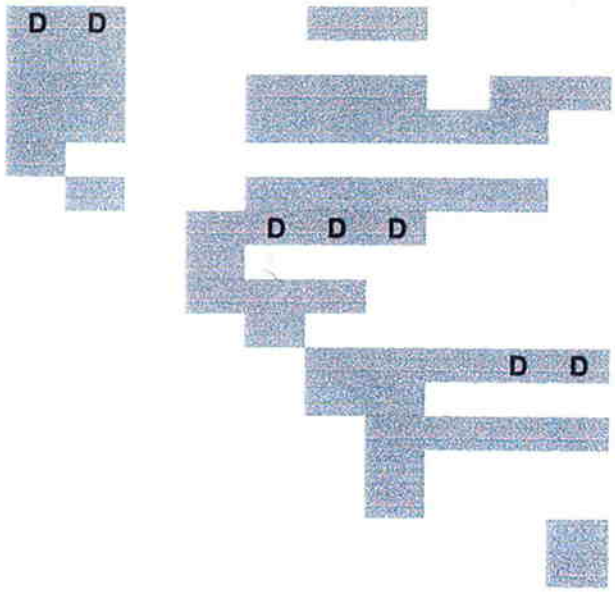
### 3.4.5 Summary

The decline in the health of Lake Altham through increasing salinisation and waterlogging has led to the loss of the overstorey vegetation on the eastern side of the lake. This reduction in the vegetation buffer has exposed the wetland to increased disturbance and runoff causing large waterlogged depressions in elevated areas. Large areas of vegetation have been lost around the inflow channel to the north-west and the high salinities recorded here appear to be encroaching south and east. The vegetation on the western ridge is currently in good condition, however, some dying stems and less vigorous vegetation can be seen on the slope, which may suggest saline groundwater is moving towards the elevated ridges. With increasing salinity predicted and the low recruitment numbers recorded, the sustainability of the remaining vegetation, in particular littoral species, looks uncertain.




Please note: Species depicted are not to scale.

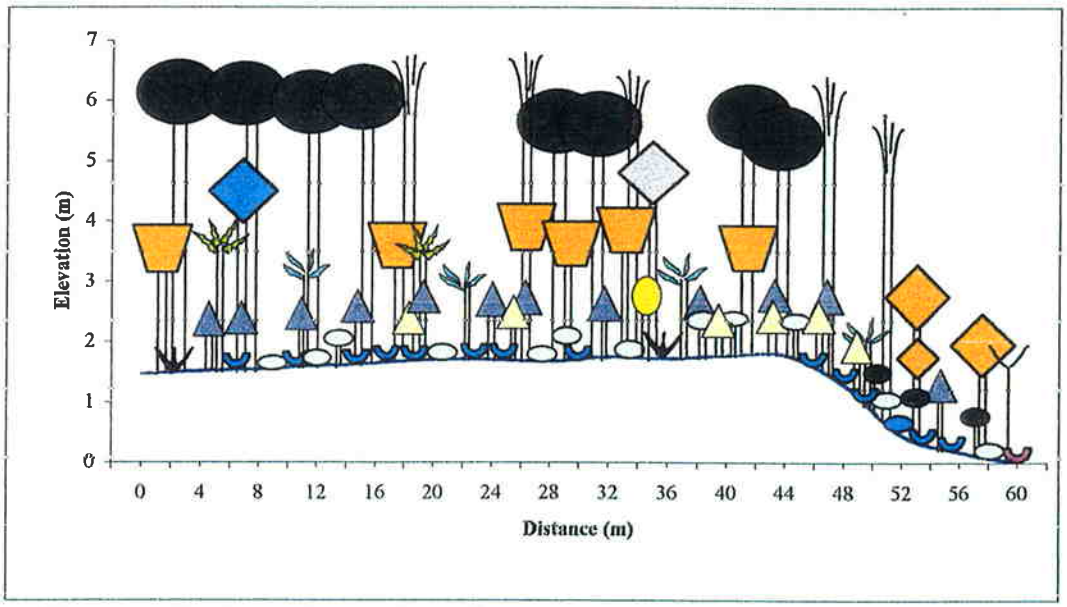
*Melaleuca lateriflora*
*Hakea preissii*
*Enchylaena tomentosa*
*Atriplex* sp 2.
*Acacia insolita* sub sp. *insolita*
*Carpobrotus* sp.
*Melaleuca uncinata*
*Dodonaea viscosa*
*Gahnia* sp.
*Daviesia* sp
*Melaleuca halmaturorum*
*Billardiera lehmanniana*
*Halosarcia* sp.
*Stipa trichophylla*
*Frankenia* sp.
*Mesembryanthemum nodiflorum*
*Parapholis incurva*




**Legend**

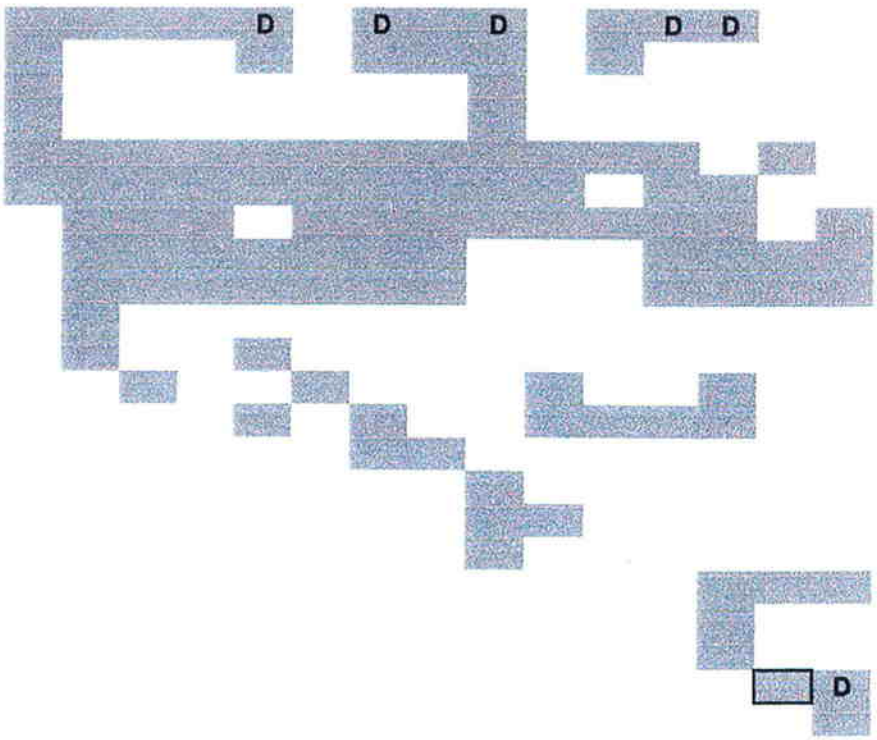
| | |
|---|---|
| Species present | |
| Seedling | |
| Dead species present | D |

**Figure 3.4.1a** Profile Diagram, Lake Altham Transect 1




Please note: Species depicted are not to scale.

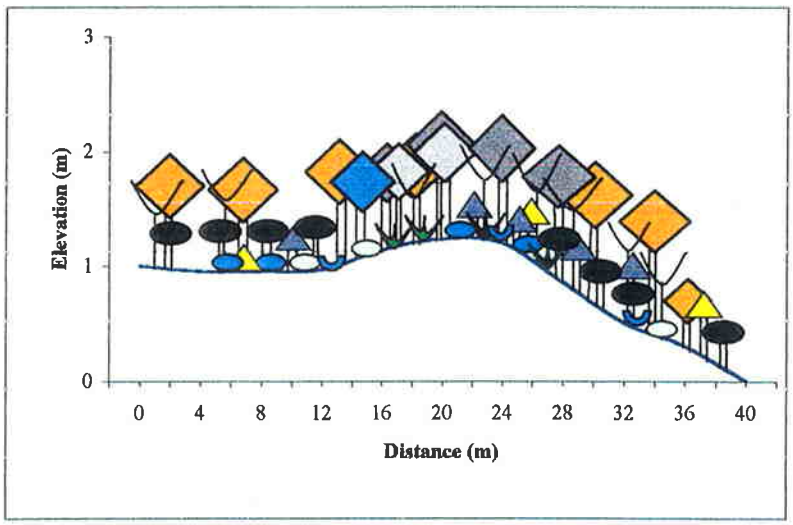
*Eucalyptus kondininensis*
*Santalum acuminatum*
*Lomandra micrantha* subsp. *teretifolia*
*Alyxia buxifolia*
*Atriplex* sp 2
*Stipa trichophylla*
*Enchylaena tomentosa*
*Carpobrotus* sp.
*Carpobrotus* sp.
*Melaleuca lateriflora*
*Hakea preissii*
*Acacia insolita* sub sp. *insolita*
*Atriplex vesicaria*
*Lepidosperma* sp.
*Melaleuca hamulosa*
*Lepidosperma* sp.
*Dodonaea viscosa*
*Halosarcia* sp.
*Parapholis incurva*
*Frankenia* sp
*Melaleuca halmaturorum*
*Mesembryanthemum nodiflorum*




**Legend**

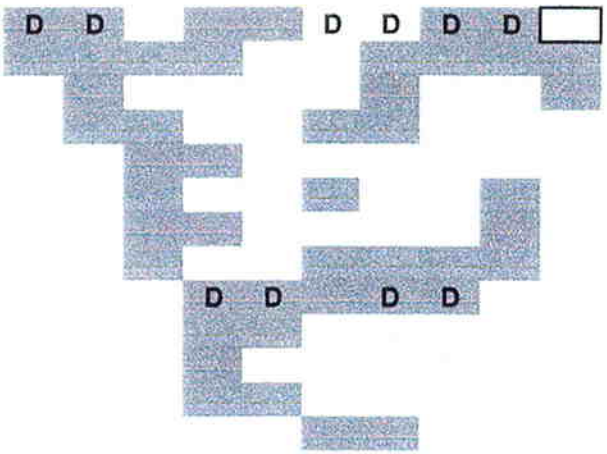
| | |
|---|---|
| Species present | |
| Seedling | |
| Dead species present | D |

**Figure 3.4.1b** Profile Diagram, Lake Altham Transect 2




Please note: Species depicted are not to scale.

*Melaleuca halmaturorum*
*Halosarcia* sp.
*Atriplex vesicaria*
*Frankenia* sp
*Parapholis incurva*
*Carpobrotus* sp.
*Enchylaena tomentosa*
*Atriplex* sp 2
*Melaleuca uncinata*
*Melaleuca hamulosa*
*Melaleuca lateriflora*
*Gahnia* sp.
*Lomandra micrantha* subsp. *teretifolia*




**Legend**

| | |
|---|---|
| Species present | |
| Seedling | |
| Dead species present | D |

**Figure 3.4.1c** Profile Diagram, Lake Altham Transect 3

*Eucalyptus kondininensis*

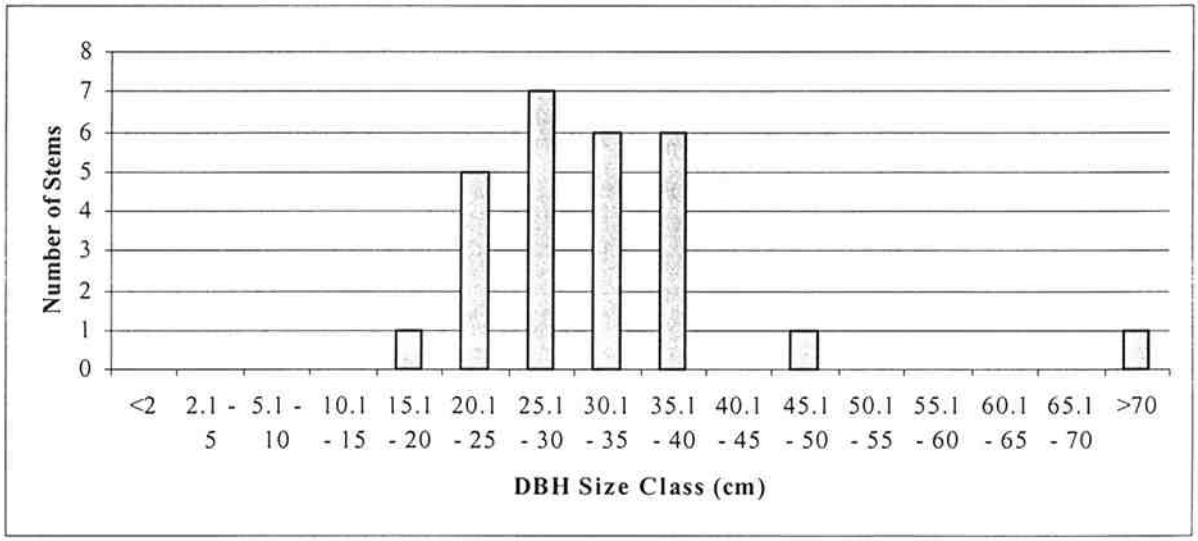



**Figure 3.4.2** Size Class Distributions for Tree Species at Lake Altham

## 3.5 YAALUP LAGOON

### 3.5.1 Description

Yaalup Lagoon is a small, fresh, semi-permanent lake situated in an unnamed Nature Reserve (36967), 25 km north east of the Ongerup town site (35°45' S, 118°34' E). The total lake area is 15.7 hectares with 57 % consisting of open water and 43 % vegetation (Halse, Pearson and Patrick, 1993). The wetland lies predominantly in a cleared catchment, apart from the buffer of remnant vegetation remaining in the unnamed reserve and surrounding nature reserves in the area. The health of the vegetation in the reserve and surrounding the wetland itself has remained in good condition despite agricultural clearing and subsequent flooding, with successful mass recruitment of overstorey species in recent years. Yaalup Lagoon is characterised by a flat basin with short, flat-gentle sloping banks. A series of saline depressions and wetlands occur within neighbouring reserves and on farmland to the south, west and north of the lagoon. Water is supplied to Yaalup lagoon by direct precipitation, surface runoff and discharges from ephemeral drains into an inflow channel located on the south west side of the lagoon.

Two 60 m transects were established on Yaalup Lagoon to sample the littoral/wetland vegetation (*Eucalyptus occidentalis*, *Melaleuca strobophylla*) and tree recruitment (*Melaleuca strobophylla*) that has occurred at the wetland in the last few years. Monitoring was undertaken in October 1999.

**Transect 1:** (GPS: 50647322 / 6263733) - Transect 1 is located on the east south east side of the lagoon, approximately 100 m north east of the fence boundary, starting in a stand of *M. strobophylla* and *E. occidentalis* and ending 15 m into the water.

**Transect 2:** (GPS: 50 647217 / 6263848) - Transect 2 is located on the north west side of the lagoon (directly opposite Transect 1), beginning in the dense regeneration stand of *M. strobophylla* surrounding the wetland on higher ground and finishing 20 m into the water.

### 3.5.2 Plant Communities

There is a small area of open water surrounded by a wide belt of *Eucalyptus/Melaleuca* woodland dominated by *Eucalyptus occidentalis* with scattered but dense thickets of *Melaleuca strobophylla*. A thick recruitment ring of *M. strobophylla* around the elevated edge of the lake is perhaps evidence of a previous high water mark. Transect 1 samples the dominant vegetation community, where *E. occidentalis* dominates the higher ground with thick stands of *M. strobophylla* occurring throughout the middle section of the transect (less elevated) and into the water. Only dead individuals of *Eucalyptus occidentalis* were sampled near and in the water. The understorey of this transect (and throughout the lake) was very sparse with *Centipeda minima* and *Atriplex* sp. occurring regularly under the closed woodland. Transect 2 samples the ring of dense *Melaleuca strobophylla* recruitment and the open woodland of *Eucalyptus occidentalis* and *Melaleuca strobophylla* down into the water. There was no understorey recorded in Transect 2. Just above the water mark and consistently around the lake seedlings/saplings of *Melaleuca strobophylla* formed a thin dense band, with the individuals in the water dead. The terrestrial community surrounding the lake was dominated by *Eucalyptus platypus*, *Eucalyptus spathulata* and *Melaleuca lateriflora* forming open woodlands (Figures 3.5.1a and b).

### 3.5.3 Tree Vigour and Population Structure

The vegetation of Yaalup Lagoon and the surrounding reserve was in very good condition. *Eucalyptus occidentalis* and *Melaleuca strobophylla* had mean crown scores of 14.9 and 13.8 respectively (Table 3.5). The low mean score of the vegetation relative to the freshness of the lake may reflect high competition for resources within the dense stands of regeneration and periods of inundation. The size class distributions for *M. strobophylla* (Figure 3.5.2) show the population to be dominated by stems in the <2 cm size class category. In comparison, the *Eucalyptus occidentalis* population is more mature with many individuals in the larger size classes and a representation in almost each size class. The most significant recruitment of trees is evident around the perimeter of the lake, where 1009 *Melaleuca strobophylla* seedling/saplings were surveyed, together with 37 *Melaleuca uncinata* saplings and 8 *Eucalyptus occidentalis* seedling/saplings.

**Table 3.5** Summary of Yaalup Lagoon Tree Data

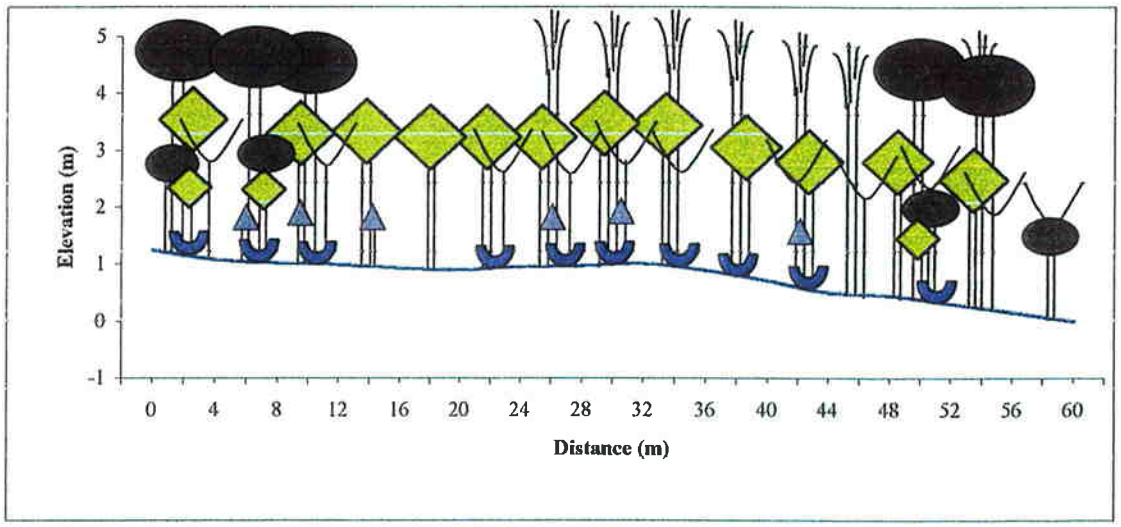
| Species | No. of live trees | No. of dead trees | No. of saplings | No. of seedlings | Mean Crown Score (S.D) |
|---|---|---|---|---|---|
| *Melaleuca strobophylla* | 322 | 328 | 969 | 40 | 14.9 (4.66) |
| *Eucalyptus occidentalis* | 49 | 96 | 2 | 6 | 13.8 (5.79) |
| *Melaleuca uncinata* | 0 | 0 | 37 | 0 | |

### 3.5.4 Soil Characteristics

Soil salinity ranged from 79 mS/m in the elevated areas to 395 mS/m on the lake edge (Appendix 1). The two transects on opposite sides of the lagoon show very low salinities in the upland regions with a gradual increase in the soil salinity toward the water. Soil salinity was not obtained for the last 8 metres of each transect because of the presence of water. Soils ranged from dark brown/coarse grey sand in the terrestrial zone to grey sandy clay near the lake bed (Appendix 1).

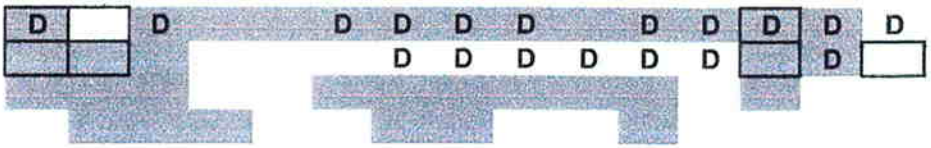
### 3.5.5 Summary

Yaalup Lagoon supports terrestrial and littoral vegetation in very good condition with the existing overstorey population characterised by numerous mature and young individuals. Several mass recruitment events of *M. strobophylla* have occurred at this wetland in the last few years. The survival and persistence of the regenerating individuals will depend on the flooding regime and catchment hydrology in the next couple of years. Some death of seedlings was noted throughout the wetland due to inundation. Yaalup Lagoon will continue as a healthy, sustainable wetland if the surrounding nature reserves and catchments are not further cleared.




Please note: Species depicted are not to scale.

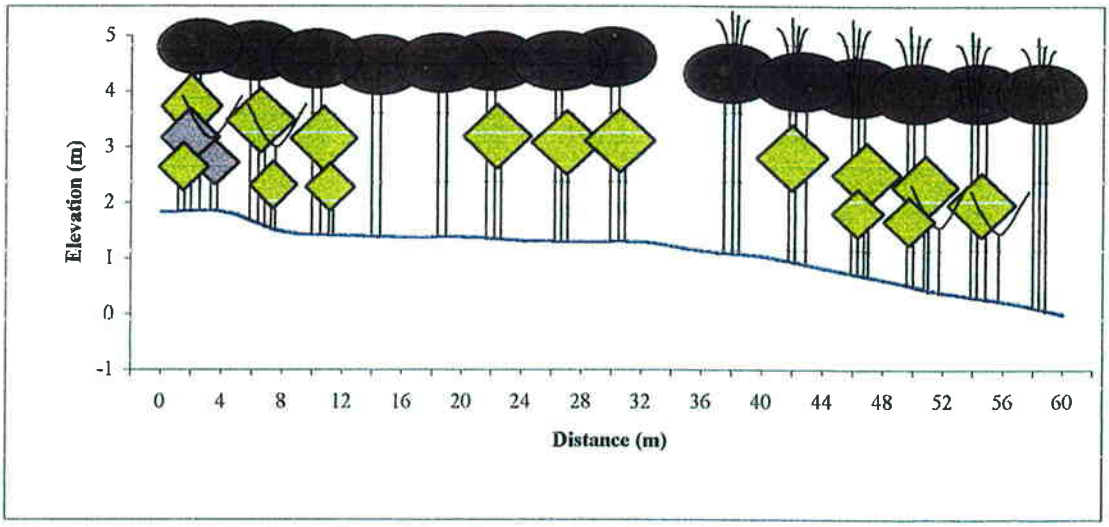
*Melaleuca strobophylla*
*Eucalyptus occidentalis*
*Centipeda minima*
*Atriplex* sp.




**Legend**

| | |
|---|---|
| Species present | |
| Seedling | |
| Dead species present | D |

**Figure 3.5.1a** Profile Diagram, Yaalup Lagoon Transect 1




Please note: Species depicted are not to scale.

*Melaleuca strobophylla*
*Eucalyptus occidentalis*
*Melaleuca uncinata*

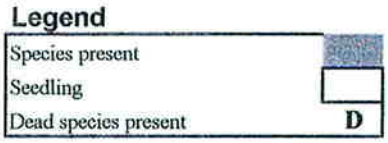
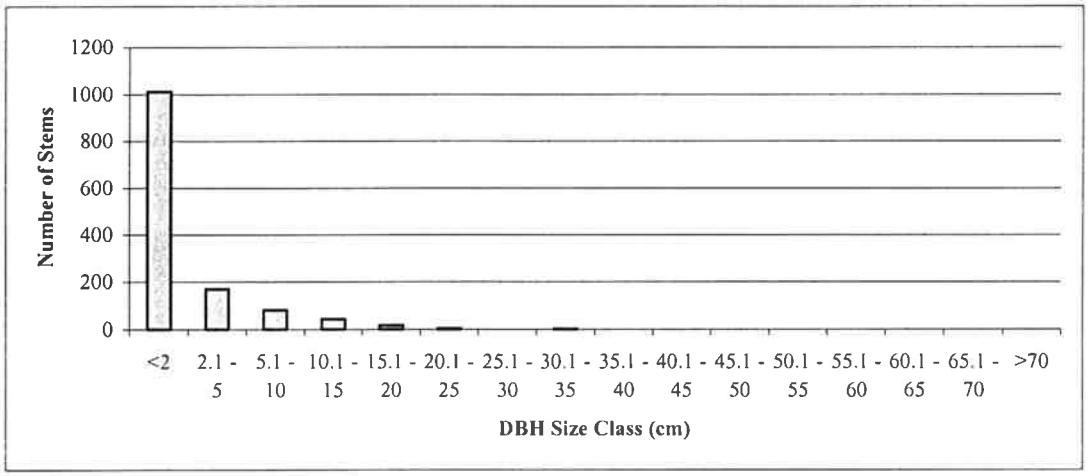
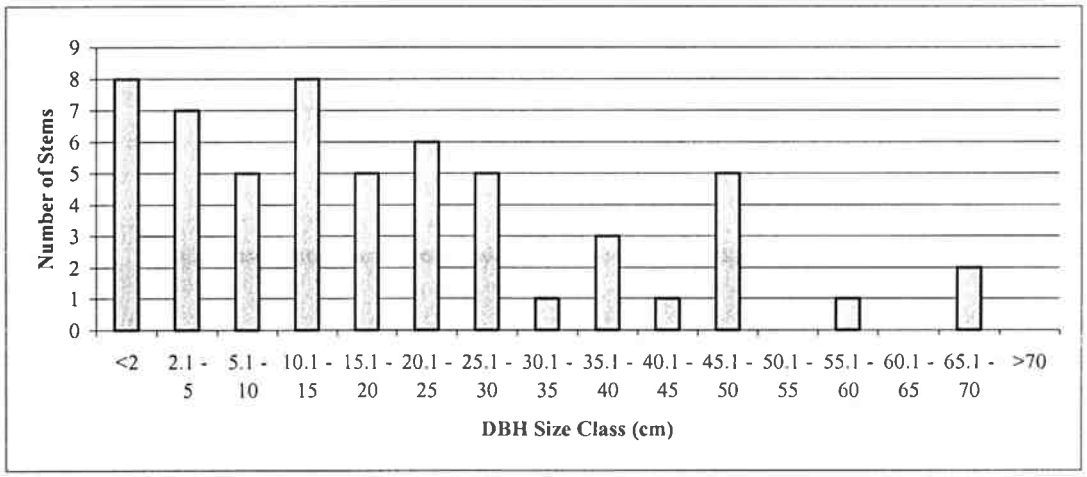




**Figure 3.5.1b** Profile Diagram, Yaalup Lagoon Transect 2

*Melaleuca strobophylla*




*Eucalyptus occidentalis*




*Melaleuca uncinata*

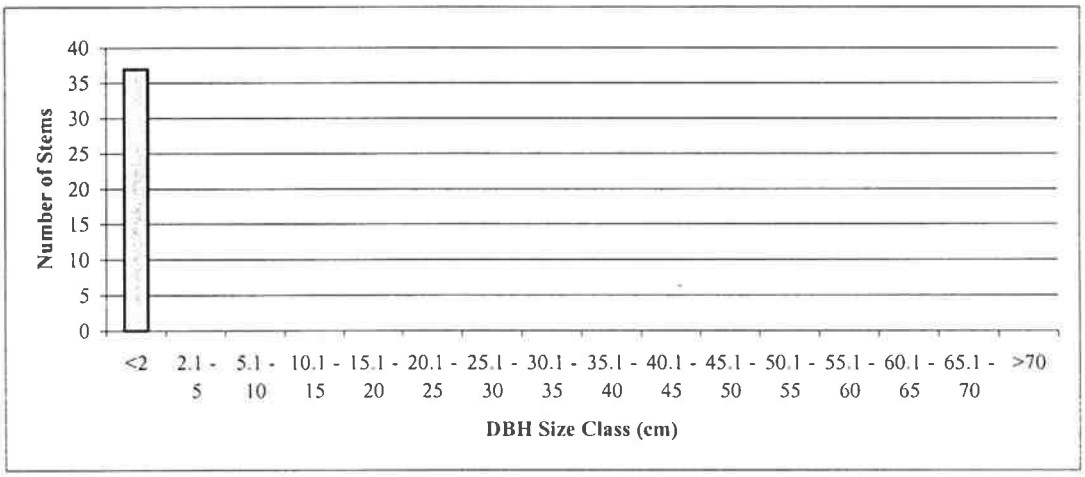



**Figure 3.5.2** Size Class Distributions for Tree Species at Yaalup Lagoon

## 3.6 LAKE BENNETTS

### 3.6.1 Description

Lake Bennetts is a small, seasonal, saline lake located in the Dunn Rock Nature Reserve (36445), 23 km south south-east of the Lake King town site (33°16' S, 119°36' E). The wetland lies within a cleared catchment apart from the buffer of vegetation in the surrounding reserve (a paddock lies approximately 500 m to the west and 2 km to the east). The wetland is characterised by a flat basin with moderately sloping short banks, increasing in length on the south eastern side. A white sandy beach exists around the edge of the lake bed with a large area of the wetland devoid of vegetation on the south eastern side. Water is supplied to Bennetts Lake by direct precipitation, surface runoff and discharges from ephemeral drainages into two inflow channels, one located on the south- south west side of the lake, which originates 15 km south-south east of the lake, and a smaller channel on the east side of the lake, which originates in the farmland to the east. A number of smaller, saline depressions are present to the east and north of Lake Bennetts in the nature reserve and on adjacent farmland.

Two (60m and 40m) transects were established on Lake Bennetts to sample the littoral/wetland vegetation (*Eucalyptus occidentalis*, *Melaleuca strobophylla*, *Melaleuca hamulosa*) and the regeneration (*Melaleuca halmaturorum*), which has occurred at the wetland in the last few years. Monitoring was undertaken in November 1999.

**Transect 1:** (1:100,000 Grid Reference X = 742450 E, Y = 6314800 N) - Transect 1 is located approximately 150 m north of the main track (from the ski sign) in a thick *Melaleuca strobophylla, Melaleuca hamulosa* and *Melaleuca halmaturorum* community. The end of the transect (star pickets) is visible on the lake bed (beach).
**Transect 2:** (1:100,000 Grid Reference X = 743100 E, Y = 6315150 N) - Transect 2 is located at the top end of the lake (NNE) in a dense stand of *Melaleuca strobophylla*, *Melaleuca hamulosa* and *Melaleuca halmaturorum*. Access to Transect 2 is via a small track at the top end (north) of the lake. Once at the end of the track (approximately 80 - 100 m), the transect is located approximately 100 m south east.

### 3.6.2 Plant Communities

The wetland vegetation on the western side of Lake Bennetts is characterised by open woodlands of mature *Eucalyptus occidentalis* and *Melaleuca hamulosa* on the elevated sandy ridges and mounds. Common understorey species located beneath this group include *Schoenus* sp., *Frankenia* sp. and *Gastrolobium pusillum*. Significant *M. hamulosa* recruitment was evident in the elevated plots of Transect 1. Slight movement down slope sees the replacement of *E. occidentalis* with *M. strobophylla*, forming dense closed stands with *M. hamulosa* and *M. halmaturorum*. *Sarcocornia* species dominate the understorey in this community. Dead individuals of *M. strobophylla* and *M. hamulosa* dominate the middle section of Transect 1, along with numerous healthy *M. halmaturorum* individuals forming low open thickets. Large recruitment events of *M. halmaturorum* have occurred in recent years, with many individuals located in distinct lines suggesting previous high water marks, with distribution almost exclusively in the samphire zone and/or on the lake bed. The elevated plots of Transect 2 are characterised by a mature open woodland of *E. occidentalis* with occasional *M. halmaturorum*. *M. strobophylla* and *M. halmaturorum* dominate the rest of Transect 2, forming dense thickets with a sparse,

species poor understorey comprised of species such as *Schoenus caespititius, Sarcocornia* sp., *Frankenia* sp. and *Disphyma crassifolium*. Recruitment of both *E. occidentalis* and *M. halmaturorum* was common throughout the transect with an increase in *M. halmaturorum* seedlings towards the lake edge (Figures 3.6.1a and b).

### 3.6.3 Tree Vigour and Population Structure

The vegetation of Bennetts Lake and the surrounding reserve was in generally in good condition. *Eucalyptus occidentalis* and *Melaleuca strobophylla* had mean crown scores of 11.8 and 15.9 respectively (Table 3.6). The size class distributions for *M. strobophylla* (Figure 3.6.2) show the population to be dominated by stems in the <2 - 10 cm size class category, with only a few individuals > 10 cm in diameter. In comparison, the *Eucalyptus occidentalis* population is comprised of more mature individuals in the larger size classes, although 40 % of the population is <2 cm in diameter. The most significant recruitment of trees is evident around the lake bed and lower littoral zone of the lake, where the majority of the 342 *Melaleuca halmaturorum* seedlings were surveyed together with 57 *Melaleuca hamulosa* seedlings. In comparison the 8 seedlings/saplings of *E. occidentalis* were surveyed in elevated areas.

**Table 3.6** Summary of Lake Bennetts Tree Data

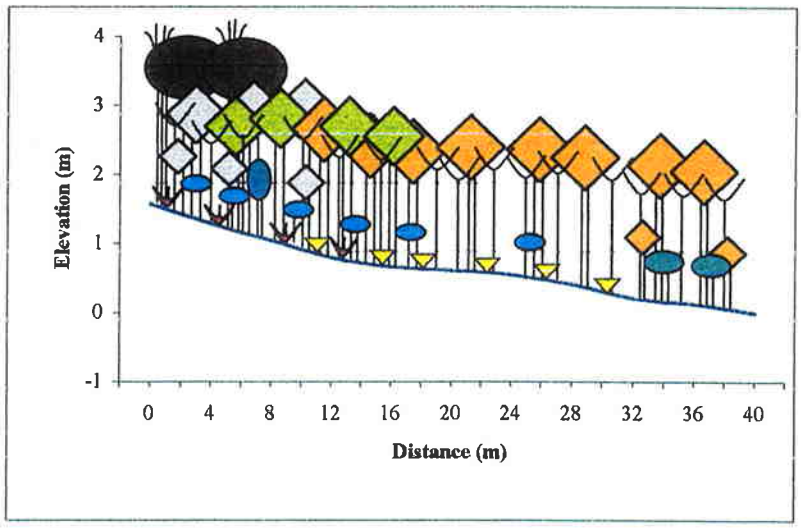
| Species | No. of live trees | No. of dead trees | No. of saplings | No. of seedlings | Mean Crown Score (S.D) |
|---|---|---|---|---|---|
| *Eucalyptus occidentalis* | 6 | 4 | 2 | 6 | 11.8 (6.1) |
| *Melaleuca hamulosa* | 83 | 156 | 0 | 51 | |
| *Melaleuca halmaturorum* | 567 | 250 | 0 | 342 | |
| *Melaleuca strobophylla* | 98 | 60 | 25 | 1 | 15.9 (3.98) |

### 3.6.4 Soil Characteristics

The EM38 data (Appendix 1) shows an increase in soil salinity with a decrease in elevation. The highest conductivities were on the lake bed at Transect 1 (583 - 780 mS/m). Transect 2 exhibited similar soil conductivities, with a range of 102 – 216 mS/m recorded at the beginning of the transect (elevated ridge) and 399 – 671 mS/m recorded at the end (lake bed). Soil salinities of the upland areas and elevated mounds were generally low (Appendix 1). Soil textures of the elevated ridges were characterised by a 2-5 cm layer of white sand underlying brown sand grading to white sand at the lake edge/bed.

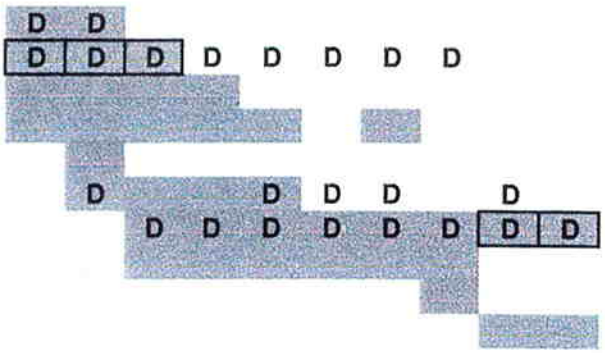
### 3.6.5 Summary

Given the high soil salinities at this lake and the probable increase in lake salinity in the future, the littoral vegetation and the vegetation on the lower elevations is likely to deteriorate. Of particular concern is the littoral vegetation on the eastern side, which due to the lower elevations and flooding is the most susceptible to increasing soil salinity. The success of the regeneration events and the long-term sustainability of the plant communities at Lake Bennetts will depend on the water regime during the next few years. GPS locations were not recorded for the two transects due to an equipment malfunction. It is proposed that during the year through other studies these data may be obtained and added to the report.




Please note: Species depicted are not to scale.

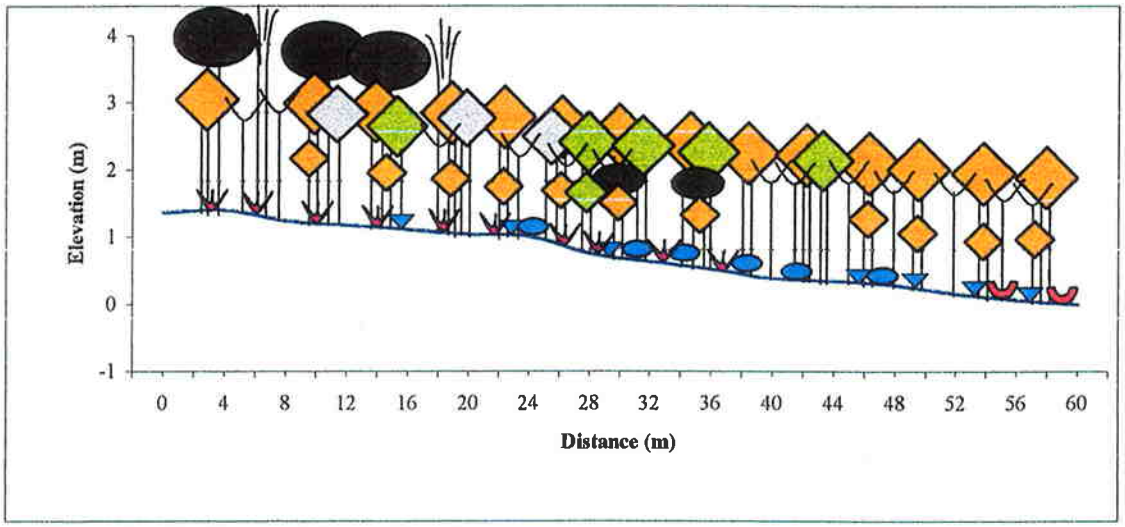
*Eucalyptus occidentalis*
*Melaleuca hamulosa*
*Schoenus* sp.
*Frankenia* sp
*Gastrolobium pusillum*
*Melaleuca strobophylla*
*Melaleuca halmaturorum*
*Sarcocornia* sp
*Lawrencia squamata*
*Halosarcia indica*




**Legend**

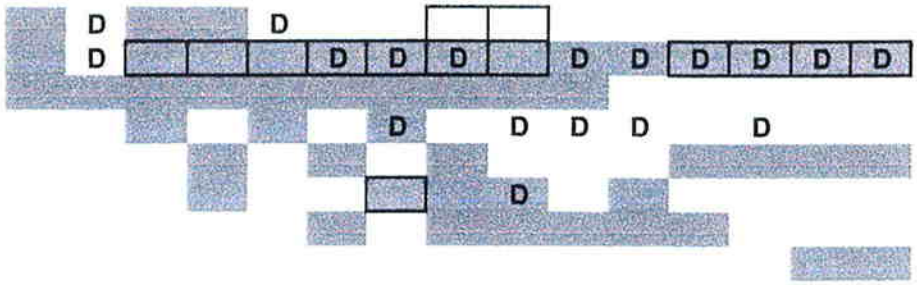
| | |
|---|---|
| Species present | |
| Seedling | |
| Dead species present | D |

**Figure 3.6.1a** Profile Diagram, Lake Bennetts Transect 1




Please note: Species depicted are not to scale.

*Eucalyptus occidentalis*
*Melaleuca halmaturorum*
*Schoenus caespititius*
*Melaleuca hamulosa*
*Sarcocornia* sp.
*Melaleuca strobophylla*
*Frankenia* sp.
*Disphyma crassifoltum*

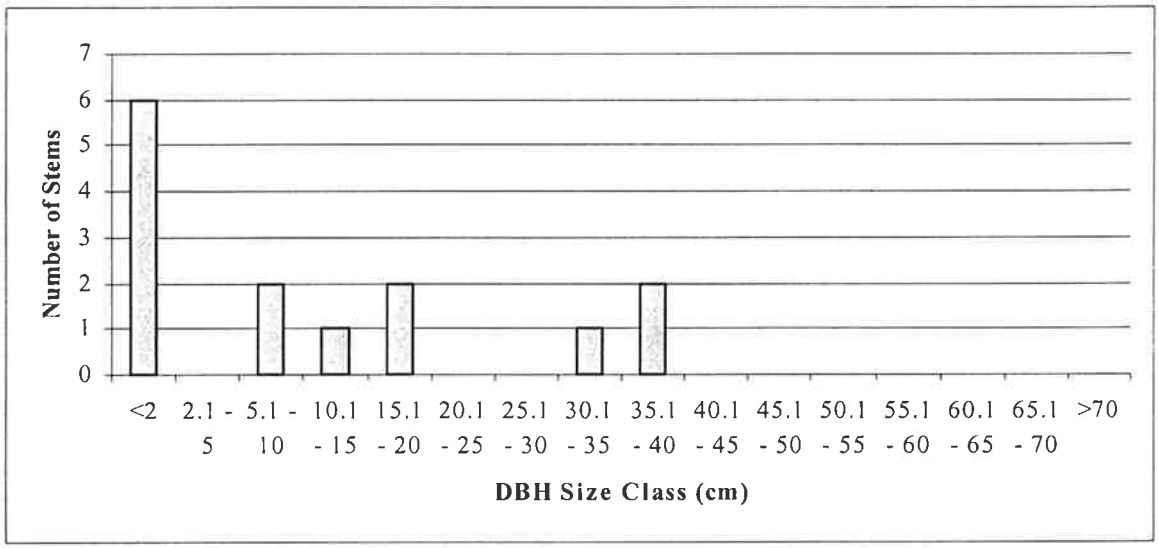



**Legend**

| | |
|---|---|
| Species present | |
| Seedling | |
| Dead species present | D |

**Figure 3.6.1b** Profile Diagram, Lake Bennetts Transect 2

*Eucalyptus occidentalis*




*Melaleuca strobophylla*

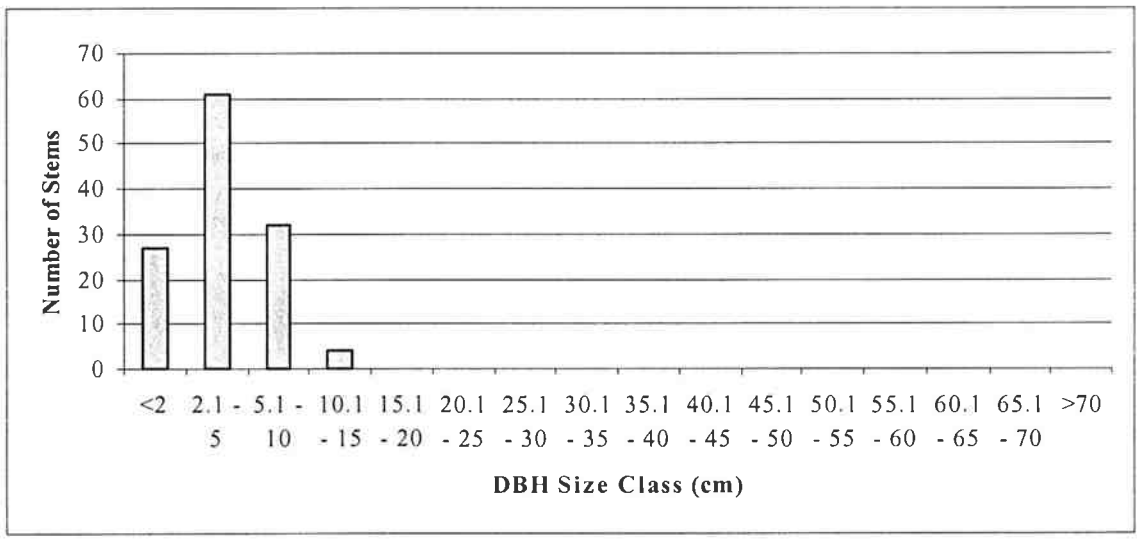



**Figure 3.6.2** Size Class Distributions for Tree Species at Lake Bennetts

## 3.7 LAKE RONNERUP

### 3.7.1 Description

Lake Ronnerup is a moderate-sized, seasonal, saline lake located in the Pallarup Nature Reserve (29860), 20 km south-south-east of the Lake King town site (33°14' S, 119°36' E). The wetland lies within a catchment that is cleared apart form the buffer of vegetation in the surrounding reserve (a paddock lies approximately 3 km to the south west). Agricultural clearing has reduced the health and distribution of the vegetation to a narrow peripheral band, which in turn appears to be severely affected by increasing soil salinity and flooding. The wetland is characterised by a flat basin with short, flat-moderate sloping banks. Lake Ronnerup is part of a larger saline drainage system, which includes a series of permanent and seasonal wetlands (Lake King, Lake Camm, Lake Fox, Lake Gulson and numerous small wetlands immediately north and west) that extend more than 70 km. Lake Ronnerup is fed by an ephemeral drainage channel (a series of small depressions) originating 3 - 5 km west north west (Lake King) and by direct precipitation and runoff. Numerous saline depressions occur in the nature reserve to the north, east and west of the Lake.

Two (60m and 40m) transects were established on Lake Ronnerup to sample the outer fringing terrestrial (*Eucalyptus occidentalis*), littoral/wetland vegetation (*Melaleuca cuticularis*) and the mass recruitment of *E. occidentalis* and *M. cuticularis*, which has occurred at the wetland in the last few years. Monitoring was undertaken in November 1999.

**Transect 1:** (1:100,000 Grid Reference X = 743800 E, Y = 6317300 N) - Transect 1 is located approximately 250 m south south-west off the main access track (from the lake bed). The transect begins on an elevated bank sampling the terrestrial vegetation and ends in a dense regeneration stand of *E. occidentalis*, 50 m up from the lake bed.

**Transect 2:** (1:100,000 Grid Reference X = 743850 E, Y = 6318500 E) - Transect 2 is located approximately 350 - 400 m north off the main access track (from the lake bed). The transect begins in the littoral/wetland vegetation (*M. cuticularis*) and ends in a dense regeneration stand of *E. occidentalis* and *M. cuticularis*, ending 10 m short of the lake bed.

### 3.7.2 Plant Communities

The majority of the vegetation on Lake Ronnerup is restricted to a thin band around the elevated ridges of the wetland, with trees becoming very sparse on the less elevated north western side. Transect 1, beginning on an elevated ridge, samples the open, mature woodland of *E. occidentalis* common around the perimeter of Lake Ronnerup. Common understorey species beneath this community include *Atriplex vesicaria, Chenopodium* sp., *Gahnia trifida, Billardiera? Lehmanniana* and *Threlkeldia diffusa*. Also present are *Santalum murrayanum* and *Acacia saligna*. Other understorey species found on the elevated ridge of Transect 1 include *Olearia axillaris, Rhagodia drummondii* and *Lomandra effusa*. The last 20 m section of Transect 1 samples a dense recruitment stand of *E. occidentalis* of various sizes. Transect 2 samples the *M. cuticularis* and *E. occidentalis* woodland on the north-north-eastern side of Lake Ronnerup. Mature individuals of *M. cuticularis* forming low open thickets dominate the elevated ridge of Transect 2, with a few seedlings of *E. occidentalis* present. A very dense stand of

young *E. occidentalis* exists in the depression of the transect, with two mature individuals present. The numbers of seedlings and saplings of the two overstorey species decline on the ridge (moving toward the lake bed), however, 461 *E. occidentalis* seedlings and 28 *M. cuticularis* seedlings were recorded on the slope leading to the lake bed (Figures 3.7.1a and b).

### 3.7.3 Tree Vigour and Population Structure

The vegetation of Lake Ronnerup was in generally good condition (Table 3.7), however, trees and understorey species associated with the wetland basin and located in less elevated areas were showing signs of stress due to increasing salinity. Both wetland tree species (*E. occidentalis* and *M. cuticularis*) were in good condition throughout the reserve. Tree recruitment has occurred in many areas around Lake Ronnerup. The size class distributions (Figure 3.7.2) show the tree populations to be relatively young with many stems in the smaller size classes, although some larger *E. occidentalis* individuals were recorded in Transect 1. The most significant recruitment of trees is evident on the eastern and northern sides of the lake, where (Transects 1 and 2) 1050 *E. occidentalis* seedlings/saplings were surveyed together with 77 *M. cuticularis* seedling/saplings (Table 3.7). These mass recruitment stands usually occur around the fringe of the lake (before the samphire zone) in dense rings/zones suggesting germination and establishment has occurred at one or more past high water marks.

**Table 3.7** Summary of Lake Ronnerup Tree Data

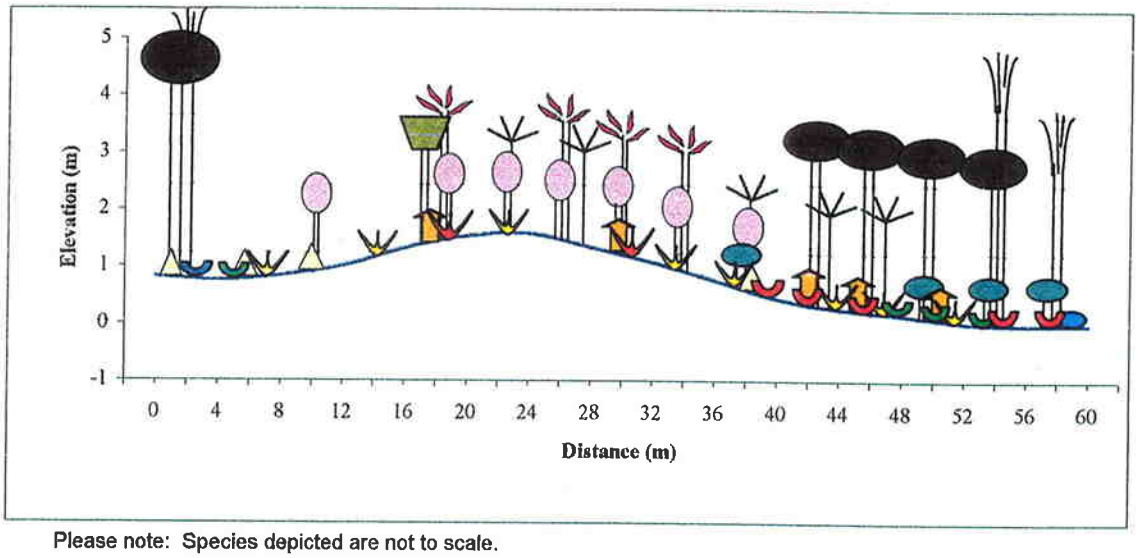
| Species | No. of live trees | No. of dead trees | No. of saplings | No. of seedlings | Mean Crown Score (S.D) |
|---|---|---|---|---|---|
| *Eucalyptus occidentalis* | 64 | 21 | 421 | 629 | 17.4 (3.75) |
| *Acacia saligna* | 8 | 9 | 3 | 0 | |
| *Melaleuca cuticularis* | 6 | 1 | 7 | 70 | 17.3 (1.96) |

### 3.7.4 Soil Characteristics

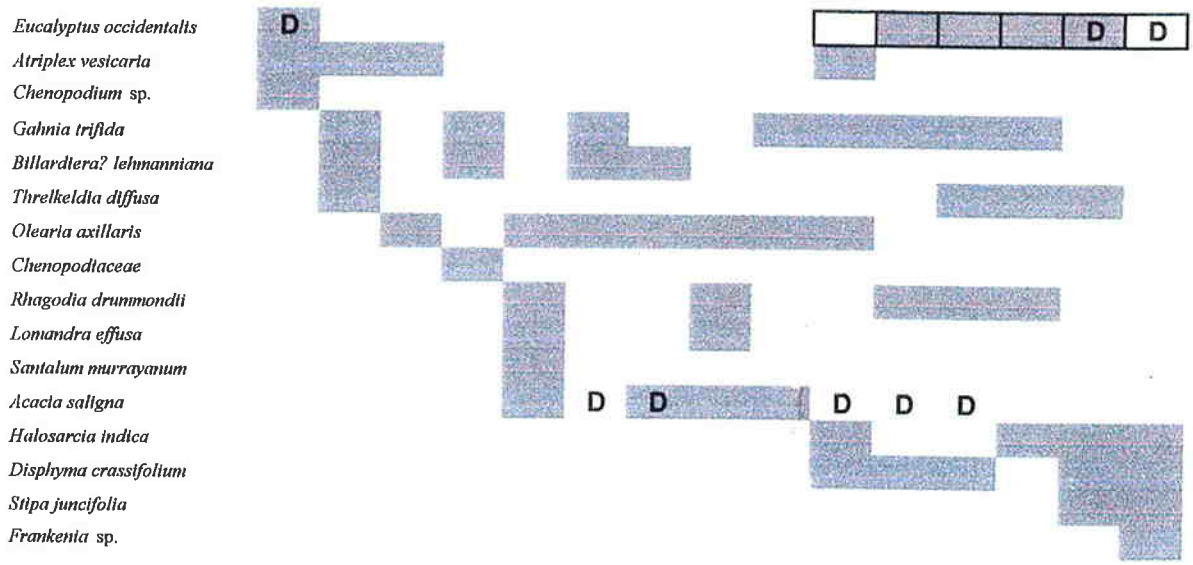
Highest soil conductivities were recorded on the lower littoral zone (30 m from lake bed) at Transect 1 (462 - 629 mS/m) (Appendix 1). The soil salinity of the elevated areas (Transect 1) was generally very low. The soil conductivity of Transect 2 was quite uniform, with salinity increasing down the transect and reaching the highest readings on the lake bed (225 – 612 mS/m.). Soil textures of the elevated areas were characterised by white sand underlying grey sand grading down to grey sandy loam in the wetland basin and drains.

### 3.7.5 Summary

Agricultural clearing causing increasing salinity and waterlogging has reduced the majority of the vegetation to a thin band on eastern side of the lake. Large recruitment events have occurred at Lake Ronnerup during the last few years, but the persistence of the regenerating tree species and colonisation of these species onto the lake bed and littoral zone is dependant on the hydrological regime of the altered catchment. GPS locations were not recorded for the two transects due to an equipment malfunction. It is proposed that during the year through other studies these data may be obtained and added to the report.




Please note: Species depicted are not to scale.



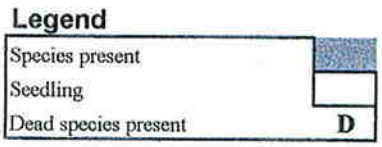
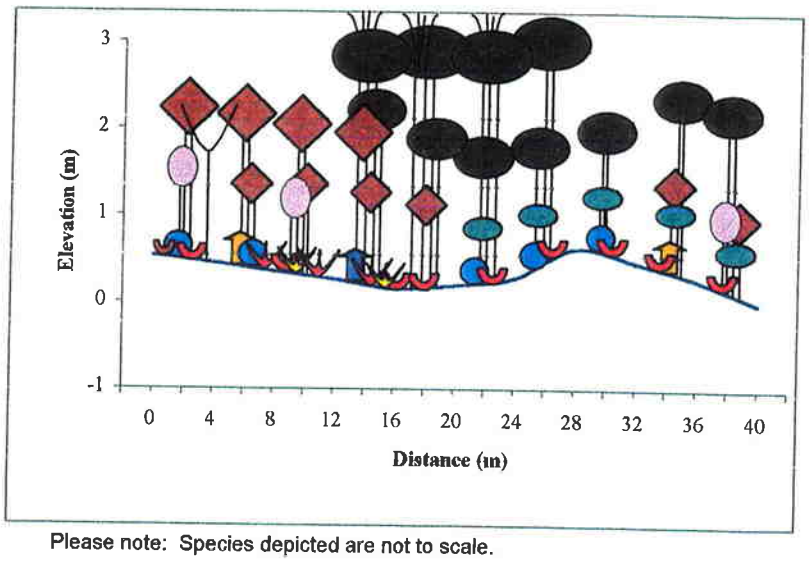




**Figure 3.7.1a** Profile Diagram, Lake Ronnerup Transect 1




Please note: Species depicted are not to scale.

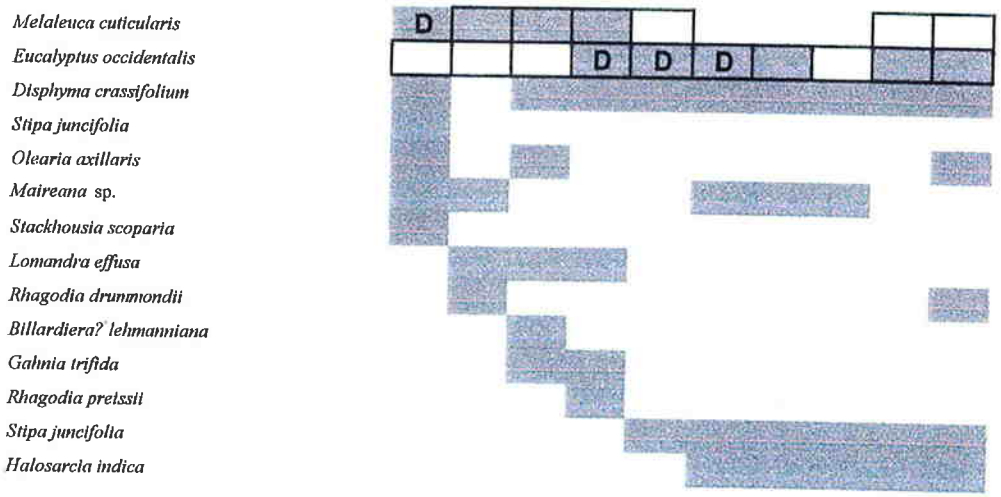
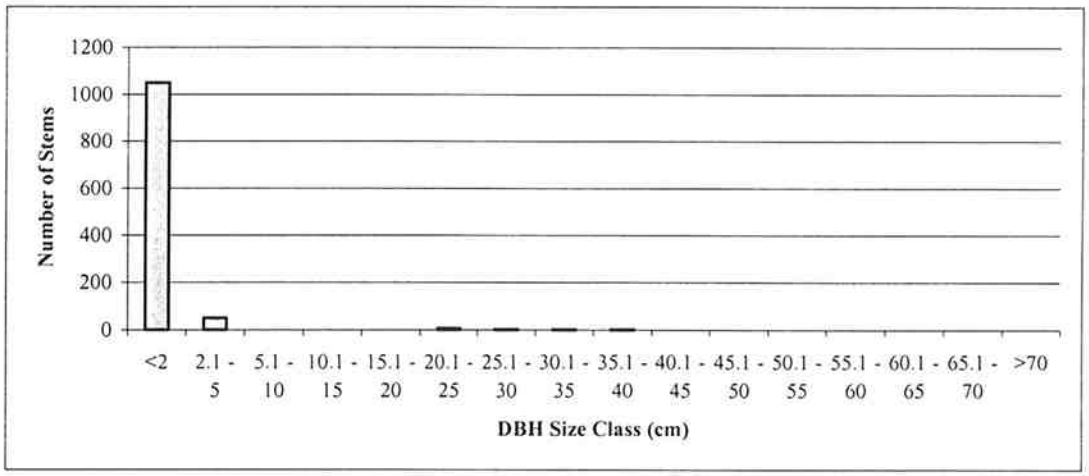



**Figure 3.7.1b** Profile Diagram, Lake Ronnerup Transect 2

*Eucalyptus occidentalis*




*Melaleuca cuticularis*

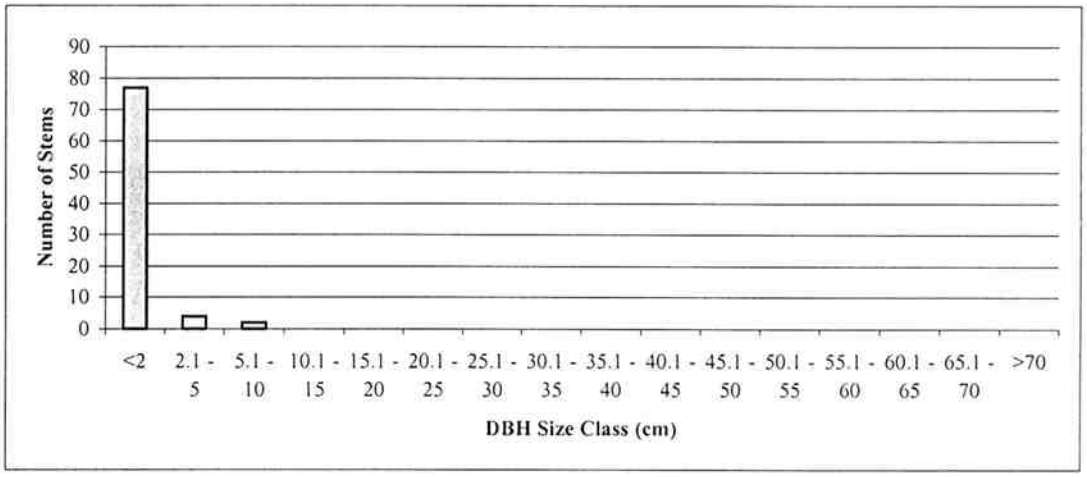



**Figure 3.7.2** Size Class Distributions for Tree Species at Lake Ronnerup

## 3.8 LAKE PLEASANT VIEW

### 3.8.1 Description

Lake Pleasant View is a moderate-sized, seasonal, fresh wetland located in the Lake Pleasant View Nature Reserve (15107), 35 km north east of the Albany town site (34°50' S, 118°12' E). The total lake area is 201 hectares with 0.04 % consisting of open water and 99 % vegetation (Halse, Pearson and Patrick, 1993). The lake is situated on the Albany-Fraser Orogen, in a depression between hills underlain by granite (granite outcrop located on the SW side of the lake) and is surrounded by 20 smaller (and more disturbed) lakes within a few kilometres distance (e.g. North Sister East, North Sister West, Corimup Lake, White Lake, Ten Mile Swamp) (Australian Nature Conservation Agency, 1996). Lake Pleasant View has a buffer of native vegetation more than 100 m wide in the south and east, but otherwise abuts cleared land. The bulk of the water supply for the lake comes from direct precipitation and groundwater with some short distance inflow across winter-wet flats. The catchment is moderately disturbed (Australian Nature Conservation Agency, 1996). This wetland (including the Lake Pleasant View System) is one of the few known breeding areas of the Australasian Bittern *(Botaurus poiciloptilus)* in WA and it supports a significant proportion of the WA population of this species (Australian Nature Conservation Agency, 1996). It has a good history of hydrological monitoring (i.e. since 1979).

One 80m transect, one 40m, one 20m and two 60m transects were established on Lake Pleasant View to sample the outer fringing terrestrial (*Eucalyptus marginata*, *Corymbia calophylla*) vegetation, the littoral/wetland vegetation (*Eucalyptus occidentalis*, *Melaleuca cuticularis*) and sedge communities. Monitoring was undertaken in December 1999.

**Transect 1:** (GPS: 50 608424 / 6145671) - situated on the eastern side of the lake. Access is via the main track (gravel start), which runs around the perimeter of the lake. Transect 1 is located 770m along the track from the South West Highway.

**Transect 2:** (GPS: 50 607472 / 6146231) - located on the northern side of the lake opposite farmland and in line with the dam on the second paddock, approximately 200 -300 m before the main track turns south west. Transect 2 is situated 50 - 70 m off the main track beginning in the terrestrial/littoral zone vegetation, continuing through the *M. cuticularis* regeneration and ending in the sedge communities.

**Transect 3:** (GPS: 50 607404 / 6144706) - located on the southern side of the lake and the north-west side of the granite outcrop in the *Eucalyptus occidentalis* woodland. Transect 3 starts in the *E. occidentalis* woodland, crosses the main track and finishes in the sedge community.

**Transect 4:** (GPS: 50 607656 / 6144935) located approximately 150 m into the lake (north direction) opposite the small fenced paddock in front of the granite outcrop. Transect 4 samples the sedge community only.

**Transect 5:** (GPS: 50 607922 / 6144778) - located on the south-south-west side of the lake, 150 m before the granite outcrop in the *M. cuticularis* and *H. oleifolia* community. Transect 5 crosses the main track surrounding the lake and the end star pickets of the transect are visible from the track.

### 3.8.2 Plant Communities

There are clumps of *Baumea articulata* throughout the lake and a couple of quite extensive areas of the species, however, the main sedge present is *Gahnia* sp. Around the edge of the lake it is replaced by *Restio* sp., *Juncus*

sp., *Lepidosperma tenue* and *Schoenus* sp., all of which extend into *Melaleuca cuticularis* shrubland that occurs just above the high water mark. A jarrah/marri woodland occupies the elevated slopes around the lake with a species rich understorey consisting of *Xanthorrhoea preissii, Anarthria scabra, Patersonia occidentalis, Loxocarya flexuosa, Leucopogon obovatus, Bossiaea linophylla, Opercularia hispidula, Anarthria prolifera* and *Hardenbergia comptoniana*. The eastern side of the lake is dominated by this terrestrial community. A *Melaleuca cuticularis* woodland replaces this vegetation community (*E. marginata, Corymbia calophylla*) on the lake side of the main track (Transect 1). The sedge community consists of *Baumea articulata, Baumea rubiginosa* and *Schoenus* sp. *Eucalyptus occidentalis* and *M. cuticularis* form dense woodlands along the northern section of the wetland (Transect 2). Common understorey species of the littoral zone include *Thomasia pauciflora* and *Stipa* sp. with *Schoenus* sp. and *Baumea articulata* persisting into the water. The elevated ridges of the south-western side of the lake are dominated by a *E. occidentalis* and *M. cuticularis* woodland. The understorey of this woodland is more species rich than the woodland on the northern side of the lake (Transect 2), with common species being *Patersonia occidentalis, Baumea juncea, Loxocarya flexuosa, Hovea trisperma, Cyperaceae* sp., *Tricoryne elatior, Dampiera linearis, Platytheca compressa* and *Xanthosia huegelii*. Similar to Transect 1, the main access track on the south-western side of the lake divides the terrestrial/littoral and sedge communities. Recruitment of the overstorey species was evident in the sedge community, which consisted of species such as *Gahnia trifida, Baumea juncea, Schoenus submicrostachyus, Lyginia barbata* and *Baumea articulata*. *Baumea rubiginosa* and *Baumea articulata* dominate the sedge community in the centre of the lake (Transect 4 - please note that no profile diagram was established for this transect due to the absence of tree species). Transect 5 samples the mature *M. cuticularis* and *Hakea oleifolia* community on the south-south eastern side of the lake (Figures 3.8.1a to d).

### 3.8.3 Tree Vigour and Population Structure

The vegetation of Lake Pleasant View was in very good condition (Table 3.8). Both wetland tree species (*E. occidentalis* and *M. cuticularis*) were in good condition throughout the reserve. The size class distributions (Figure 3.8.2) show the tree populations on Lake Pleasant View to be relatively mature, however, there are many individuals with stems in the smaller size classes, indicating a recent recruitment event. The most significant recruitment of *M. cuticularis* is evident on the eastern and northern sides of the lake (Transects 1 and 2), where 100 *M. cuticularis* seedlings/saplings were surveyed (Table 3.8). Recruitment of *E. occidentalis* individuals was generally restricted to the south-western side of the lake (Transect 3). Similar to the other lakes sampled this year, the recruitment stands at Lake Pleasant View usually occurred around the fringe of the lake in dense rings/zones, suggesting germination and establishment has occurred at one or more past high water marks.

**Table 3.8** Summary of Lake Pleasant View Tree Data

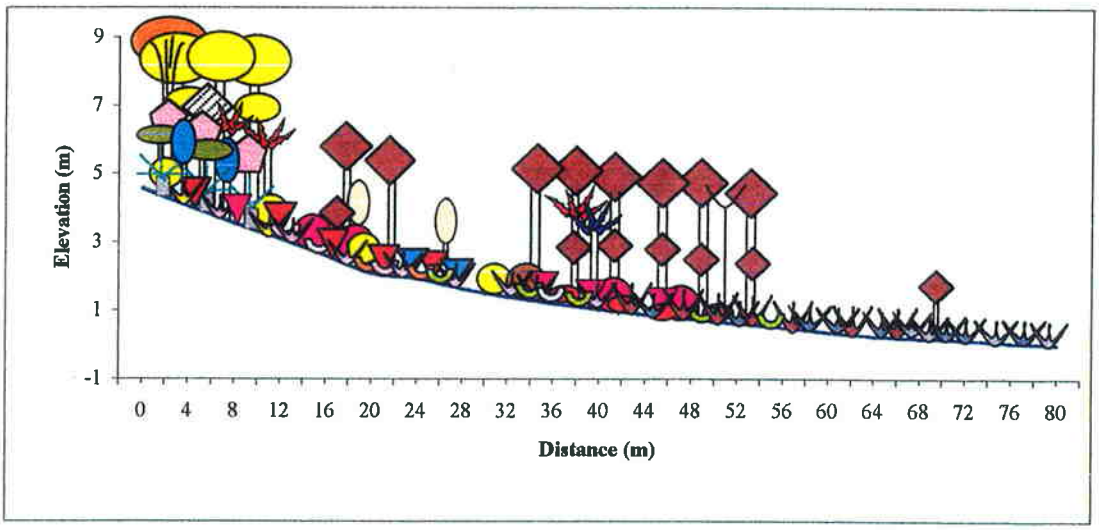
| Species | No. of live trees | No. of dead trees | No. of saplings | No. of seedlings | Mean Crown Score (S.D) |
|---|---|---|---|---|---|
| *Corymbia calophylla* | 8 | 1 | 5 | 0 | 17.5 (3.16) |
| *Eucalyptus marginata* | 1 | 0 | 0 | 0 | 11 |
| *Melaleuca cuticularis* | 173 | 4 | 57 | 43 | 15.5 (2.76) |
| *Eucalyptus occidentalis* | 61 | 0 | 3 | 13 | 14.3 (4.22) |
| *Hakea oleifolia* | 18 | 0 | 2 | 6 | 18 (1.41) |

### 3.8.4 Soil Characteristics

The soil salinity at this lake was generally very low (Appendix 1). Soil conductivity ranged from 32 - 168 mS/m to 62 - 101 on the lake bed (close to water mark). The soil salinity appears lower on the northern side of the lake opposite the paddock. Soil textures of the elevated areas were characterised by grey sand (eastern side) and loam with laterite rocks (southern side). Dark sandy loam was common in the littoral zone and the lake bed was comprised of peat.

### 3.8.5 Summary

Lake Pleasant View is a good example of near-permanent freshwater marshes with a peat substrate. The terrestrial and littoral vegetation is in very good condition, with the highest species diversity of all the wetlands in this monitoring period. The immediate threat to this wetland is eutrophication from the adjoining farmland to the north and west.




Please note: Species depicted are not to scale.

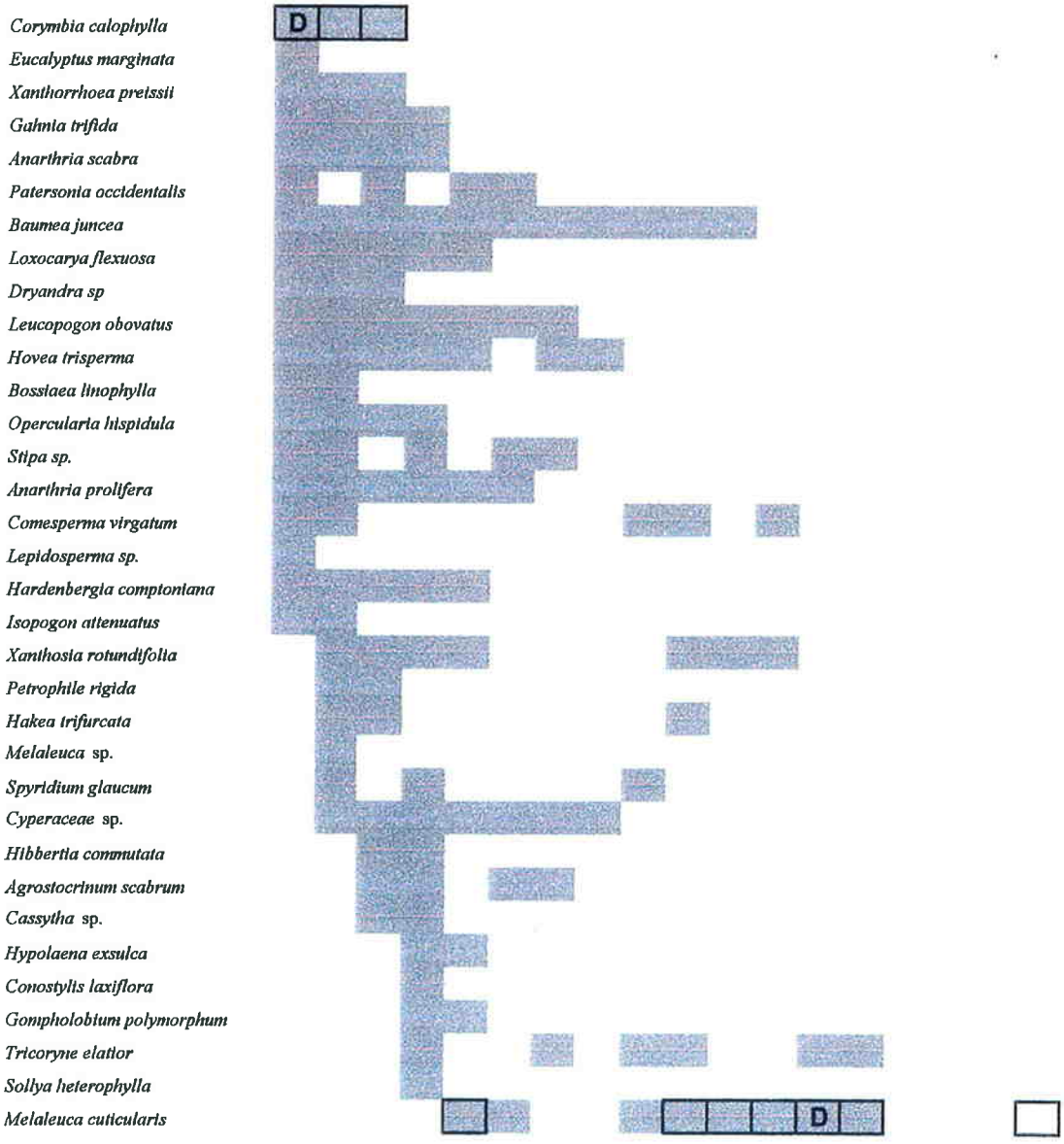



**Figure 3.8.1a** Profile Diagram, Lake Pleasant View Transect 1

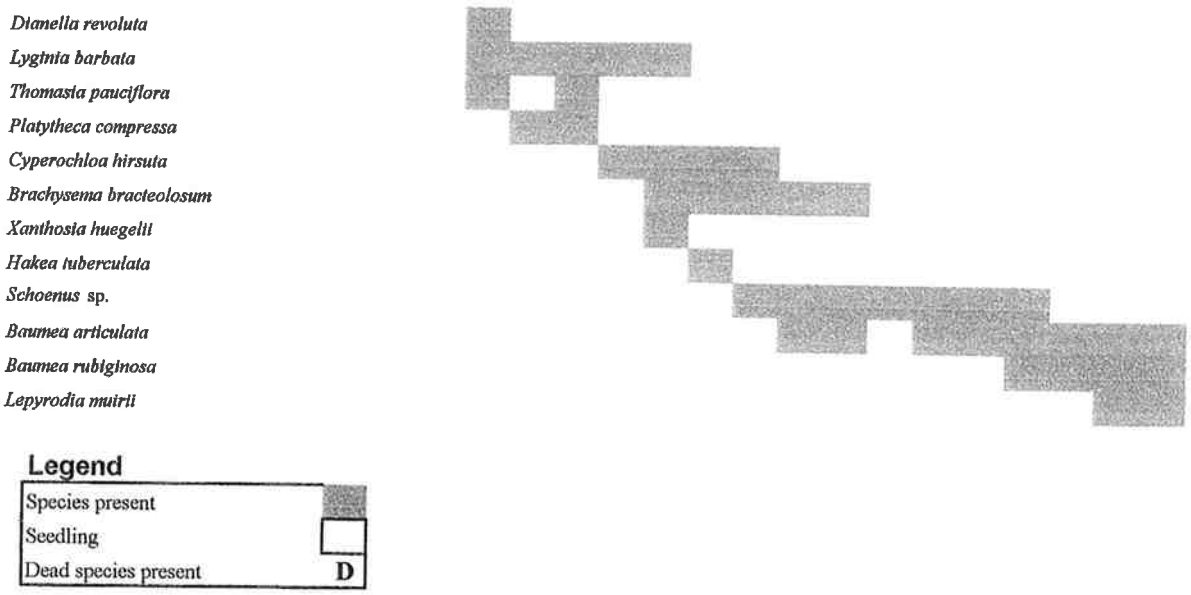
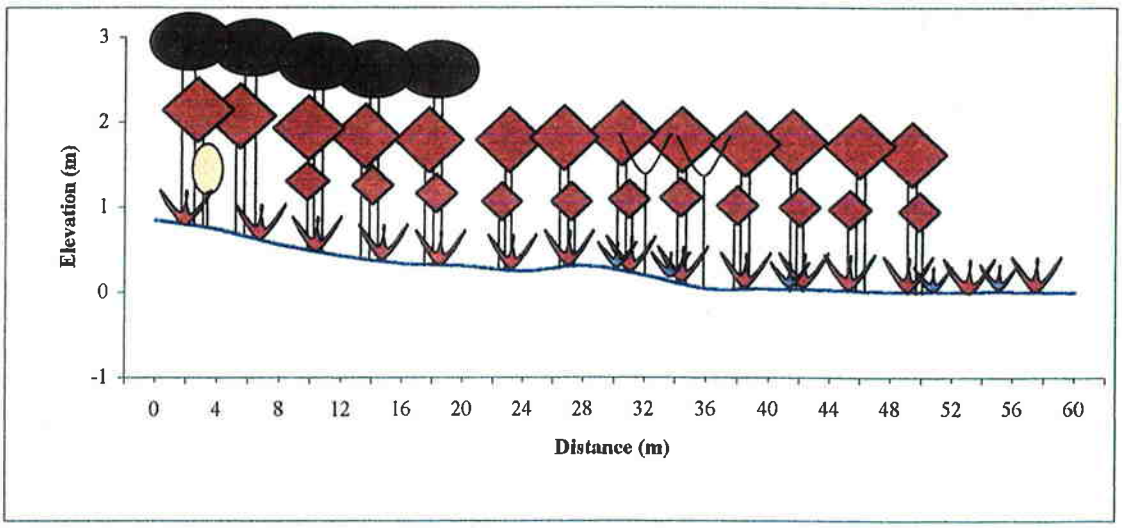



**Figure 3.8.1a cont.** Profile Diagram, Lake Pleasant View Transect 1

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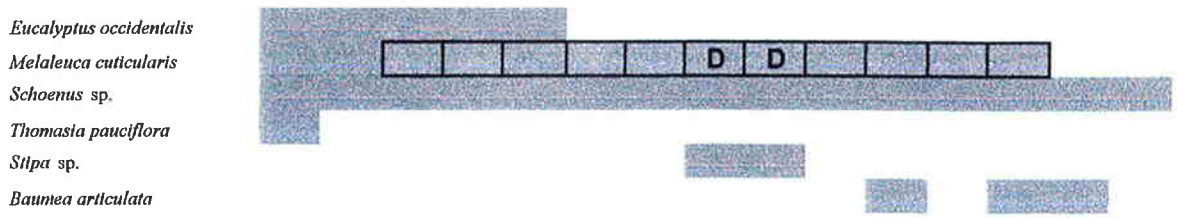


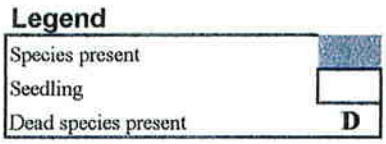
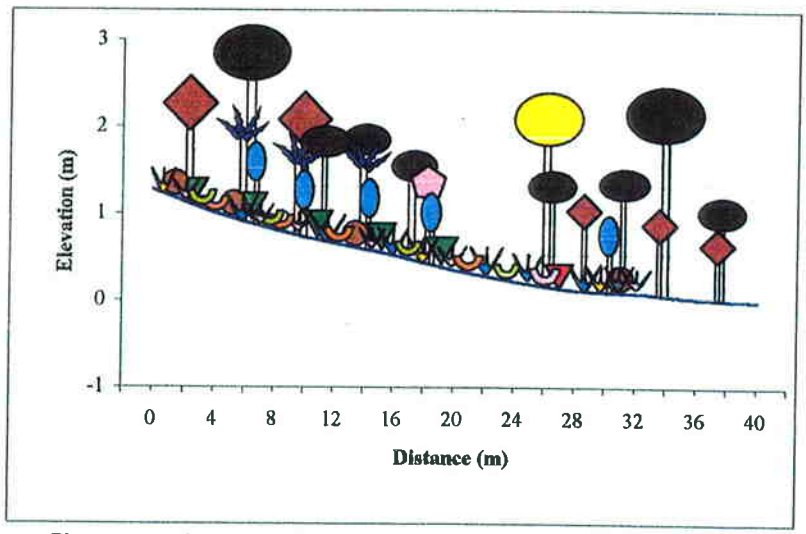
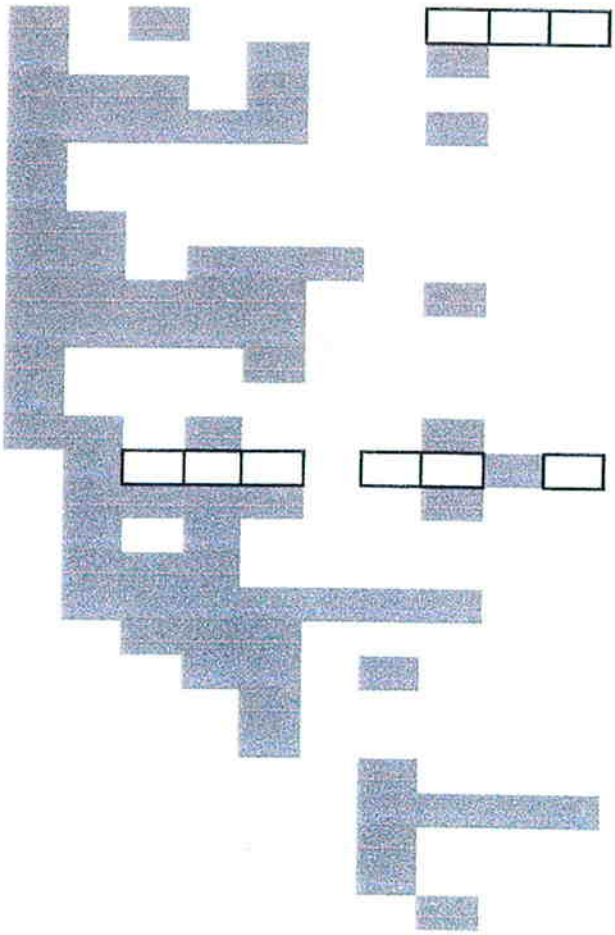




**Figure 3.8.1b** Profile Diagram, Lake Pleasant View Transect 2




Please note: Species depicted are not to scale.

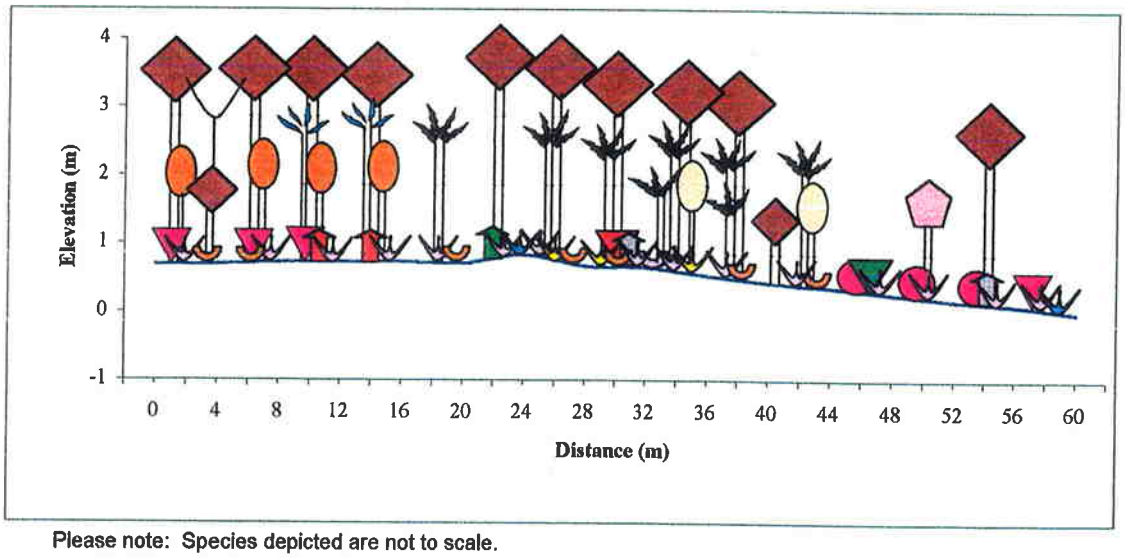
*Melaleuca cuticularis*
*Gahnia trifida*
*Patersonia occidentalis*
*Baumea juncea*
*Loxocarya flexuosa*
*Hovea trisperma*
*Cyperaceae* sp.
*Tricoryne elatior*
*Cyperochloa hirsuta*
*Leucopogon? glabellus*
*Dampiera linearis*
*Platytheca compressa*
*Xanthosia huegelii*
*Eucalyptus occidentalis*
*Isopogon attenuatus*
*Agrostocrinum scabrum*
*Hakea tuberculata*
*Schoenus submicrostachyus*
*Stylidium spathulatum*
*Stipa* sp.
*Dryandra* sp.
*Cassytha* sp.
*Leucopogon obovatus*
*Lyginia barbata*
*Dianella revoluta*
*Corymbia calophylla*
*Baumea articulata*



**Legend**

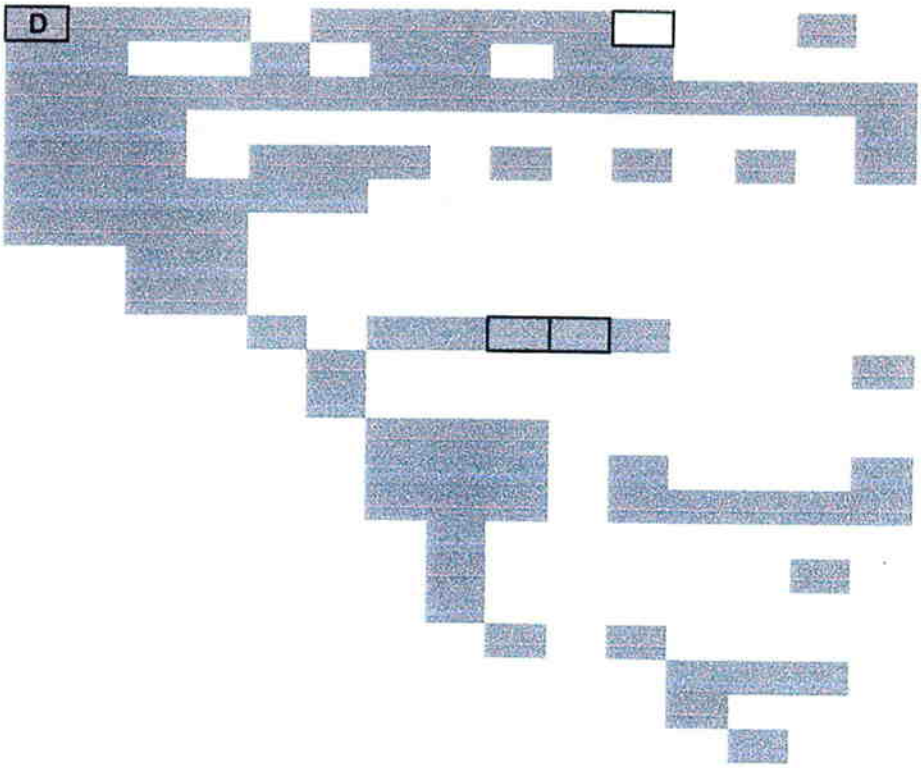
| | |
|---|---|
| Species present | |
| Seedling | |
| Dead species present | D |

**Figure 3.8.1c** Profile Diagram, Lake Pleasant View Transect 3




Please note: Species depicted are not to scale.

*Melaleuca cuticularis*
*Patersonia occidentalis*
*Baumea juncea*
*Comesperma virgatum*
*Stipa* sp.
*Meeboldina crebriculmis*
*Viminaria juncea*
*Chorizandra enodis*
*Acacia? Cyclops*
*Hakea oleifolia*
*Schoenus submicrostachyus* sp.
*Eutaxia parvifolia*
*Gahnia trifida*
*Agrostocrinum scabrum*
*Cyperochloa hirsuta*
*Leucopogon obovatus*
*Dampiera linearis*
*Dianella revoluta*
*Thomasia pauciflora*
*Xanthosia rotundifolia*
*Leucopogon? glabellus*
*Dryandra* sp.

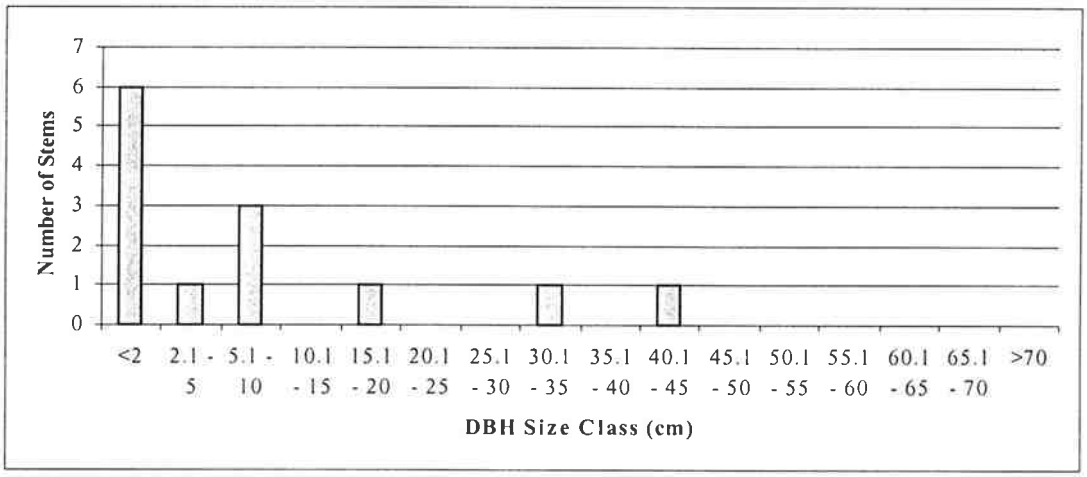



**Legend**

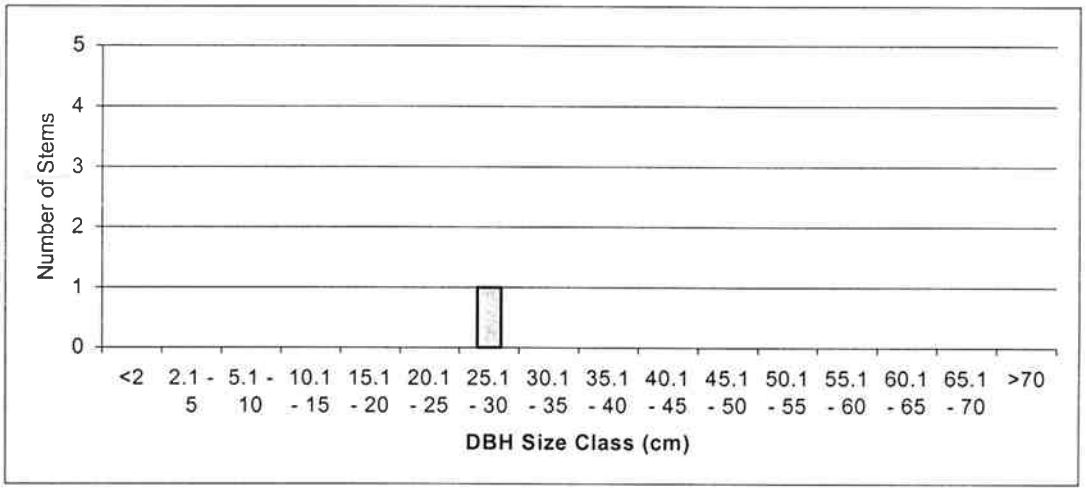
| | |
|---|---|
| Species present | |
| Seedling | |
| Dead species present | D |

**Figure 3.8.1d** Profile Diagram, Lake Pleasant View Transect 5

*Corymbia calophylla*




*Eucalyptus marginata*




*Melaleuca cuticularis*

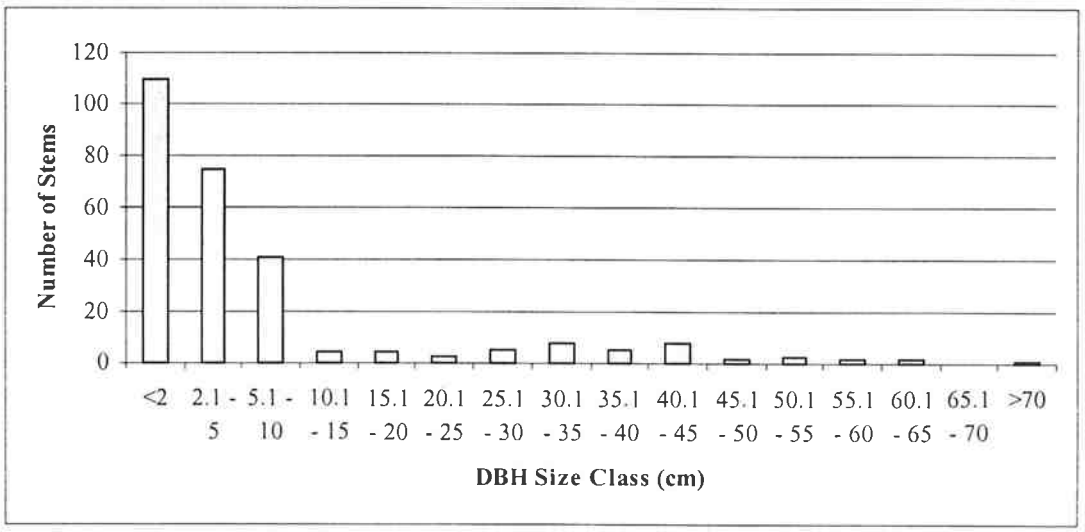
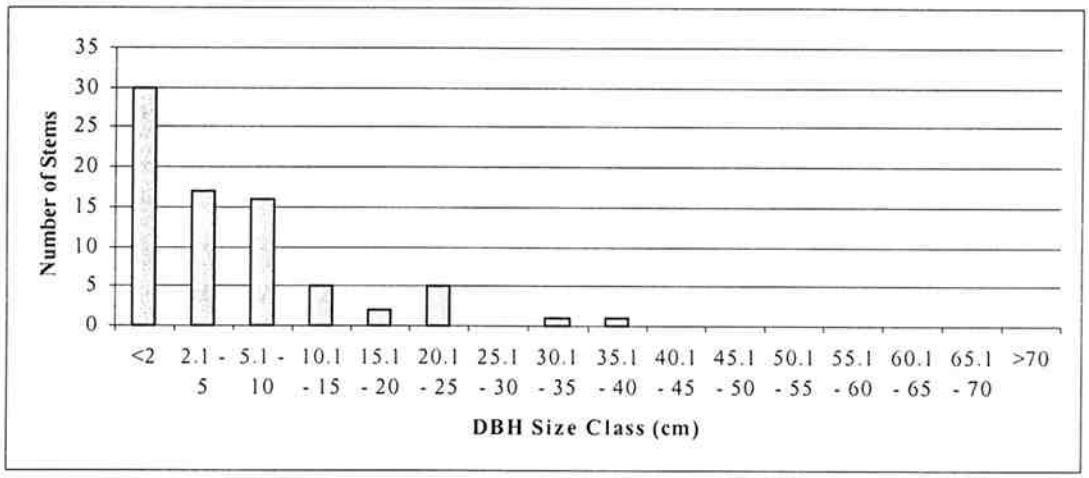



**Figure 3.8.2** Size Class Distributions for Tree Species at Lake Pleasant View
(continued next page)

*Eucalyptus occidentalis*




*Hakea oleifolia*

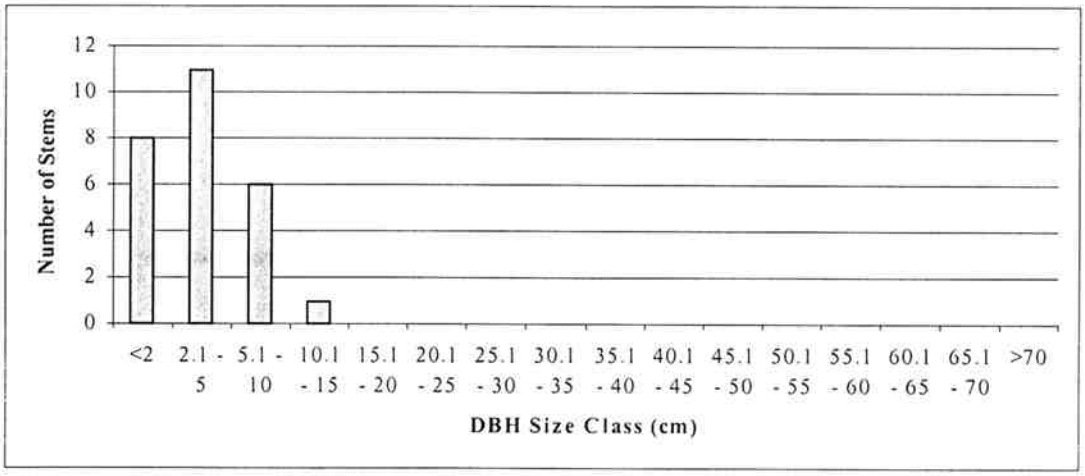



**Figure 3.8.2 cont.** Size Class Distributions for Tree Species at Lake Pleasant View

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# 5.0 APPENDICES

# APPENDIX 1

## EM 38 Soil Conductivity Data and Soil Field Assessments

## EM38 Data

**COOMELBERRUP - Transect 1**

| | Distance Across (m) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0 | | 10 | | 20 | | |
| Distance (m) | Vertical | Horizontal | Vertical | Horizontal | Vertical | Horizontal | Field Texture |
| 0 | 52 | 23 | 49 | 23 | 54 | 25 | |
| 4 | 61 | 27 | 58 | 20 | 62 | 29 | |
| 8 | 76 | 40 | 79 | 37 | 81 | 40 | Clay (1 -2 cm) over |
| 12 | 111 | 59 | 105 | 54 | 116 | 60 | dark loamy sand |
| 16 | 142 | 83 | 140 | 77 | 142 | 84 | |
| 20 | 214 | 129 | 170 | 106 | 181 | 110 | |
| 24 | 290 | 194 | 269 | 180 | 271 | 173 | |
| 28 | 404 | 294 | 373 | 244 | 412 | 318 | Light brown sand |
| 30 | 737 | 592 | 681 | 563 | 725 | 537 | over deep brown |
| 36 | 857 | 729 | 893 | 792 | 891 | 817 | sand |
| 40 | 942 | 908 | 954 | 924 | 993 | 988 | |
| 44 | | | | | | | |
| 48 | | | | | | | |
| 52 | | | | | | | |
| 56 | | | | | | | |
| 60 | | | | | | | |

**COOMELBERRUP - Transect 2**

| | Distance Across (m) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0 | | 10 | | 20 | | |
| Distance (m) | Vertical | Horizontal | Vertical | Horizontal | Vertical | Horizontal | Field Texture |
| 0 | 57 | 40 | 71 | 46 | 71 | 44 | |
| 4 | 41 | 32 | 52 | 35 | 49 | 38 | |
| 8 | 49 | 36 | 48 | 34 | 47 | 37 | White sand over |
| 12 | 67 | 45 | 69 | 44 | 66 | 45 | grey sand |
| 16 | 104 | 67 | 104 | 68 | 103 | 67 | |
| 20 | 167 | 107 | 172 | 113 | 181 | 125 | |
| 24 | 246 | 174 | 289 | 186 | 322 | 217 | |
| 28 | 536 | 466 | 536 | 529 | 511 | 524 | Deep brown sand |
| 32 | 704 | 739 | 717 | 742 | 641 | 687 | |
| 36 | water | water | water | water | water | water | |
| 40 | water | water | water | water | water | water | |
| 44 | | | | | | | |
| 48 | | | | | | | |
| 52 | | | | | | | |
| 56 | | | | | | | |
| 60 | | | | | | | |

## EM38 Data

**PARKEYERRING - Transect 1**

| | Distance Across (m) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0 | | 10 | | 20 | | |
| Distance (m) | Vertical | Horizontal | Vertical | Horizontal | Vertical | Horizontal | Field Texture |
| 0 | 113 | 84 | 102 | 66 | 88 | 41 | |
| 4 | 115 | 75 | 143 | 90 | 70 | 42 | |
| 8 | 82 | 52 | 80 | 48 | 79 | 50 | Brown organic sand |
| 12 | 80 | 51 | 89 | 55 | 113 | 70 | in top 5 cm/white |
| 16 | 98 | 58 | 136 | 83 | 198 | 133 | sand below |
| 20 | 178 | 113 | 262 | 190 | 310 | 375 | |
| 24 | 335 | 286 | 377 | 312 | 370 | 431 | |
| 28 | 351 | 309 | 346 | 336 | 278 | 258 | White coarse sand |
| 30 | 318 | 319 | 306 | 280 | 299 | 226 | |
| 36 | 377 | 385 | 339 | 277 | 435 | 392 | |
| 40 | 424 | 499 | 423 | 459 | 467 | 459 | |
| 44 | | | | | | | |
| 48 | | | | | | | |
| 52 | | | | | | | |
| 56 | | | | | | | |
| 60 | | | | | | | |

**PARKEYERRING - Transect 2**

| | Distance Across (m) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0 | | 10 | | 20 | | |
| Distance (m) | Vertical | Horizontal | Vertical | Horizontal | Vertical | Horizontal | Field Texture |
| 0 | 377 | 312 | 371 | 332 | 403 | 319 | |
| 4 | 403 | 327 | 421 | 356 | 343 | 259 | |
| 8 | 384 | 326 | 375 | 284 | 333 | 260 | Brown sandy |
| 12 | 330 | 262 | 384 | 295 | 334 | 286 | loam |
| 16 | 274 | 190 | 316 | 238 | 309 | 238 | |
| 20 | 243 | 162 | 258 | 167 | 239 | 148 | |
| 24 | 225 | 144 | 189 | 117 | 205 | 118 | |
| 28 | 218 | 137 | 223 | 141 | 210 | 133 | Brown sandy |
| 32 | 286 | 198 | 363 | 291 | 304 | 226 | loam/white sand |
| 36 | 418 | 314 | 493 | 377 | 482 | 380 | on lake bed |
| 40 | 459 | 365 | 551 | 455 | 566 | 540 | |
| 44 | | | | | | | |
| 48 | | | | | | | |
| 52 | | | | | | | |
| 56 | | | | | | | |
| 60 | | | | | | | |

## EM38 Data

**DUMBLEYUNG - Transect 1**

| | Distance Across (m) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0 | | 10 | | 20 | | |
| Distance (m) | Vertical | Horizontal | Vertical | Horizontal | Vertical | Horizontal | Field Texture |
| 0 | 77 | 82 | 47 | 54 | 55 | 51 | |
| 4 | 67 | 63 | 57 | 50 | 49 | 38 | |
| 8 | 72 | 54 | 96 | 48 | 85 | 65 | Red clay on slope |
| 12 | 78 | 52 | 85 | 55 | 77 | 51 | grading to brown |
| 16 | 85 | 53 | 90 | 60 | 93 | 57 | sand down-slope |
| 20 | 94 | 60 | 104 | 63 | 108 | 65 | |
| 24 | 114 | 74 | 123 | 78 | 134 | 88 | |
| 28 | 140 | 96 | 141 | 84 | 149 | 95 | Light brown |
| 30 | 136 | 95 | 157 | 103 | 135 | 82 | coarse sand |
| 36 | 166 | 124 | 182 | 124 | 167 | 107 | |
| 40 | 265 | 188 | 237 | 161 | 249 | 169 | |
| 44 | 394 | 312 | 382 | 290 | 431 | 329 | |
| 48 | 443 | 327 | 367 | 271 | 428 | 315 | Coarse white sand |
| 52 | 430 | 328 | 453 | 345 | 434 | 321 | to dark sandy clay |
| 56 | 530 | 565 | 559 | 442 | 590 | 539 | in depressions |
| 60 | 649 | 745 | 638 | 719 | 673 | 782 | |

**DUMBLEYUNG - Transect 2**

| | Distance Across (m) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0 | | 10 | | 20 | | |
| Distance (m) | Vertical | Horizontal | Vertical | Horizontal | Vertical | Horizontal | Field Texture |
| 0 | 22 | 20 | 28 | 22 | 22 | 12 | |
| 4 | 34 | 28 | 43 | 41 | 19 | 15 | |
| 8 | 39 | 29 | 46 | 34 | 40 | 30 | Granite outcrop at |
| 12 | 53 | 37 | 53 | 34 | 49 | 36 | top of plot - dark |
| 16 | 68 | 50 | 70 | 46 | 56 | 39 | brown sandy loam |
| 20 | 68 | 44 | 69 | 45 | 74 | 51 | becoming coarse grey |
| 24 | 87 | 51 | 97 | 65 | 99 | 65 | |
| 28 | 124 | 79 | 127 | 87 | 146 | 96 | Coarse grey sand |
| 32 | 145 | 90 | 177 | 118 | 149 | 91 | |
| 36 | 177 | 111 | 197 | 134 | 215 | 134 | |
| 40 | 141 | 88 | 166 | 100 | 192 | 122 | |
| 44 | 187 | 124 | 183 | 116 | 215 | 130 | |
| 48 | 187 | 123 | 194 | 128 | 210 | 135 | Coarse grey sand |
| 52 | 213 | 136 | 182 | 114 | 210 | 136 | with quartz stones |
| 56 | 219 | 153 | 176 | 115 | 188 | 122 | |
| 60 | 212 | 149 | 179 | 125 | 216 | 150 | |

**DUMBLEYUNG - Transect 3**

| | Distance Across (m) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0 | | 10 | | 20 | | |
| Distance (m) | Vertical | Horizontal | Vertical | Horizontal | Vertical | Horizontal | Field Texture |
| 0 | 302 | 218 | 456 | 302 | 551 | 385 | |
| 4 | 263 | 196 | 487 | 308 | 513 | 363 | |
| 8 | 318 | 238 | 334 | 242 | 495 | 343 | Granite outcrop - |
| 12 | 299 | 213 | 334 | 213 | 463 | 336 | coarse brown sand |
| 16 | 437 | 326 | 558 | 424 | 399 | 194 | |
| 20 | 442 | 300 | 572 | 426 | 466 | 332 | |
| 24 | 488 | 346 | 400 | 284 | 459 | 322 | |
| 28 | 445 | 365 | 426 | 299 | 466 | 317 | Coarse white sand |
| 32 | 507 | 396 | 472 | 342 | 335 | 364 | grey sandy clay in |
| 36 | 536 | 413 | 594 | 405 | 689 | 518 | depressions |
| 40 | 688 | 560 | 715 | 517 | 720 | 579 | |
| 44 | | | | | | | |
| 48 | | | | | | | |
| 52 | | | | | | | |
| 56 | | | | | | | |
| 60 | | | | | | | |

**DUMBLEYUNG - Transect 4**

| | Distance Across (m) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0 | | 10 | | 20 | | |
| Distance (m) | Vertical | Horizontal | Vertical | Horizontal | Vertical | Horizontal | Field Texture |
| 0 | 277 | 174 | 224 | 143 | 163 | 105 | |
| 4 | 343 | 260 | 300 | 209 | 236 | 152 | |
| 8 | 369 | 257 | 339 | 218 | 326 | 244 | Light brown coarse |
| 12 | 387 | 232 | 387 | 260 | 349 | 258 | sand |
| 16 | 348 | 266 | 398 | 288 | 392 | 279 | |
| 20 | 329 | 245 | 416 | 296 | 319 | 218 | |
| 24 | 339 | 241 | 411 | 313 | 316 | 216 | |
| 28 | 292 | 217 | 449 | 309 | 347 | 255 | Light brown fine |
| 32 | 334 | 262 | 406 | 314 | 400 | 295 | sand - organic |
| 36 | 388 | 287 | 461 | 335 | 404 | 296 | A horizon |
| 40 | 358 | 265 | 402 | 308 | 464 | 376 | |
| 44 | | | | | | | |
| 48 | | | | | | | |
| 52 | | | | | | | |
| 56 | | | | | | | |
| 60 | | | | | | | |

## EM38 Data

**ALTHAM - Transect 1**

| | Distance Across (m) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0 | | 10 | | 20 | | |
| Distance (m) | Vertical | Horizontal | Vertical | Horizontal | Vertical | Horizontal | Field Texture |
| 0 | 305 | 225 | 364 | 267 | 460 | 363 | |
| 4 | 307 | 235 | 367 | 285 | 437 | 314 | |
| 8 | 317 | 264 | 376 | 268 | 456 | 310 | Brown sand underlying |
| 12 | 327 | 234 | 321 | 207 | 381 | 242 | grey sandy clay |
| 16 | 325 | 226 | 348 | 228 | 418 | 278 | |
| 20 | 427 | 305 | 394 | 249 | 418 | 278 | |
| 24 | 438 | 294 | 423 | 272 | 420 | 275 | |
| 28 | 637 | 445 | 529 | 350 | 486 | 315 | White sand with |
| 30 | 804 | 606 | 817 | 588 | 781 | 550 | grey sandy silt at |
| 36 | 1093 | 997 | 1117 | 980 | 911 | 682 | lake edge |
| 40 | 1436 | 1798 | 1298 | 1630 | 1500 | 1728 | |
| 44 | | | | | | | |
| 48 | | | | | | | |
| 52 | | | | | | | |
| 56 | | | | | | | |
| 60 | | | | | | | |

**ALTHAM - Transect 2**

| | Distance Across (m) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0 | | 10 | | 20 | | |
| Distance (m) | Vertical | Horizontal | Vertical | Horizontal | Vertical | Horizontal | Field Texture |
| 0 | 541 | 360 | 352 | 248 | 322 | 200 | |
| 4 | 470 | 331 | 344 | 229 | 285 | 169 | |
| 8 | 478 | 341 | 344 | 223 | 259 | 160 | Brown sand |
| 12 | 485 | 339 | 338 | 224 | 287 | 167 | |
| 16 | 467 | 322 | 324 | 226 | 310 | 213 | |
| 20 | 412 | 279 | 313 | 213 | 285 | 196 | |
| 24 | 374 | 257 | 324 | 224 | 285 | 201 | |
| 28 | 405 | 294 | 356 | 248 | 238 | 138 | Brown sand |
| 32 | 384 | 278 | 313 | 205 | 228 | 156 | |
| 36 | 377 | 276 | 299 | 183 | 239 | 150 | |
| 40 | 384 | 259 | 271 | 182 | 238 | 155 | |
| 44 | 361 | 244 | 292 | 197 | 219 | 140 | |
| 48 | 356 | 255 | 389 | 259 | 360 | 246 | Brown sand/grey |
| 52 | 436 | 317 | 814 | 671 | 791 | 646 | silty sand near |
| 56 | 810 | 718 | 979 | 862 | 969 | 818 | lake edge |
| 60 | 931 | 894 | 1216 | 1175 | 1187 | 1315 | |

**ALTHAM - Transect 3**

| | Distance Across (m) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0 | | 10 | | 20 | | |
| Distance (m) | Vertical | Horizontal | Vertical | Horizontal | Vertical | Horizontal | Field Texture |
| 0 | 594 | 408 | 487 | 318 | 602 | 439 | |
| 4 | 546 | 310 | 528 | 352 | 534 | 354 | |
| 8 | 621 | 443 | 550 | 370 | 642 | 464 | Grey sand underlying |
| 12 | 620 | 442 | 573 | 395 | 601 | 424 | white sand |
| 16 | 433 | 282 | 412 | 264 | 413 | 264 | |
| 20 | 397 | 250 | 359 | 225 | 357 | 218 | |
| 24 | 340 | 207 | 335 | 210 | 366 | 224 | |
| 28 | 373 | 240 | 424 | 269 | 526 | 342 | White sand to loamy |
| 30 | 486 | 309 | 603 | 423 | 740 | 544 | clay near lake edge |
| 36 | 804 | 648 | 918 | 794 | 925 | 778 | |
| 40 | 1310 | 1521 | 1303 | 1757 | 1296 | 1679 | |
| 44 | | | | | | | |
| 48 | | | | | | | |
| 52 | | | | | | | |
| 56 | | | | | | | |
| 60 | | | | | | | |

## EM38 Data

**YAALUP - Transect 1**

| | Distance Across (m) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0 | | 10 | | 20 | | |
| Distance (m) | Vertical | Horizontal | Vertical | Horizontal | Vertical | Horizontal | Field Texture |
| 0 | 155 | 98 | 124 | 79 | 157 | 97 | |
| 4 | 188 | 124 | 125 | 79 | 151 | 93 | |
| 8 | 218 | 136 | 159 | 106 | 211 | 141 | Dark brown sand |
| 12 | 276 | 172 | 170 | 105 | 225 | 143 | overlying sandy loam |
| 16 | 348 | 245 | 200 | 124 | 227 | 146 | |
| 20 | 270 | 180 | 205 | 128 | 235 | 146 | |
| 24 | 160 | 102 | 164 | 105 | 213 | 133 | |
| 28 | 122 | 80 | 134 | 84 | 176 | 112 | Dark brown sand |
| 30 | 108 | 69 | 11 | 72 | 145 | 93 | overlying silty sand |
| 36 | 132 | 85 | 151 | 96 | 143 | 87 | |
| 40 | 227 | 156 | 255 | 166 | 260 | 172 | |
| 44 | 346 | 237 | 333 | 226 | 368 | 256 | |
| 48 | 395 | 291 | 349 | 233 | 442 | 345 | Dark brown sand |
| 52 | water | water | water | water | water | water | overlying silty sand |
| ↓ | | | | | | | |
| 56 | | | | | | | |
| 60 | | | | | | | |

**YAALUP - Transect 2**

| | Distance Across (m) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0 | | 10 | | 20 | | |
| Distance (m) | Vertical | Horizontal | Vertical | Horizontal | Vertical | Horizontal | Field Texture |
| 0 | 192 | 116 | 265 | 186 | 200 | 123 | |
| 4 | 186 | 116 | 227 | 147 | 218 | 144 | |
| 8 | 195 | 125 | 231 | 150 | 241 | 157 | Coarse grey sand |
| 12 | 191 | 112 | 231 | 152 | 242 | 160 | |
| 16 | 210 | 137 | 238 | 154 | 245 | 166 | |
| 20 | 193 | 124 | 258 | 176 | 260 | 176 | |
| 24 | 238 | 161 | 263 | 175 | 240 | 166 | |
| 28 | 270 | 175 | 257 | 162 | 240 | 151 | Coarse grey sand |
| 32 | 262 | 167 | 235 | 151 | 299 | 207 | |
| 36 | 295 | 202 | 262 | 173 | 330 | 223 | |
| 40 | 310 | 213 | 292 | 211 | 315 | 216 | |
| 44 | 319 | 225 | 312 | 216 | 340 | 239 | |
| 48 | 348 | 287 | 365 | 320 | 343 | 241 | Thin layer of O |
| 52 | water | water | water | water | water | water | horizon underlying |
| ↓ | | | | | | | |
| 56 | | | | | | | grey sand |
| 60 | | | | | | | |

## EM38 Data

**BENNETTS - Transect 1**

| | Distance Across (m) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0 | | 10 | | 20 | | |
| Distance (m) | Vertical | Horizontal | Vertical | Horizontal | Vertical | Horizontal | Field Texture |
| 0 | 189 | 108 | 224 | 140 | 286 | 184 | |
| 4 | 252 | 157 | 296 | 194 | 340 | 219 | |
| 8 | 344 | 239 | 377 | 264 | 391 | 285 | White sand (5cm) |
| 12 | 454 | 343 | 461 | 355 | 461 | 371 | underlying brown |
| 16 | 475 | 358 | 489 | 376 | 523 | 407 | coarse sand |
| 20 | 463 | 405 | 509 | 415 | 451 | 364 | |
| 24 | 507 | 405 | 461 | 352 | 473 | 386 | |
| 28 | 484 | 366 | 496 | 412 | 450 | 369 | White sand |
| 30 | 525 | 493 | 484 | 411 | 566 | 584 | |
| 36 | 606 | 516 | 552 | 515 | 540 | 456 | |
| 40 | 641 | 780 | 637 | 627 | 583 | 690 | |
| 44 | | | | | | | |
| 48 | | | | | | | |
| 52 | | | | | | | |
| 56 | | | | | | | |
| 60 | | | | | | | |

**BENNETTS - Transect 2**

| | Distance Across (m) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0 | | 10 | | 20 | | |
| Distance (m) | Vertical | Horizontal | Vertical | Horizontal | Vertical | Horizontal | Field Texture |
| 0 | 179 | 102 | 204 | 123 | 216 | 128 | |
| 4 | 160 | 91 | 170 | 104 | 202 | 119 | |
| 8 | 169 | 100 | 183 | 107 | 211 | 122 | White sand (2cm) |
| 12 | 167 | 99 | 200 | 123 | 209 | 122 | underlying grey sand |
| 16 | 196 | 126 | 301 | 108 | 193 | 119 | |
| 20 | 227 | 136 | 223 | 138 | 211 | 126 | |
| 24 | 223 | 138 | 214 | 131 | 220 | 133 | |
| 28 | 207 | 121 | 194 | 116 | 212 | 126 | White sand (2cm) |
| 32 | 253 | 151 | 227 | 139 | 213 | 127 | underlying grey sand |
| 36 | 333 | 234 | 296 | 191 | 247 | 151 | |
| 40 | 398 | 262 | 373 | 251 | 272 | 170 | |
| 44 | 470 | 353 | 481 | 390 | 372 | 265 | |
| 48 | 427 | 364 | 437 | 351 | 452 | 408 | White sand (10cm) |
| 52 | 451 | 366 | 442 | 389 | 457 | 313 | underlying grey sand |
| 56 | 503 | 441 | 509 | 423 | 452 | 365 | to depth |
| 60 | 507 | 399 | 633 | 671 | 474 | 433 | |

## EM38 Data

**RONNERUP - Transect 1**

| | Distance Across (m) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0 | | 10 | | 20 | | |
| Distance (m) | Vertical | Horizontal | Vertical | Horizontal | Vertical | Horizontal | Field Texture |
| 0 | 517 | 403 | 399 | 268 | 440 | 283 | |
| 4 | 501 | 374 | 440 | 318 | 458 | 313 | |
| 8 | 455 | 307 | 422 | 264 | 372 | 237 | White sand (1-2cm) |
| 12 | 366 | 231 | 330 | 201 | 332 | 206 | underlying grey |
| 16 | 246 | 146 | 232 | 135 | 255 | 152 | coarse sand |
| 20 | 162 | 93 | 173 | 98 | 190 | 108 | |
| 24 | 158 | 92 | 153 | 91 | 168 | 98 | |
| 28 | 182 | 101 | 176 | 104 | 174 | 101 | White sand (1-2cm) |
| 30 | 220 | 130 | 228 | 135 | 211 | 130 | underlying grey |
| 36 | 332 | 206 | 335 | 204 | 245 | 126 | coarse sand |
| 40 | 438 | 322 | 439 | 383 | 315 | 185 | |
| 44 | 525 | 383 | 551 | 378 | 495 | 310 | |
| 48 | 545 | 382 | 615 | 449 | 570 | 441 | Grey sandy loam |
| 52 | 612 | 458 | 578 | 457 | 573 | 454 | |
| 56 | 557 | 408 | 584 | 439 | 664 | 466 | |
| 60 | 615 | 462 | 574 | 405 | 629 | 495 | |

**RONNERUP - Transect 2**

| | Distance Across (m) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0 | | 10 | | 20 | | |
| Distance (m) | Vertical | Horizontal | Vertical | Horizontal | Vertical | Horizontal | Field Texture |
| 0 | 335 | 204 | 314 | 194 | 310 | 192 | |
| 4 | 330 | 204 | 344 | 210 | 328 | 198 | |
| 8 | 349 | 233 | 344 | 208 | 355 | 221 | White sand (1-2cm) |
| 12 | 427 | 389 | 361 | 227 | 374 | 235 | underlying grey sand |
| 16 | 482 | 347 | 397 | 263 | 387 | 256 | to depth |
| 20 | 527 | 322 | 429 | 293 | 417 | 272 | |
| 24 | 451 | 304 | 478 | 339 | 468 | 322 | |
| 28 | 359 | 222 | 389 | 258 | 386 | 250 | White sand (5cm) |
| 32 | 354 | 218 | 300 | 185 | 350 | 213 | underlying grey sand |
| 36 | 381 | 229 | 345 | 230 | 389 | 243 | to depth |
| 40 | 612 | 415 | 425 | 290 | 338 | 225 | |
| 44 | | | | | | | |
| 48 | | | | | | | |
| 52 | | | | | | | |
| 56 | | | | | | | |
| 60 | | | | | | | |

## EM38 Data

**Pleasant View - Transect 1**

| | Distance Across (m) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0 | | 10 | | 20 | | |
| Distance (m) | Vertical | Horizontal | Vertical | Horizontal | Vertical | Horizontal | Field Texture |
| 0 | 54 | 36 | 54 | 32 | 75 | 44 | |
| 4 | 72 | 45 | 80 | 44 | 84 | 48 | |
| 8 | 136 | 84 | 109 | 63 | 94 | 55 | Grey sand |
| 12 | 168 | 99 | 129 | 74 | 125 | 73 | |
| 16 | 146 | 91 | 130 | 80 | 144 | 95 | |
| 20 | 148 | 100 | 120 | 70 | 157 | 91 | |
| 24 | 81 | 50 | 97 | 58 | 102 | 62 | |
| 28 | 62 | 36 | 73 | 43 | 83 | 48 | Grey sand |
| 30 | 52 | 30 | 61 | 37 | 60 | 32 | |
| 36 | 52 | 34 | 53 | 34 | 50 | 28 | |
| 40 | 61 | 45 | 60 | 42 | 50 | 32 | |
| 44 | 74 | 51 | 65 | 44 | 53 | 31 | |
| 48 | 101 | 58 | 73 | 55 | 72 | 46 | Black loam |
| 52 | 89 | 57 | 72 | 52 | 65 | 45 | (very organic) |
| 56 | 82 | 61 | 69 | 48 | 66 | 44 | |
| 60 | 101 | 56 | 64 | 44 | 87 | 45 | |
| 64 | water | water | water | water | water | water | |
| ↓ | | | | | | | |
| 68 | | | | | | | |
| | | | | | | | Black loam |
| 72 | | | | | | | (very organic) |
| 76 | | | | | | | |
| 80 | | | | | | | |

**Pleasant View - Transect 2**

| | Distance Across (m) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0 | | 10 | | 20 | | |
| Distance (m) | Vertical | Horizontal | Vertical | Horizontal | Vertical | Horizontal | Field Texture |
| 0 | 72 | 44 | 97 | 55 | 73 | 44 | |
| 4 | 55 | 32 | 77 | 45 | 90 | 51 | |
| 8 | 52 | 31 | 64 | 43 | 119 | 68 | Loam, laterite rocks |
| 12 | 50 | 32 | 60 | 39 | 122 | 75 | |
| 16 | 50 | 23 | 61 | 35 | 122 | 74 | |
| 20 | 51 | 36 | 73 | 41 | 109 | 63 | |
| 24 | 58 | 34 | 66 | 38 | 109 | 69 | |
| 28 | 66 | 34 | 65 | 35 | 98 | 64 | Organic loam, laterite |
| 32 | 69 | 41 | 68 | 40 | 78 | 51 | rocks |
| 36 | 64 | 36 | 69 | 45 | 75 | 42 | |
| 40 | 58 | 41 | 68 | 46 | 80 | 64 | |
| 44 | 56 | 38 | 71 | 48 | 85 | 58 | |
| 48 | 64 | 42 | 73 | 45 | 83 | 57 | Peat |
| 52 | 62 | 41 | 59 | 34 | 87 | 56 | |
| 56 | 66 | 45 | 62 | 43 | 89 | 58 | |
| 60 | 74 | 52 | 67 | 46 | 86 | 57 | |

**Pleasant View - Transect 3**

| | Distance Across (m) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0 | | 10 | | 20 | | |
| Distance (m) | Vertical | Horizontal | Vertical | Horizontal | Vertical | Horizontal | Field Texture |
| 0 | 145 | 97 | 114 | 70 | 135 | 84 | |
| 4 | 136 | 83 | 122 | 80 | 141 | 104 | |
| 8 | 148 | 96 | 129 | 82 | 139 | 98 | Dark sandy loam |
| 12 | 127 | 82 | 143 | 100 | 134 | 91 | |
| 16 | 123 | 84 | 130 | 93 | 126 | 82 | |
| 20 | 129 | 94 | 130 | 102 | 119 | 86 | |
| 24 | 87 | 64 | 79 | 53 | 101 | 78 | |
| 28 | 76 | 53 | 60 | 42 | 90 | 65 | Grey sandy silt (loam) |
| 30 | 83 | 57 | 78 | 59 | 80 | 56 | |
| 36 | 75 | 60 | 83 | 62 | 86 | 59 | |
| 40 | 77 | 62 | 86 | 71 | 89 | 64 | |
| 44 | | | | | | | |
| 48 | | | | | | | |
| 52 | | | | | | | |
| 56 | | | | | | | |
| 60 | | | | | | | |

**Pleasant View - Transect 4**

| | Distance Across (m) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0 | | 10 | | 20 | | |
| Distance (m) | Vertical | Horizontal | Vertical | Horizontal | Vertical | Horizontal | Field Texture |
| 0 | water | water | water | water | water | water | |
| 4 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | |
| 8 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | Peat |
| 12 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | |
| 16 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | |
| 20 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | |
| 24 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | |
| 28 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | |
| 30 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | |
| 36 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | |
| 40 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | |

**Pleasant View - Transect 5**

| | Distance Across (m) | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0 | | 10 | | 20 | | |
| Distance (m) | Vertical | Horizontal | Vertical | Horizontal | Vertical | Horizontal | Field Texture |
| 0 | 101 | 65 | 146 | 94 | 168 | 112 | |
| 4 | 102 | 60 | 129 | 78 | 157 | 103 | |
| 8 | 115 | 77 | 135 | 85 | 174 | 109 | Dark loam |
| 12 | 126 | 79 | 143 | 90 | 163 | 102 | |
| 16 | 105 | 66 | 145 | 96 | 159 | 105 | |
| 20 | 110 | 66 | 138 | 83 | 148 | 96 | |
| 24 | 96 | 66 | 143 | 85 | 164 | 101 | |
| 28 | 96 | 58 | 165 | 102 | 203 | 124 | Dark brown sand |
| 32 | 78 | 51 | 122 | 72 | 180 | 114 | |
| 36 | 68 | 42 | 89 | 53 | 154 | 96 | |
| 40 | 65 | 44 | 60 | 36 | 145 | 89 | |
| 44 | 53 | 36 | 61 | 36 | 128 | 74 | |
| 48 | 61 | 40 | 59 | 38 | 106 | 68 | Dark sandy loam |
| 52 | 66 | 44 | 55 | 36 | 83 | 54 | |
| 56 | 71 | 49 | 60 | 44 | 49 | 38 | |
| 60 | 67 | 48 | 61 | 43 | 53 | 44 | |

# APPENDIX 2

## Transect Overstorey Data

## COOMELBERRUP - Transect 1

| Plot | Species # | Species | Tag # | DBH (cm) (1999) | Height(m) | Crown (1999) |
|---|---|---|---|---|---|---|
| 1A | COOM 1 | *Allocasuarina huegeliana* | 181 | 37.7 | 10.75 | 13 |
| | COOM 1 | *Allocasuarina huegeliana* | 182 | 9.2 | 6.7 | 11 |
| | COOM 2 | *Jacksonia* sp. | 183 | 2.8 | 3.5 | 15 |
| | COOM 1 | *Allocasuarina huegeliana* | 184 | 24 | 8.5 | 18 |
| | COOM 5 | *Acacia acuminata* | 185 | <2 | 2 | 19 |
| | COOM 2 | *Jacksonia* sp. | x1 | dead | | |
| | COOM 1 | *Allocasuarina huegeliana* | x2 | dead | | |
| 1B | COOM 5 | *Acacia acuminata* | 186 | 5.5, 4.2, 3.7 | 3.35 | 13 |
| | COOM 5 | *Acacia acuminata* | 187 | 18.5 | 8.25 | 11 |
| | COOM 5 | *Acacia acuminata* | 188 | 7.5, 5.5 | 5.2 | 15 |
| | COOM 1 | *Allocasuarina huegeliana* | 189 | 14.75 | 9.15 | 3 |
| | COOM 1 | *Allocasuarina huegeliana* | 190 | 6.4 | 4.9 | 9 |
| | COOM 1 | *Allocasuarina huegeliana* | 191 | 8.3 | 4.5 | 14 |
| | COOM 1 | *Allocasuarina huegeliana* | x2 | dead | | |
| | COOM 5 | *Acacia acuminata* | x1 | dead | | |
| 1C | COOM 5 | *Acacia acuminata* | 192 | <2 | 1.9 | 17 |
| | COOM 1 | *Allocasuarina huegeliana* | x6 | dead | | |
| 1D | COOM 1 | *Allocasuarina huegeliana* | x2 | dead | | |
| 1E | COOM 5 | *Acacia acuminata* | 192 | 21.9, 11.7 | 9.25 | 6 |
| 2A | COOM 10 | *Melaleuca hamulosa* | 193 | 2, 2.5, 3.9, 2.6, 2.8, 3.5, 2.9, 2.1, <2, <2, <2 | 4.8 | 18 |
| | | *Casuarina obesa* | 194 | 8.7 | 6.8 | 11 |
| | | *Casuarina obesa* | 195 | 7.2 | 2.95 | 10 |
| | | *Casuarina obesa* | 196 | 3.5 | 2.65 | 10 |
| | | *Casuarina obesa* | 197 | 8.3 | 6.3 | 15 |
| | | *Casuarina obesa* | 198 | 11.5 | 6.5 | 16 |
| | | *Casuarina obesa* | 199 | 9.9 | 4.8 | 16 |
| | | *Casuarina obesa* | x1 | dead | | |
| 2B | | *Casuarina obesa* | 201 | 3.2 | 4.1 | 14 |
| | | *Casuarina obesa* | 301 | 22 | 6.75 | 14 |
| | | *Casuarina obesa* | 302 | 4.2 | 6.75 | 12 |
| | | *Casuarina obesa* | 303 | 9.6 | 6.95 | 12 |
| | | *Casuarina obesa* | 304 | 4.1 | 4.85 | 14 |
| | | *Casuarina obesa* | 305 | 4.5 | 4.6 | 14 |
| | | *Casuarina obesa* | 306 | <2 | 2.15 | 14 |
| | | *Casuarina obesa* | 307 | 8.8 | 7.15 | 18 |
| | | *Casuarina obesa* | 308 | 7 | 6.85 | 13 |
| | | *Casuarina obesa* | 309 | 7.6 | 6.75 | 17 |
| | | *Casuarina obesa* | 310 | 2.8 | 3.2 | 12 |
| | | *Casuarina obesa* | 311 | 4.5 | 4.95 | 12 |
| | | *Casuarina obesa* | 312 | <2 | 4.5 | 13 |
| | | *Casuarina obesa* | 313 | 2.9, 2.6, 2.4 | 4.2 | 11 |
| | COOM 11 | *Eucalyptus spathulata* | 314 | 18 | 8.5 | 19 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | COOM 11 | *Eucalyptus spathulata* | 315 | 31 | 7.5 | 9 |
| | | *Casuarina obesa* | 316 | 2.7 | 4.1 | 14 |
| | | *Casuarina obesa* | 317 | 4.9 | 4.4 | 15 |
| | | *Casuarina obesa* | 318 | 5.2 | 4.5 | 14 |
| | | *Casuarina obesa* | 319 | 6.3 | 5.5 | 14 |
| | | *Casuarina obesa* | 320 | 6.6 | 5.65 | 14 |
| | | *Casuarina obesa* | 321 | 6.2 | 5.8 | 15 |
| | | *Casuarina obesa* | 322 | <2, <2 | 2.5 | 12 |
| | | *Casuarina obesa* | 323 | 7.6 | 5.8 | 17 |
| | | *Casuarina obesa* | 324 | 20.6, 14.7 | 11.75 | 19 |
| | | *Casuarina obesa* | 325 | 14.8, 21 | 10.8 | 17 |
| | | *Casuarina obesa* | x7 | dead | | |
| | | *Melaleuca strobophylla* | x2 | dead | | |
| **2C** | | *Casuarina obesa* | 326 | 8.5 | 5.5 | 13 |
| | | *Casuarina obesa* | 327 | 10.8 | 6.75 | 13 |
| | | *Casuarina obesa* | 328 | <2, 2.2 | 4.15 | 9 |
| | | *Casuarina obesa* | 329 | 3.3 | 4.5 | 14 |
| | | *Casuarina obesa* | 330 | 12.4 | 8 | 19 |
| | | *Casuarina obesa* | 331 | 6 | 4.5 | 12 |
| | | *Casuarina obesa* | 332 | 15.5 | 9.5 | 13 |
| | | *Casuarina obesa* | 333 | 10.6 | 6 | 13 |
| | | *Casuarina obesa* | 334 | 11.8 | 9.75 | 8 |
| | | *Casuarina obesa* | 335 | 15.8 | 9.5 | 13 |
| | | *Casuarina obesa* | 336 | 8.2 | 9 | 8 |
| | | *Casuarina obesa* | 337 | 22.3, 17 | 9.5 | 16 |
| | COOM 11 | *Eucalyptus spathulata* | 338 | 11.5 | 9.75 | 16 |
| | | *Casuarina obesa* | 339 | 5.5 | 4.15 | 9 |
| | | *Casuarina obesa* | 340 | 8.9 | 6 | 14 |
| | | *Casuarina obesa* | 341 | 10 | 7.5 | 13 |
| | | *Casuarina obesa* | 342 | 13 | 5.75 | 10 |
| | COOM 11 | *Eucalyptus spathulata* | 343 | 31.9 | 9.5 | 19 |
| | | *Casuarina obesa* | 344 | 4.4 | 4.4 | 14 |
| | | *Casuarina obesa* | 345 | 12 | 5.75 | 14 |
| | | *Casuarina obesa* | 346 | 4.5 | 5 | 14 |
| | | *Casuarina obesa* | 347 | 7.7 | 5.5 | 13 |
| | COOM 11 | *Eucalyptus spathulata* | 348 | 14.5 | 9.5 | 19 |
| | | *Casuarina obesa* | 349 | 5.5 | 5.85 | 12 |
| | COOM 11 | *Eucalyptus spathulata* | 350 | 30 | 9 | 23 |
| | | *Casuarina obesa* | 351 | 10.6 | 7.75 | 5 |
| | | *Casuarina obesa* | x9 | dead | | |
| | COOM 12 | *Melaleuca halmaturorum* | x3 | <2 | 2.0 - 3.0 | Very stressed |
| **2D** | | *Casuarina obesa* | 352 | 15.7 | 8.75 | 3 |
| | | *Casuarina obesa* | 353 | 12 | 5 | 5 |
| | | *Casuarina obesa* | 354 | 22 | 9.5 | 13 |
| | | *Casuarina obesa* | x7 | dead | | |
| | COOM 11 | *Eucalyptus spathulata* | x1 | dead | | |
| **2E** | | *Casuarina obesa* | x4 | dead | | |

## COOMELBERRUP - Transect 2

| Plot | Species # | Species | Tag # | DBH (cm) (1999) | Height(m) | Crown (1999) |
|---|---|---|---|---|---|---|
| 1A | COOM 5 | *Acacia acuminata* | 355 | 29 | 12.5 | 15 |
| | COOM 1 | *Allocasuarina huegeliana* | 356 | 26.4 | 9.5 | 14 |
| 1B | | NO TREES | | | | |
| 1C | COOM 1 | *Allocasuarina huegeliana* | 357 | 28.8 | 9 | 12 |
| | COOM 1 | *Allocasuarina huegeliana* | 358 | 14.5 | 4.75 | 9 |
| | COOM 1 | *Allocasuarina huegeliana* | x2 | dead | | |
| 1D | COOM 1 | *Allocasuarina huegeliana* | x1 | dead | | |
| 1E | | NO TREES | | | | |
| 2A | | *Casuarina obesa* | 359 | 23.9 | 9.75 | 11 |
| | | *Casuarina obesa* | 360 | 14.5 | 6.5 | 16 |
| | | *Casuarina obesa* | 361 | 18.5 | 7 | 14 |
| | | *Casuarina obesa* | 362 | 10.2 | 5.8 | 14 |
| | | *Casuarina obesa* | 363 | 9.2 | 6 | 14 |
| | | *Casuarina obesa* | 364 | 9.1 | 5.5 | 13 |
| | | *Casuarina obesa* | 365 | 13.7 | 9.5 | 12 |
| | | *Casuarina obesa* | 366 | 14.0 | 6.5 | 5 |
| | | *Casuarina obesa* | 367 | 7.51, 5.85 | 6.25 | 7 |
| | | *Casuarina obesa* | 368 | 15.5, 10.9, 8.5 | 6 | 13 |
| | | *Casuarina obesa* | 369 | 14.8 | 9.25 | 9 |
| | | *Casuarina obesa* | 370 | 18.8 | 7.5 | 9 |
| | | *Casuarina obesa* | 371 | 11.7 | 8.5 | 9 |
| | | *Casuarina obesa* | 372 | 16.7, 13.4 | 8.75 | 10 |
| | | *Casuarina obesa* | 373 | 13.3 | 6.25 | 3 |
| 2B | | *Casuarina obesa* | 374 | 17.98 | 6.25 | 9 |
| | COOM 12 | *Melaleuca halmaturorum* | 375 | 8.5, 7.5 | 2.25 | Stressed |
| | | *Casuarina obesa* | 376 | 22, 19.9, 22.7 | 9.75 | 14 |
| | | *Casuarina obesa* | 377 | 7.7, 9.99 | 6 | 8 |
| | COOM 12 | *Melaleuca halmaturorum* | 378 | 7.00 | 2.25 | Slightly stressed |
| | | *Casuarina obesa* | 379 | 27.66 | 6.5 | 8 |
| | COOM 12 | *Melaleuca halmaturorum* | 380 | 2.86 | 1.75 | Slightly stressed |
| | COOM 12 | *Melaleuca halmaturorum* | 381 | 7.26 | 2.5 | Slightly stressed |
| | | *Casuarina obesa* | 382 | 6.43 | 3.95 | 3 |
| | | *Casuarina obesa* | 383 | 19.5, 13.2, 11.8 | 8.5 | 12 |
| | | *Casuarina obesa* | 384 | 8.28 | 6 | 8 |
| | | *Casuarina obesa* | 385 | 18.9, 14. | 9.5 | 9 |
| | | *Casuarina obesa* | x10 | dead | | |
| 2C | COOM 12 | *Melaleuca halmaturorum* | 386 | 20.2 | 4 | Healthy |
| | COOM 12 | *Melaleuca halmaturorum* | 387 | 8.9 | 3.8 | Healthy |
| | COOM 12 | *Melaleuca halmaturorum* | 388 | 10.8, 8.2 | 4.3 | Slightly stressed |
| | COOM 12 | *Melaleuca halmaturorum* | 389 | 7.9, 12.7 | 4.2 | Slightly stressed |
| | COOM 12 | *Melaleuca halmaturorum* | 390 | 9.7 | 4.1 | Very stressed |
| | COOM 12 | *Melaleuca halmaturorum* | 391 | 9.5 | 3.8 | Very stressed |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | *Casuarina obesa* | x6 | dead | | |
| 2D | | NO TREES | | | | |
| 2E | | *Casuarina obesa* | x1 | dead | | |
| | COOM 12 | *Melaleuca halmaturorum* | x13 | dead | | |

## PARKEYERRING - Transect 1

| Plot | Species # | Species | Tag # | DBH (cm) (1999) | Height(m) | Crown (1999) |
|---|---|---|---|---|---|---|
| 1A | | *Casuarina obesa* | 392 | 20 | 7.25 | 9 |
| | | *Casuarina obesa* | 393 | 11.4 | 5.75 | 10 |
| | | *Casuarina obesa* | 394 | 9.85 | 5.2 | 14 |
| | | *Casuarina obesa* | 395 | 6.45 | 4.15 | 14 |
| | | *Casuarina obesa* | 396 | 3.95 | 3.25 | 11 |
| | | *Casuarina obesa* | 397 | 5.3 | 3.65 | 11 |
| | | *Casuarina obesa* | 398 | 3.65 | 2.15 | 12 |
| | | *Casuarina obesa* | 399 | 3.25 | 2 | 13 |
| | | *Casuarina obesa* | 400 | 6.5, 5.2, 7.45, 7.25, 3.05 | 3.5 | 15 |
| | | *Casuarina obesa* | 201 | 16.65 | 7.75 | 15 |
| | | *Casuarina obesa* | 202 | 38.55 | 8.75 | 21 |
| | | *Casuarina obesa* | 203 | <2 | 1.9 | 17 |
| | | *Casuarina obesa* | 204 | <2, <2, <2 | 2.5 | 17 |
| | | *Casuarina obesa* | 205 | <2 | 1.6 | 17 |
| 1B | | *Casuarina obesa* | 206 | 16.2, 15.5, 11.9, 14.15, 11.4 | 12 | 18 |
| | | *Casuarina obesa* | 207 | 10.45, 10.6, 10.7, 8.05, 11.45, 7.7, 6.45 | 11.5 | 19 |
| | | *Casuarina obesa* | | 6.3, 4.6 | | |
| | | *Casuarina obesa* | 208 | <2 | 1.75 | 14 |
| | | *Casuarina obesa* | 209 | 13.55, 12.95, 9.45, 2.45, 9.15, 11.55, | 12.5 | 14 |
| | | *Casuarina obesa* | | 5.55 | | |
| | | *Casuarina obesa* | x7 | <2 - seedlings | 0.2 - 0.65 | Healthy |
| | | *Casuarina obesa* | x1 | dead | | |
| 1C | | *Casuarina obesa* | 210 | 5.75 | 3.8 | 19 |
| | | *Casuarina obesa* | 211 | <2 | 2.2 | 15 |
| | | *Casuarina obesa* | 212 | <2 | 2.2 | 13 |
| | | *Casuarina obesa* | 213 | 2 | 2.9 | 16 |
| | | *Casuarina obesa* | 214 | <2 | 2.2 | 16 |
| | | *Casuarina obesa* | 215 | <2 | 2.9 | 16 |
| | | *Casuarina obesa* | 216 | 2.65, 2.4 | 3.5 | 17 |
| | | *Casuarina obesa* | 217 | 3.45 | 4.5 | 15 |
| | | *Casuarina obesa* | 218 | 5.15 | 5.2 | 18 |
| | | *Casuarina obesa* | 219 | <2 | 2.1 | 14 |
| | | *Casuarina obesa* | 220 | 17 | 4.3 | 19 |
| | PARK 9 | *Melaleuca halmaturorum* | 249 | <2 | 4.3 | 13 |
| | | *Casuarina obesa* | x1 | <2 - seedling | 0.8 | Healthy |
| 1D | | *Casuarina obesa* | 221 | 3.55 | 4.75 | 13 |
| | | *Casuarina obesa* | 222 | 9.75 | 5.6 | 14 |
| | | *Casuarina obesa* | 223 | 4.45 | 3.3 | 15 |
| | PARK 9 | *Melaleuca halmaturorum* | x6 | <2 | 1.8 - 2.2 | Healthy |
| | PARK 9 | *Melaleuca halmaturorum* | x5 | <2 - seedlings | 0.4 - 1.4 | Healthy |
| | PARK 9 | *Melaleuca halmaturorum* | x2 | dead | | |
| 1E | PARK 8 | *Eucalyptus rudis* | 224 | 18.9, 12.95, 11.4, 12.15 | 5.7 | 6 |
| | | *Casuarina obesa* | 225 | 9.3, 9.95 | 4.3 | 16 |
| | | *Casuarina obesa* | 226 | 5.7 | 7.5 | 18 |
| | | *Casuarina obesa* | 227 | 4.85 | 4 | 14 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | *Casuarina obesa* | 228 | 7.5 | 5 | 18 |
| | | *Casuarina obesa* | 229 | 5.35 | 3.5 | 14 |
| | | *Casuarina obesa* | 230 | 3.5, 3.45 | 4.2 | 16 |
| | | *Casuarina obesa* | 231 | 3.75, 3.35 | 2 | 18 |
| | PARK 9 | *Melaleuca halmaturorum* | 236 | 6.6 | 3.7 | 19 |
| | PARK 9 | *Melaleuca halmaturorum* | x33 | <2 | 1.5 - 2.5 | Healthy |
| | PARK 9 | *Melaleuca halmaturorum* | x17 | <2 - seedlings | 0.5 - 1.5 | Healthy |
| | PARK 9 | *Melaleuca halmaturorum* | x1 | dead | | |
| **2A** | PARK 9 | *Melaleuca halmaturorum* | 232 | 12.25 | 3.3 | 19 |
| | PARK 9 | *Melaleuca halmaturorum* | 233 | 3.1, 4.2, 4.7, 2.5, 2.8 | 3.3 | 9 |
| | PARK 9 | *Melaleuca halmaturorum* | 234 | 8.05, 6.25, 2.7 | 4 | 17 |
| | PARK 9 | *Melaleuca halmaturorum* | 235 | 5.85, 5.45, 3.5, 3.65, 2.5 | 4 | 17 |
| | PARK 9 | *Melaleuca halmaturorum* | 237 | 15.5 | 3.7 | 14 |
| | PARK 9 | *Melaleuca halmaturorum* | 238 | 6.5, 4.9, 13.85 | 4 | 14 |
| | PARK 9 | *Melaleuca halmaturorum* | 239 | 7.5, 5.45 | 3.9 | 17 |
| | PARK 9 | *Melaleuca halmaturorum* | 240 | 6.95, 5.3 | 3 | 11 |
| | PARK 9 | *Melaleuca halmaturorum* | x42 | <2 | 1.8 - 4.0 | Healthy |
| | PARK 9 | *Melaleuca halmaturorum* | x55 | <2 - seedlings | 1.0 - 1.5 | Healthy |
| | PARK 9 | *Melaleuca halmaturorum* | x11 | dead | | |
| **2B** | PARK 9 | *Melaleuca halmaturorum* | 241 | 11.5 | 2.8 | 19 |
| | PARK 9 | *Melaleuca halmaturorum* | 242 | 7.7, 9.05 | 4 | 14 |
| | PARK 9 | *Melaleuca halmaturorum* | 243 | 8 | 3.7 | 17 |
| | PARK 9 | *Melaleuca halmaturorum* | 244 | 9.05 | 3.7 | 17 |
| | PARK 9 | *Melaleuca halmaturorum* | 245 | 3.3, 4.55, <2, 4.9, 3.3, 2.85 | 3.5 | 11 |
| | PARK 9 | *Melaleuca halmaturorum* | 246 | 13.75 | 3.3 | 19 |
| | PARK 9 | *Melaleuca halmaturorum* | 247 | 6.35, 5.35 | 3.5 | 13 |
| | PARK 9 | *Melaleuca halmaturorum* | 248 | 6.35 | 3.5 | 13 |
| | PARK 9 | *Melaleuca halmaturorum* | 250 | 14.2 | 3.5 | 15 |
| | PARK 9 | *Melaleuca halmaturorum* | 251 | 10.2, 8.95 | 3.7 | 17 |
| | PARK 9 | *Melaleuca halmaturorum* | 252 | 19.35, 7.8 | 3.3 | 15 |
| | PARK 9 | *Melaleuca halmaturorum* | 253 | 7.5 | 4 | 13 |
| | PARK 9 | *Melaleuca halmaturorum* | 254 | 6.5, 7.1 | 4 | 15 |
| | PARK 9 | *Melaleuca halmaturorum* | 255 | 8.2 | 4 | 17 |
| | PARK 9 | *Melaleuca halmaturorum* | 256 | 7.1, 4.9, 4, 3.8, 3.3, 4.7, 5, 4.1, 3.3 | 3.8 | 19 |
| | PARK 9 | *Melaleuca halmaturorum* | 257 | 9.5, 15 | 3.8 | 11 |
| | PARK 9 | *Melaleuca halmaturorum* | 258 | 19.3 | 4.2 | 13 |
| | PARK 9 | *Melaleuca halmaturorum* | 259 | 18, 5.1 | 4 | 15 |
| | PARK 9 | *Melaleuca halmaturorum* | 260 | 6.4, 5.6, 5.55 | 4 | 15 |
| | PARK 9 | *Melaleuca halmaturorum* | 261 | 25.2 | 4.3 | 19 |
| | PARK 9 | *Melaleuca halmaturorum* | 262 | 10.1, 11, 5.5 | 4.2 | 17 |
| | PARK 9 | *Melaleuca halmaturorum* | x2 | <2 | 2 | Healthy |
| | PARK 9 | *Melaleuca halmaturorum* | x7 | dead | | |
| **2C** | PARK 9 | *Melaleuca halmaturorum* | 263 | 27.6 | 3.7 | 9 |
| | PARK 9 | *Melaleuca halmaturorum* | 264 | 11.45 | 2.5 | 11 |
| | PARK 9 | *Melaleuca halmaturorum* | 265 | 11.4 | 2.6 | 11 |
| | PARK 9 | *Melaleuca halmaturorum* | 266 | 6.4 | 2.7 | 11 |
| | PARK 9 | *Melaleuca halmaturorum* | 267 | 9.7 | 3.6 | 15 |
| | PARK 9 | *Melaleuca halmaturorum* | 268 | 8.45 | 3 | 15 |
| | PARK 9 | *Melaleuca halmaturorum* | 269 | 7.4 | 3.2 | 15 |
| | PARK 9 | *Melaleuca halmaturorum* | 270 | 6.6, 2.8 | 3.1 | 9 |
| | PARK 9 | *Melaleuca halmaturorum* | 271 | 7 | 3.1 | 11 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | PARK 9 | *Melaleuca halmaturorum* | 272 | 4.3 | 2.6 | 11 |
| | PARK 9 | *Melaleuca halmaturorum* | 273 | 8.7 | 2.3 | 11 |
| | PARK 9 | *Melaleuca halmaturorum* | 274 | 11 | 2.7 | 19 |
| | PARK 9 | *Melaleuca halmaturorum* | 275 | 9 | 2.9 | 15 |
| | PARK 9 | *Melaleuca halmaturorum* | 276 | 11.3 | 3.6 | 11 |
| | PARK 9 | *Melaleuca halmaturorum* | 277 | 8.2 | 3.4 | 11 |
| | PARK 9 | *Melaleuca halmaturorum* | 278 | 7.15 | 3.2 | 11 |
| | PARK 9 | *Melaleuca halmaturorum* | 279 | 9.8 | 3.2 | 15 |
| | PARK 9 | *Melaleuca halmaturorum* | 280 | 9.4 | 3 | 11 |
| | PARK 9 | *Melaleuca halmaturorum* | 281 | 8.8 | 3 | 10 |
| | PARK 9 | *Melaleuca halmaturorum* | 282 | 11.5 | 3 | 13 |
| | PARK 9 | *Melaleuca halmaturorum* | 283 | 10.55 | 2.2 | 13 |
| | PARK 9 | *Melaleuca halmaturorum* | x11 | dead | | |
| 2D | PARK 9 | *Melaleuca halmaturorum* | 284 | 22.5 | 2.8 | 3 |
| | PARK 9 | *Melaleuca halmaturorum* | 285 | 6 | 2 | 15 |
| | PARK 9 | *Melaleuca halmaturorum* | 286 | 7.15 | 2.6 | 13 |
| | PARK 9 | *Melaleuca halmaturorum* | 287 | 11.8 | 2.8 | 11 |
| | PARK 9 | *Melaleuca halmaturorum* | x9 | <2 - seedlings | 0.3 - 0.5 | Healthy |
| | PARK 9 | *Melaleuca halmaturorum* | x14 | dead | | |
| 2E | PARK 9 | *Melaleuca halmaturorum* | x2 | <2 - seedlings | 0.5 | Healthy |
| | PARK 9 | *Melaleuca halmaturorum* | x4 | dead | | |

## PARKEYERRING - Transect 2

| Plot | Species # | Species | Tag # | DBH (cm) (1999) | Height(m) | Crown (1999) |
|---|---|---|---|---|---|---|
| 1A | | *Casuarina obesa* | 288 | 14.3, 11.25, 10, 13.5, 16.2, 14.4, 13.2 | 10.6 | 12 |
| | | *Casuarina obesa* | 289 | 6.5 | 9.5 | 11 |
| | | *Casuarina obesa* | 290 | 7.4 | 6.5 | 9 |
| | | *Casuarina obesa* | 291 | 10.7, 11.65 | 13.5 | 13 |
| | | *Casuarina obesa* | 292 | 20.35, 17.65 | 13.5 | 12 |
| | | *Casuarina obesa* | 293 | 31.2, 15.5 | 13.5 | 14 |
| | | *Casuarina obesa* | 294 | 15.95, 15.15 | 10.5 | 11 |
| 1B | | *Casuarina obesa* | 295 | 30.4, 16.9 | 13.5 | 13 |
| | | *Casuarina obesa* | 296 | 6.9, 4 | 6.5 | 3 |
| | | *Casuarina obesa* | 297 | 39.8 | 13.5 | 15 |
| | | *Casuarina obesa* | 298 | 13.65 | 9 | 6 |
| | | *Casuarina obesa* | 299 | 13.5, 9 | 6 | 6 |
| | | *Casuarina obesa* | 300 | 8.6, 9.4 | 9 | 6 |
| | | *Casuarina obesa* | 401 | 13.6 | 9 | 8 |
| | | *Casuarina obesa* | 402 | 44.6, 6.2 | 13.8 | 12 |
| | | *Casuarina obesa* | 403 | 13.8 | 10 | 3 |
| | | *Casuarina obesa* | x2 | dead | | |
| 1C | | *Casuarina obesa* | 404 | 9.2 | 9.5 | 7 |
| | | *Casuarina obesa* | 405 | 28.9 | 13.5 | 15 |
| | | *Casuarina obesa* | 406 | 19.9, 18.1, 6 | 9.5 | 13 |
| | | *Casuarina obesa* | 407 | 14.4, 15.7 | 10 | 9 |
| | | *Casuarina obesa* | x4 | dead | | |

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|---|---|---|---|---|---|---|
| 1D | | *Casuarina obesa* | 408 | 38.2, 12.05 | 11.5 | 10 |
| | | *Casuarina obesa* | 409 | 17.2, 13.3 | 13.5 | 14 |
| | | *Casuarina obesa* | 410 | 12.3 | 10.5 | 12 |
| | | *Casuarina obesa* | 411 | 8.2, 8.9 | 9 | 9 |
| | | *Casuarina obesa* | 412 | 5.3, 4.3, 4, 3.8 | 6.5 | 4 |
| | | *Casuarina obesa* | x1 | dead | | |
| 1E | | *Casuarina obesa* | 413 | 9.05, 11.5 | 9 | 11 |
| | | *Casuarina obesa* | 414 | 7.75 | 10 | 14 |
| | | *Casuarina obesa* | 415 | 3.9 | 4.5 | 4 |
| | | *Casuarina obesa* | 416 | 18.4, 22.05 | 11 | 10 |
| | | *Casuarina obesa* | 417 | 10.25, 21.4 | 10.5 | 3 |
| | | *Casuarina obesa* | 418 | 16.6 | 10.5 | 8 |
| | | *Casuarina obesa* | 419 | 15.7, 14.3 | 13 | 10 |
| | | *Casuarina obesa* | x1 | dead | | |
| 2A | | *Casuarina obesa* | 420 | 2.3 | 5.3 | 6 |
| | | *Casuarina obesa* | 421 | 4.7 | 7.5 | 12 |
| | | *Casuarina obesa* | 422 | 3 | 6.5 | 3 |
| | | *Casuarina obesa* | 423 | 2.6 | 4.8 | 10 |
| | | *Casuarina obesa* | 424 | 5.7 | 8 | 15 |
| | | *Casuarina obesa* | 425 | 5 | 8 | 15 |
| | | *Casuarina obesa* | 426 | 4.35 | 7.5 | 15 |
| | | *Casuarina obesa* | 427 | 4.2 | 4.8 | 11 |
| | | *Casuarina obesa* | 428 | 6.1 | 8 | 13 |
| | | *Casuarina obesa* | 429 | 5.4 | 8 | 3 |
| | | *Casuarina obesa* | 430 | 2.8 | 4 | 8 |
| | | *Casuarina obesa* | 431 | 4.4 | 6 | 9 |
| | | *Casuarina obesa* | 432 | 5 | 7.5 | 11 |
| | | *Casuarina obesa* | 433 | 2.55 | 5 | 3 |
| | | *Casuarina obesa* | 434 | 2.3 | 4.5 | 6 |
| | | *Casuarina obesa* | 435 | 5 | 7.75 | 7 |
| | | *Casuarina obesa* | 436 | 5.3 | 7.1 | 13 |
| | | *Casuarina obesa* | 437 | 6.15 | 7.15 | 12 |
| | | *Casuarina obesa* | 438 | 4 | 7.2 | 9 |
| | | *Casuarina obesa* | 439 | 4.05 | 7.2 | 10 |
| | | *Casuarina obesa* | 440 | 4.1 | 7.15 | 8 |
| | | *Casuarina obesa* | 441 | 4 | 6.85 | 8 |
| | | *Casuarina obesa* | 442 | 2.9 | 6 | 8 |
| | | *Casuarina obesa* | 443 | 3.6 | 6.5 | 8 |
| | | *Casuarina obesa* | 444 | 3.5 | 7.2 | 3 |
| | | *Casuarina obesa* | 445 | 3.75 | 6.75 | 8 |
| | | *Casuarina obesa* | 446 | 4.95 | 6.5 | 12 |
| | | *Casuarina obesa* | 447 | 5.2 | 7.8 | 12 |
| | | *Casuarina obesa* | 448 | 2.8 | 4.85 | 6 |
| | | *Casuarina obesa* | 449 | 2.6 | 4.85 | 3 |
| | | *Casuarina obesa* | 450 | 6.3 | 9.75 | 12 |
| | | *Casuarina obesa* | 451 | 4 | 7 | 9 |
| | | *Casuarina obesa* | 452 | 2.7 | 4.5 | 12 |
| | | *Casuarina obesa* | 453 | 2.8 | 4.6 | 8 |
| | | *Casuarina obesa* | 454 | 4.1 | 7 | 11 |
| | | *Casuarina obesa* | 455 | 3.8 | 6 | 8 |
| | | *Casuarina obesa* | 456 | 5.6 | 7 | 9 |

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|---|---|---|---|---|---|---|---|
| | | | *Casuarina obesa* | 457 | 2.8 | 5.8 | 6 |
| | | | *Casuarina obesa* | 458 | 2.7 | 5.3 | 8 |
| | | | *Casuarina obesa* | 459 | 5.7 | 7.5 | 10 |
| | | | *Casuarina obesa* | 460 | 7.95 | 10.5 | 14 |
| | | | *Casuarina obesa* | 461 | 5.7 | 8 | 14 |
| | | | *Casuarina obesa* | 462 | 3.3 | 6 | 9 |
| | | | *Casuarina obesa* | 463 | 6.45 | 10.75 | 15 |
| | | | *Casuarina obesa* | 464 | 3.4 | 6.8 | 6 |
| | | | *Casuarina obesa* | 465 | 3.55 | 4.65 | 10 |
| | | | *Casuarina obesa* | 466 | 2.7, 3.4 | 6.1 | 11 |
| | | | *Casuarina obesa* | 467 | 3.6 | 7 | 8 |
| | | | *Casuarina obesa* | 468 | 4.55 | 7 | 6 |
| | | | *Casuarina obesa* | 469 | 4.6 | 6.7 | 13 |
| | | | *Casuarina obesa* | 470 | 2.4 | 6 | 4 |
| | | | *Casuarina obesa* | 471 | 4.75 | 6.9 | 11 |
| | | | *Casuarina obesa* | 472 | 3.3 | 6 | 9 |
| | | | *Casuarina obesa* | 473 | 5.25 | 9 | 13 |
| | | | *Casuarina obesa* | 474 | 5.2 | 8.5 | 9 |
| | | | *Casuarina obesa* | 475 | 5, 3.2 | 9 | 13 |
| | | | *Casuarina obesa* | 476 | 4.6 | 8 | 12 |
| | | | *Casuarina obesa* | 477 | 3.4 | 7 | 3 |
| | | | *Casuarina obesa* | 478 | 4.7 | 6.9 | 15 |
| | | | *Casuarina obesa* | 479 | 5.6 | 8.6 | 14 |
| | | | *Casuarina obesa* | 480 | 5 | 8.5 | 12 |
| | | | *Casuarina obesa* | 481 | 7.1 | 6.25 | 13 |
| | | | *Casuarina obesa* | 482 | 3.05 | 7.5 | 8 |
| | | | *Casuarina obesa* | 483 | 4.8 | 7 | 14 |
| | | | *Casuarina obesa* | 484 | 2.55 | 6.2 | 9 |
| | | | *Casuarina obesa* | 485 | 4.3 | 8.3 | 9 |
| | | | *Casuarina obesa* | 486 | 7.15 | 10.25 | 11 |
| | | | *Casuarina obesa* | 487 | 3.2 | 6.5 | 8 |
| | | | *Casuarina obesa* | 488 | 5.1 | 10 | 9 |
| | | | *Casuarina obesa* | 489 | 4.3 | 10.25 | 7 |
| | | | *Casuarina obesa* | 490 | 2.95 | 6.2 | 9 |
| | | | *Casuarina obesa* | 491 | 8.9 | 11 | 15 |
| | | | *Casuarina obesa* | 492 | 5.3 | 6.85 | 12 |
| | | | *Casuarina obesa* | 493 | 3.6 | 5.85 | 10 |
| | | | *Casuarina obesa* | 494 | 7.95 | 11 | 5 |
| | | | *Casuarina obesa* | 495 | 3.1 | 6.75 | 6 |
| | | | *Casuarina obesa* | 496 | 4.75 | 7.25 | 8 |
| | | | *Casuarina obesa* | 497 | 5.4 | 7.25 | 12 |
| | | | *Casuarina obesa* | 498 | 3.15 | 5 | 6 |
| | | | *Casuarina obesa* | 499 | 4.7 | 8.1 | 8 |
| | | | *Casuarina obesa* | 500 | 6 | 8.3 | 12 |
| | | | *Casuarina obesa* | 1 | 2.2 | 4.2 | 9 |
| | | | *Casuarina obesa* | 2 | 2.7 | 2.8 | 7 |
| | | | *Casuarina obesa* | 3 | 7 | 7.5 | 14 |
| | | | *Casuarina obesa* | 4 | 3.3 | 5.5 | 6 |
| | | | *Casuarina obesa* | 5 | 2.65 | 5 | 7 |
| | | | *Casuarina obesa* | 6 | 2.9 | 5 | 4 |
| | | | *Casuarina obesa* | 7 | 2.2 | 3.8 | 6 |
| | | | *Casuarina obesa* | 8 | 6.9 | 7.5 | 12 |
| | | | *Casuarina obesa* | 9 | 6.3 | 7.5 | 12 |
| | | | *Casuarina obesa* | 10 | 2.9 | 4.8 | 4 |

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|---|---|---|---|---|---|---|
| | | *Casuarina obesa* | 11 | 3.05 | 4.8 | 8 |
| | | *Casuarina obesa* | 12 | 2.9 | 4.2 | 7 |
| | | *Casuarina obesa* | 13 | 2.45 | 4.8 | 3 |
| | | *Casuarina obesa* | 14 | 3.85 | 4.5 | 8 |
| | | *Casuarina obesa* | 15 | 2.5 | 4.2 | 3 |
| | | *Casuarina obesa* | 16 | 3.5 | 6.5 | 11 |
| | | *Casuarina obesa* | 17 | 2.8 | 6.3 | 7 |
| | | *Casuarina obesa* | 18 | 3.4 | 6.1 | 11 |
| | | *Casuarina obesa* | 19 | 2.5 | 5 | 3 |
| | | *Casuarina obesa* | 20 | 2.05 | 2.3 | 8 |
| | | *Casuarina obesa* | 21 | 3.55 | 5.5 | 9 |
| | | *Casuarina obesa* | 22 | 3.8 | 6.3 | 9 |
| | | *Casuarina obesa* | 23 | 5.3 | 6.6 | 13 |
| | | *Casuarina obesa* | 24 | 3.5 | 5 | 9 |
| | | *Casuarina obesa* | 25 | 2.85 | 5 | 9 |
| | | *Casuarina obesa* | 26 | 2.2 | 4 | 8 |
| | | *Casuarina obesa* | 27 | 5 | 6.5 | 11 |
| | | *Casuarina obesa* | 28 | <2, <2 | 4.2 | 4 |
| | | *Casuarina obesa* | 29 | 2.3 | 4 | 3 |
| | | *Casuarina obesa* | 30 | 5.6 | 7.5 | 12 |
| | | *Casuarina obesa* | 31 | 5.65 | 7.5 | 14 |
| | | *Casuarina obesa* | 32 | 3.4 | 4.5 | 11 |
| | | *Casuarina obesa* | 33 | 7.7, 8.2 | 7.8 | 14 |
| | | *Casuarina obesa* | 34 | 2.2 | 4 | 4 |
| | | *Casuarina obesa* | 35 | 3.8 | 4.5 | 7 |
| | | *Casuarina obesa* | 36 | 2.95 | 4.5 | 6 |
| | | *Casuarina obesa* | 37 | 3.5 | 5.7 | 9 |
| | | *Casuarina obesa* | 38 | 6.6 | 8 | 14 |
| | | *Casuarina obesa* | 39 | 2.9, <2 | 3.6 | 8 |
| | | *Casuarina obesa* | 40 | 8.9 | 8.5 | 17 |
| | | *Casuarina obesa* | 41 | 3.5 | 5.5 | 9 |
| | | *Casuarina obesa* | 42 | 6.5 | 8.5 | 15 |
| | | *Casuarina obesa* | 43 | 6.5 | 8.2 | 13 |
| | | *Casuarina obesa* | 44 | 3.3 | 5 | 6 |
| | | *Casuarina obesa* | 45 | <2, <2 | 4 | 4 |
| | | *Casuarina obesa* | 46 | 3.95 | 7.4 | 9 |
| | | *Casuarina obesa* | 47 | 6.9 | 7.9 | 11 |
| | | *Casuarina obesa* | 48 | 7 | 7.3 | 11 |
| | | *Casuarina obesa* | 49 | 4.1 | 5 | 9 |
| | | *Casuarina obesa* | 50 | 5.9 | 6 | 11 |
| | | *Casuarina obesa* | 51 | 5.05 | 5.8 | 8 |
| | | *Casuarina obesa* | 52 | 6.8 | 5.7 | 4 |
| | | *Casuarina obesa* | 53 | 5.05 | 6 | 9 |
| | | *Casuarina obesa* | 54 | 2.9 | 4.8 | 7 |
| | | *Casuarina obesa* | 55 | 3.9 | 5 | 9 |
| | | *Casuarina obesa* | 56 | 3.05 | 4.4 | 8 |
| | | *Casuarina obesa* | 57 | 6 | 6 | 9 |
| | | *Casuarina obesa* | 58 | 3.8 | 4.8 | 6 |
| | | *Casuarina obesa* | x 59 | <2 | 2.2 | Healthy |
| | | *Melaleuca halmaturorum* | x1 | <2 | 2.2 | Healthy |
| | | *Casuarina obesa* | x4 | dead | | |
| **2B** | | *Casuarina obesa* | 73 | 8.25 | 8 | 14 |
| | | *Casuarina obesa* | 72 | 6.35 | 7 | 15 |

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|---|---|---|---|---|---|---|
| | | *Casuarina obesa* | 71 | 2.4 | 3.1 | 9 |
| | | *Casuarina obesa* | 59 | 4.55 | 6.5 | 10 |
| | | *Casuarina obesa* | 60 | 6.2 | 6.5 | 10 |
| | | *Casuarina obesa* | 61 | 3.3 | 5 | 13 |
| | | *Casuarina obesa* | 62 | 2.5 | 3.3 | 13 |
| | | *Casuarina obesa* | 63 | 7.4 | 8 | 15 |
| | | *Casuarina obesa* | 64 | 4.2 | 5 | 10 |
| | | *Casuarina obesa* | 65 | 4.9 | 6 | 15 |
| | | *Casuarina obesa* | 66 | 5.5 | 6.5 | 10 |
| | | *Casuarina obesa* | 67 | 3.5 | 4.8 | 11 |
| | | *Casuarina obesa* | 68 | 2.7 | 4.1 | 6 |
| | | *Casuarina obesa* | 69 | 3.15 | 4.7 | 9 |
| | | *Casuarina obesa* | 70 | 5 | 6.5 | 13 |
| | | *Casuarina obesa* | 74 | 2.95 | 4.2 | 8 |
| | | *Casuarina obesa* | 75 | 4.4 | 6.6 | 11 |
| | | *Casuarina obesa* | 76 | 3.4 | 5.8 | 7 |
| | | *Casuarina obesa* | 77 | 4.1 | 6.1 | 9 |
| | | *Casuarina obesa* | 78 | 3 | 5.5 | 15 |
| | | *Casuarina obesa* | 79 | 2.5 | 5 | 14 |
| | | *Casuarina obesa* | 80 | 6.3 | 7 | 15 |
| | | *Casuarina obesa* | 81 | 3.7 | 5.5 | 12 |
| | | *Casuarina obesa* | 13x | <2 | 2.5 | Healthy |
| | | *Casuarina obesa* | x5 | dead | | |
| **2C** | | *Casuarina obesa* | 82 | 20.2, 20.2, 9.7 | 10 | 8 |
| | | *Casuarina obesa* | 83 | 21.4 | 7.5 | 10 |
| | | *Casuarina obesa* | 84 | 23.5 | 11 | 15 |
| | | *Casuarina obesa* | 85 | 47.4 | 9.5 | 5 |
| | | *Casuarina obesa* | 86 | 24 | 10 | 10 |
| | | *Casuarina obesa* | 87 | 23.05, 19.95 | 11 | 13 |
| | | *Melaleuca halmaturorum* | x1 | dead | | |
| | | *Casuarina obesa* | x3 | dead | | |
| **2D** | | *Casuarina obesa* | x5 | dead | | |
| | | *Melaleuca halmaturorum* | x3 | dead | | |
| **2E** | | *Melaleuca halmaturorum* | x1 | dead | | |

## DUMBLEYUNG - Transect 1

| Plot | Species # | Species | Tag # | DBH (cm) (1999) | Height(m) | Crown (1999) |
|---|---|---|---|---|---|---|
| 1A | | *Eucalyptus loxophleba* | 88 | 38.25 | 8.5 | 14 |
| 1B | | *Eucalyptus rudis* | 90 | 58.9 | 17.75 | 19 |
| 1C | | *Eucalyptus rudis* | 89 | 65.7 | 17.5 | 17 |
| | | *Casuarina obesa* | 91 | 9.25 | 4 | 17 |
| 1D | | *Eucalyptus rudis* | x2 | dead | | |
| 1E | | NO TREES | | | | |
| 2A | | *Casuarina obesa* | 120 | <2 | 1.8 | 19 |
| 2B | | *Eucalyptus rudis* | 92 | 11.9 | 4.9 | 17 |
| | | *Eucalyptus rudis* | 93 | 5, 7.95, 9.35, 6.8 | 6.25 | 19 |
| | | *Eucalyptus rudis* | 94 | 8.5 | 4.95 | 15 |
| | | *Eucalyptus rudis* | x1 | dead | | |
| 2C | | *Eucalyptus rudis* | 95 | 6.7 | 4.85 | 17 |
| | | *Eucalyptus rudis* | 96 | 7 | 4.85 | 15 |
| | | *Eucalyptus rudis* | 97 | 4.95 | 4.55 | 15 |
| | | *Eucalyptus rudis* | 98 | 5.25 | 4.5 | 15 |
| | | *Eucalyptus rudis* | 99 | 10.95 | 6.2 | 15 |
| | | *Eucalyptus rudis* | 100 | 10.2 | 6.1 | 17 |
| | | *Eucalyptus rudis* | 101 | 9.05, 6.2 | 6.5 | 14 |
| | | *Eucalyptus rudis* | 102 | 9.8 | 6.75 | 14 |
| | | *Eucalyptus rudis* | 103 | 8.35, 7 | 5.2 | 15 |
| | | *Eucalyptus rudis* | 104 | 8.05 | 6 | 14 |
| | | *Eucalyptus rudis* | 105 | 3.8 | 3.95 | 15 |
| | | *Eucalyptus rudis* | 106 | 6.5 | 4.5 | 15 |
| | | *Eucalyptus rudis* | 107 | 11, 9.2 | 6.5 | 19 |
| | | *Eucalyptus rudis* | 108 | 10.55 | 6.75 | 18 |
| 2D | | *Casuarina obesa* | 109 | 13.45, 8.8 | 7.75 | 17 |
| | | *Eucalyptus rudis* | 110 | 6.25, 8.05, 7.65 | 6.3 | 19 |
| | | *Eucalyptus rudis* | 111 | 7.85, 8.1 | 6 | 15 |
| | | *Eucalyptus rudis* | 112 | 8.5 | 5.95 | 14 |
| | | *Eucalyptus rudis* | 113 | 6.9, 8.3 | 6 | 14 |
| | | *Eucalyptus rudis* | 114 | 5.6, 10.9, 10.3 | 6.35 | 17 |
| | | *Eucalyptus rudis* | 115 | 6.7, 9.05 | 4.75 | 17 |
| | | *Eucalyptus rudis* | x5 | dead | | |
| 2E | | *Eucalyptus rudis* | 116 | 7.55 | 5.15 | 14 |
| | | *Eucalyptus rudis* | 117 | 11.05 | 7.15 | 16 |
| | | *Eucalyptus rudis* | 118 | 7.5, 6.65 | 6 | 14 |
| | | *Eucalyptus rudis* | 119 | 11.65, 5 | 7.2 | 17 |
| | | *Eucalyptus rudis* | x5 | dead | | |
| 3A | | *Eucalyptus rudis* | x2 | dead | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 3B | | *Casuarina obesa* | x2 | dead | | |
| 3C | | *Casuarina obesa* | x2 | dead | | |
| | 3D - 3E | NO TREES | | | | |

## DUMBLEYUNG - Transect 2

| Plot | Species # | Species | Tag # | DBH (cm) (1999) | Height(m) | Crown (1999) |
|---|---|---|---|---|---|---|
| 1A | | *Eucalyptus rudis* | 121 | 38.8 | 18.5 | 8 |
| | | *Eucalyptus rudis* | 122 | 34, 33.4, 12.8, 31.05 | 22.5 | 10 |
| | | *Eucalyptus rudis* | x1 | dead | | |
| 1B | | *Eucalyptus rudis* | 123 | 45.05 | 9.5 | 6 |
| | | *Eucalyptus rudis* | x2 | dead | | |
| | 1C - 1D | NO TREES | | | | |
| 1E | | *Casuarina obesa* | 124 | 13.55, 13.55, 16.05 | 9.75 | 17 |
| 2A | | *Casuarina obesa* | 125 | 36.12 | 10.75 | 18 |
| | | *Casuarina obesa* | 126 | 15.35, 18.95 | 8.75 | 18 |
| | | *Acacia acuminata* | x1 | <2 | 2.1 | Healthy |
| 2B | | *Casuarina obesa* | 129 | 14.7, 12.2, 7.7, 13.75 | 7.5 | 14 |
| | | *Casuarina obesa* | x1 | dead | | |
| 2C | | *Casuarina obesa* | 128 | 15.65, 15.2, 10.4 | 10.5 | 14 |
| | | *Casuarina obesa* | 130 | 6.1 | 5.75 | 13 |
| | | *Casuarina obesa* | 131 | 5.4 | 5.2 | 15 |
| | | *Casuarina obesa* | 132 | 4.55, 3.6 | 5.2 | 17 |
| | | *Casuarina obesa* | 133 | 7.1 | 6 | 15 |
| | | *Casuarina obesa* | 134 | 9.95, 10, 12.65, 14 | 10 | 14 |
| | | *Casuarina obesa* | 135 | 5.15, 5.65 | 6 | 10 |
| | | *Casuarina obesa* | x2 | <2 - seedling | 1 | Grazed |
| 2D | | *Casuarina obesa* | 136 | 5.8 | 6 | 17 |
| | | *Casuarina obesa* | 137 | 4.95 | 6 | 15 |
| | | *Casuarina obesa* | 138 | 5.25 | 6 | 14 |
| | | *Casuarina obesa* | 139 | 2.6, <2 | 3 | 9 |
| | | *Casuarina obesa* | 140 | <2 | 2.7 | 7 |
| | | *Casuarina obesa* | 141 | 7.4 | 6.5 | 15 |
| | | *Casuarina obesa* | 142 | 2.7 | 3 | 10 |
| | | *Casuarina obesa* | 143 | 7.85, 5.9 | 6 | 16 |
| | | *Casuarina obesa* | 144 | 3, <2 | 4 | 11 |
| | | *Casuarina obesa* | 145 | 6.7 | 6 | 12 |
| | | *Casuarina obesa* | 146 | 5.1, 5.25 | 5.7 | 14 |
| | | *Casuarina obesa* | 147 | 6.35, 4.8 | 5.7 | 10 |
| | | *Casuarina obesa* | 148 | 7.95 | 6.2 | 15 |
| | | *Casuarina obesa* | 149 | 4.75 | 6 | 14 |
| | | *Casuarina obesa* | 150 | 4.4 | 5.9 | 14 |

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|---|---|---|---|---|---|---|
| | | *Casuarina obesa* | 151 | 6.2, 8.1 | 6.5 | 15 |
| | | *Casuarina obesa* | 152 | 5.4 | 6 | 14 |
| | | *Casuarina obesa* | 153 | <2 | 2.9 | 13 |
| | | *Casuarina obesa* | 154 | 5.2 | 5.7 | 15 |
| | | *Casuarina obesa* | 155 | <2 | 3 | 10 |
| | | *Casuarina obesa* | 156 | 6.85 | 6 | 15 |
| | | *Casuarina obesa* | 157 | 7.35 | 6.2 | 15 |
| | | *Casuarina obesa* | 158 | 5.7 | 6 | 15 |
| | | *Casuarina obesa* | 159 | 9.15 | 6.5 | 15 |
| | | *Casuarina obesa* | 160 | 8.8 | 6.2 | 17 |
| | | *Casuarina obesa* | 161 | 3.7 | 4.9 | 16 |
| | | *Casuarina obesa* | 162 | 4.55 | 4.9 | 18 |
| | | *Casuarina obesa* | 163 | <2 | 3.5 | 14 |
| | | *Casuarina obesa* | 164 | <2 | 2.7 | 13 |
| | | *Casuarina obesa* | 165 | <2 | 2 | 6 |
| | | *Casuarina obesa* | 166 | 11.5 | 6 | 18 |
| | | *Casuarina obesa* | x3 | <2 - seedlings | 1 - 1.5 | Grazed |
| | | *Casuarina obesa* | x2 | dead | | |
| 2E | | *Casuarina obesa* | 170 | 6.8, 6 | 6.1 | 19 |
| | | *Casuarina obesa* | 171 | 3.8 | 3.5 | 14 |
| | | *Casuarina obesa* | 172 | 6.55 | 6 | 15 |
| | | *Casuarina obesa* | 173 | 7, 4.55 | 5.8 | 12 |
| | | *Casuarina obesa* | 174 | 5.75 | 6 | 15 |
| | | *Casuarina obesa* | 175 | <2 | 3.2 | 13 |
| | | *Casuarina obesa* | 176 | 3.2, <2 | 4.15 | 14 |
| | | *Casuarina obesa* | x1 | <2 - seedling | 1 | Heavily grazed |
| | | *Casuarina obesa* | x2 | dead | | |
| 3A | | *Casuarina obesa* | 167 | 24.1, 20.6, 10.7, 23, 21.7 | 11.75 | 16 |
| | | *Casuarina obesa* | x2 | dead | | |
| 3B | | *Casuarina obesa* | 168 | 7.05 | 4.8 | 19 |
| 3C | | *Casuarina obesa* | 169 | 14 | 6.7 | 15 |
| | | *Casuarina obesa* | x8 | dead | | |
| 3D | | *Casuarina obesa* | x5 | dead | | |
| 3E | | *Casuarina obesa* | x1 | dead | | |

## DUMBLEYUNG - Transect 3

| Plot | Species # | Species | Tag # | DBH (cm) (1999) | Height(m) | Crown (1999) |
|---|---|---|---|---|---|---|
| 1A | | *Eucalyptus rudis* | 179 | 23.45 | 20.75 | 19 |
| | | *Eucalyptus rudis* | 180 | 32.65 | 20.5 | 19 |
| | | *Eucalyptus rudis* | 181 | 15.5, 19.65 | 19.5 | 3 |
| | | *Eucalyptus rudis* | 182 | 30.5, 24.05, 25.5 | 21.5 | 21 |
| | | *Eucalyptus rudis* | 183 | 37.05, 21.5 | 19.5 | 19 |
| | | *Eucalyptus rudis* | 184 | 25.65, 17.7 | 11.75 | 15 |
| | | *Melaleuca strobophylla* | 200 | 10.25, 8 | 5.9 | 15 |
| | | *Melaleuca strobophylla* | x2 | dead | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 1B | | *Casuarina obesa* | 185 | 8.3 | 6 | 17 |
| | | *Eucalyptus rudis* | 186 | 8.15 | 7.25 | 19 |
| | | *Eucalyptus rudis* | x8 | dead | | |
| 1C | | *Melaleuca strobophylla* | 187 | 5.8, 5.65 | 4.95 | 19 |
| | | *Melaleuca strobophylla* | 188 | 7.1, 6.55 | 4.5 | 17 |
| | | *Eucalyptus rudis* | 189 | 6.3 | 6.75 | 17 |
| | | *Melaleuca strobophylla* | 190 | 5.4 | 4.5 | 17 |
| | | *Melaleuca strobophylla* | 191 | 6.05, 4.9, 5.45, 3.95 | 4.3 | 17 |
| | | *Melaleuca strobophylla* | x1 | <2 - seedling | 1.7 | Healthy |
| | | *Eucalyptus rudis* | x11 | dead | | |
| 1D | | *Casuarina obesa* | 192 | 6.95 | 6.6 | 17 |
| | | *Melaleuca strobophylla* | 193 | 6.7, 5.95 | 4.75 | 19 |
| | | *Melaleuca strobophylla* | 194 | 3.6 | 4.2 | 19 |
| | | *Melaleuca strobophylla* | 195 | 7.3, 5.5 | 5.2 | 19 |
| | | *Melaleuca strobophylla* | 196 | 6.15, <2 | 4.75 | 19 |
| | | *Melaleuca strobophylla* | 197 | 4.75 | 4.45 | 12 |
| | | *Melaleuca strobophylla* | 198 | 6.3, 5 | 4.75 | 17 |
| | | *Melaleuca strobophylla* | 199 | 5.2, 5.25, 8.2, 6.4 | 4.95 | 19 |
| | | *Eucalyptus rudis* | x9 | dead | | |
| | | *Melaleuca strobophylla* | x3 | dead | | |
| 1E | | *Melaleuca strobophylla* | 177 | 5.7 | 5 | 15 |
| | | *Melaleuca strobophylla* | 178 | 3.2, <2, <2, <2, <2 | 2.8 | 15 |
| | | *Casuarina obesa* | 201 | 7.2 | 6 | 15 |
| | | *Melaleuca halmaturorum* | 202 | 2.7, 2.8 | 3.1 | 13 |
| | | *Casuarina obesa* | 203 | <2 | 1.8 | 14 - Fallen |
| | | *Melaleuca strobophylla* | 204 | 5.05, 4.1, 2.8 | 5.5 | 13 |
| | | *Melaleuca strobophylla* | 205 | 3.6 | 4 | 11 |
| | | *Melaleuca strobophylla* | 206 | 4.3 | 3.6 | 11 |
| | | *Melaleuca strobophylla* | 207 | 4.1 | 3.7 | 15 |
| | | *Melaleuca strobophylla* | 208 | 6.4, 7.1 | 5.5 | 19 |
| | | *Melaleuca strobophylla* | 209 | 2.9 | 3.5 | 11 |
| | | *Melaleuca strobophylla* | 210 | 3.3, 3.5 | 3.8 | 15 |
| | | *Melaleuca strobophylla* | 211 | 4.9 | 4.2 | 19 |
| | | *Melaleuca strobophylla* | 212 | 2.5 | 3 | 9 |
| | | *Melaleuca strobophylla* | 213 | 3.8, 4.4 | 4.1 | 17 |
| | | *Melaleuca strobophylla* | 214 | 4.8 | 4 | 11 |
| | | *Melaleuca strobophylla* | 215 | 4.1, 3.2 | 4 | 15 |
| | | *Melaleuca strobophylla* | 216 | 4.3 | 3.8 | 11 |
| | | *Melaleuca strobophylla* | 217 | 4.8 | 4 | 13 |
| | | *Melaleuca strobophylla* | 218 | 2.8, 2.25 | 3 | 13 |
| | | *Melaleuca strobophylla* | 219 | 4.95 | 3.9 | 15 |
| | | *Melaleuca halmaturorum* | 220 | 3.8 | 3 | 14 |
| | | *Melaleuca strobophylla* | 221 | 3.2 | 3.1 | 11 |
| | | *Melaleuca strobophylla* | 222 | 5.4, 3.9 | 4 | 17 |
| | | *Melaleuca strobophylla* | 223 | 4.3, 2.4 | 3.9 | 11 |
| | | *Melaleuca halmaturorum* | 224 | <2 | 2.1 | 15 |
| | | *Melaleuca strobophylla* | 225 | 6.7, 5.35, 5.3 | 5.3 | 17 |
| | | *Melaleuca strobophylla* | 226 | 9.8, 7.8, 5.8, 5.8, 5.3 | 6 | 19 |
| | | *Melaleuca strobophylla* | 227 | 8, 4.5, 7.7 | 5.5 | 17 |
| | | *Eucalyptus rudis* | x5 | dead | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | *Melaleuca strobophylla* | x3 | dead | | |
| **2A** | | *Melaleuca strobophylla* | 228 | 5.7, 4 | 5 | 13 |
| | | *Melaleuca strobophylla* | 229 | 4.8, 4.6, 3.5 | 5.5 | 15 |
| | | *Casuarina obesa* | 230 | 16.3 | 8.5 | 15 |
| | | *Melaleuca halmaturorum* | 231 | 6.2 | 4.3 | 15 |
| | | *Melaleuca strobophylla* | 232 | 2.6 | 4 | 6 |
| | | *Melaleuca strobophylla* | 233 | 8.7 | 4.2 | 13 |
| | | *Melaleuca strobophylla* | 234 | 4.3 | 4 | 14 |
| | | *Melaleuca strobophylla* | 235 | 4.95, 2.5, 2.95 | 4.2 | 17 |
| | | *Casuarina obesa* | 236 | 6.8, 4.8 | 7 | 19 |
| | | *Casuarina obesa* | 237 | 6.95 | 7.5 | 17 |
| | | *Melaleuca strobophylla* | 238 | 6.45 | 4.5 | 15 |
| | | *Melaleuca strobophylla* | 239 | 4.5, 3.2 | 4.1 | 17 |
| | | *Melaleuca strobophylla* | 240 | 4.55, 5 | 4.3 | 15 |
| | | *Casuarina obesa* | 241 | 3.5, 5.4 | 5.1 | 14 |
| | | *Melaleuca strobophylla* | 242 | 6.5 | 5.2 | 17 |
| | | *Melaleuca strobophylla* | 243 | 3.2 | 4 | 14 |
| | | *Melaleuca halmaturorum* | 244 | 3.4 | 3.9 | 13 |
| | | *Melaleuca halmaturorum* | 245 | 2.95 | 2.9 | 15 |
| | | *Melaleuca strobophylla* | 246 | 7.5 | 5.6 | 19 |
| | | *Melaleuca strobophylla* | 247 | 4.5 | 4.5 | 17 |
| | | *Casuarina obesa* | 248 | 4.75 | 5.5 | 6 |
| | | *Casuarina obesa* | 249 | 11.2 | 8.5 | 15 |
| | | *Melaleuca halmaturorum* | 250 | 3.35, 2.5 | 3.2 | 19 |
| | | *Melaleuca halmaturorum* | 251 | Multiple <2 | 2.7 | 19 |
| | | *Casuarina obesa* | 252 | 3.6, 2.15, <2 | 3.6 | 17 |
| | | *Melaleuca strobophylla* | 253 | 4.5 | 4.9 | 17 |
| | | *Melaleuca strobophylla* | 254 | 4.1 | 5 | 17 |
| | | *Melaleuca strobophylla* | 255 | 4.8, 3.5 | 5 | 17 |
| | | *Casuarina obesa* | 256 | 4.6 | 5.4 | 18 |
| | | *Melaleuca strobophylla* | 257 | 2.25, 2.7 | 3.7 | 19 |
| | | *Melaleuca halmaturorum* | 258 | 2.75 | 4.4 | 14 |
| | | *Melaleuca strobophylla* | 259 | 4.25, 4.25 | 4.8 | 17 |
| | | *Melaleuca strobophylla* | x21 | dead | | |
| | | *Casuarina obesa* | x1 | dead | | |
| **2B** | | *Melaleuca strobophylla* | 260 | 6.45, 5.1 | 5.1 | 19 |
| | | *Melaleuca halmaturorum* | 261 | 4.5, 2.65, 3.65, 3.4, 3.3, 2.65 | 4.7 | 21 |
| | | *Melaleuca halmaturorum* | 262 | 6.5, <2, 8.05 | 4.7 | 21 |
| | | *Melaleuca halmaturorum* | 263 | 3.7, 3, 3.9, 3.3 | 4.5 | 19 |
| | | *Melaleuca halmaturorum* | 264 | 3.5, 4.05, 2, 3.35, 3.3 | 4.5 | 19 |
| | | *Melaleuca halmaturorum* | 265 | 2.65, <2, <2, <2, <2 | 3 | 19 |
| | | *Melaleuca halmaturorum* | 266 | 5.95, 4.15 | 4.1 | 19 |
| | | *Melaleuca halmaturorum* | 267 | 3.85 | 2.8 | 19 |
| | | *Casuarina obesa* | 268 | 10.9 | 8.5 | 19 |
| | | *Casuarina obesa* | 269 | 10.15 | 8.8 | 19 |
| | | *Casuarina obesa* | 270 | 7.45 | 7 | 19 |
| | | *Casuarina obesa* | x10 | dead | | |
| | | *Melaleuca halmaturorum* | x6 | dead | | |
| **2C** | | *Melaleuca halmaturorum* | 271 | 12.5 | 4.9 | 19 |
| | | *Melaleuca halmaturorum* | 272 | 5.8, 7.8 | 4.5 | 17 |
| | | *Melaleuca halmaturorum* | 273 | 10.7 | 7 | 15 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | *Melaleuca halmaturorum* | 274 | 5.3, 5.3, 4.3, 7.8, 4.15 | 5 | 19 |
| | | *Melaleuca halmaturorum* | x12 | <2 - seedlings | 0.5 - 1.8 | Healthy |
| | | *Melaleuca halmaturorum* | x17 | dead | | |
| 2D | | *Melaleuca halmaturorum* | 275 | 8.25 | 4.7 | 19 |
| | | *Melaleuca halmaturorum* | x86 | <2 - seedlings | 0.5 - 2 | Healthy |
| | | *Melaleuca halmaturorum* | x19 | dead | | |
| | | *Casuarina obesa* | x1 | <2 - seedling | 0.4 | Healthy |
| | | *Casuarina obesa* | x1 | dead | | |
| 2E | | *Melaleuca halmaturorum* | x46 | <2 - seedlings | 0.1 - 2 | Healthy |
| | | *Melaleuca halmaturorum* | x20 | dead | | |
| | | *Casuarina obesa* | x3 | <2 - seedlings | 0.4 - 1.1 | Healthy |

## DUMBLEYUNG - Transect 4

| Plot | Species # | Species | Tag # | DBH (cm) (1999) | Height(m) | Crown (1999) |
|---|---|---|---|---|---|---|
| 1A | | *Eucalyptus rudis* | 281 | 13.5 | 7.5 | 17 |
| | | *Eucalyptus rudis* | 282 | 19.4 | 13 | 19 |
| | | *Eucalyptus rudis* | 283 | 26 | 13.5 | 21 |
| | | *Eucalyptus rudis* | 284 | 20.3 | 14 | 14 |
| | | *Eucalyptus rudis* | x5 | dead | | |
| 1B | | *Melaleuca halmaturorum* | 285 | 6.6 | 5 | 11 |
| | | *Eucalyptus rudis* | 286 | 56 | 15.5 | 18 |
| | | *Eucalyptus rudis* | 287 | 7.1 | 6.8 | 8 |
| | | *Eucalyptus rudis* | 288 | 7.2 | 6 | 14 |
| | | *Eucalyptus rudis* | 289 | 23.3 | 13 | 21 |
| | | *Eucalyptus rudis* | 290 | 5.3 | 4.2 | 9 |
| | | *Eucalyptus rudis* | 291 | 5.6 | 4.1 | 9 |
| | | *Casuarina obesa* | 292 | 2.2 | 2.1 | 3 |
| | | *Eucalyptus rudis* | 293 | 14.8 | 11 | 19 |
| | | *Eucalyptus rudis* | 294 | 9.7 | 6.5 | 11 |
| | | *Eucalyptus rudis* | 295 | 8.7 | 5 | 14 |
| | | *Eucalyptus rudis* | 296 | 14.3 | 7.5 | 14 |
| | | *Eucalyptus rudis* | x35 | dead | | |
| 1C | | *Casuarina obesa* | 297 | <2 | 2.1 | 15 |
| | | *Casuarina obesa* | 298 | <2 | 2.2 | 15 |
| | | *Casuarina obesa* | 299 | <2, <2 | 2.9 | 17 |
| | | *Casuarina obesa* | 300 | 2.75 | 3.3 | 15 |
| | | *Casuarina obesa* | 301 | <2 | 2.1 | 13 |
| | | *Melaleuca halmaturorum* | 302 | 5.1 | 3.5 | 17 |
| | | *Casuarina obesa* | 303 | <2 | 2 | 15 |
| | | *Casuarina obesa* | 304 | <2, <2 | 2 | 19 |
| | | *Casuarina obesa* | 305 | <2 | 2.4 | 17 |
| | | *Casuarina obesa* | 306 | <2 | 2.2 | 12 |
| | | *Casuarina obesa* | 307 | 2.2 | 2.5 | 15 |
| | | *Casuarina obesa* | 308 | 3.8 | 4.2 | 15 |
| | | *Casuarina obesa* | 309 | <2 | 2 | 19 |
| | | *Casuarina obesa* | 310 | <2 | 2.1 | 17 |
| | | *Casuarina obesa* | 311 | 14.9, 20.1, 10.5 | 10 | 16 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | *Melaleuca halmaturorum* | 312 | 8.7, 10, 11 | 5.5 | 19 |
| | | *Melaleuca halmaturorum* | x2 | <2 - seedlings | 1.1 | Healthy |
| | | *Casuarina obesa* | x11 | <2 - seedlings | 0.5 - 2 | Healthy |
| | | *Eucalyptus rudis* | x1 | <2 - seedling | 1.9 | Healthy |
| | | *Eucalyptus rudis* | x20 | dead | | |
| 1D | | *Casuarina obesa* | 313 | <2, <2, <2 | 2 | 9 |
| | | *Casuarina obesa* | 314 | 3.4 | 2.1 | 8 |
| | | *Melaleuca halmaturorum* | 315 | <2, <2 | 2.2 | 15 |
| | | *Melaleuca halmaturorum* | 316 | <2 | 2.6 | 17 |
| | | *Casuarina obesa* | 317 | <2 | 2 | 9 |
| | | *Melaleuca halmaturorum* | 318 | <2 | 2.2 | 17 |
| | | *Melaleuca halmaturorum* | 319 | <2 | 2.3 | 15 |
| | | *Melaleuca halmaturorum* | 320 | <2 | 2.5 | 13 |
| | | *Melaleuca halmaturorum* | 321 | <2 | 3 | 19 |
| | | *Melaleuca halmaturorum* | 322 | <2 | 2.6 | 15 |
| | | *Casuarina obesa* | 323 | <2 | 2.4 | 15 |
| | | *Eucalyptus rudis* | 324 | <2 | 2 | 9 |
| | | *Eucalyptus rudis* | 325 | 4.1 | 5 | 14 |
| | | *Casuarina obesa* | 326 | 3.5 | 3 | 14 |
| | | *Casuarina obesa* | 327 | 4.4 | 3.8 | 15 |
| | | *Casuarina obesa* | 328 | 4.2 | 3.9 | 15 |
| | | *Casuarina obesa* | 329 | 3.3 | 3 | 15 |
| | | *Casuarina obesa* | 330 | 3.5 | 3.1 | 15 |
| | | *Eucalyptus rudis* | 331 | <2 | 3.2 | 15 |
| | | *Casuarina obesa* | 332 | 2.2 | 3.7 | 17 |
| | | *Melaleuca halmaturorum* | 333 | <2 | 2.4 | 19 |
| | | *Casuarina obesa* | 334 | <2 | 2.5 | 15 |
| | | *Casuarina obesa* | 335 | <2 | 2.5 | 14 |
| | | *Casuarina obesa* | 336 | 2.6 | 2.6 | 12 |
| | | *Casuarina obesa* | 337 | 3.3 | 3.6 | 18 |
| | | *Casuarina obesa* | 338 | 3.95 | 3.2 | 16 |
| | | *Casuarina obesa* | 339 | 2.8 | 3.4 | 18 |
| | | *Casuarina obesa* | 340 | 2.8 | 3.3 | 8 |
| | | *Casuarina obesa* | 341 | 2.35 | 3.2 | 14 |
| | | *Casuarina obesa* | 342 | <2, <2 | 3.2 | 14 |
| | | *Casuarina obesa* | 343 | 2.6 | 3.2 | 12 |
| | | *Casuarina obesa* | 344 | 2.3, <2 | 3.3 | 14 |
| | | *Casuarina obesa* | 345 | 2 | 3.2 | 14 |
| | | *Casuarina obesa* | 346 | 2.1 | 3.9 | 15 |
| | | *Casuarina obesa* | 347 | 3.55, 2.1 | 3.9 | 19 |
| | | *Casuarina obesa* | 348 | 2.1, <2 | 3.1 | 16 |
| | | *Casuarina obesa* | 349 | <2 | 2 | 14 |
| | | *Casuarina obesa* | 351 | 3.32, 3.2 | 4 | 18 |
| | | *Casuarina obesa* | 352 | 3.4 | 3.9 | 16 |
| | | *Casuarina obesa* | 353 | 2.4 | 2.8 | 14 |
| | | *Casuarina obesa* | 354 | 2.1 | 3.3 | 15 |
| | | *Casuarina obesa* | 355 | 2.55 | 3.8 | 14 |
| | | *Melaleuca halmaturorum* | 356 | 6 | 4 | 15 |
| | | *Casuarina obesa* | 357 | 2.9 | 3.3 | 14 |
| | | *Casuarina obesa* | 358 | 2 | 3.3 | 12 |
| | | *Casuarina obesa* | 359 | 2.9 | 4.2 | 14 |
| | | *Casuarina obesa* | 360 | 3.2, 3.1 | 4.1 | 16 |
| | | *Casuarina obesa* | x14 | <2 -seedlings | 0.7 - 2.5 | Healthy |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | *Casuarina obesa* | x13 | dead | | |
| | | *Melaleuca halmaturorum* | x26 | <2 -seedlings | 0.4 - 1.8 | Healthy |
| | | *Eucalyptus rudis* | x1 | <2 -seedling | 0.5 | Healthy |
| **1E** | | *Casuarina obesa* | 361 | 8.6 | 7 | 16 |
| | | *Casuarina obesa* | 362 | 2.55, <2 | 3.2 | 12 |
| | | *Casuarina obesa* | 363 | 3.2 | 3.1 | 10 |
| | | *Casuarina obesa* | 364 | 3.5 | 4.1 | 14 |
| | | *Casuarina obesa* | 365 | 12.3 | 8.5 | 15 |
| | | *Casuarina obesa* | 366 | <2 | 2.6 | 12 |
| | | *Casuarina obesa* | 367 | <2 | 3.2 | 10 |
| | | *Casuarina obesa* | 368 | 3.9 | 4.2 | 9 |
| | | *Casuarina obesa* | 369 | <2 | 3.2 | 14 |
| | | *Casuarina obesa* | 370 | 2.3, 2.2 | 3.3 | 16 |
| | | *Casuarina obesa* | 371 | <2, <2 | 2.9 | 14 |
| | | *Casuarina obesa* | 372 | <2, <2 | 2.1 | 9 |
| | | *Casuarina obesa* | 373 | <2, <2, <2 | 2.1 | 9 |
| | | *Casuarina obesa* | 374 | <2 | 2 | 9 |
| | | *Casuarina obesa* | 375 | 3.4, 2.8 | 3.9 | 9 |
| | | *Casuarina obesa* | 376 | 2.5 | 3.1 | 11 |
| | | *Casuarina obesa* | 377 | 4.05 | 3.7 | 14 |
| | | *Melaleuca halmaturorum* | 378 | 2.15 | 2.6 | 15 |
| | | *Casuarina obesa* | 379 | <2 | 2.4 | 13 |
| | | *Casuarina obesa* | 380 | 2.25 | 2.6 | 10 |
| | | *Melaleuca halmaturorum* | 381 | 4.8, 3.4, 2.9 | 4.1 | 15 |
| | | *Casuarina obesa* | 382 | 3.1, 2.4 | 4 | 10 |
| | | *Casuarina obesa* | 383 | 3.45 | 4 | 12 |
| | | *Melaleuca halmaturorum* | 384 | <2, <2, <2, <2, <2 | 2.3 | 15 |
| | | *Casuarina obesa* | 385 | 5.3 | 4.5 | 14 |
| | | *Casuarina obesa* | 386 | 4.2 | 3.5 | 9 |
| | | *Casuarina obesa* | 387 | 4.2, 2.15 | 4.5 | 16 |
| | | *Melaleuca halmaturorum* | 388 | <2 | 2.4 | 13 |
| | | *Casuarina obesa* | 389 | 4.15 | 4.2 | 14 |
| | | *Casuarina obesa* | 390 | 4.8 | 5 | 14 |
| | | *Casuarina obesa* | 391 | 2.75, 2.8 | 3.85 | 14 |
| | | *Eucalyptus rudis* | 392 | <2 | 3 | 15 |
| | | *Casuarina obesa* | 393 | <2 | 2.5 | 15 |
| | | *Eucalyptus rudis* | 394 | 2.2 | 2.5 | 15 |
| | | *Casuarina obesa* | 395 | <2 | 2.2 | 13 |
| | | *Eucalyptus rudis* | 396 | 3.6 | 4.5 | 17 |
| | | *Eucalyptus rudis* | 397 | <2 | 2.5 | 15 |
| | | *Melaleuca halmaturorum* | 398 | <2, <2, <2 | 2.4 | 15 |
| | | *Melaleuca halmaturorum* | x40 | <2 - seedlings | 0.4 - 2.2 | Healthy |
| | | *Casuarina obesa* | x3 | <2 - seedlings | 0.5 - 2 | Healthy |
| | | *Casuarina obesa* | x8 | dead | | |
| | | *Eucalyptus rudis* | x3 | dead | | |
| **2A** | | *Casuarina obesa* | 399 | 3.5 | 3.1 | 14 |
| | | *Casuarina obesa* | 400 | 11.9 | 10.5 | 16 |
| | | *Melaleuca halmaturorum* | 401 | 2.6 | 2.6 | 15 |
| | | *Melaleuca halmaturorum* | 402 | <2, <2 | 2.3 | 15 |
| | | *Melaleuca halmaturorum* | 403 | 2.8, <2 | 2.6 | 15 |
| | | *Melaleuca halmaturorum* | 404 | 2.9, 2.6, 2.1, <2 | 3.5 | 19 |
| | | *Casuarina obesa* | 405 | 2.3, <2 | 2.6 | 14 |

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|---|---|---|---|---|---|---|
| | | *Casuarina obesa* | 406 | 14.5 | 10.5 | 16 |
| | | *Casuarina obesa* | 407 | 5.4, 5.2, 7.9 | 7.2 | 16 |
| | | *Casuarina obesa* | 408 | <2 | 2.4 | 11 |
| | | *Casuarina obesa* | 409 | 6 | 5.2 | 14 |
| | | *Casuarina obesa* | 410 | 2.25 | 3.2 | 14 |
| | | *Casuarina obesa* | 411 | 5.8 | 3.1 | 12 |
| | | *Casuarina obesa* | 412 | 2.8 | 3.1 | 13 |
| | | *Casuarina obesa* | x3 | <2 - seedlings | 1.7 - 2.2 | Healthy |
| | | *Casuarina obesa* | x20 | dead | | |
| | | *Melaleuca halmaturorum* | x5 | <2 - seedlings | 1.6 - 2 | Healthy |
| **2B** | | *Casuarina obesa* | 413 | 8.3, 8.3, 5 | 9.5 | 12 |
| | | *Melaleuca halmaturorum* | 414 | 2.85, <2 | 3.1 | 15 |
| | | *Casuarina obesa* | 415 | 7.7 | 6.75 | 18 |
| | | *Casuarina obesa* | x5 | dead | | |
| **2C** | | *Casuarina obesa* | 416 | 9.5 | 7.1 | 18 |
| | | *Melaleuca halmaturorum* | 417 | 2.9, 3.1, <2, <2 | 3.75 | 19 |
| | | *Casuarina obesa* | 418 | 8.2 | 7 | 16 |
| | | *Casuarina obesa* | 419 | 4.8 | 4.2 | 14 |
| | | *Melaleuca halmaturorum* | 420 | 6.3 | 4.9 | 17 |
| | | *Melaleuca halmaturorum* | 421 | <2 | 2.5 | 15 |
| | | *Melaleuca halmaturorum* | 422 | <2 | 2.1 | 13 |
| | | *Melaleuca halmaturorum* | 423 | 2.1 | 3 | 15 |
| | | *Casuarina obesa* | 424 | 4.45 | 3 | 9 |
| | | *Casuarina obesa* | 425 | 4.6 | 4.1 | 13 |
| | | *Melaleuca halmaturorum* | 426 | Multiple <2 | 2.5 | 19 |
| | | *Casuarina obesa* | 427 | 3.1 | 2.5 | 14 |
| | | *Casuarina obesa* | 428 | 11.5 | 10.5 | 18 |
| | | *Melaleuca halmaturorum* | x4 | <2 - seedlings | 0.6 - 2.1 | Healthy |
| | | *Casuarina obesa* | x2 | dead | | |
| **2D** | | *Melaleuca halmaturorum* | 429 | 12.1, 8.7 | 8.75 | 19 |
| | | *Melaleuca halmaturorum* | 430 | Multiple <2 | 2.5 | 15 |
| | | *Melaleuca halmaturorum* | 431 | <2, <2, <2 | 2.2 | 15 |
| | | *Casuarina obesa* | 432 | 5.45, 3.9 | 5.5 | 13 |
| | | *Casuarina obesa* | x2 | <2 - seedlings | 1.2 - 1.8 | Healthy |
| | | *Melaleuca halmaturorum* | x1 | <2 - seedling | 1.8 | Healthy |
| **2E** | | *Melaleuca halmaturorum* | 434 | 2.8, 3.8, Multiple <2 | 3.2 | 19 |
| | | *Melaleuca halmaturorum* | 435 | 2.05 | 2.7 | 13 |
| | | *Melaleuca halmaturorum* | 436 | 2.7, <2, <2, <2, <2 | 3.2 | 15 |
| | | *Casuarina obesa* | 437 | 3.6 | 3 | 13 |
| | | *Melaleuca halmaturorum* | 438 | 2.6 | 3.2 | 15 |
| | | *Melaleuca halmaturorum* | 439 | 2.8 | 3.1 | 15 |
| | | *Melaleuca halmaturorum* | x1 | <2 - seedling | 1.5 | Healthy |

## ALTHAM - Transect 1

| Plot | Species # | Species | Tag # | DBH (cm) (1999) | Height(m) | Crown (1999) |
|---|---|---|---|---|---|---|
| 1A | | *Melaleuca lateriflora* | | | 6.1 | Healthy |
| | | *Melaleuca lateriflora* | | | 4.5 | Healthy |
| | | *Melaleuca lateriflora* | | | 4.5 | Healthy |
| | | *Melaleuca lateriflora* | | | 7 | Healthy |
| | | *Hakea preissii* | | | 3 | Healthy |
| | | *Melaleuca lateriflora* | | | 3.1 | Healthy |
| | | *Melaleuca lateriflora* | x27 | dead | | |
| 1B | | *Melaleuca lateriflora* | | | 4 | Healthy |
| | | *Melaleuca lateriflora* | | | 2 | Stressed |
| | | *Hakea preissii* | | | 4 | Stressed |
| | | *Melaleuca lateriflora* | x6 | dead | | |
| 1C | | NO TREES | | | | |
| 1D | | *Melaleuca uncinata* | | | 4.5 | Healthy |
| | | *Melaleuca uncinata* | | | 4.2 | Healthy |
| | | *Melaleuca uncinata* | | | 4.2 | Healthy |
| | | *Melaleuca uncinata* | | | 4.3 | Healthy |
| | | *Melaleuca uncinata* | | | 4.5 | Healthy |
| | | *Melaleuca uncinata* | | | 4.5 | Healthy |
| 1E | | *Melaleuca uncinata* | | | 4.2 | Healthy |
| | | *Melaleuca uncinata* | | | 4.3 | Healthy |
| | | *Melaleuca uncinata* | | | 4.6 | Healthy |
| | | *Melaleuca uncinata* | | | 4.2 | Healthy |
| | | *Melaleuca uncinata* | | | 6.1 | Healthy |
| | | *Melaleuca uncinata* | | | 2.8 | Healthy |
| | | *Melaleuca uncinata* | | | 4.9 | Healthy |
| | | *Melaleuca uncinata* | | | 4.1 | Healthy |
| | | *Melaleuca uncinata* | | | 2.6 | Healthy |
| | | *Melaleuca uncinata* | | | 2.3 | Healthy |
| | | *Melaleuca uncinata* | | | 4.3 | Healthy |
| | | *Melaleuca uncinata* | | | 4.3 | Healthy |
| | | *Melaleuca uncinata* | | | 4.6 | Healthy |
| | | *Melaleuca uncinata* | | | 4.6 | Healthy |
| | | *Melaleuca uncinata* | | | 4.6 | Healthy |
| | | *Melaleuca uncinata* | | | 4.6 | Healthy |
| | | *Melaleuca uncinata* | x1 | dead | | |
| 2A | | *Melaleuca lateriflora* | | | 3 | Healthy |
| | | *Melaleuca uncinata* | | | 4 | Healthy |
| | | *Melaleuca uncinata* | | | 4.8 | Healthy |
| | | *Melaleuca uncinata* | | | 4.8 | Healthy |
| | | *Melaleuca uncinata* | | | 4.9 | Healthy |
| | | *Melaleuca uncinata* | | | 5 | Healthy |
| | | *Melaleuca uncinata* | | | 4.5 | Healthy |
| | | *Melaleuca uncinata* | | | 4.7 | Healthy |
| | | *Melaleuca uncinata* | | | 4.1 | Healthy |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | *Melaleuca uncinata* | | | 6 | Healthy |
| | | *Melaleuca uncinata* | | | 4.7 | Healthy |
| | | *Melaleuca uncinata* | | | 4.7 | Healthy |
| | | *Melaleuca uncinata* | | | 4.7 | Healthy |
| | | *Melaleuca uncinata* | | | 4.6 | Healthy |
| | | *Melaleuca uncinata* | | | 4 | Stressed |
| | | *Melaleuca uncinata* | | | 6 | Slightly Stressed |
| | | *Melaleuca uncinata* | | | 5.6 | Slightly Stressed |
| | | *Melaleuca uncinata* | | | 5.4 | Slightly Stressed |
| | | *Melaleuca uncinata* | | | 5.5 | Healthy |
| | | *Melaleuca lateriflora* | | | 5 | Healthy |
| | | *Melaleuca uncinata* | | | 5 | Healthy |
| | | *Melaleuca uncinata* | | | 5 | Healthy |
| | | *Melaleuca uncinata* | | | 5 | Healthy |
| | | *Melaleuca uncinata* | | | 5.8 | Stressed |
| | | *Melaleuca uncinata* | | | 5.5 | Slightly Stressed |
| | | *Melaleuca uncinata* | | | 4.2 | Stressed |
| | | *Melaleuca uncinata* | | | 4.3 | Slightly Stressed |
| | | *Melaleuca uncinata* | | | 4.8 | Slightly Stressed |
| | | *Melaleuca uncinata* | | | 4.6 | Slightly Stressed |
| | | *Melaleuca uncinata* | | | 4.95 | Stressed |
| | | *Melaleuca uncinata* | | | 4 | Slightly Stressed |
| | | *Melaleuca uncinata* | | | 5.6 | Healthy |
| | | *Melaleuca uncinata* | | | 5.8 | Healthy |
| | Melaleuca sp.1 | *Melaleuca halmaturorum* | | | 1.6 | Healthy |
| | | *Melaleuca uncinata* | x10 | dead | | |
| **2B** | | *Melaleuca uncinata* | | | 2.6 | Stressed |
| | | *Melaleuca uncinata* | | | 3 | Stressed |
| | | *Melaleuca uncinata* | | | 2.4 | Stressed |
| | | *Melaleuca uncinata* | | | 3 | Slightly Stressed |
| | | *Melaleuca uncinata* | | | 3.1 | Healthy |
| | | *Melaleuca uncinata* | | | 3 | Healthy |
| | Melaleuca sp.1 | *Melaleuca halmaturorum* | | | 1.5 | Healthy |
| | | *Melaleuca uncinata* | | | 3.1 | Healthy |
| | | *Melaleuca uncinata* | | | 3.1 | Healthy |
| | Melaleuca sp.1 | *Melaleuca halmaturorum* | | | 1.5 | Healthy |
| | Melaleuca sp.1 | *Melaleuca halmaturorum* | | | 1.8 | Healthy |
| | Melaleuca sp.1 | *Melaleuca halmaturorum* | | | 1.7 | Healthy |
| | Melaleuca sp.1 | *Melaleuca halmaturorum* | | | 1.5 | Healthy |
| | Melaleuca sp.1 | *Melaleuca halmaturorum* | | | 1.5 | Slightly Stressed |
| | | *Melaleuca lateriflora* | | | 1.75 | Slightly Stressed |
| | Melaleuca sp.1 | *Melaleuca halmaturorum* | | | 1.6 | Healthy |
| | Melaleuca sp.1 | *Melaleuca halmaturorum* | | | 1.4 | Healthy |
| | Melaleuca sp.1 | *Melaleuca halmaturorum* | | | 1.5 | Stressed |
| | Melaleuca sp.1 | *Melaleuca halmaturorum* | | | 1.4 | Stressed |
| | Melaleuca sp.1 | *Melaleuca halmaturorum* | | | 1.8 | Stressed |
| | Melaleuca sp.1 | *Melaleuca halmaturorum* | | | 1.5 | Stressed |
| | Melaleuca sp.1 | *Melaleuca halmaturorum* | | | 1.8 | Slightly Stressed |
| | | *Melaleuca uncinata* | | | 2.8 | Stressed |
| | | *Melaleuca uncinata* | | | 2.8 | Stressed |
| | | *Melaleuca uncinata* | | | 4.1 | Healthy |
| | | *Melaleuca uncinata* | | | 6 | Healthy |
| | | *Melaleuca uncinata* | | | 6 | Healthy |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | *Melaleuca uncinata* | | | 5 | Slightly Stressed |
| | | *Melaleuca uncinata* | | | 4 | Stressed |
| | | *Melaleuca uncinata* | | | 3.2 | Stressed |
| | | *Melaleuca uncinata* | | | 4.5 | Slightly Stressed |
| | | *Melaleuca uncinata* | | | 4 | Stressed |
| | Melaleuca sp.1 | *Melaleuca halmaturorum* | | | 2 | Slightly Stressed |
| | Melaleuca sp.1 | *Melaleuca halmaturorum* | | | 1.5 | Healthy |
| | Melaleuca sp.1 | *Melaleuca halmaturorum* | | | 1.2 | Healthy |
| | | *Melaleuca uncinata* | | | 4.5 | Stressed |
| | | *Melaleuca uncinata* | | | 4.5 | Stressed |
| | | *Melaleuca uncinata* | | | 4.5 | Stressed |
| | | *Melaleuca uncinata* | | | 4.2 | Slightly Stressed |
| | Melaleuca sp.1 | *Melaleuca halmaturorum* | | | 1 | Healthy |
| | Melaleuca sp.1 | *Melaleuca halmaturorum* | | | 2.2 | Healthy |
| | Melaleuca sp.1 | *Melaleuca halmaturorum* | | | 2.2 | Healthy |
| | Melaleuca sp.1 | *Melaleuca halmaturorum* | | | 1.5 | Healthy |
| | Melaleuca sp.1 | *Melaleuca halmaturorum* | | | 1.7 | Healthy |
| | | *Melaleuca uncinata* | | | 2.8 | Stressed |
| | | *Melaleuca uncinata* | | | 4.2 | Slightly Stressed |
| | | *Melaleuca uncinata* | | | 4 | Stressed |
| | | *Melaleuca uncinata* | | | 4.5 | Very Stressed |
| | | *Melaleuca uncinata* | | | 4.6 | Slightly Stressed |
| | | *Melaleuca uncinata* | | | 4.8 | Healthy |
| | | *Melaleuca uncinata* | | | 4 | Slightly Stressed |
| | | *Melaleuca uncinata* | | | 2.9 | Stressed |
| | | *Melaleuca uncinata* | | | 3 | Slightly Stressed |
| | | *Melaleuca lateriflora* | | | 4 | Healthy |
| | | *Melaleuca uncinata* | x19 | dead | | |

## ALTHAM - Transect 2

| Plot | Species # | Species | Tag # | DBH (cm) (1999) | Height(m) | Crown (1999) |
|---|---|---|---|---|---|---|
| 1A | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 440 | 35, 30.4, 32.5 | 19.75 | 12 |
| | | *Santalum acuminatum* | x2 | | 1.5 | Healthy |
| 1B | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 441 | 26.7 | 20.5 | 11 |
| | | *Melaleuca lateriflora* | x1 | | 2.2 | Healthy |
| | | *Hakea preissii* | x1 | | 1.7 | Healthy |
| 1C | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 442 | 18.5, 22.1 | 17.5 | 12 |
| | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 443 | 33.7 | 22.5 | 16 |
| | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 444 | 25.5 | 18.5 | 15 |
| | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 445 | 23.5 | 17.5 | 14 |
| 1D | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 446 | 34.4 | 20 | 17 |
| 1E | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 447 | 22.1 | 18.5 | 14 |
| | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 448 | 37 | 19 | 19 |
| | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 449 | 23.7 | 20.5 | 19 |
| | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 450 | 36.4 | 17.5 | 15 |
| | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 451 | 26.8 | 14.5 | 15 |
| | Eucalyptus sp 1 | *Eucalyptus kondininensis* | x5 | dead | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | *Santalum acuminatum* | x2 | | 1.2 - 2.2 | Healthy |
| | | *Hakea preissii* | x1 | | 1.5 | Healthy |
| 2A | | NO TREES | | | | |
| 2B | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 433 | 38.8 | 19.5 | 17 |
| | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 452 | 33.3 | 19 | 12 |
| | Eucalyptus sp 1 | *Eucalyptus kondininensis* | x2 | dead | | |
| | | *Santalum acuminatum* | x2 | | 0.7 - 1.1 | Healthy |
| 2C | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 453 | 27.4, 34.45, 29.9 | 20 | 12 |
| | | *Santalum acuminatum* | x3 | | 1.5 | Healthy |
| 2D | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 454 | 20 | 16.5 | 12 |
| | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 455 | 25.7 | 17 | 17 |
| | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 456 | 32.7 | 19.5 | 19 |
| | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 457 | 28.2 | 20 | 7 |
| | Eucalyptus sp 1 | *Eucalyptus kondininensis* | x2 | dead | | |
| | Melaleuca sp 2 | *Melaleuca hamulosa* | x1 | | 1.8 | Healthy |
| | | *Santalum acuminatum* | x4 | | 0.5 - 1.7 | Healthy |
| 2E | | NO TREES | | | | |
| 3A | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 458 | 71 | 18.5 | 15 |
| | | *Santalum acuminatum* | x1 | | 1.2 | Healthy |
| 3B | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 459 | 47.45 | 20 | 14 |
| | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 460 | 29.9 | 20.5 | 17 |
| | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 461 | 35.9 | 18.5 | 19 |
| | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 462 | 31.4, 22.4 | 21 | 19 |
| | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 463 | 29.1 | 21 | 15 |
| | Eucalyptus sp 1 | *Eucalyptus kondininensis* | x2 | dead | | |
| 3C | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 464 | 27.8 | 18.5 | 15 |
| | Eucalyptus sp 1 | *Eucalyptus kondininensis* | 465 | 20, 36.95 | 17 | 14 |
| | Eucalyptus sp 1 | *Eucalyptus kondininensis* | x1 | dead | | |
| 3D | Melaleuca sp 1 | *Melaleuca halmaturorum* | 466 | 30.5 (Basal Diameter) | 4.2 | 15 |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | x4 | <2 - seedlings | 0.2 - 0.4 | Healthy |
| 3E | Melaleuca sp 1 | *Melaleuca halmaturorum* | 467 | 19.45 (Basal Diameter) | 2.4 | 15 |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | 468 | 24.8 (Basal Diameter) | 4 | 11 |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | 469 | 13.45 (Basal Diameter) | 2.6 | 15 |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | 470 | 16.7, 16.8 (Basal Diameter) | 4.8 | 13 |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | 471 | 15.4, 9.7, 16.1 (Basal Diameter) | 3.6 | 11 |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | x4 | dead | | |

## ALTHAM - Transect 3

| Plot | Species # | Species | Tag # | DBH (cm) (1999) | Height(m) | Crown (1999) |
|---|---|---|---|---|---|---|
| 1A | Melaleuca sp 1 | *Melaleuca halmaturorum* | | | 7.5 | Slightly Stressed |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | | | 5.75 | Slightly Stressed |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | | | 5.95 | Healthy |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | | | 3.5 | Healthy |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | x10 | dead | | |
| **1B** | Melaleuca sp 1 | *Melaleuca halmaturorum* | | | 6.4 | Healthy |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | | | 3.2 | Stressed |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | | | 1.75 | Slightly Stressed |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | x2 | dead | | |
| **1C** | | NO TREES | | | | |
| **1D** | | *Melaleuca uncinata* | | | 4.1 | Slightly Stressed |
| | | *Melaleuca uncinata* | | | 4.5 | Healthy |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | | | 1.8 | Slightly Stressed |
| | | *Melaleuca uncinata* | | | 6.5 | Stressed |
| | Melaleuca sp 2 | *Melaleuca hamulosa* | | | 3.2 | Healthy |
| | | *Melaleuca lateriflora* | | | 3.5 | Healthy |
| | | *Melaleuca uncinata* | | | 7.75 | Very Stressed |
| | | *Melaleuca uncinata* | | | 7.75 | Stressed |
| | | *Melaleuca uncinata* | | | 7.5 | Stressed |
| | | *Melaleuca uncinata* | | | 7.5 | Stressed |
| | | *Melaleuca uncinata* | | | 7.75 | Stressed |
| | | *Melaleuca uncinata* | | | 7.5 | Stressed |
| | | *Melaleuca uncinata* | | | 7.75 | Stressed |
| | | *Melaleuca uncinata* | | | 6.95 | Stressed |
| | | *Melaleuca uncinata* | | | 7.15 | Stressed |
| | | *Melaleuca uncinata* | | | 7.25 | Stressed |
| | | *Melaleuca uncinata* | | | 7.5 | Stressed |
| | | *Melaleuca uncinata* | x6 | dead | | |
| **1E** | Melaleuca sp 2 | *Melaleuca hamulosa* | | | 3 | Healthy |
| | | *Melaleuca uncinata* | | | 5.2 | Healthy |
| | | *Melaleuca uncinata* | | | 5 | Very Stressed |
| | | *Melaleuca uncinata* | | | 6.2 | Healthy |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | | | 6.3 | Healthy |
| | | *Melaleuca uncinata* | x1 | dead | | |
| **2A** | | *Melaleuca uncinata* | | | 6 | Slightly Stressed |
| | | *Melaleuca uncinata* | | | 6.7 | Stressed |
| | | *Melaleuca uncinata* | | | 5.3 | Very Stressed |
| | | *Melaleuca uncinata* | | | 6.7 | Slightly Stressed |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | x2 | dead | | |
| **2B** | | *Melaleuca uncinata* | | | 2.8 | Healthy |
| | | *Melaleuca uncinata* | | | 4.2 | Healthy |
| | | *Melaleuca uncinata* | | | 7 | Healthy |
| | | *Melaleuca uncinata* | x1 | dead | | |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | x1 | dead | | |
| **2C** | Melaleuca sp 1 | *Melaleuca halmaturorum* | | | 2.75 | Healthy |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | | | 2.5 | Slightly Stressed |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | | | 1.75 | Slightly Stressed |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | | | 1.4 | Slightly Stressed |
| | | *Melaleuca uncinata* | | | 6 | Very Stressed |
| | | *Melaleuca uncinata* | x2 | dead | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | x2 | dead | | |
| **2D** | Melaleuca sp 1 | *Melaleuca halmaturorum* | | | 3 | Healthy |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | | | 2.5 | Healthy |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | | | 2.1 | Healthy |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | | | 2.6 | Healthy |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | | | 4.2 | Healthy |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | | | 3.8 | Slightly Stressed |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | | | 1.8 | Slightly Stressed |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | x5 | dead | | |
| **2E** | | NO TREES | | | | |

## YAALUP - Transect 1

| Plot | Species # | Species | Tag # | DBH (cm) (1999) | Height(m) | Crown (1999) |
|---|---|---|---|---|---|---|
| 1A | | *Melaleuca strobophylla* | 472 | 3.85 | 4.6 | 17 |
| | | *Melaleuca strobophylla* | 473 | 4.75 | 4 | 19 |
| | | *Melaleuca strobophylla* | 474 | 3.9, 2.65, <2, <2, <2, <2, <2 | 3.6 | 19 |
| | | *Eucalyptus occidentalis* | 475 | 26 | 11.7 | 19 |
| | | *Eucalyptus occidentalis* | 476 | 66.95 | 20 | 17 |
| | | *Melaleuca strobophylla* | 477 | 2.75, 3.4, <2, <2 | 3.5 | 19 |
| | | *Melaleuca strobophylla* | 478 | 14.5, 17.7 | 7.2 | 15 |
| | | *Melaleuca strobophylla* | 479 | 6.95, 5.85 | 7.1 | 19 |
| | | *Melaleuca strobophylla* | 480 | 6.05 | 6.4 | 15 |
| | | *Melaleuca strobophylla* | x79 | <2 - seedlings | 0.7 - 1.9 | Healthy |
| | | *Melaleuca strobophylla* | x6 | dead seedlings | | |
| | | *Eucalyptus occidentalis* | x1 | <2 - seedling | 1.75 | Stressed |
| 1B | | *Eucalyptus occidentalis* | 481 | 27 | 9.75 | 8 |
| | | *Eucalyptus occidentalis* | 482 | 13.25 | 9.75 | 17 |
| | | *Eucalyptus occidentalis* | 483 | 9.5 | 9.5 | 13 |
| | | *Eucalyptus occidentalis* | 484 | 21.45, 17.3 | 15.75 | 17 |
| | | *Melaleuca strobophylla* | x1 | <2 - seedling | 1.7 | Healthy |
| | | *Eucalyptus occidentalis* | x5 | <2 - seedlings | 0.1 - 0.25 | Healthy |
| 1C | | *Eucalyptus occidentalis* | 485 | 32 | 14.25 | 8 |
| | | *Melaleuca strobophylla* | 486 | 11.8 | 7.25 | 17 |
| | | *Eucalyptus occidentalis* | 487 | 48.65 | 17.75 | 7 |
| | | *Melaleuca strobophylla* | 488 | 6.85, 3.2 | 5.75 | 3 |
| | | *Melaleuca strobophylla* | 489 | 8.6 | 5.75 | 15 |
| | | *Melaleuca strobophylla* | 490 | 3.25 | 5.25 | 11 |
| | | *Melaleuca strobophylla* | 491 | 7.55 | 6.5 | 15 |
| | | *Melaleuca strobophylla* | 492 | 13 | 6.5 | 3 |
| | | *Melaleuca strobophylla* | 493 | 3.05 | 5.65 | 3 |
| | | *Melaleuca strobophylla* | 494 | 4.95 | 5.75 | 3 |
| | | *Melaleuca strobophylla* | 495 | 4.25 | 5.5 | 9 |
| | | *Melaleuca strobophylla* | 496 | 11.6 | 6.5 | 15 |
| | | *Melaleuca strobophylla* | 497 | 6.5 | 6 | 3 |
| | | *Melaleuca strobophylla* | 498 | 7.95 | 5.6 | 15 |
| | | *Melaleuca strobophylla* | x3 | dead | | |
| 1D | | *Melaleuca strobophylla* | 499 | 10.2, 6.8 | 6.5 | 17 |
| | | *Melaleuca strobophylla* | 500 | 7.6 | 6.5 | 14 |
| | | *Melaleuca strobophylla* | 501 | 8.3 | 6.5 | 15 |
| | | *Melaleuca strobophylla* | 502 | 10.95, 10.5 | 6.5 | 19 |
| | | *Melaleuca strobophylla* | 503 | 8.25 | 6.9 | 12 |
| | | *Melaleuca strobophylla* | 504 | 13.5 | 6.5 | 15 |
| | | *Melaleuca strobophylla* | 505 | 6.8 | 6.5 | 13 |
| | | *Melaleuca strobophylla* | 506 | 9.2, 8.35 | 6 | 15 |
| | | *Melaleuca strobophylla* | 507 | 8 | 6.5 | 14 |
| | | *Melaleuca strobophylla* | 508 | 11.85 | 6.5 | 15 |
| | | *Melaleuca strobophylla* | 509 | 7.2, 4.4, 6.5 | 6.2 | 13 |
| | | *Melaleuca strobophylla* | 510 | 5.7, 5.3, 4.9 | 6.5 | 5 |
| | | *Melaleuca strobophylla* | 511 | 8.4 | 6.2 | 10 |

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|---|---|---|---|---|---|---|
| | | *Melaleuca strobophylla* | 512 | 13.55 | 6.7 | 3 |
| | | *Melaleuca strobophylla* | 513 | 9.25 | 6.5 | 14 |
| | | *Melaleuca strobophylla* | 514 | 8, 4.45, 6.9 | 6.5 | 8 |
| | | *Melaleuca strobophylla* | 515 | 8.15 | 6.7 | 15 |
| | | *Melaleuca strobophylla* | 516 | 8.7, 4.3 | 6.7 | 17 |
| | | *Melaleuca strobophylla* | 517 | 13.65, 12.3, 10.25, 6.55 | 6.7 | 17 |
| **1E** | | *Melaleuca strobophylla* | 522 | 5.9, 4.4, 5.9, 3.6, 13.4 | 6.5 | 17 |
| | | *Melaleuca strobophylla* | 523 | 8, 7.95 | 6.3 | 17 |
| | | *Melaleuca strobophylla* | 524 | 6.55 | 6.7 | 17 |
| | | *Melaleuca strobophylla* | 525 | 5.7 | 3.5 | 9 |
| **2A** | | *Melaleuca strobophylla* | 526 | 10.5 | 6.7 | 17 |
| | | *Melaleuca strobophylla* | 527 | 12.65 | 6.4 | 19 |
| | | *Melaleuca strobophylla* | 528 | 12.65, 6.65, 3.75 | 6.7 | 19 |
| | | *Melaleuca strobophylla* | 529 | 29.35 | 7.9 | 19 |
| | | *Melaleuca strobophylla* | 530 | 9.6 | 7 | 15 |
| | | *Melaleuca strobophylla* | 531 | 24.9 | 10.75 | 17 |
| | | *Melaleuca strobophylla* | 532 | 35 | 9.75 | 21 |
| | | *Melaleuca strobophylla* | x2 | dead | | |
| **2B** | | *Melaleuca strobophylla* | 533 | 7.1, 3.1, 7.35 | 5.75 | 15 |
| | | *Melaleuca strobophylla* | 534 | 15.25 | 6.3 | 3 |
| | | *Melaleuca strobophylla* | 535 | 5.55, 14.05 | 5.75 | 13 |
| | | *Melaleuca strobophylla* | 536 | 4.8, 9.3 | 5 | 10 |
| | | *Melaleuca strobophylla* | x1 | dead | | |
| | | *Eucalyptus occidentalis* | x1 | dead | | |
| **2C** | | *Melaleuca strobophylla* | 537 | 13.65 | 6.8 | 3 |
| | | *Melaleuca strobophylla* | 538 | 10.5 | 6.8 | 15 |
| | | *Melaleuca strobophylla* | 539 | 9.3 | 7.2 | 12 |
| | | *Melaleuca strobophylla* | 540 | 6.9 | 7.2 | 12 |
| | | *Melaleuca strobophylla* | 541 | 18.3 | 7.2 | 3 |
| | | *Melaleuca strobophylla* | 542 | 8.55 | 8 | 15 |
| | | *Melaleuca strobophylla* | 543 | 6.65 | 7.5 | 12 |
| | | *Melaleuca strobophylla* | 544 | 14 | 8 | 16 |
| | | *Melaleuca strobophylla* | 545 | 10.8, 4.7, 8.4 | 7.5 | 5 |
| | | *Melaleuca strobophylla* | 546 | 6.2, 5.2 | 6.5 | 15 |
| | | *Melaleuca strobophylla* | x18 | dead | | |
| | | *Eucalyptus occidentalis* | x1 | dead | | |
| **2D** | | *Melaleuca strobophylla* | 547 | 13.25 | 6.75 | 12 |
| | | *Melaleuca strobophylla* | 548 | 14.6 | 6.5 | 15 |
| | | *Melaleuca strobophylla* | 549 | 15 | 7 | 3 |
| | | *Melaleuca strobophylla* | 550 | 12.65 | 7 | 17 |
| | | *Melaleuca strobophylla* | 551 | 17.75 | 10.75 | 19 |
| | | *Melaleuca strobophylla* | 552 | 17.15 | 6.5 | 10 |
| | | *Melaleuca strobophylla* | x6 | dead | | |
| | | *Eucalyptus occidentalis* | x5 | dead | | |
| **2E** | | *Melaleuca strobophylla* | 553 | 9.35 | 6.5 | 3 |
| | | *Melaleuca strobophylla* | 554 | 11.25, 10 | 6.75 | 14 |
| | | *Melaleuca strobophylla* | 555 | 10.2 | 6.5 | 3 |
| | | *Melaleuca strobophylla* | 556 | 32.05 | 8 | 21 |

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|---|---|---|---|---|---|---|
| | | *Melaleuca strobophylla* | 557 | 10.5, 4.45 | 6.5 | 15 |
| | | *Melaleuca strobophylla* | 558 | 10 | 6.75 | 13 |
| | | *Melaleuca strobophylla* | 559 | 16.6, 10.65, 10.8, 6.95 | 7 | 17 |
| | | *Eucalyptus occidentalis* | x5 | dead | | |
| **3A** | | *Melaleuca strobophylla* | 560 | 12.4 | 6.5 | 19 |
| | | *Melaleuca strobophylla* | 561 | 19.95 | 6.5 | 17 |
| | | *Melaleuca strobophylla* | 562 | 17.2 | 8 | 19 |
| | | *Melaleuca strobophylla* | 563 | 17.55, 15.7 | 8 | 21 |
| | | *Melaleuca strobophylla* | 564 | 9.05, 7.4 | 8 | 13 |
| | | *Melaleuca strobophylla* | 565 | 17.4 | 7 | 13 |
| | | *Melaleuca strobophylla* | 566 | 13.4, 15.15 | 7 | 19 |
| | | *Melaleuca strobophylla* | 567 | 13.15 | 7 | 13 |
| | | *Melaleuca strobophylla* | 568 | 8.1, 8.55 | 6.5 | 19 |
| | | *Melaleuca strobophylla* | 569 | 16.8 | 7 | 10 |
| | | *Melaleuca strobophylla* | 570 | 13.5, 10.75, 17.3 | 7 | 19 |
| | | *Melaleuca strobophylla* | x1 | dead | | |
| | | *Eucalyptus occidentalis* | x12 | dead | | |
| **3B** | | *Melaleuca strobophylla* | 571 | 4.95, 8.75, 9.7, 3, 8.25, 8.05, 7.95, 5.45, 8.25, 11 | 6.75 | 23 |
| | | *Melaleuca strobophylla* | 572 | 14.3 | 7 | 17 |
| | | *Melaleuca strobophylla* | 573 | 19.55 | 8 | 11 |
| | | *Melaleuca strobophylla* | 574 | 19.95 | 8 | 19 |
| | | *Melaleuca strobophylla* | x3 | dead | | |
| | | *Eucalyptus occidentalis* | x11 | dead | | |
| **3C** | | *Melaleuca strobophylla* | 575 | 12.7, 12.8 | 7 | 19 |
| | | *Melaleuca strobophylla* | 576 | 15.05, 11.05 | 8 | 3 |
| | | *Melaleuca strobophylla* | 577 | 20.3 | 7 | 19 |
| | | *Melaleuca strobophylla* | 578 | 6.55, 6.3, 3.25, 7.6, 7.5 | 6.5 | 15 |
| | | *Melaleuca strobophylla* | 579 | 3.95 | 4.5 | 3 |
| | | *Melaleuca strobophylla* | x9 | <2 - seedlings | 1.5 - 2 | Healthy |
| | | *Melaleuca strobophylla* | x32 | dead seedlings | | |
| | | *Melaleuca strobophylla* | x1 | dead | | |
| | | *Eucalyptus occidentalis* | x1 | <2 - seedling | 1 | Healthy |
| | | *Eucalyptus occidentalis* | x2 | dead | | |
| **3D** | | *Melaleuca strobophylla* | 580 | 7.5 | 6.5 | 19 |
| | | *Melaleuca strobophylla* | 581 | 3.7 | 3 | 3 |
| | | *Melaleuca strobophylla* | 582 | | 4 | 17 |
| | | *Eucalyptus occidentalis* | 583 | 10.6, 4.65 | 8.25 | 19 |
| | | *Melaleuca strobophylla* | 584 | 36 | 9 | 17 |
| | | *Melaleuca strobophylla* | x1 | dead | | |
| | | *Melaleuca strobophylla* | x34 | dead seedlings | | |
| | | *Eucalyptus occidentalis* | x14 | dead | | |
| **3E** | | *Melaleuca strobophylla* | x135 | dead seedlings | | |
| | | *Eucalyptus occidentalis* | x1 | <2 - seedling | 1.5 | Very stressed |

## YAALUP - Transect 2

| Plot | Species # | Species | Tag # | DBH (cm) (1999) | Height(m) | Crown (1999) |
|---|---|---|---|---|---|---|
| 1A | | *Melaleuca strobophylla* | 587 | 2.4 | Stand height | 15 |
| | | *Melaleuca strobophylla* | 588 | 3.35 | 1.8 - 3.2 | 15 |
| | | *Melaleuca strobophylla* | 589 | 2.85 | | 3 |
| | | *Eucalyptus occidentalis* | 590 | 3.55 | 6 | 17 |
| | | *Melaleuca strobophylla* | 591 | 2.45 | | 15 |
| | | *Melaleuca strobophylla* | 592 | 2.25 | | 15 |
| | | *Eucalyptus occidentalis* | 593 | 3.1 | 6.7 | 17 |
| | | *Melaleuca strobophylla* | 594 | 2 | | 15 |
| | | *Melaleuca strobophylla* | 595 | 2.3 | | 13 |
| | | *Eucalyptus occidentalis* | 597 | 3.65 | 6 | 19 |
| | | *Melaleuca strobophylla* | 598 | 2.95 | | 11 |
| | | *Melaleuca strobophylla* | 599 | 2.1 | | 13 |
| | | *Melaleuca strobophylla* | 600 | 2.8 | | 15 |
| | | *Melaleuca strobophylla* | 601 | 2 | | 15 |
| | | *Melaleuca uncinata* | 602 | 1.8 | | 3 |
| | | *Melaleuca strobophylla* | 603 | 2.2 | | 15 |
| | | *Melaleuca strobophylla* | 604 | 2.1 | | 15 |
| | | *Melaleuca strobophylla* | 605 | 2.1 | | 15 |
| | | *Melaleuca strobophylla* | 606 | 2.35 | | 15 |
| | | *Melaleuca strobophylla* | 607 | 1.9 | | 15 |
| | | *Melaleuca strobophylla* | 608 | 2 | | 17 |
| | | *Melaleuca strobophylla* | 610 | 1.85 | | 15 |
| | | *Melaleuca strobophylla* | 611 | 2 | | 3 |
| | | *Melaleuca strobophylla* | 612 | 2.25 | | 17 |
| | | *Melaleuca strobophylla* | 613 | 1.95 | | 15 |
| | | *Melaleuca strobophylla* | 614 | 2.2 | | 11 |
| | | *Melaleuca strobophylla* | 615 | 2.05 | | 3 |
| | | *Melaleuca strobophylla* | 616 | 2 | | 3 |
| | | *Eucalyptus occidentalis* | 617 | 7.1 | 8.25 | 3 |
| | | *Melaleuca strobophylla* | 618 | 2.2 | | 15 |
| | | *Eucalyptus occidentalis* | 619 | 2.05 | 2.75 | 3 |
| | | *Melaleuca strobophylla* | 620 | 3.55 | | 19 |
| | | *Melaleuca strobophylla* | 621 | 2 | | 13 |
| | | *Melaleuca strobophylla* | 622 | 1.95 | | 15 |
| | | *Melaleuca strobophylla* | 623 | 2.2 | | 15 |
| | | *Eucalyptus occidentalis* | 624 | 3.1 | 6.5 | 19 |
| | | *Melaleuca strobophylla* | 625 | 1.85 | | 15 |
| | | *Melaleuca strobophylla* | 626 | 2.8 | | 19 |
| | | *Melaleuca strobophylla* | 627 | 2.15 | | 15 |
| | | *Eucalyptus occidentalis* | 628 | 3.15 | 6 | 19 |
| | | *Melaleuca strobophylla* | 629 | 2.75 | | 19 |
| | | *Melaleuca strobophylla* | 630 | 2.05 | | 19 |
| | | *Melaleuca strobophylla* | 631 | 2.1 | | 15 |
| | | *Melaleuca strobophylla* | x535 | <2 - seedlings | 1.5 - 1.8 | Slightly stressed |
| | | *Melaleuca uncinata* | x36 | <2 - seedlings | 1.5 - 2 | Slightly stressed |
| | | *Melaleuca strobophylla* | x47 | dead | | |
| 1B | | *Melaleuca strobophylla* | 632 | 2.75 | Stand height | 15 |
| | | *Melaleuca strobophylla* | 633 | 3.15 | 2.5 - 4.5 | 15 |

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|---|---|---|---|---|---|---|---|
| | | *Melaleuca strobophylla* | 634 | 2.4 | | 15 |
| | | *Melaleuca strobophylla* | 635 | 2.6 | | 17 |
| | | *Melaleuca strobophylla* | 636 | 2.7 | | 7 |
| | | *Melaleuca strobophylla* | 637 | 2 | | 17 |
| | | *Melaleuca strobophylla* | 638 | 1.9 | | 17 |
| | | *Melaleuca strobophylla* | 639 | 2.85 | | 17 |
| | | *Melaleuca strobophylla* | 640 | 2.3 | | 15 |
| | | *Melaleuca strobophylla* | 641 | 2.2 | | 13 |
| | | *Melaleuca strobophylla* | 642 | 2.9 | | 17 |
| | | *Melaleuca strobophylla* | 643 | 2.95 | | 17 |
| | | *Melaleuca strobophylla* | 644 | 2 | | 3 |
| | | *Melaleuca strobophylla* | 645 | 3.6 | | 17 |
| | | *Melaleuca strobophylla* | 646 | 2.35, <2 | | 17 |
| | | *Melaleuca strobophylla* | 647 | 3.1 | | 17 |
| | | *Melaleuca strobophylla* | 648 | 2.5 | | 17 |
| | | *Melaleuca strobophylla* | 649 | 3 | | 15 |
| | | *Melaleuca strobophylla* | 650 | 1.8 | | 15 |
| | | *Eucalyptus occidentalis* | 651 | 4.3 | 6.15 | 19 |
| | | *Melaleuca strobophylla* | 652 | 2.6 | | 15 |
| | | *Melaleuca strobophylla* | 653 | 2.9 | | 3 |
| | | *Melaleuca strobophylla* | 654 | 2.1 | | 17 |
| | | *Melaleuca strobophylla* | 655 | 1.7 | | 3 |
| | | *Melaleuca strobophylla* | 656 | 2.6 | | 15 |
| | | *Melaleuca strobophylla* | 657 | 2.3 | | 15 |
| | | *Melaleuca strobophylla* | 658 | 1.9 | | 13 |
| | | *Melaleuca strobophylla* | 659 | 2 | | 15 |
| | | *Melaleuca strobophylla* | 660 | 2.05 | | 15 |
| | | *Melaleuca strobophylla* | 661 | 1.95 | | 15 |
| | | *Melaleuca strobophylla* | 662 | 1.9 | | 15 |
| | | *Melaleuca strobophylla* | 663 | 2.25 | | 17 |
| | | *Melaleuca strobophylla* | 664 | 2.2 | | 17 |
| | | *Melaleuca strobophylla* | 665 | 2.2 | | 17 |
| | | *Melaleuca strobophylla* | 666 | 2.2 | | 17 |
| | | *Melaleuca strobophylla* | 667 | 2.4 | | 17 |
| | | *Melaleuca strobophylla* | 668 | 2.7 | | 17 |
| | | *Melaleuca strobophylla* | 669 | 2.25 | | 17 |
| | | *Melaleuca strobophylla* | 670 | 1.95 | | 19 |
| | | *Melaleuca strobophylla* | 671 | 2.05 | | 19 |
| | | *Melaleuca strobophylla* | 672 | 2.3 | | 17 |
| | | *Melaleuca strobophylla* | 673 | 3.1 | | 19 |
| | | *Melaleuca strobophylla* | 674 | 3.45 | | 19 |
| | | *Melaleuca strobophylla* | 675 | 2.55 | | 19 |
| | | *Melaleuca strobophylla* | 676 | 2.2 | | 15 |
| | | *Melaleuca strobophylla* | 677 | 3 | | 19 |
| | | *Melaleuca strobophylla* | 678 | 2.1 | | 19 |
| | | *Melaleuca strobophylla* | 679 | 1.95 | | 17 |
| | | *Melaleuca strobophylla* | 681 | 1.95 | | 15 |
| | | *Melaleuca strobophylla* | 682 | 2.75 | | 19 |
| | | *Melaleuca strobophylla* | 683 | 3 | | 19 |
| | | *Melaleuca strobophylla* | 684 | 2.2 | | 19 |
| | | *Melaleuca strobophylla* | 685 | 2.6 | | 17 |
| | | *Melaleuca strobophylla* | 686 | 3.5 | | 19 |
| | | *Melaleuca strobophylla* | 687 | 2.5 | | 17 |
| | | *Melaleuca strobophylla* | 688 | 2.15 | | 15 |

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|---|---|---|---|---|---|---|
| | | *Melaleuca strobophylla* | 689 | 2.5 | | 19 |
| | | *Melaleuca strobophylla* | 690 | 2.6 | | 17 |
| | | *Melaleuca strobophylla* | 691 | 2.75 | | 17 |
| | | *Melaleuca strobophylla* | 692 | 3.1 | | 19 |
| | | *Melaleuca strobophylla* | 693 | 3.05 | | 19 |
| | | *Melaleuca strobophylla* | 694 | 2.6 | | 19 |
| | | *Melaleuca strobophylla* | 695 | 3.2 | | 19 |
| | | *Melaleuca strobophylla* | 696 | 3.25 | | 19 |
| | | *Melaleuca strobophylla* | 697 | 2.25 | | 19 |
| | | *Melaleuca strobophylla* | 698 | 3.45 | | 19 |
| | | *Melaleuca strobophylla* | 699 | 2.85 | | 19 |
| | | *Melaleuca strobophylla* | 700 | 3 | | 19 |
| | | *Melaleuca strobophylla* | 701 | 2.95 | | 19 |
| | | *Melaleuca strobophylla* | 702 | 1.9, 2.15 | | 19 |
| | | *Melaleuca strobophylla* | 703 | 2.1 | | 19 |
| | | *Melaleuca strobophylla* | 799 | 3.3 | | 19 |
| | | *Melaleuca strobophylla* | 800 | 3.55 | | 19 |
| | | *Melaleuca strobophylla* | x367 | <2 - seedlings | 1.5 - 2.5 | Slightly stressed |
| | | *Melaleuca strobophylla* | x22 | dead | | |
| 1C | | *Melaleuca strobophylla* | 704 | 3.5 | Stand Height | 19 |
| | | *Melaleuca strobophylla* | 705 | 2.3 | 4 - 6.5 | 19 |
| | | *Melaleuca strobophylla* | 706 | 2.75 | | 19 |
| | | *Melaleuca strobophylla* | 707 | 2.95 | | 17 |
| | | *Melaleuca strobophylla* | 708 | 2.55 | | 19 |
| | | *Melaleuca strobophylla* | 709 | 2, <2 | | 19 |
| | | *Melaleuca strobophylla* | 710 | 2.05 | | 17 |
| | | *Melaleuca strobophylla* | 711 | 4.35 | | 19 |
| | | *Melaleuca strobophylla* | 712 | 2.2, <2 | | 19 |
| | | *Melaleuca strobophylla* | 713 | 3.05 | | 15 |
| | | *Melaleuca strobophylla* | 714 | 3.7 | | 15 |
| | | *Melaleuca strobophylla* | 715 | 2.5 | | 15 |
| | | *Melaleuca strobophylla* | 716 | 2.95 | | 15 |
| | | *Melaleuca strobophylla* | 717 | 2.8 | | 15 |
| | | *Melaleuca strobophylla* | 718 | 2.4 | | 15 |
| | | *Melaleuca strobophylla* | 719 | 2.85 | | 15 |
| | | *Melaleuca strobophylla* | 720 | 3.95 | | 15 |
| | | *Melaleuca strobophylla* | 721 | 1.95, 2.6 | | 17 |
| | | *Melaleuca strobophylla* | 722 | 2.6 | | 15 |
| | | *Melaleuca strobophylla* | 723 | 3.1 | | 15 |
| | | *Melaleuca strobophylla* | 724 | 3.55 | | 15 |
| | | *Melaleuca strobophylla* | 725 | 2.45 | | 19 |
| | | *Melaleuca strobophylla* | 726 | 3.15 | | 15 |
| | | *Melaleuca strobophylla* | 727 | 2.1, 3.75 | | 15 |
| | | *Melaleuca strobophylla* | 728 | 5.45 | | 21 |
| | | *Melaleuca strobophylla* | 729 | 4, <2 | | 17 |
| | | *Melaleuca strobophylla* | 730 | 3.45 | | 17 |
| | | *Melaleuca strobophylla* | 731 | 2.6 | | 15 |
| | | *Melaleuca strobophylla* | 732 | 2.6 | | 17 |
| | | *Eucalyptus occidentalis* | 736 | 66.45, 15.65 | 17.75 | 21 - outside plot |
| | | *Melaleuca strobophylla* | x3 | <2 - seedlings | 1.9 - 2.2 | Healthy |
| 1D | | *Eucalyptus occidentalis* | 733 | 49.45 | 17.75 | 15 |
| | | *Eucalyptus occidentalis* | 734 | 14.7, 8.7 | 11.75 | 9 |

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|---|---|---|---|---|---|---|
| | | *Eucalyptus occidentalis* | 735 | 29.4, 38.75 | 17.75 | 15 |
| 1E | | *Eucalyptus occidentalis* | 737 | 38.1 | 15 | 15 |
| | | *Eucalyptus occidentalis* | 738 | 48.75 | 21.75 | 19 |
| | | *Eucalyptus occidentalis* | 739 | 42.4 | 19 | 19 |
| 2A | | *Eucalyptus occidentalis* | 740 | 26.05 | 2.4 | 19 |
| | | *Melaleuca strobophylla* | 741 | 11.6, 14.2, 22, 9.7, 16.05, 13.75 | 9.75 | 17 |
| | | *Eucalyptus occidentalis* | 742 | 57.65 | 21.75 | 21 |
| 2B | | *Eucalyptus occidentalis* | 743 | 12.4, 12.75 | 15 | 3 |
| | | *Melaleuca strobophylla* | 744 | 4.8, 5.5, 17.75, 9.2, 5.45, 16.5 9.6, 3.45, 5.7 | 9.75 | 19 |
| | | *Eucalyptus occidentalis* | 745 | 45.05 | 21 | 21 |
| | | *Eucalyptus occidentalis* | 746 | 36.1 | 19 | 15 |
| 2C | | *Eucalyptus occidentalis* | 747 | 9.9 | 13 | 9 |
| | | *Eucalyptus occidentalis* | 748 | 9.05 | 11.5 | 4 |
| | | *Melaleuca strobophylla* | 749 | 21.1 | 13 | 17 |
| 2D | | *Eucalyptus occidentalis* | 750 | 11.25, 8.85, 12.3, 9.1 | 16.75 | 14 |
| | | *Eucalyptus occidentalis* | 751 | 12.7 | 14 | 6 |
| | | *Eucalyptus occidentalis* | 752 | 11.2 | 8 | 3 |
| | | *Eucalyptus occidentalis* | 753 | 9.5 | 10 | 3 |
| | | *Eucalyptus occidentalis* | 754 | 48.95 | 16 | 19 |
| | | *Eucalyptus occidentalis* | x1 | dead | | |
| 2E | | *Eucalyptus occidentalis* | 755 | 21.5, 21.2, 26.3 | 16.75 | 19 |
| | | *Eucalyptus occidentalis* | 756 | 21.8 | 16.75 | 17 |
| | | *Eucalyptus occidentalis* | 757 | 18.2 | 16.75 | 17 |
| | | *Eucalyptus occidentalis* | 758 | 20, 8.8 | 16.75 | 3 |
| | | *Eucalyptus occidentalis* | 759 | 16.5 | 15 | 15 |
| | | *Eucalyptus occidentalis* | 760 | 15 | 14 | 15 |
| | | *Eucalyptus occidentalis* | 761 | 17.25 | 16 | 15 |
| | | *Melaleuca strobophylla* | 762 | 4.25 | 6.2 | 15 |
| | | *Melaleuca strobophylla* | 763 | 4.9 | 3.5 | 17 |
| | | *Melaleuca strobophylla* | 764 | 4.35 | 4.5 | 9 |
| | | *Melaleuca strobophylla* | 765 | 4.5 | 5 | 9 |
| | | *Melaleuca strobophylla* | 766 | 9, 7.5 | 6.5 | 19 |
| | | *Melaleuca strobophylla* | 767 | 7.05 | 5 | 17 |
| | | *Melaleuca strobophylla* | 768 | 4.8 | 3.2 | 15 |
| | | *Melaleuca strobophylla* | 769 | 7.45 | 5 | 19 |
| | | *Melaleuca strobophylla* | 770 | 11.95 | 6.5 | 15 |
| | | *Melaleuca strobophylla* | 771 | 3.4 | 4 | 3 |
| | | *Melaleuca strobophylla* | 772 | 5.8 | 8 | 15 |
| | | *Melaleuca strobophylla* | 773 | 6.75 | 7.5 | 15 |
| | | *Melaleuca strobophylla* | 774 | 3.95 | 5 | 15 |
| | | *Melaleuca strobophylla* | 775 | 5.8 | 5 | 9 |
| | | *Eucalyptus occidentalis* | x1 | dead | | |
| 3A | | *Melaleuca strobophylla* | 776 | 7.05 | | 21 |
| | | *Eucalyptus occidentalis* | 777 | 28.35 | 16.65 | 19 |
| | | *Melaleuca strobophylla* | 778 | 7.45 | | 14 |
| | | *Melaleuca strobophylla* | 779 | 4.1 | | 15 |

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|---|---|---|---|---|---|---|
| | | *Melaleuca strobophylla* | 780 | 6.1 | Stand height | 3 |
| | | *Melaleuca strobophylla* | 781 | 2.8 | 1.75 - 3.2 | 9 |
| | | *Melaleuca strobophylla* | 782 | 2.45 | | 9 |
| | | *Melaleuca strobophylla* | 783 | 7 | | 15 |
| | | *Melaleuca strobophylla* | 784 | 5 | | 9 |
| | | *Melaleuca strobophylla* | 785 | 4.45 | | 15 |
| | | *Melaleuca strobophylla* | 786 | 8 | | 9 |
| | | *Melaleuca strobophylla* | 787 | 2.6 | | 9 |
| | | *Melaleuca strobophylla* | 788 | 4.05 | | 9 |
| | | *Melaleuca strobophylla* | 789 | 8.05 | | 19 |
| | | *Melaleuca strobophylla* | 790 | 4.45 | | 15 |
| | | *Melaleuca strobophylla* | 791 | 9.8 | | 19 |
| | | *Melaleuca strobophylla* | 792 | 3.8 | | 9 |
| | | *Melaleuca strobophylla* | 793 | 9.3 | | 15 |
| | | *Melaleuca strobophylla* | 794 | 4.5 | | 9 |
| | | *Melaleuca strobophylla* | 795 | 3.4 | | 15 |
| | | *Melaleuca strobophylla* | 796 | 4.6 | | 15 |
| | | *Melaleuca strobophylla* | 797 | 4.95 | | 17 |
| | | *Melaleuca strobophylla* | 801 | 3.15 | | 9 |
| | | *Melaleuca strobophylla* | 802 | 6.1 | | 15 |
| | | *Melaleuca strobophylla* | 803 | 5.2 | | 9 |
| | | *Melaleuca strobophylla* | 804 | 9.55 | | 15 |
| | | *Melaleuca strobophylla* | 805 | 2.8 | | 9 |
| | | *Melaleuca strobophylla* | 806 | 7.8 | | 3 |
| | | *Melaleuca strobophylla* | 807 | 4.9 | | 15 |
| | | *Melaleuca strobophylla* | 808 | 7.95 | | 15 |
| | | *Melaleuca strobophylla* | 809 | 11.05 | | 21 |
| | | *Melaleuca strobophylla* | 810 | 7.5 | | 15 |
| | | *Melaleuca strobophylla* | 811 | 5.65 | | 3 |
| | | *Melaleuca strobophylla* | 812 | 13.35 | | 11 |
| | | *Melaleuca strobophylla* | 813 | 2.8 | | 9 |
| | | *Melaleuca strobophylla* | 814 | 4.75 | | 15 |
| | | *Melaleuca strobophylla* | 815 | 2.85 | | 9 |
| | | *Melaleuca strobophylla* | 816 | 4.9 | | 15 |
| | | *Melaleuca strobophylla* | 817 | 7.3, 4.8 | | 15 |
| | | *Melaleuca strobophylla* | 818 | 4.45 | | 15 |
| | | *Melaleuca strobophylla* | 819 | 8.25 | | 15 |
| | | *Melaleuca strobophylla* | 820 | 6.25 | | 15 |
| | | *Melaleuca strobophylla* | 821 | 3.65 | | 9 |
| | | *Melaleuca strobophylla* | 822 | 2.8 | | 15 |
| | | *Melaleuca strobophylla* | 823 | 8 | | 15 |
| | | *Melaleuca strobophylla* | 851 | 5 | | 15 |
| | | *Melaleuca strobophylla* | x10 | dead | | |
| | | *Eucalyptus occidentalis* | x3 | dead | | |
| **3B** | | *Melaleuca strobophylla* | 824 | 7.1 | 6.25 | 19 |
| | | *Melaleuca strobophylla* | 825 | 13.5 | 9 | 3 |
| | | *Melaleuca strobophylla* | 826 | 14.1 | 10 | 19 |
| | | *Melaleuca strobophylla* | 827 | 7.4 | 9 | 3 |
| | | *Melaleuca strobophylla* | 828 | 7.9 | 7 | 15 |
| | | *Melaleuca strobophylla* | 829 | 11.95, 13.2 | 9 | 15 |
| | | *Eucalyptus occidentalis* | 830 | 13.35 | 14 | 15 |
| | | *Melaleuca strobophylla* | 832 | 10.95 | 11 | 19 |
| | | *Melaleuca strobophylla* | 833 | 3 | 3.5 | 15 |

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|---|---|---|---|---|---|---|
| | | *Melaleuca strobophylla* | 834 | 9.5 | 10 | 19 |
| | | *Melaleuca strobophylla* | 835 | 12.7 | 10 | 19 |
| | | *Melaleuca strobophylla* | 836 | 3.6 | 8 | 3 |
| | | *Melaleuca strobophylla* | 837 | 9.5, 7.2 | 9 | 9 |
| | | *Melaleuca strobophylla* | 838 | 9.55 | 9.5 | 15 |
| | | *Melaleuca strobophylla* | 839 | 8.55 | 10 | 15 |
| | | *Melaleuca strobophylla* | 840 | 6.15 | 6 | 15 |
| | | *Melaleuca strobophylla* | 841 | 7.95 | 6 | 15 |
| | | *Melaleuca strobophylla* | 842 | 3.85 | 4.5 | 19 |
| | | *Melaleuca strobophylla* | 843 | 2.6 | 4.5 | 19 |
| | | *Melaleuca strobophylla* | 844 | 4 | 4.5 | 19 |
| | | *Melaleuca strobophylla* | 846 | 6.15 | 4 | 19 |
| | | *Melaleuca strobophylla* | 847 | 4 | 5 | 19 |
| | | *Melaleuca strobophylla* | 848 | 4.55 | 5.5 | 19 |
| | | *Melaleuca strobophylla* | 849 | 3.5 | 6 | 19 |
| | | *Melaleuca strobophylla* | 850 | 5.5 | 6 | 19 |
| | | *Melaleuca strobophylla* | x14 | dead | | |
| | | *Eucalyptus occidentalis* | x5 | dead | | |
| **3C** | | *Melaleuca strobophylla* | 852 | 10.35 | 11 | 13 |
| | | *Melaleuca strobophylla* | 853 | 7.1 | 9 | 15 |
| | | *Melaleuca strobophylla* | 854 | 15, 6.7 | 10 | 13 |
| | | *Melaleuca strobophylla* | 855 | 3.7 | 5 | 15 |
| | | *Melaleuca strobophylla* | 856 | 19.2 | 11 | 15 |
| | | *Melaleuca strobophylla* | 857 | 10.95 | 10.5 | 15 |
| | | *Melaleuca strobophylla* | 858 | 6.2 | 6 | 15 |
| | | *Melaleuca strobophylla* | x1 | <2 - seedling | 1.2 | Healthy |
| | | *Melaleuca strobophylla* | x4 | dead | | |
| | | *Eucalyptus occidentalis* | x4 | dead | | |
| **3D** | | *Melaleuca strobophylla* | 859 | 10.8 | 8 | 19 |
| | | *Melaleuca strobophylla* | 860 | 6.3 | 6 | 15 |
| | | *Melaleuca strobophylla* | 861 | 7.7 | 8 | 15 |
| | | *Melaleuca strobophylla* | 862 | 13.6, 6.15, 7.5 | 8.5 | 19 |
| | | *Melaleuca strobophylla* | 863 | 9.1 | 7 | 17 |
| | | *Melaleuca strobophylla* | 864 | 11.2 | 7 | 15 |
| | | *Eucalyptus occidentalis* | 865 | 20.7 | 13 | 13 |
| | | *Eucalyptus occidentalis* | x17 | dead | | |
| | | *Melaleuca strobophylla* | x7 | dead | | |
| | | *Melaleuca strobophylla* | x13 | dead seedlings | | |
| **3E** | | *Eucalyptus occidentalis* | 866 | 23.4 | 13 | 18 |
| | | *Eucalyptus occidentalis* | 867 | 21 | 15 | 11 |
| | | *Eucalyptus occidentalis* | 868 | 22.9 | 15 | 11 |
| | | *Eucalyptus occidentalis* | x12 | dead | | |

## BENNETTS - Transect 1

| Plot | Species # | Species | Tag # | DBH (cm) (1999) | Height(m) | Crown (1999) |
|---|---|---|---|---|---|---|
| 1A | | *Eucalyptus occidentalis* | 869 | 8.75 | 5 | 8 |
| | | *Eucalyptus occidentalis* | 870 | 19.8 | 9 | 9 |
| | | *Eucalyptus occidentalis* | 871 | 10.55 | 3.5 | 3 |
| | Melaleuca sp. 1 | *Melaleuca hamulosa* | | | 2.5 | Healthy |
| | Melaleuca sp. 1 | *Melaleuca hamulosa* | x23 | <2 - seedling | 0.2 - 0.5 | Healthy |
| | Melaleuca sp. 1 | *Melaleuca hamulosa* | x8 | dead | | |
| | | *Eucalyptus occidentalis* | x3 | dead | | |
| 1B | | *Eucalyptus occidentalis* | 872 | 20, 19.7 | 11 | 17 |
| | Melaleuca sp. 1 | *Melaleuca hamulosa* | 873 | 9.7 | 4 | 19 |
| | Melaleuca sp. 1 | *Melaleuca hamulosa* | 874 | 7.8 | 4 | 15 |
| | Melaleuca sp. 1 | *Melaleuca hamulosa* | 875 | 5.85, 5.55, 5.05, 5 | 3.5 | 21 |
| | | *Melaleuca strobophylla* | 876 | 15 | 4.3 | 19 |
| | | *Melaleuca strobophylla* | 878 | 6.45 | 4.3 | 19 |
| | | *Eucalyptus occidentalis* | 879 | <2 | 2.3 | 3 |
| | Melaleuca sp. 1 | *Melaleuca hamulosa* | 880 | 8.5, 9.35 | 4.3 | 19 |
| | | *Melaleuca strobophylla* | 881 | 5.9 | 4 | 19 |
| | | *Melaleuca strobophylla* | 882 | 6.4, 6.4 | 4 | 19 |
| | | *Melaleuca strobophylla* | 883 | 7.35 | 4 | 19 |
| | | *Melaleuca strobophylla* | x1 | dead | | |
| | | *Eucalyptus occidentalis* | x1 | dead | | |
| | Melaleuca sp. 1 | *Melaleuca hamulosa* | x27 | <2 - seedlings | 0.2 - 0.35 | Healthy |
| | Melaleuca sp. 1 | *Melaleuca hamulosa* | x5 | dead | | |
| 1C | | *Melaleuca strobophylla* | 884 | 2.5 | 3.8 | 19 |
| | | *Melaleuca strobophylla* | 885 | 3.9 | 3 | 15 |
| | | *Melaleuca strobophylla* | 886 | 7.95, 7.8 | 4.5 | 15 |
| | | *Melaleuca strobophylla* | 887 | 4.1 | 3 | 17 |
| | | *Melaleuca strobophylla* | 888 | 4.9 | 4.5 | 15 |
| | | *Melaleuca strobophylla* | 889 | 4 | 4.5 | 17 |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | 890 | 2.75, 4.2, 2.7, 2.8, 2.6, 2.75, 5.9, 2.45, 2.8, 3.6 | 5 | 19 |
| | | *Melaleuca strobophylla* | 891 | 3.8 | 4 | 3 |
| | | *Melaleuca strobophylla* | 892 | 5.85 | 4.3 | 19 |
| | | *Melaleuca strobophylla* | 893 | 3.95 | 4.3 | 19 |
| | | *Melaleuca strobophylla* | 894 | 6.6 | 4 | 19 |
| | | *Melaleuca strobophylla* | 895 | 2.35 | 3.5 | 15 |
| | | *Melaleuca strobophylla* | 896 | 6 | 4 | 19 |
| | | *Melaleuca strobophylla* | 897 | 3.7 | 4.5 | 19 |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | 898 | 3.75, 2.6, 6, 4.2, 4.35 | 4.8 | 19 |
| | | *Melaleuca strobophylla* | 899 | 6.5, 3.85 | 4.3 | 19 |
| | | *Melaleuca strobophylla* | 900 | 3.2 | 4.2 | 13 |
| | | *Melaleuca strobophylla* | 901 | 4.85 | 4.5 | 19 |
| | | *Melaleuca strobophylla* | 902 | 2.9 | 4.2 | 19 |
| | | *Melaleuca strobophylla* | 903 | 4.35 | 3.5 | 19 |
| | | *Melaleuca strobophylla* | 904 | 5.55 | 5 | 19 |
| | | *Melaleuca strobophylla* | 905 | 6.7 | 4.5 | 9 |
| | | *Melaleuca strobophylla* | 906 | 1.6 | 3 | 19 |
| | | *Melaleuca strobophylla* | 907 | 4.05 | 4.3 | 19 |

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|---|---|---|---|---|---|---|
| | | *Melaleuca strobophylla* | 908 | 2.05 | 2.5 | 3 |
| | | *Melaleuca strobophylla* | 909 | 7.5 | 4.7 | 15 |
| | | *Melaleuca strobophylla* | 910 | 6.85 | 3.5 | 19 |
| | | *Melaleuca strobophylla* | 911 | 4.45 | 4 | 17 |
| | | *Melaleuca strobophylla* | 912 | 4.5, 3.95 | 4.5 | 3 |
| | | *Melaleuca strobophylla* | 913 | 4.55 | 4.5 | 13 |
| | | *Melaleuca strobophylla* | 914 | 6.4 | 4.5 | 19 |
| | | *Melaleuca strobophylla* | 915 | 6.35 | 4.5 | 19 |
| | | *Melaleuca strobophylla* | 916 | 8.05 | 4.5 | 19 |
| | | *Melaleuca strobophylla* | 917 | 4.95 | 4 | 19 |
| | | *Melaleuca strobophylla* | 918 | 2.2 | 3 | 17 |
| | | *Melaleuca strobophylla* | 919 | 2.5 | 3 | 17 |
| | | *Melaleuca strobophylla* | 920 | 3.5, 4.5 | 4.2 | 17 |
| | | *Melaleuca strobophylla* | 921 | 6.55, 5.35, 5.4 | 4.2 | 19 |
| | | *Melaleuca strobophylla* | 922 | 3.75 | 4 | 19 |
| | | *Melaleuca strobophylla* | 923 | 9.2, 6, 7.8 | 4.5 | 23 |
| | | *Melaleuca strobophylla* | 924 | 4.95, 6.05 | 4.2 | 19 |
| | | *Melaleuca strobophylla* | 925 | 7.75 | 4.2 | 19 |
| | | *Melaleuca strobophylla* | 877 | <2 | 1.75 | 19 |
| | | *Melaleuca strobophylla* | x13 | dead | | |
| | Melaleuca sp. 1 | *Melaleuca hamulosa* | x63 | <2 - seedling | 2.2 - 4.5 | Healthy |
| | Melaleuca sp. 1 | *Melaleuca hamulosa* | x1 | <2 - seedling | 0.1 | Stressed |
| | Melaleuca sp. 1 | *Melaleuca hamulosa* | x23 | dead | | |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x20 | | 1.75 - 4.2 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x4 | dead | | |
| **1D** | | *Melaleuca strobophylla* | 926 | 8.5 | 5 | 19 |
| | | *Melaleuca strobophylla* | 927 | 4.7 | 4.5 | 9 |
| | | *Melaleuca strobophylla* | 928 | 6.05 | 4 | 15 |
| | | *Melaleuca strobophylla* | 929 | 7.3, 3.05 | 5 | 19 |
| | | *Melaleuca strobophylla* | 930 | 8.2 | 4.5 | 15 |
| | | *Melaleuca strobophylla* | 931 | 2.85 | 4 | 15 |
| | | *Melaleuca strobophylla* | 932 | 2.1 | 3.5 | 9 |
| | | *Melaleuca strobophylla* | 933 | <2 | 3.5 | 9 |
| | | *Melaleuca strobophylla* | 934 | 5.85 | 5 | 19 |
| | | *Melaleuca strobophylla* | 935 | 4.55 | 4.5 | 17 |
| | | *Melaleuca strobophylla* | 936 | 5.15 | 4.7 | 19 |
| | | *Melaleuca strobophylla* | 937 | 6.45 | 4.5 | 19 |
| | | *Melaleuca strobophylla* | 938 | 3.3 | 3.75 | 15 |
| | | *Melaleuca strobophylla* | 939 | 2.6 | 3.5 | 9 |
| | | *Melaleuca strobophylla* | 940 | 4.25 | 4.5 | 15 |
| | | *Melaleuca strobophylla* | 941 | 3.15 | 4.4 | 19 |
| | | *Melaleuca strobophylla* | 942 | 3.8 | 4.5 | 19 |
| | | *Melaleuca strobophylla* | 943 | 4.3 | 4.7 | 19 |
| | | *Melaleuca strobophylla* | 944 | 2.95 | 3.7 | 19 |
| | | *Melaleuca strobophylla* | 945 | 5.95 | 4 | 17 |
| | | *Melaleuca strobophylla* | 946 | 5.15 | 4 | 17 |
| | | *Melaleuca strobophylla* | 947 | 2.65 | 3.5 | 9 |
| | | *Melaleuca strobophylla* | 948 | 2.55 | 4 | 15 |
| | | *Melaleuca strobophylla* | 949 | 4.5 | 4 | 15 |
| | | *Melaleuca strobophylla* | 950 | 2.75 | 4 | 15 |
| | | *Melaleuca strobophylla* | 951 | 3 | 4.2 | 15 |
| | | *Melaleuca strobophylla* | 952 | 4.2 | 4.2 | 19 |
| | | *Melaleuca strobophylla* | 953 | 2.7 | 3.5 | 19 |

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|---|---|---|---|---|---|---|
| | | *Melaleuca strobophylla* | 954 | 3 | 5 | 9 |
| | | *Melaleuca strobophylla* | 955 | 3.9 | 4.5 | 17 |
| | | *Melaleuca strobophylla* | 956 | 3.65, <2 | 3.9 | 15 |
| | | *Melaleuca strobophylla* | 957 | 5.35 | 4 | 19 |
| | | *Melaleuca strobophylla* | 958 | 3.65 | 4.5 | 15 |
| | | *Melaleuca strobophylla* | x1 | <2 - seedlings | 1.8 - 2.8 | Healthy |
| | Melaleuca sp. 1 | *Melaleuca hamulosa* | x6 | dead | | |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x32 | | 2.2 - 4.3 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x5 | dead | | |
| 1E | | *Melaleuca strobophylla* | 959 | 3.8 | 3.5 | 15 |
| | | *Melaleuca strobophylla* | 960 | 2.8 | 4 | 3 |
| | | *Melaleuca strobophylla* | 961 | 2.95 | 4.2 | 15 |
| | | *Melaleuca strobophylla* | x10 | dead | | |
| | Melaleuca sp. 1 | *Melaleuca hamulosa* | x19 | dead | | |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x19 | | 2.2 - 4.5 | Healthy |
| 2A | | *Melaleuca strobophylla* | x9 | dead | | |
| | Melaleuca sp. 1 | *Melaleuca hamulosa* | x15 | dead | | |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x26 | | 2.2 - 5.5 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x26 | dead | | |
| 2B | | *Melaleuca strobophylla* | x5 | dead | | |
| | Melaleuca sp. 1 | *Melaleuca hamulosa* | x18 | dead | | |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x20 | | 2 - 3.9 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x13 | dead | | |
| 2C | Melaleuca sp. 1 | *Melaleuca hamulosa* | x21 | dead | | |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x101 | | 2 - 4.1 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x12 | dead | | |
| 2D | | *Melaleuca strobophylla* | x1 | <2 - seedling | 0.3 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x20 | | 2.2 - 3.2 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x44 | <2 - seedlings | 0.05 - 0.3 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x22 | dead | | |
| 2E | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x25 | | 2.5 - 4 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x65 | <2 - seedlings | 0.1 - 0.3 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x47 | dead | | |

## BENNETTS - Transect 2

| Plot | Species # | Species | Tag # | DBH (cm) (1999) | Height(m) | Crown (1999) |
|---|---|---|---|---|---|---|
| 1A | | *Eucalyptus occidentalis* | 962 | 37.2 | 14.25 | 19 |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x2 | | 1.6 - 3 | Healthy |
| 1B | | *Eucalyptus occidentalis* | x2 | dead | | |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x1 | dead | | |
| 1C | | *Eucalyptus occidentalis* | 963 | 32.1 | 18 | 15 |
| | Melaleuca sp. 1 | *Melaleuca hamulosa* | x1 | | 4 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x8 | | 1.75 - 3.4 | Healthy |

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|---|---|---|---|---|---|---|
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x6 | <2 - seedlings | 0.2 - 0.6 | Healthy |
| 1D | | *Melaleuca strobophylla* | 964 | 13.85 | 5 | 19 |
| | | *Melaleuca strobophylla* | 965 | 11, 12.9, 4.9 | 4.8 | 17 |
| | | *Melaleuca strobophylla* | 966 | | 3.8 | 15 |
| | | *Melaleuca strobophylla* | 967 | 8.55 | 4 | 15 |
| | | *Melaleuca strobophylla* | 968 | 11.2, 6.95 | 5.8 | 15 |
| | | *Eucalyptus occidentalis* | 969 | 38.2 | 15.2 | 11 |
| | | *Eucalyptus occidentalis* | | <2 | 0.7 | coppice |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x13 | | 1.65 - 3 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x7 | <2 - seedlings | 0.1 - 0.5 | Healthy |
| 1E | Melaleuca sp. 1 | *Melaleuca hamulosa* | x1 | | 2 | Stressed |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x4 | | 2.7 - 3.7 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x38 | <2 - seedlings | 0.1 - 0.5 | Healthy |
| | | *Eucalyptus occidentalis* | x1 | dead | | |
| 2A | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x40 | | 2.6 - 4.2 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x2 | <2 - seedlings | 0.4 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x5 | dead | | |
| 2B | | *Melaleuca strobophylla* | 970 | 9.45 | 4.5 | 15 |
| | | *Melaleuca strobophylla* | x13 | <2 - seedlings | 2.8 | Healthy |
| | Melaleuca sp. 1 | *Melaleuca hamulosa* | x13 | | 6 - 6.5 | Stressed |
| | Melaleuca sp. 1 | *Melaleuca hamulosa* | x23 | dead | | |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x41 | | 2.6 - 6 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x24 | <2 - seedlings | 0.2 - 0.8 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x41 | dead | | |
| 2C | | *Melaleuca strobophylla* | 971 | 4.1 | 3.2 | 19 |
| | | *Melaleuca strobophylla* | 972 | 3.4 | 3.5 | 9 |
| | | *Eucalyptus occidentalis* | x1 | <2 - seedling | 1.75 | 19 |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x19 | | 2 - 6.1 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x20 | <2 - seedlings | 0.1 - 0.5 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x4 | dead | | |
| 2D | | *Melaleuca strobophylla* | 973 | 3.55 | 3.8 | 9 |
| | | *Melaleuca strobophylla* | 974 | 2.5 | 2.5 | 15 |
| | | *Melaleuca strobophylla* | 975 | 2 | 3.5 | 15 |
| | | *Melaleuca strobophylla* | x8 | dead | | |
| | | *Eucalyptus occidentalis* | x5 | <2 - seedlings | 0.6 - 0.8 | Healthy |
| | Melaleuca sp. 1 | *Melaleuca hamulosa* | x9 | dead | | |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x8 | | 2.5 - 4.2 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x27 | <2 - seedlings | 0.1 - 0.4 | Healthy |
| 2E | | *Melaleuca strobophylla* | 976 | 4 | 5 | 15 |
| | | *Melaleuca strobophylla* | 977 | 2.9 | 4.5 | 15 |
| | | *Melaleuca strobophylla* | 978 | 3 | 4.8 | 15 |
| | | *Melaleuca strobophylla* | 979 | 4 | 5.3 | 15 |
| | | *Melaleuca strobophylla* | 980 | 2.4 | 4 | 15 |
| | | *Melaleuca strobophylla* | 981 | 4.5 | 5 | 15 |
| | | *Melaleuca strobophylla* | 982 | 2.25 | 3.5 | 15 |
| | | *Melaleuca strobophylla* | 983 | 2.2 | 3.8 | 15 |
| | | *Melaleuca strobophylla* | x8 | <2 - seedlings | 2.5 - 3.2 | Healthy |

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|---|---|---|---|---|---|---|
| | | *Melaleuca strobophylla* | x12 | dead | | |
| | Melaleuca sp. 1 | *Melaleuca hamulosa* | x6 | dead | | |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x45 | | 3.7 - 6 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x6 | dead | | |
| 3A | | *Melaleuca strobophylla* | x2 | | dead | |
| | Melaleuca sp. 1 | *Melaleuca hamulosa* | x1 | dead | | |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x35 | | 2 - 6.2 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x11 | dead | | |
| 3B | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x56 | | 2 - 7.9 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x20 | <2 - seedlings | 1.5 - 2.2 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x8 | dead | | |
| 3C | Melaleuca sp. 1 | *Melaleuca hamulosa* | x2 | dead | | |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x8 | | 2.2 - 4.5 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x20 | <2 - seedlings | 0.1 - 0.3 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x3 | dead | | |
| 3D | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x38 | | 2.7 - 4.2 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x6 | <2 - seedlings | 0.05 - 0.1 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x38 | dead | | |
| 3E | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x3 | | 2.5 - 3 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x63 | <2 - seedlings | 0.05 - 0.3 | Healthy |
| | Melaleuca sp. 2 | *Melaleuca halmaturorum* | x4 | dead | | |

## RONNERUP - Transect 1

| Plot | Species # | Species | Tag # | DBH (cm) (1999) | Height(m) | Crown (1999) |
|---|---|---|---|---|---|---|
| 1A | | *Eucalyptus occidentalis* | 984 | 25.8, 22.6 | 16.75 | 14 |
| | | *Eucalyptus occidentalis* | 985 | 23.4 | 16 | 14 |
| | | *Eucalyptus occidentalis* | 986 | 24.6 | 16 | 13 |
| | | *Eucalyptus occidentalis* | 987 | 35.5 | 15.75 | 15 |
| | | *Eucalyptus occidentalis* | 988 | 26.55 | 16.5 | 13 |
| | | *Eucalyptus occidentalis* | 989 | 51.3 | 23.75 | 19 |
| | | *Eucalyptus occidentalis* | 990 | 20.05 | 15 | 3 |
| | | *Eucalyptus occidentalis* | 991 | 33.75 | 23 | 19 |
| | | *Eucalyptus occidentalis* | 992 | 24.55 | 15 | 3 |
| | | *Eucalyptus occidentalis* | 993 | 21.75, 16.2 | 14.5 | 13 |
| | | *Eucalyptus occidentalis* | 994 | 36.1, 33.65 | 18 | 15 |
| | | *Eucalyptus occidentalis* | x2 | dead | | |
| | 1B - 1D | NO TREES | | | | |
| 1E | | *Santalum murrayanum* | x1 | | 2.4 | Healthy |
| | Species 3 | *Acacia saligna* | x1 | | 0.5 | Healthy |
| 2A | Species 3 | *Acacia saligna* | x2 | dead | | |
| 2B | Species 3 | *Acacia saligna* | x5 | | 0.4 - 1 | Healthy |
| | Species 3 | *Acacia saligna* | x1 | dead | | |
| 2C | Species 3 | *Acacia saligna* | x3 | | 1.2 - 4 | Stressed |
| 2D | Species 3 | *Acacia saligna* | x2 | | 0.2 - 0.6 | Stressed |
| 2E | | *Eucalyptus occidentalis* | x1 | <2 - seedling | 0.8 | Slightly stressed |
| | Species 3 | *Acacia saligna* | x1 | dead | | |
| 3A | | *Eucalyptus occidentalis* | 5 | 2.15, <2 | 2.5 | 19 |
| | | *Eucalyptus occidentalis* | 6 | 2.5 | 2.9 | 19 |
| | | *Eucalyptus occidentalis* | 7 | 2.7, 2.25 | 3 | 19 |
| | | *Eucalyptus occidentalis* | x16 | <2 - seedlings | 0.2 - 2.2 | Healthy |
| | Species 3 | *Acacia saligna* | x1 | dead | | |
| 3B | | *Eucalyptus occidentalis* | 995 | 35 | 14.2 | 17 |
| | | *Eucalyptus occidentalis* | 8 | 2.35 | 2.6 | 19 |
| | | *Eucalyptus occidentalis* | 9 | 1.95 | 2.5 | 19 |
| | | *Eucalyptus occidentalis* | x28 | <2 - seedlings | 0.2 - 2 | Healthy |
| | Species 3 | *Acacia saligna* | x4 | dead | | |
| 3C | | *Eucalyptus occidentalis* | 996 | 2.1, 3 | 2.8 | 19 |
| | | *Eucalyptus occidentalis* | 997 | 2.55 | 2.8 | 19 |
| | | *Eucalyptus occidentalis* | 998 | 2.25 | 2.8 | 19 |
| | | *Eucalyptus occidentalis* | 999 | 2.65, 2.45, <2, <2, <2, <2, <2, <2 | 3.1 | 19 |
| | | *Eucalyptus occidentalis* | 1000 | 5 | 3.2 | 19 |
| | | *Eucalyptus occidentalis* | 1 | 3.75 | 3.4 | 19 |
| | | *Eucalyptus occidentalis* | x48 | <2 - seedlings | 0.15 - 1.7 | Healthy |

| | | | | | | |
|---|---|---|---|---|---|---|
| 3D | | *Eucalyptus occidentalis* | 2 | 2.1 | 2.9 | 19 |
| | | *Eucalyptus occidentalis* | 3 | 2.45, 2.05, 2.25, multiple <2 | 2.9 | 19 |
| | | *Eucalyptus occidentalis* | 4 | 2.6 | 2.6 | 19 |
| | | *Eucalyptus occidentalis* | x62 | <2 - seedlings | 0.3 - 2.1 | Healthy |
| | | *Eucalyptus occidentalis* | x1 | dead | | |
| 3E | | *Eucalyptus occidentalis* | x25 | <2 - seedlings | 0.3 - 1 | Healthy |
| | | *Eucalyptus occidentalis* | x1 | dead | | |

## RONNERUP - Transect 2

| Plot | Species # | Species | Tag # | DBH (cm) (1999) | Height(m) | Crown (1999) |
|---|---|---|---|---|---|---|
| 1A | | *Melaleuca cuticularis* | 10 | 3.75, 2.15, 3.05, multiple <2 | 2 | 17 |
| | | *Melaleuca cuticularis* | 11 | 4.15, 3.75, 3.4, 4.85, 4.1, 3.45, 3.4, 4, 6.55, 2.95, multiple <2 | 3 | 19 |
| | | *Melaleuca cuticularis* | 12 | 4, 2.45, 2.9, 3.4, 4.7 | 3 | 19 |
| | | *Melaleuca cuticularis* | 13 | 2.2, multiple <2 | 2.2 | 15 |
| | | *Melaleuca cuticularis* | 14 | multiple <2 | 2.1 | 19 |
| | | *Melaleuca cuticularis* | x1 | dead | | |
| | | *Eucalyptus occidentalis* | x1 | <2 - seedling | 0.6 | Healthy |
| 1B | | *Melaleuca cuticularis* | 15 | 4.6, 4.2, 2.9, 5.5, 3.25, 3.85, multiple <2 | 3 | 15 |
| | | *Melaleuca cuticularis* | 16 | multiple <2 | 1.7 | 15 |
| | | *Melaleuca cuticularis* | 17 | 3, 3.05, 3.3, 2.55, 4.7, multiple <2 | 2.5 | 19 |
| | | *Melaleuca cuticularis* | 18 | multiple <2 | 2 | 15 |
| | | *Melaleuca cuticularis* | x9 | <2 - seedlings | 0.3 - 1 | Healthy |
| | | *Eucalyptus occidentalis* | x1 | <2 - seedling | 1.2 | Healthy |
| 1C | | *Melaleuca cuticularis* | 19 | multiple <2 | 2 | 11 |
| | | *Melaleuca cuticularis* | x8 | <2 - seedlings | 0.3 - 1 | Healthy |
| | | *Eucalyptus occidentalis* | x12 | <2 - seedlings | 0.25 - 2 | Healthy |
| 1D | | *Eucalyptus occidentalis* | 20 | 3.9 | 4 | 19 |
| | | *Eucalyptus occidentalis* | 21 | 2.7 | 3 | 19 |
| | | *Eucalyptus occidentalis* | 22 | 3.25 | 3.8 | 19 |
| | | *Eucalyptus occidentalis* | 23 | 3.1 | 2.5 | 19 |
| | | *Eucalyptus occidentalis* | 24 | 4.25, <2 | 4.2 | 19 |
| | | *Eucalyptus occidentalis* | 25 | 2.4, <2 | 2.9 | 19 |
| | | *Eucalyptus occidentalis* | 26 | 3.3 | 3 | 19 |
| | | *Eucalyptus occidentalis* | 27 | 4.05 | 3.9 | 19 |
| | | *Eucalyptus occidentalis* | 28 | 2.9, <2 | 3.5 | 19 |
| | | *Eucalyptus occidentalis* | 29 | 2.15 | 3 | 19 |
| | | *Melaleuca cuticularis* | 30 | multiple <2 | 2.5 | 15 |
| | | *Melaleuca cuticularis* | x23 | <2 - seedlings | 0.1 - 1 | Healthy |
| | | *Eucalyptus occidentalis* | x43 | <2 - seedlings | 0.2 - 3 | Healthy |
| | | *Eucalyptus occidentalis* | x2 | <2 - seedlings dead | | |
| 1E | | *Eucalyptus occidentalis* | 31 | 2.8, <2 | 2.7 | 19 |
| | | *Eucalyptus occidentalis* | 32 | 2.15 | 2.3 | 19 |
| | | *Eucalyptus occidentalis* | 33 | 3.1, <2, <2, <2 | 2.4 | 19 |
| | | *Eucalyptus occidentalis* | 34 | 34.1 | 18.5 | 11 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | *Eucalyptus occidentalis* | 35 | 2.75 | 2.5 | 19 |
| | | *Eucalyptus occidentalis* | 36 | 2.8 | 2.7 | 17 |
| | | *Eucalyptus occidentalis* | 37 | 3.15 | 3.4 | 19 |
| | | *Eucalyptus occidentalis* | 38 | 2.5 | 2.9 | 19 |
| | | *Eucalyptus occidentalis* | 39 | 2.4 | 2.1 | 19 |
| | | *Eucalyptus occidentalis* | 40 | 2.1 | 2.5 | 19 |
| | | *Eucalyptus occidentalis* | 41 | 2, <2, <2, <2, <2 | 2.1 | 19 |
| | | *Eucalyptus occidentalis* | 42 | 2.35 | 2.35 | 19 |
| | | *Eucalyptus occidentalis* | 43 | 27.8 | 17 | 3 |
| | | *Eucalyptus occidentalis* | 44 | 1.9 | 2.1 | 19 |
| | | *Eucalyptus occidentalis* | 45 | 2.4 | 2.4 | 19 |
| | | *Eucalyptus occidentalis* | 46 | 4.5 | 4.2 | 19 |
| | | *Eucalyptus occidentalis* | 47 | 2 | 2.65 | 19 |
| | | *Eucalyptus occidentalis* | 48 | 1.85 | 2.45 | 19 |
| | | *Eucalyptus occidentalis* | 49 | 2.8 | 2.45 | 19 |
| | | *Eucalyptus occidentalis* | x108 | <2 - seedlings | 0.2 - 2.5 | Healthy |
| | | *Eucalyptus occidentalis* | x5 | <2 - seedlings dead | | |
| | | *Melaleuca cuticularis* | x2 | <2 - seedlings | 0.3 - 1.5 | Healthy |
| **2A** | | *Eucalyptus occidentalis* | 50 | 4.05, 2.35 | 3 | 19 |
| | | *Eucalyptus occidentalis* | 51 | 3 | 2.3 | 19 |
| | | *Eucalyptus occidentalis* | 52 | 1.7 | 2.1 | 19 |
| | | *Eucalyptus occidentalis* | 53 | 2.8, <2, <2 | 2.5 | 19 |
| | | *Eucalyptus occidentalis* | 54 | 2.2 | 2.1 | 19 |
| | | *Eucalyptus occidentalis* | 55 | 2.95 | 2.4 | 19 |
| | | *Eucalyptus occidentalis* | 56 | 2.8 | 2.6 | 19 |
| | | *Eucalyptus occidentalis* | 57 | 2.7 | 3 | 19 |
| | | *Eucalyptus occidentalis* | 58 | 1.8 | 2.9 | 19 |
| | | *Eucalyptus occidentalis* | 59 | 2.95 | 3 | 19 |
| | | *Eucalyptus occidentalis* | x183 | <2 - seedlings | 0.2 - 3 | Healthy |
| | | *Eucalyptus occidentalis* | x5 | <2 - seedlings dead | | |
| **2B** | | *Eucalyptus occidentalis* | 60 | 2.9 | 2.5 | 19 |
| | | *Eucalyptus occidentalis* | x53 | <2 - seedlings | 0.1 - 2 | Healthy |
| **2C** | | *Eucalyptus occidentalis* | x16 | <2 - seedlings | 0.2 - 1.2 | Healthy |
| **2D** | | *Eucalyptus occidentalis* | 61 | 23, 16.75, 15.3, 12.6 | 16 | 15 |
| | | *Eucalyptus occidentalis* | x179 | <2 - seedlings | 0.1 - 1.75 | Healthy |
| | | *Eucalyptus occidentalis* | x10 | <2 - seedlings | 0.1 - 1.75 | Stressed |
| | | *Melaleuca cuticularis* | x4 | <2 - seedlings | 0.1 - 2 | Healthy |
| **2E** | | *Eucalyptus occidentalis* | 62 | 2.25 | 2.3 | 19 |
| | | *Eucalyptus occidentalis* | 63 | 1.9 | 2.4 | 19 |
| | | *Eucalyptus occidentalis* | 64 | 1.75 | 2.6 | 19 |
| | | *Eucalyptus occidentalis* | 65 | 2 | 2.5 | 19 |
| | | *Eucalyptus occidentalis* | 66 | 1.75 | 2.2 | 19 |
| | | *Eucalyptus occidentalis* | x244 | <2 - seedlings | 0.2 - 2.2 | Healthy |
| | | *Eucalyptus occidentalis* | x12 | <2 - seedlings | 0.2 - 2.2 | Stressed |
| | | *Melaleuca cuticularis* | x26 | <2 - seedlings | 0.1 - 1 | Healthy |

## PLEASANT VIEW - Transect 1

| Plot | Species # | Species | Tag # | DBH (cm) (1999) | Height(m) | Crown (1999) |
|---|---|---|---|---|---|---|
| 1A | | *Eucalyptus calophylla* | 1 | 6.8 | 4.2 | 19 |
| | | *Eucalyptus calophylla* | 2 | <2 | 2.4 | 9 |
| | | *Eucalyptus calophylla* | 3 | 33.3 | 10.5 | 15 |
| | | *Eucalyptus marginata* | 4 | 28.25 | 9 | 11 |
| | | *Eucalyptus calophylla* | x1 | <2 - seedling | 1.5 | Healthy |
| | | *Eucalyptus calophylla* | x1 | dead | | |
| 1B | | *Eucalyptus calophylla* | 5 | 5.2, 2.7 | 3.8 | 19 |
| | | *Eucalyptus calophylla* | 6 | 7.8 | 4 | 19 |
| | | *Eucalyptus calophylla* | 7 | 41.4 | 10 | 11 |
| | | *Eucalyptus calophylla* | x1 | resprout | 1.3 | Stressed |
| | | *Eucalyptus calophylla* | x2 | <2 - seedlings | 1.5 - 2 | Healthy |
| 1C | | *Eucalyptus calophylla* | 8 | 2.25 | 3 | 19 |
| | | *Eucalyptus calophylla* | 9 | 4 | 4.5 | 21 |
| | | *Eucalyptus calophylla* | x1 | <2 - seedling | 2 | Healthy |
| 1D | | NO TREES | | | | |
| 1E | | *Melaleuca cuticularis* | 10 | 41.5, 62.5 | 10.5 | 21 |
| | | *Melaleuca cuticularis* | 11 | 4.8 | 2.7 | 19 |
| | | *Melaleuca cuticularis* | x1 | <2 - seedling | 0.4 | Healthy |
| 2A | | *Melaleuca cuticularis* | 12 | 45.2, 25.3, 11.3, 5.5 | 7 | 21 |
| | 2B - 2C | NO TREES | | | | |
| 2D | | *Melaleuca cuticularis* | 13 | 13.2, 8.3, 13.8, 10, 14.3 | 6.5 | 21 |
| | | *Melaleuca cuticularis* | 14 | 16.7, 4.8, 3.95 | 4.8 | 19 |
| | | *Melaleuca cuticularis* | 15 | 9, 18.9, 8.05 | 3.1 | 19 |
| 2E | | *Melaleuca cuticularis* | 16 | 3.55 | 2.3 | 19 |
| | | *Melaleuca cuticularis* | 17 | 2.75 | 2.1 | 19 |
| | | *Melaleuca cuticularis* | x2 | <2 - seedlings | 1.5 | Healthy |
| 3A | | *Melaleuca cuticularis* | 18 | 2.3 | 2 | 15 |
| | | *Melaleuca cuticularis* | 19 | 4, 2.45 | 2.2 | 15 |
| | | *Melaleuca cuticularis* | 20 | <2 | 1.7 | 17 |
| | | *Melaleuca cuticularis* | 21 | multiple <2 | 2 | 17 |
| | | *Melaleuca cuticularis* | 22 | 6.7, 3.35, 3.4 | 3 | 19 |
| | | *Melaleuca cuticularis* | 23 | 2.55 | 2.1 | 15 |
| | | *Melaleuca cuticularis* | 24 | 8.8 | 3.3 | 19 |
| | | *Melaleuca cuticularis* | 25 | 4 | 2.6 | 17 |
| | | *Melaleuca cuticularis* | 26 | <2, <2 | 1.9 | 19 |
| | | *Melaleuca cuticularis* | 27 | 3.2 | 2.6 | 15 |
| | | *Melaleuca cuticularis* | 28 | 2.2 | 2.2 | 15 |
| | | *Melaleuca cuticularis* | 29 | 2.8 | 2.4 | 17 |
| | | *Melaleuca cuticularis* | 30 | 3.2 | 2.6 | 15 |
| | | *Melaleuca cuticularis* | 31 | 2, <2 | 2.2 | 17 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | *Melaleuca cuticularis* | 32 | 3.5 | 2.6 | 17 |
| | | *Melaleuca cuticularis* | x10 | <2 - seedlings | 0.5 - 2 | Healthy |
| **3B** | | *Melaleuca cuticularis* | 33 | 5.05, 5 | 3.2 | 17 |
| | | *Melaleuca cuticularis* | 34 | 4.55, 4.65 | 3 | 17 |
| | | *Melaleuca cuticularis* | 35 | 2.75, <2, <2 | 2.2 | 15 |
| | | *Melaleuca cuticularis* | 36 | 6.4 | 3 | 19 |
| | | *Melaleuca cuticularis* | 37 | 4.55 | 2.9 | 19 |
| | | *Melaleuca cuticularis* | 38 | 4.35 | 2.9 | 15 |
| | | *Melaleuca cuticularis* | 39 | 7.3 | 3.3 | 19 |
| | | *Melaleuca cuticularis* | 40 | <2 | 1.7 | 15 |
| | | *Melaleuca cuticularis* | 41 | <2 | 1.9 | 15 |
| | | *Melaleuca cuticularis* | 42 | 4.65, <2 | 2 | 17 |
| | | *Melaleuca cuticularis* | 43 | 2.35, 2.3, <2 | 1.7 | 15 |
| | | *Melaleuca cuticularis* | 44 | 3.7, 2.3 | 2.4 | 15 |
| | | *Melaleuca cuticularis* | 45 | 2.95 | 1.8 | 15 |
| | | *Melaleuca cuticularis* | 46 | 3.3 | 2.3 | 13 |
| | | *Melaleuca cuticularis* | 47 | 6.3 | 3.8 | 15 |
| | | *Melaleuca cuticularis* | 48 | 3.5, 4.2, 3.8, <2, <2 | 3.1 | 15 |
| | | *Melaleuca cuticularis* | 49 | <2 | 1.9 | 13 |
| | | *Melaleuca cuticularis* | 50 | multiple <2 | 1.7 | 15 |
| | | *Melaleuca cuticularis* | 51 | <2 | 1.9 | 15 |
| | | *Melaleuca cuticularis* | 52 | 9.65 | 3 | 17 |
| | | *Melaleuca cuticularis* | 53 | 3.2 | 1.8 | 17 |
| | | *Melaleuca cuticularis* | 54 | <2, 4 | 2.1 | 19 |
| | | *Melaleuca cuticularis* | 55 | 3.05, multiple <2 | 2 | 15 |
| | | *Melaleuca cuticularis* | x14 | <2 - seedlings | 1.1 - 2 | Healthy |
| **3C** | | *Melaleuca cuticularis* | 56 | 3.1, <2 | 2.2 | 15 |
| | | *Melaleuca cuticularis* | 57 | 3.95, 3.8 | 2.8 | 15 |
| | | *Melaleuca cuticularis* | 58 | 3.3, 3.8, 4.45 | 2.8 | 15 |
| | | *Melaleuca cuticularis* | 59 | 5.45, 3.7, 4.95 | 2.7 | 17 |
| | | *Melaleuca cuticularis* | 60 | 2.45, multiple <2 | 1.5 | 15 |
| | | *Melaleuca cuticularis* | 61 | 4.2 | 2 | 13 |
| | | *Melaleuca cuticularis* | 62 | 3.2 | 2.1 | 15 |
| | | *Melaleuca cuticularis* | 63 | 4.85, 2.35 | 2.4 | 17 |
| | | *Melaleuca cuticularis* | 65 | 2.7, 2.9 | 1.8 | 13 |
| | | *Melaleuca cuticularis* | 66 | 3.6 | 2.3 | 13 |
| | | *Melaleuca cuticularis* | 67 | 5.6, 3.2 | 2.8 | 15 |
| | | *Melaleuca cuticularis* | 68 | 3.5 | 1.6 | 13 |
| | | *Melaleuca cuticularis* | x6 | <2 - seedlings | 1.1 - 2 | 4 Healthy, 2 stressed |
| | | *Melaleuca cuticularis* | x1 | dead | | |
| **3D** | | *Melaleuca cuticularis* | 69 | 4.45, 8.2, 3 | 3.3 | 17 |
| | | *Melaleuca cuticularis* | x1 | <2 - seedling | 1 | Healthy |
| **3E** | | NO TREES | | | | |
| | **4A - 4B** | NO TREES | | | | |
| **4C** | | *Melaleuca cuticularis* | x1 | <2 - seedling | 1.7 | Healthy |
| | **4D - 4E** | NO TREES | | | | |

## PLEASANT VIEW - Transect 2

| Plot | Species # | Species | Tag # | DBH (cm) (1999) | Height(m) | Crown (1999) |
|---|---|---|---|---|---|---|
| 1A | | *Eucalyptus occidentalis* | 70 | 3.3 | 3.3 | 11 |
| | | *Eucalyptus occidentalis* | 71 | 8.7 | 6.5 | 17 |
| | | *Eucalyptus occidentalis* | 72 | 5.6 | 5.8 | 15 |
| | | *Eucalyptus occidentalis* | 73 | 2.8 | 2.5 | 11 |
| | | *Eucalyptus occidentalis* | 74 | 2.45 | 3.4 | 9 |
| | | *Eucalyptus occidentalis* | 75 | 6.7 | 6.5 | 17 |
| | | *Eucalyptus occidentalis* | 76 | 5.4 | 5 | 11 |
| | | *Eucalyptus occidentalis* | 77 | 14.2, 16 | 8.5 | 21 |
| | | *Eucalyptus occidentalis* | 78 | 2.95 | 2.8 | 11 |
| | | *Eucalyptus occidentalis* | 79 | 7.9 | 7 | 15 |
| | | *Eucalyptus occidentalis* | 80 | 2.55 | 3.2 | 11 |
| | | *Eucalyptus occidentalis* | 81 | <2 | 3.1 | 7 |
| | | *Eucalyptus occidentalis* | 82 | 4.5 | 4.2 | 7 |
| | | *Eucalyptus occidentalis* | 83 | 9.3 | 6.5 | 17 |
| | | *Eucalyptus occidentalis* | 84 | 5.7 | 6 | 15 |
| | | *Eucalyptus occidentalis* | 85 | 2.4 | 2.6 | 7 |
| | | *Eucalyptus occidentalis* | 86 | 10.6 | 7.5 | 19 |
| | | *Eucalyptus occidentalis* | 87 | 7.4 | 7.5 | 13 |
| | | *Eucalyptus occidentalis* | 88 | <2 | 2 | 11 |
| | | *Eucalyptus occidentalis* | 89 | 7.6 | 7.5 | 15 |
| | | *Melaleuca cuticularis* | 90 | 30.6 | 9 | 22 |
| | | *Eucalyptus occidentalis* | 91 | 7.2 | 6.5 | 17 |
| | | *Eucalyptus occidentalis* | 92 | 7.1 | 7 | 21 |
| | | *Eucalyptus occidentalis* | 93 | 3.5, 2.8, 2.5 | 3.5 | 15 |
| | | *Melaleuca cuticularis* | 94 | 29.7 | 7 | 23 |
| | | *Melaleuca cuticularis* | 95 | <2 | 1.6 | 17 |
| 1B | | *Melaleuca cuticularis* | 96 | 40.9 | 8.5 | 21 |
| | | *Eucalyptus occidentalis* | 97 | 6.1, <2 | 5.3 | 19 |
| | | *Eucalyptus occidentalis* | 98 | 5 | 6.5 | 15 |
| | | *Eucalyptus occidentalis* | 99 | 2.2 | 2.4 | 11 |
| | | *Eucalyptus occidentalis* | 100 | 11.3 | 5.5 | 13 |
| | | *Eucalyptus occidentalis* | 101 | 2.4, <2 | 2.1 | 9 |
| | | *Eucalyptus occidentalis* | 102 | 5.8 | 5 | 11 |
| 1C | | *Eucalyptus occidentalis* | 103 | 2.6 | 2.6 | 9 |
| | | *Eucalyptus occidentalis* | 104 | 5.9 | 4.8 | 13 |
| | | *Melaleuca cuticularis* | 105 | 51.7 | 8.7 | 19 |
| | | *Melaleuca cuticularis* | 106 | 3.6, 2.65, <2 | 2.1 | 17 |
| | | *Melaleuca cuticularis* | 107 | 4.8 | 2.8 | 17 |
| | | *Melaleuca cuticularis* | x2 | <2 - seedlings | 1 - 1.5 | Healthy |
| 1D | | *Melaleuca cuticularis* | 108 | 8.2, 9.8 | 4.7 | 17 |
| | | *Melaleuca cuticularis* | 109 | 2.5 | 2.4 | 15 |
| | | *Eucalyptus occidentalis* | 110 | 9.6 | 6.8 | 17 |
| | | *Eucalyptus occidentalis* | 111 | 12.5 | 6.8 | 19 |
| | | *Melaleuca cuticularis* | x6 | <2 - seedlings | 1.1 - 2 | 4 Healthy, 2 Stressed |
| 1E | | *Eucalyptus occidentalis* | 112 | 9.9 | 5.8 | 19 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | *Melaleuca cuticularis* | 113 | 6.8, 5.4 | 3 | 17 |
| | | *Melaleuca cuticularis* | 114 | 43.9 | 9 | 23 |
| | | *Melaleuca cuticularis* | 115 | 18.5 | 5 | 17 |
| | | *Melaleuca cuticularis* | 116 | 6.8, 4.2, 4.6 | 4 | 17 |
| | | *Melaleuca cuticularis* | 117 | 9.4 | 4.4 | 15 |
| | | *Melaleuca cuticularis* | 118 | 5.9 | 3.3 | 17 |
| | | *Melaleuca cuticularis* | x2 | <2 - seedlings | 1.2 - 1.4 | Healthy |
| **2A** | | *Melaleuca cuticularis* | 119 | 2.05, <2, <2 | 2.1 | 13 |
| | | *Melaleuca cuticularis* | 120 | <2 | 1.8 | 15 |
| | | *Melaleuca cuticularis* | 121 | 6, 3.6, 2.6, 2.9 | 3 | 17 |
| | | *Melaleuca cuticularis* | 122 | 2.3 | 2.2 | 15 |
| | | *Melaleuca cuticularis* | 123 | 2.05 | 2 | 15 |
| | | *Melaleuca cuticularis* | 124 | 5.6 | 3 | 17 |
| | | *Melaleuca cuticularis* | 125 | <2 | 1.7 | 15 |
| | | *Melaleuca cuticularis* | 126 | 3.9 | 3 | 15 |
| | | *Melaleuca cuticularis* | 127 | 2.1 | 2.2 | 15 |
| | | *Melaleuca cuticularis* | 128 | 2.7 | 9.5 | 13 |
| | | *Melaleuca cuticularis* | 129 | 35.9, 27.2 | 1.3 | 22 |
| | | *Melaleuca cuticularis* | x1 | <2 - seedling | 1.3 | Healthy |
| **2B** | | *Melaleuca cuticularis* | 130 | 3.45, <2 | 2.5 | 13 |
| | | *Melaleuca cuticularis* | 131 | 6.5, 8.2, 4, 4.3 | 3.8 | 15 |
| | | *Melaleuca cuticularis* | 132 | 2.7, <2 | 2.3 | 13 |
| | | *Melaleuca cuticularis* | 133 | 3.6, 3.4 | 2.8 | 13 |
| | | *Melaleuca cuticularis* | 134 | 2.4, 2 | 2.1 | 15 |
| | | *Melaleuca cuticularis* | x3 | <2 - seedlings | 1.2 - 1.5 | Slightly stressed |
| **2C** | | *Melaleuca cuticularis* | 135 | 3.2 | 2.6 | 17 |
| | | *Melaleuca cuticularis* | 136 | 6.4, <2, <2 | 2.6 | 15 |
| | | *Melaleuca cuticularis* | 137 | 2.2 | 2.2 | 11 |
| | | *Melaleuca cuticularis* | 138 | 4.5 | 3.1 | 15 |
| | | *Melaleuca cuticularis* | 139 | 8.5 | 2.7 | 11 |
| | | *Melaleuca cuticularis* | 140 | 5.8 | 4.1 | 15 |
| | | *Melaleuca cuticularis* | 141 | 4.3 | 3.4 | 13 |
| | | *Melaleuca cuticularis* | 142 | 5.4 | 4.6 | 13 |
| | | *Melaleuca cuticularis* | 143 | 4.6 | 4.1 | 13 |
| | | *Melaleuca cuticularis* | 144 | 5.5 | 4.3 | 11 |
| | | *Melaleuca cuticularis* | 145 | 45 | 9.5 | 23 |
| | | *Melaleuca cuticularis* | 8x | <2 - seedlings | 1.1 - 1.9 | Slightly stressed |
| | | *Melaleuca cuticularis* | x1 | dead | | |
| **2D** | | *Melaleuca cuticularis* | 146 | 4.9 | 2.5 | 15 |
| | | *Melaleuca cuticularis* | 147 | 3.55 | 2.3 | 15 |
| | | *Melaleuca cuticularis* | 148 | 10.2, 4.2, 9.8, 8.4 | 4.7 | 17 |
| | | *Melaleuca cuticularis* | 149 | 4.95, 3.85 | 2.9 | 15 |
| | | *Melaleuca cuticularis* | x3 | <2 - seedlings | 0.6 - 1.5 | 1 Stressed, 1 Slightly stressed |
| | | *Melaleuca cuticularis* | x1 | dead | | |
| **2E** | | *Melaleuca cuticularis* | 150 | 8.3 | 4.8 | 17 |
| | | *Melaleuca cuticularis* | 151 | 8.45, 9, 7.45 | 5 | 19 |
| | | *Melaleuca cuticularis* | 152 | 2.8 | 2.1 | 15 |
| | | *Melaleuca cuticularis* | 153 | 3 | 2.5 | 15 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | *Melaleuca cuticularis* | 154 | 4.7 | 3.3 | 15 |
| | | *Melaleuca cuticularis* | 155 | 5.1, 2.85, 3.9, 8, 6.5, 5.4, 3.1, 2.9, 8.9 | 3.8 | 17 |
| | | *Melaleuca cuticularis* | 156 | 4.6 | 3.2 | 13 |
| | | *Melaleuca cuticularis* | 157 | 2.1 | 2 | 11 |
| | | *Melaleuca cuticularis* | 158 | 3.2, 2.3 | 2.1 | 15 |
| | | *Melaleuca cuticularis* | 159 | 6.05 | 3.5 | 19 |
| | | *Melaleuca cuticularis* | 160 | 4.15 | 3 | 15 |
| | | *Melaleuca cuticularis* | 161 | 3.85, 2.85 | 2.6 | 15 |
| | | *Melaleuca cuticularis* | 162 | 8.95, 2.5 | 3.8 | 19 |
| | | *Melaleuca cuticularis* | 163 | 5.5, 2.6 | 3.8 | 13 |
| | | *Melaleuca cuticularis* | 164 | 2.9, <2, <2, <2 | 2.3 | 15 |
| | | *Melaleuca cuticularis* | 165 | 6.4, 4.5, 6.2, 6.75 | 3.8 | 17 |
| | | *Melaleuca cuticularis* | 166 | 6.5, 2.9, 5.8, 4.65 | 3.2 | 15 |
| | | *Melaleuca cuticularis* | 167 | 3.2 | 2.6 | 13 |
| | | *Melaleuca cuticularis* | x11 | <2 - seedlings | 0.9 - 2 | 7 Healthy, 4 Slightly stressed |
| **3A** | | *Melaleuca cuticularis* | 168 | 4.2 | 2.6 | 11 |
| | | *Melaleuca cuticularis* | 169 | 5.6, 5.45 | 2.3 | 15 |
| | | *Melaleuca cuticularis* | 170 | 3.75 | 3.2 | 19 |
| | | *Melaleuca cuticularis* | 171 | 2.95 | 2.6 | 17 |
| | | *Melaleuca cuticularis* | 172 | 4.1 | 2.6 | 15 |
| | | *Melaleuca cuticularis* | 173 | 4.4 | 3 | 15 |
| | | *Melaleuca cuticularis* | 174 | 2.25 | 2.1 | 15 |
| | | *Melaleuca cuticularis* | 175 | 2.4 | 2.4 | 15 |
| | | *Melaleuca cuticularis* | 176 | 8.8 | 3.8 | 15 |
| | | *Melaleuca cuticularis* | 177 | 5, 4.7, 3.1 | 3 | 17 |
| | | *Melaleuca cuticularis* | 178 | 6.75, 7.75 | 3.8 | 15 |
| | | *Melaleuca cuticularis* | x9 | <2 - seedlings | 1.5 - 2 | 7 Healthy, 2 Slightly stressed |
| **3B** | | *Melaleuca cuticularis* | 179 | 6.1, 2.1 | 3.2 | 11 |
| | | *Melaleuca cuticularis* | 180 | 5.9, 4.55 | 3.2 | 13 |
| | | *Melaleuca cuticularis* | 181 | 2.5 | 2.5 | 13 |
| | | *Melaleuca cuticularis* | 182 | 7.1, 5.15, 4.1 | 3.3 | 17 |
| | | *Melaleuca cuticularis* | 183 | 9.95, 8.8, 3.35 | 4.7 | 19 |
| | | *Melaleuca cuticularis* | x6 | <2 - seedlings | 0.5 - 1.8 | Slightly stressed |
| **3C** | | *Melaleuca cuticularis* | 184 | 6, 3.5 | 2.1 | 13 |
| | | *Melaleuca cuticularis* | 185 | 4.5, 3.6 | 1.7 | 13 |
| | | *Melaleuca cuticularis* | x2 | <2 - seedlings | 1.5 | Slightly stressed |
| | **3D - 3E** | NO TREES | | | | |

## PLEASANT VIEW - Transect 3

| Plot | Species # | Species | Tag # | DBH (cm) (1999) | Height(m) | Crown (1999) |
|---|---|---|---|---|---|---|
| 1A | | *Melaleuca cuticularis* | 64 | 28.5, 11.9 | 6.5 | 13 |
| | | *Melaleuca cuticularis* | 218 | 6.3 | 3.2 | 4 |
| | | *Melaleuca cuticularis* | 186 | 31.5 | 8.5 | 14 |
| | | *Melaleuca cuticularis* | 187 | 21.6, 7.7 | 7.7 | 12 |
| | | *Melaleuca cuticularis* | 188 | 21, 20.5 | 6.5 | 12 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | *Melaleuca cuticularis* | 189 | 31.85 | 7 | 15 |
| 1B | | *Eucalyptus occidentalis* | 190 | <2 | 1.9 | 13 |
| | | *Eucalyptus occidentalis* | 191 | 23 | 9.5 | 19 |
| | | *Eucalyptus occidentalis* | x2 | Resprouts | 0.5 | |
| | | *Eucalyptus occidentalis* | 193 | 11.55 | 7 | 15 |
| | | *Eucalyptus occidentalis* | 194 | <2 | 1.9 | 13 |
| 1C | | *Melaleuca cuticularis* | 195 | 31.4, 11.9 | 7 | 17 |
| | | *Eucalyptus occidentalis* | 196 | 16.3 | 10 | 15 |
| | | *Eucalyptus occidentalis* | 197 | 3.3 | 2.2 | 15 |
| | | *Eucalyptus occidentalis* | 198 | 21.95 | 10 | 19 |
| | | *Eucalyptus occidentalis* | x3 | <2 - seedlings | 1 | 1 Healthy, 1 stressed |
| 1D | | *Eucalyptus occidentalis* | 192 | 24.05 | 10.5 | 17 |
| | | *Eucalyptus occidentalis* | 199 | 4.85 | 4.7 | 15 |
| | | *Eucalyptus occidentalis* | 200 | <2 | 2 | 10 |
| | | *Eucalyptus occidentalis* | x2 | <2 - seedlings | 0.5 | Slightly stressed |
| 1E | | *Eucalyptus occidentalis* | 201 | 23.15 | 10.5 | 19 |
| | | *Eucalyptus occidentalis* | x5 | <2 - seedlings | 0.3 - 0.6 | Slightly stressed |
| 2A | | NO TREES | | | | |
| 2B | | *Eucalyptus occidentalis* | 202 | 36.15 | 12.3 | 21 |
| | | *Eucalyptus occidentalis* | 203 | <2 | 1.8 | 7 |
| | | *Eucalyptus occidentalis* | 204 | 6.5, 6.8 | 6.5 | 15 |
| | | *Eucalyptus occidentalis* | 205 | 3.5 | 3.5 | 10 |
| | | *Eucalyptus occidentalis* | 206 | 4.8 | 5 | 11 |
| | | *Eucalyptus occidentalis* | 207 | 11.5 | 6.8 | 15 |
| | | *Eucalyptus occidentalis* | 208 | 30.5 | 12.3 | 23 |
| | | *Eucalyptus occidentalis* | 209 | 24.9 | 9.8 | 19 |
| | | *Eucalyptus calophylla* | 219 | 15.85 | 6 | 17 |
| | | *Eucalyptus occidentalis* | x3 | <2 - seedlings | 0.3 - 0.6 | Healthy |
| 2C | | *Eucalyptus occidentalis* | 210 | 8.2 | 5.5 | 12 |
| | | *Eucalyptus occidentalis* | 211 | 3.3 | 3.8 | 4 |
| | | *Eucalyptus occidentalis* | 212 | 11.5 | 8.3 | 13 |
| | | *Eucalyptus occidentalis* | 213 | 3.65 | 4 | 8 |
| | | *Melaleuca cuticularis* | x1 | <2 - seedling | 1 | Healthy |
| 2D | | *Eucalyptus occidentalis* | 214 | 37.4 | 13.8 | 23 |
| | | *Eucalyptus occidentalis* | 215 | 5.8 | 6 | 13 |
| | | *Eucalyptus occidentalis* | 216 | 5.1 | 5.3 | 15 |
| | | *Eucalyptus occidentalis* | 217 | 9.9 | 7.4 | 17 |
| | | *Melaleuca cuticularis* | x2 | <2 - seedlings | 0.5 | Healthy |
| 2E | | *Melaleuca cuticularis* | x7 | <2 - seedlings | 0.5 - 1 | Healthy |
| | | *Eucalyptus occidentalis* | x1 | <2 - seedlings | 0.2 | Healthy |

## PLEASANT VIEW - Transect 4

| Plot | Species # | Species | Tag # | DBH (cm) (1999) | Height(m) | Crown (1999) |
|---|---|---|---|---|---|---|
| 1A | | NO TREES | | | | |

## PLEASANT VIEW - Transect 5

| Plot | Species # | Species | Tag # | DBH (cm) (1999) | Height(m) | Crown (1999) |
|---|---|---|---|---|---|---|
| 1A | | *Melaleuca cuticularis* | 220 | 15.7 | 7.5 | 12 |
| | | *Melaleuca cuticularis* | 221 | 40.2, 28.6 | 9.5 | 14 |
| | | *Melaleuca cuticularis* | 222 | 42.5 | 10 | 16 |
| | | *Melaleuca cuticularis* | 223 | 91.5 | 7 | 18 - outside plot |
| | | *Melaleuca cuticularis* | x1 | <2 - seedling | 1.5 | Healthy |
| | | *Melaleuca cuticularis* | x1 | dead | | |
| 1B | | *Melaleuca cuticularis* | 224 | 25.5 | 11.5 | 11 - outside plot |
| | | *Melaleuca cuticularis* | 225 | 63.8 | 11 | 13 |
| | | *Melaleuca cuticularis* | 226 | 30.2 | 9.5 | 14 |
| | | *Melaleuca cuticularis* | 227 | 44.8 | 9 | 12 |
| 1C | | *Melaleuca cuticularis* | 228 | 50.2 | 11 | 14 - outside plot |
| | | *Melaleuca cuticularis* | 229 | 35.2 | 8 | 9 - outside plot |
| | | *Melaleuca cuticularis* | 230 | 47.1, 22 | 10.5 | 16 |
| | | *Melaleuca cuticularis* | 231 | 36.5 | 7.8 | 12 |
| | | *Melaleuca cuticularis* | 236 | 57.1 | fallen | 9 |
| 1D | | *Melaleuca cuticularis* | 232 | 41, 32.8, 26.7 | 9.8 | 18 |
| 1E | PLE 55 | *Hakea oleifolia* | 233 | 8.95 | 5.3 | 19 |
| | PLE 55 | *Hakea oleifolia* | 234 | 3.6 | 3.5 | 17 |
| | PLE 55 | *Hakea oleifolia* | 235 | 14.8 | 7 | 19 |
| 2A | | *Melaleuca cuticularis* | 237 | 51.8, 16.3, 11.8 | 10.5 | 21 |
| | | *Melaleuca cuticularis* | 238 | 55.8 | 10.5 | 18 |
| | | *Melaleuca cuticularis* | 239 | 29.7 | 8.5 | 12 |
| | | *Melaleuca cuticularis* | 240 | 36.8 | 10.5 | 16 |
| 2B | PLE 55 | *Hakea oleifolia* | 241 | 6.6 | 4.3 | 19 |
| | PLE 55 | *Hakea oleifolia* | 242 | 3.8 | 3.3 | 19 |
| | | *Melaleuca cuticularis* | 243 | 10.1, 6.8, 5.7 | 5 | 16 |
| | | *Melaleuca cuticularis* | 244 | 31.6, 22.1 | 9.5 | 14 |
| | | *Melaleuca cuticularis* | 245 | 5.7, 5.5 | 2.9 | 12 |
| | | *Melaleuca cuticularis* | 246 | 8 | 3.9 | 14 |
| | | *Melaleuca cuticularis* | 247 | 38, 7.3 | 9.5 | 14 |
| | | *Melaleuca cuticularis* | 248 | 11 | 2.9 | 12 |
| | | *Melaleuca cuticularis* | 249 | 41.2 | 9.5 | 16 |
| | | *Melaleuca cuticularis* | 250 | 25.7 | 5.8 | 18 - outside plot |
| 2C | PLE 55 | *Hakea oleifolia* | 251 | 2.1, 2.5 | 2.5 | 19 |
| | | *Melaleuca cuticularis* | 252 | 12.1 | 4 | 14 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **2D** | | *Melaleuca cuticularis* | 253 | 6 | 2.8 | 15 |
| | PLE 55 | *Hakea oleifolia* | 254 | 5.25 | 4.2 | 19 |
| | PLE 55 | *Hakea oleifolia* | 255 | 3.8 | 3.9 | 19 |
| | PLE 55 | *Hakea oleifolia* | 256 | 3.8 | 1.8 | 15 |
| | PLE 55 | *Hakea oleifolia* | 257 | 2.05 | 3 | 15 |
| | PLE 55 | *Hakea oleifolia* | 258 | <2 | 1.7 | 17 |
| | PLE 55 | *Hakea oleifolia* | 259 | 7.3, 5.95, 2.95, 4.1, 2.8 | 6 | 17 |
| | PLE 55 | *Hakea oleifolia* | x1 | <2 -seedling | 1.6 | Healthy |
| **2E** | PLE 55 | *Hakea oleifolia* | 260 | 2.3 | 2.4 | 19 |
| | | *Melaleuca cuticularis* | 261 | 23.5 | 8 | 14 |
| | | *Melaleuca cuticularis* | 262 | 28.1 | 8 | 16 |
| | | *Melaleuca cuticularis* | 263 | 4.5 | 2.2 | 13 |
| | PLE 55 | *Hakea oleifolia* | 264 | 3.5, 2 | 2.9 | 17 |
| | PLE 55 | *Hakea oleifolia* | 265 | 4.85, 2.55 | 4 | 19 |
| | | *Melaleuca cuticularis* | 266 | 2.1 | 1.7 | 19 |
| | | *Melaleuca cuticularis* | 267 | 18.4, 20.4, 23.8, 33 | 7.5 | 16 |
| | PLE 55 | *Hakea oleifolia* | 268 | 6.75, 2.45 | 4.2 | 17 |
| | PLE 55 | *Hakea oleifolia* | 269 | 2.9, <2, <2 | 4 | 19 |
| | PLE 55 | *Hakea oleifolia* | 270 | 3.3, 3.9 | 3.2 | 17 |
| | PLE 55 | *Hakea oleifolia* | x6 | <2 -seedlings | 0.4 - 3 | Healthy |
| **3A** | PLE 55 | *Hakea oleifolia* | 271 | 5.1, 2.7, 2.5, <2 | 4 | 19 |
| | | *Melaleuca cuticularis* | x1 | <2 - seedling | 1.5 | Slightly stressed |
| | **3B - 3C** | NO TREES | | | | |
| **3D** | | *Melaleuca cuticularis* | 272 | 7.6, 2.95, 5.8, 5.8 | 3.8 | 17 |
| **3E** | | NO TREES | | | | |

# APPENDIX 3

## Transect Understorey Data

## COOMELBERRUP - Transect 1

| Plot | Species # | Species | Number | % Cover | Mean height (m) | Notes |
|---|---|---|---|---|---|---|
| 1A | COOM 4 | *Carpobrotus* sp. | 1 | 0.008 | 0.05 | |
| | COOM 2 | *Jacksonia* sp. | 1 | 0.005 | 0.14 | |
| | COOM 3 | *Stipa elegantissima* | 3 | 1.4 | 0.63 | |
| 1B | | NO UNDERSTOREY | | | | |
| 1C | COOM 6 | *Lomandra effusa* | 2 | 0.66 | 0.5 | |
| 1D | COOM 6 | *Lomandra effusa* | 1 | 0.45 | 0.55 | |
| 1E | COOM 6 | *Lomandra effusa* | 6 | 1.39 | 0.48 | |
| | COOM 7 | *Carpobrotus* sp. | | 0.1 | 0.05 | |
| 2A | COOM 6 | *Lomandra effusa* | 2 | 0.48 | 0.66 | |
| | COOM 3 | *Stipa elegantissima* | 1 | 0.075 | 0.55 | |
| | COOM 8 | *Halosarcia ?indica* | | 15 | 0.3 - 0.6 | |
| | COOM 7 | *Carpobrotus* sp. | | 25 | 0.05 | |
| 2B | COOM 8 | *Halosarcia ?indica* | | 35 | 0.3 - 0.8 | |
| | COOM 9 | *Sarcocornia* sp. | | 4 | 0.3 | |
| 2C | COOM 8 | *Halosarcia ?indica* | | 40 | 0.3 - 0.6 | |
| | COOM 9 | *Sarcocornia* sp. | | 12 | 0.3 | |
| 2D | COOM 8 | *Halosarcia ?indica* | | 8 | 0.4 | |
| | COOM 9 | *Sarcocornia* sp. | | 75 | 0.3 | |
| 2E | COOM 9 | *Sarcocornia* sp. | | 60 | 0.3 | |

## COOMELBERRUP - Transect 2

| Plot | Species # | Species | Number | % Cover | Mean height (m) | Notes |
|---|---|---|---|---|---|---|
| 1A | COOM 3 | *Stipa elegantissima* | 3 | 1.32 | 0.43 | |
| | COOM 6 | *Lomandra effusa* | 1 | 0.01 | 0.3 | |
| 1B | COOM 13 | *Dianella revoluta* | 1 | 1.55 | 0.8 | |
| | COOM 3 | *Stipa elegantissima* | 1 | 0.007 | 0.35 | |
| 1C | COOM 3 | *Stipa elegantissima* | 2 | 0.05 | 0.25 | |
| | COOM 13 | *Dianella revoluta* | 1 | 0.19 | 0.35 | |
| 1D | COOM 3 | *Stipa elegantissima* | 6 | 0.48 | 0.25 | |
| | COOM 13 | *Dianella revoluta* | 4 | 0.15 | 0.23 | |
| 1E | COOM 4 | *Carpobrotus* sp. | 1 | 0.003 | 0.05 | |
| | COOM 7 | *Carpobrotus* sp. | | 8 | 0.05 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **2A** | COOM 8 | *Halosarcia ?indica* | | 12 | 0.3 - 0.4 | |
| | COOM 9 | *Sarcocornia* sp. | | 18 | 0.25 | |
| | COOM 7 | *Carpobrotus* sp. | | 20 | 0.05 | |
| **2B** | COOM 9 | *Sarcocornia* sp. | | 22 | 0.25 - 0.35 | |
| **2C** | COOM 9 | *Sarcocornia* sp. | | 8 | 0.25 | |
| | **2D - 2E** | NO UNDERSTOREY | | | | |

## PARKEYERRING - Transect 1

| Plot | Species # | Species | Number | % Cover | Mean height (m) | Notes |
|---|---|---|---|---|---|---|
| 1A | PARK 1 | *Enchylaena tomentosa* | 5 | 39.5 | 0.13 | |
| | PARK 3 | *Dianella revoluta* | 1 | 4.5 | 0.25 | |
| | PARK 2 | *Stipa trichophylla* | | 5 | 0.3 - 0.4 | |
| 1B | PARK 1 | *Enchylaena tomentosa* | 1 | 2.34 | 0.15 | |
| 1C | PARK 3 | *Dianella revoluta* | 1 | 22.5 | 0.48 | |
| | PARK 4 | *Cyperus gymnocaulos* | | 0.01 | 0.3 | |
| 1D | PARK 4 | *Cyperus gymnocaulos* | | 23 | 0.4 | |
| | PARK 5 | *Atriplex* sp. | 1 | 1.125 | 0.125 | |
| | PARK 7 | *Sarcocornia* sp. | 2 | 4.21 | 0.2 | |
| 1E | PARK 6 | *Sporobolus virginicus* | | 40 | 0.15 | |
| | PARK 7 | *Sarcocornia* sp. | | 5 | 0.2 | |
| 2A | PARK 6 | *Sporobolus virginicus* | | 30 | 0.15 | |
| | PARK 7 | *Sarcocornia* sp. | | 6 | 0.2 | |
| 2B | PARK 6 | *Sporobolus virginicus* | | 40 | 0.15 | |
| | PARK 7 | *Sarcocornia* sp. | | 18 | 0.2 - 0.3 | |
| 2C | PARK 7 | *Sarcocornia* sp. | | 45 | 0.2 - 0.3 | |
| 2D | PARK 7 | *Sarcocornia* sp. | | 65 | 0.25 | |
| 2E | PARK 7 | *Sarcocornia* sp. | | 5 | 0.2 | |

## PARKEYERRING - Transect 2

| Plot | Species # | Species | Number | % Cover | Mean height (m) | Notes |
|---|---|---|---|---|---|---|
| | 1A - 1E | NO UNDERSTOREY | | | | |
| 2A | PARK 7 | *Sarcocornia* sp. | 1 | 23.62 | 1.1 | |
| 2B | | NO UNDERSTOREY | | | | |
| 2C | PARK 7 | *Sarcocornia* sp. | | 6 | 0.3 | |
| 2D | PARK 7 | *Sarcocornia* sp. | | 45 | 0.3 | |
| 2E | PARK 7 | *Sarcocornia* sp. | | 75 | 0.3 | |

## DUMBLEYUNG - Transect 1

| Plot | Species # | Species | Number | % Cover | Mean height (m) | Notes |
|---|---|---|---|---|---|---|
| 1A | DUMB 4 | *Templetonia sulcata* | 2 | 13.5 | 1.05 | |
| | DUMB 3 | *Atriplex* sp. | 4 | 3.95 | 0.15 | |
| | DUMB 2 | *Enchylaena tomentosa* | 2 | 6.39 | 0.275 | |
| | DUMB 1 | *Acacia erinacea* | 1 | 9.22 | 0.15 | |
| 1B | DUMB 1 | *Acacia erinacea* | 2 | 10.35 | 0.1 | |
| | DUMB 2 | *Enchylaena tomentosa* | 3 | 3.34 | 0.175 | |
| | DUMB 4 | *Templetonia sulcata* | 1 | 8.1 | 1.4 | |
| | DUMB 3 | *Atriplex* sp. | 4 | 4.34 | 0.18 | |
| 1C | DUMB 5 | *Grass* sp. | | 0.1 | 0.2 | |
| 1D | DUMB 2 | *Enchylaena tomentosa* | 1 | 1.41 | 0.3 | |
| 1E | DUMB 6 | *Chenopodium* sp | 1 | 4.27 | 0.25 | |
| | **2A - 2B** | NO UNDERSTOREY | | | | Annuals only |
| 2C | DUMB 7 | *Halosarcia ?halocnemoides* | 5 | 0.88 | 0.24 | |
| 2D | DUMB 7 | *Halosarcia ?halocnemoides* | 6 | 0.52 | 0.25 | |
| 2E | DUMB 7 | *Halosarcia ?halocnemoides* | 11 | 18.61 | 0.375 | |
| 3A | DUMB 7 | *Halosarcia ?halocnemoides* | | 40 | 0.3 - 0.5 | |
| 3B | DUMB 7 | *Halosarcia ?halocnemoides* | | 25 | 0.4 | |
| 3C | DUMB 7 | *Halosarcia ?halocnemoides* | | 45 | 0.3 - 0.4 | |
| 3D | DUMB 7 | *Halosarcia ?halocnemoides* | | 40 | 0.3 | |
| 3E | DUMB 7 | *Halosarcia ?halocnemoides* | | 20 | 0.5 - 0.3 | |

## DUMBLEYUNG - Transect 2

| Plot | Species # | Species | Number | % Cover | Mean height (m) | Notes |
|---|---|---|---|---|---|---|
| 1A | | NO UNDERSTOREY | | | | 100% Annuals |
| 1B | DUMB 6 | *Chenopodium* sp | 1 | 1.59 | 0.2 | 50% Annuals |
| 1C | DUMB 8 | *Cyperus gymnocaulos* | 2 | 11.79 | 0.775 | 50% Annuals |
| 1D | DUMB 7 | *Halosarcia ?halocnemoides* | 1 | 1 | 0.35 | 70% Annuals |
| 1E | | NO UNDERSTOREY | | | | 70% Annuals |

| | | | | | | |
|---|---|---|---|---|---|---|
| 2A | | NO UNDERSTOREY | | | | 30% Annuals |
| 2B | DUMB 7 | *Halosarcia ?halocnemoides* | 2 | 4.76 | 0.4 | 70% Annuals |
| 2C | DUMB 7 | *Halosarcia ?halocnemoides* | 6 | 12.27 | 0.53 | 50% Annuals |
| 2D | DUMB 7 | *Halosarcia ?halocnemoides* | 9 | 9.8 | 0.34 | 40% Annuals |
| 2E | DUMB 7 | *Halosarcia ?halocnemoides* | | 32 | 0.3 - 0.5 | |
| 3A | DUMB 7 | *Halosarcia ?halocnemoides* | | 40 | 0.3 - 0.6 | |
| 3B | DUMB 7 | *Halosarcia ?halocnemoides* | | 25 | 0.3 - 0.6 | |
| 3C | DUMB 7 | *Halosarcia ?halocnemoides* | | 25 | 0.3 - 0.6 | |
| 3D | | NO UNDERSTOREY | | | | |
| 3E | DUMB 9 | *Kennedia eximia* | 1 | 46.8 | 0.01 | |
| | DUMB 6 | *Chenopodium* sp | 1 | 2.2 | 0.2 | |

## DUMBLEYUNG - Transect 3

| Plot | Species # | Species | Number | % Cover | Mean height (m) | Notes |
|---|---|---|---|---|---|---|
| 1A | DUMB 2 | *Enchylaena tomentosa* | 2 | 1.1 | 0.175 | |
| 1B | DUMB 2 | *Enchylaena tomentosa* | 7 | 4.9 | 0.16 | |
| 1C | DUMB 2 | *Enchylaena tomentosa* | 2 | 0.58 | 0.15 | |
| | DUMB 7 | *Halosarcia ?halocnemoides* | 4 | 3.08 | 0.25 | |
| 1D | DUMB 2 | *Enchylaena tomentosa* | 1 | 1.12 | 0.15 | |
| | DUMB 7 | *Halosarcia ?halocnemoides* | | 20 | 0.2 - 0.4 | |
| | DUMB 10 | *Disphyma crassifolium* | 2 | 0.18 | 0.05 | |
| 1E | DUMB 10 | *Disphyma crassifolium* | | 5 | 0.05 | |
| | DUMB 7 | *Halosarcia ?halocnemoides* | | 15 | 0.3 - 0.5 | |
| 2A | DUMB 2 | *Enchylaena tomentosa* | 1 | 1.72 | 0.3 | |
| | DUMB 7 | *Halosarcia ?halocnemoides* | | 35 | 0.3 - 0.5 | |
| 2B | DUMB 2 | *Enchylaena tomentosa* | 1 | 1.35 | 0.3 | |
| | DUMB 7 | *Halosarcia ?halocnemoides* | | 20 | 0.3 | |
| | DUMB 3 | *Atriplex* sp. | 2 | 3.75 | 0.2 | |
| | DUMB 11 | *Alyogyne huegelii* | 1 | 0.14 | 1 | |
| | DUMB 4 | *Templetonia sulcata* | 1 | 1.75 | 0.4 | |
| 2C | DUMB 4 | *Templetonia sulcata* | 1 | 1.2 | 0.4 | |
| | DUMB 3 | *Atriplex* sp. | 1 | 0.61 | 0.2 | |
| | DUMB 10 | *Disphyma crassifolium* | 3 | 0.14 | 0.05 | |
| | DUMB 7 | *Halosarcia ?halocnemoides* | | 45 | 0.3 - 0.5 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | DUMB 2 | *Enchylaena tomentosa* | 1 | 0.27 | 0.2 | |
| 2D | DUMB 7 | *Halosarcia ?halocnemoides* | | 50 | 0.3 - 0.5 | |
| 2E | DUMB 7 | *Halosarcia ?halocnemoides* | | 50 | 0.3 - 0.4 | |
| | DUMB 10 | *Disphyma crassifolium* | 1 | 0.47 | 0.05 | |

## DUMBLEYUNG - Transect 4

| Plot | Species # | Species | Number | % Cover | Mean height (m) | Notes |
|---|---|---|---|---|---|---|
| 1A | DUMB 7 | *Halosarcia ?halocnemoides* | 2 | 0.03 | 0.3 | |
| 1B | DUMB 7 | *Halosarcia ?halocnemoides* | 9 | 0.21 | 0.275 | |
| 1C | DUMB 2 | *Enchylaena tomentosa* | 1 | 6.47 | 0.3 | |
| | DUMB 7 | *Halosarcia ?halocnemoides* | 10 | 3.05 | 0.35 | |
| 1D | DUMB 7 | *Halosarcia ?halocnemoides* | | 18 | 0.3 - 0.5 | |
| 1E | DUMB 7 | *Halosarcia ?halocnemoides* | | 35 | 0.2 - 0.5 | |
| 2A | DUMB 7 | *Halosarcia ?halocnemoides* | | 18 | 0.3 - 0.5 | |
| 2B | DUMB 7 | *Halosarcia ?halocnemoides* | | 15 | 0.3 - 0.5 | |
| 2C | DUMB 7 | *Halosarcia ?halocnemoides* | | 25 | 0.3 - 0.5 | |
| 2D | DUMB 7 | *Halosarcia ?halocnemoides* | | 30 | 0.3 - 0.5 | |
| 2E | DUMB 7 | *Halosarcia ?halocnemoides* | | 12 | 0.3 - 0.5 | |

## ALTHAM - Transect 1

| Plot | Species # | Species | Number | % Cover | Mean height (m) | Notes |
|---|---|---|---|---|---|---|
| 1A | ALTH 1 | *Enchylaena tomentosa* | 11 | 19.44 | 0.29 | |
| | ALTH 2 | *Atriplex* sp 2. | 6 | 23 | 0.52 | |
| | ALTH 3 | *Acacia insolita* sub sp. *insolita* | 4 | 12.7 | 1.17 | |
| 1B | ALTH 1 | *Enchylaena tomentosa* | 9 | 23.46 | 0.425 | |
| | ALTH 2 | *Atriplex* sp 2. | 4 | 6.86 | 0.3 | |
| | ALTH 4 | *Carpobrotus* sp. | 1 | 0.067 | 0.1 | |
| 1C | | NO UNDERSTOREY | | | | |
| 1D | ALTH 5 | *Dodonaea viscosa* | 1 | 0.63 | 0.5 | |
| | ALTH 6 | *Gahnia* sp. | 3 | 0.5 | 0.4 | |
| 1E | ALTH 7 | *Daviesia* sp | 1 | 8.55 | 1 | |
| | ALTH 6 | *Gahnia* sp. | 2 | 12.49 | 0.4 | |
| | ALTH 2 | *Atriplex* sp 2 | 1 | 4.72 | 0.3 | |
| | ALTH 1 | *Enchylaena tomentosa* | 2 | 0.12 | 0.2 | |
| | ALTH 4 | *Carpobrotus* sp. | | 5 | 0.2 | |
| 2A | ALTH 4 | *Carpobrotus* sp. | | 3 | 0.1 | |
| | ALTH 3 | *Atriplex* sp 2 | 1 | 5.5 | 0.3 | |
| | ALTH 1 | *Enchylaena tomentosa* | 3 | 1.58 | 0.2 | |
| | ALTH 6 | *Gahnia* sp. | 2 | 0.61 | 0.4 | |
| | ALTH 8 | *Billardiera lehmanniana* | | 4 | 1.8 | |
| 2B | ALTH 9 | *Halosarcia* sp. | 1 | 2.25 | 0.3 | |
| | ALTH 4 | *Carpobrotus* sp. | | 1 | 0.1 | |
| | ALTH 8 | *Billardiera lehmanniana* | | 5 | 2 | |
| | ALTH 1 | *Enchylaena tomentosa* | 2 | 0.39 | 0.15 | |
| | ALTH 10 | *Stipa trichophylla* | | 1 | 0.3 | |
| | ALTH 11 | *Frankenia* sp. | 1 | 1.27 | 0.3 | |
| | ALTH 2 | *Atriplex* sp 2. | 1 | 3.05 | 1 | |
| 2C | ALTH 9 | *Halosarcia* sp. | | 25 | 0.3 | |
| | ALTH 4 | *Carpobrotus* sp. | | 2 | 0.1 | |
| | ALTH 2 | *Atriplex* sp 2. | 2 | 2.05 | 0.3 | |
| 2D | ALTH 9 | *Halosarcia* sp. | | 20 | 0.3 | |
| | ALTH 4 | *Carpobrotus* sp. | | 8 | 0.15 | |
| | ALTH 9 | *Enchylaena tomentosa* | 4 | 2.66 | 1.5 | |
| | ALTH 2 | *Atriplex* sp 2. | 2 | 2.98 | 0.4 | |
| 2E | ALTH 12 | *Mesembryanthemum nodiflorum* | | 12 | 0.05 | |
| | ALTH 9 | *Halosarcia* sp. | | 10 | 0.3 | |
| | ALTH 1 | *Enchylaena tomentosa* | 2 | 1.4 | 0.4 | |
| | ALTH 13 | *Parapholis incurva* | | 5 | 0.2 | |

## ALTHAM - Transect 2

| Plot | Species # | Species | Number | % Cover | Mean height (m) | Notes |
|---|---|---|---|---|---|---|
| 1A | ALTH 14 | *Lomandra micrantha* subsp. *teretifolia* | 2 | 6.36 | 0.5 | |
| | ALTH 15 | *Alyxia buxifolia* | 1 | 1.72 | 0.35 | |
| | ALTH 2 | *Atriplex* sp 2 | 5 | 18.46 | 0.39 | |
| | ALTH 10 | *Stipa trichophylla* | | 8 | 0.3 - 0.5 | |
| 1B | ALTH 10 | *Stipa trichophylla* | | 5 | 0.4 | |
| | ALTH 16 | *Carpobrotus* sp. | | 3 | 0.05 | |
| | ALTH 4 | *Carpobrotus* sp. | 2 | 0.49 | 0.05 | |
| | ALTH 2 | *Atriplex* sp 2 | 7 | 4 | 0.21 | |
| | ALTH 1 | *Enchylaena tomentosa* | 3 | 0.84 | 0.2 | |
| 1C | ALTH 16 | *Carpobrotus* sp. | | 1 | 0.05 | |
| | ALTH 4 | *Carpobrotus* sp. | | 10 | 0.05 | |
| | ALTH 10 | *Stipa trichophylla* | | 15 | 0.3 | |
| | ALTH 2 | *Atriplex* sp 2 | 9 | 9.53 | 0.23 | |
| | ALTH 1 | *Enchylaena tomentosa* | 2 | 0.61 | 0.175 | |
| | ALTH 3 | *Acacia insolita* sub sp. *insolita* | 1 | 0.73 | 0.6 | |
| 1D | ALTH 16 | *Carpobrotus* sp. | | 12 | 0.05 | |
| | ALTH 4 | *Carpobrotus* sp. | | 8 | 0.05 | |
| | ALTH 10 | *Stipa trichophylla* | | 5 | 0.3 | |
| | ALTH 1 | *Enchylaena tomentosa* | 3 | 1.12 | 0.15 | |
| | ALTH 2 | *Atriplex* sp 2 | 2 | 0.83 | 0.3 | |
| 1E | ALTH 16 | *Carpobrotus* sp. | | 5 | 0.05 | |
| | ALTH 4 | *Carpobrotus* sp. | | 8 | 0.1 | |
| | ALTH 10 | *Stipa trichophylla* | | 5 | 0.3 | |
| | ALTH 2 | *Atriplex* sp 2 | 8 | 10.38 | 0.26 | |
| | ALTH 17 | *Atriplex vesicaria* | 1 | 1.69 | 0.5 | |
| 2A | ALTH 16 | *Carpobrotus* sp. | | 2 | 0.05 | |
| | ALTH 4 | *Carpobrotus* sp. | | 4 | 0.05 | |
| | ALTH 10 | *Stipa trichophylla* | | 1 | 0.4 | |
| | ALTH 3 | *Acacia insolita* sub sp. *insolita* | 1 | 0.02 | 0.4 | |
| | ALTH 1 | *Enchylaena tomentosa* | 6 | 4.63 | 0.17 | |
| | ALTH 2 | *Atriplex* sp 2 | 3 | 18.45 | 0.63 | |
| 2B | ALTH 4 | *Carpobrotus* sp. | | 2 | 0.05 | |
| | ALTH 10 | *Stipa trichophylla* | | 4 | 0.3 | |
| | ALTH 17 | *Atriplex vesicaria* | 1 | 0.19 | 0.2 | |
| | ALTH 2 | *Atriplex* sp 2 | 14 | 12.5 | 0.25 | |
| | ALTH 1 | *Enchylaena tomentosa* | 2 | 0.63 | 0.07 | |
| | ALTH 18 | *Lepidosperma* sp. | | 4 | 0.2 | |
| 2C | ALTH 16 | *Carpobrotus* sp. | | 1 | 0.05 | |
| | ALTH 4 | *Carpobrotus* sp. | | 1 | 0.05 | |
| | ALTH 18 | *Lepidosperma* sp. | | 3 | 0.3 | |
| | ALTH 2 | *Atriplex* sp 2 | 7 | 11.35 | 0.26 | |
| | ALTH 1 | *Enchylaena tomentosa* | 1 | 1.12 | 0.05 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | ALTH 10 | *Stipa trichophylla* | | 1 | 0.2 | |
| **2D** | ALTH 18 | *Lepidosperma* sp. | | 15 | 0.2 | |
| | ALTH 10 | *Stipa trichophylla* | | 5 | 0.3 | |
| | ALTH 15 | *Alyxia buxifolia* | 1 | 0.89 | 0.5 | |
| | ALTH 2 | *Atriplex* sp 2 | 8 | 10.07 | 0.32 | |
| | ALTH 1 | *Enchylaena tomentosa* | 2 | 0.71 | 0.15 | |
| | ALTH 14 | *Lomandra micrantha* subsp. *teretifolia* | 1 | 0.34 | 0.2 | |
| | ALTH 19 | *Dodonaea viscosa* | 2 | 1.42 | 0.35 | |
| **2E** | ALTH 18 | *Lepidosperma* sp. | | 3 | 0.3 | |
| | ALTH 10 | *Stipa trichophylla* | | 1 | 0.3 | |
| | ALTH 2 | *Atriplex* sp 2 | 6 | 8.05 | 0.31 | |
| | ALTH 3 | *Acacia insolita* sub sp. *insolita* | 1 | 0.14 | 0.2 | |
| | ALTH 1 | *Enchylaena tomentosa* | 2 | 0.53 | 0.125 | |
| | ALTH 17 | *Atriplex vesicaria* | 1 | 0.21 | 0.15 | |
| **3A** | ALTH 17 | *Atriplex vesicaria* | 2 | 8.1 | 0.35 | |
| | ALTH 2 | *Atriplex* sp 2 | 3 | 7.37 | 0.26 | |
| | ALTH 1 | *Enchylaena tomentosa* | 7 | 4.04 | 0.15 | |
| **3B** | ALTH 17 | *Atriplex vesicaria* | 3 | 5.15 | 0.33 | |
| | ALTH 1 | *Enchylaena tomentosa* | 5 | 1.06 | 0.22 | |
| | ALTH 10 | *Stipa trichophylla* | | 1 | 0.2 | |
| | ALTH 2 | *Atriplex* sp 2 | 2 | 1.56 | 0.3 | |
| | ALTH 16 | *Carpobrotus* sp. | | 2 | 0.05 | |
| | ALTH 4 | *Carpobrotus* sp. | | 10 | 0.05 | |
| **3C** | ALTH 9 | *Halosarcia* sp. | | 20 | 0.3 | |
| | ALTH 16 | *Carpobrotus* sp. | | 8 | 0.05 | |
| | ALTH 13 | *Parapholis incurva* | | 5 | 0.1 | |
| | ALTH 10 | *Stipa trichophylla* | | 0.1 | 0.3 | |
| | ALTH 11 | *Frankenia* sp | 4 | 4.93 | 0.22 | |
| | ALTH 17 | *Atriplex vesicaria* | 3 | 1.68 | 0.26 | |
| | ALTH 3 | *Acacia insolita* sub sp. *insolita* | 2 | 0.56 | 0.45 | |
| | ALTH 1 | *Enchylaena tomentosa* | 3 | 0.68 | 0.2 | |
| **3D** | ALTH 2 | *Atriplex* sp 2 | 2 | 0.84 | 0.3 | |
| | ALTH 9 | *Halosarcia* sp. | | 15 | 0.3 | |
| | ALTH 4 | *Carpobrotus* sp. | | 4 | 0.1 | |
| | ALTH 16 | *Carpobrotus* sp. | | 6 | 0.1 | |
| **3E** | ALTH 12 | *Mesembryanthemum nodiflorum* | | 3 | 0.01 | |
| | ALTH 4 | *Carpobrotus* sp. | | 4 | 0.1 | |
| | ALTH 16 | *Carpobrotus* sp. | | 5 | 0.1 | |
| | ALTH 9 | *Halosarcia* sp. | | 21 | 0.3 | |
| | ALTH 1 | *Enchylaena tomentosa* | 2 | 1.24 | 0.2 | |

## ALTHAM - Transect 3

| Plot | Species # | Species | Number | % Cover | Mean height (m) | Notes |
|---|---|---|---|---|---|---|
| 1A | ALTH 9 | *Halosarcia* sp. | | 40 | 0.5 | |
| 1B | ALTH 17 | *Atriplex vesicaria* | 1 | 15.67 | 1.4 | |
| | ALTH 11 | *Frankenia* sp | 3 | 7.49 | 0.3 | |
| | ALTH 9 | *Halosarcia* sp. | | 15 | 0.4 | |
| 1C | ALTH 13 | *Parapholis incurva* | | 12 | 0.3 | |
| | ALTH 9 | *Halosarcia* sp. | | 50 | 0.3 - 0.6 | |
| | ALTH 16 | *Carpobrotus* sp. | | 1 | 0.05 | |
| | ALTH 11 | *Frankenia* sp | 2 | 8.7 | 0.4 | |
| | ALTH 1 | *Enchylaena tomentosa* | 3 | 1.02 | 0.2 | |
| | ALTH 2 | *Atriplex* sp 2 | 1 | 0.33 | 0.3 | |
| 1D | ALTH 9 | *Halosarcia* sp. | | 30 | 0.5 | |
| | ALTH 6 | *Gahnia* sp. | | 12 | 0.4 | |
| | ALTH 1 | *Enchylaena tomentosa* | 1 | 4.03 | 0.3 | |
| | ALTH 13 | *Parapholis incurva* | | 10 | 0.1 | |
| 1E | ALTH 6 | *Gahnia* sp. | | 20 | 0.4 | |
| 2A | ALTH 16 | *Carpobrotus* sp. | | 1 | 0.1 | |
| | ALTH 14 | *Lomandra micrantha* subsp. *teretifolia* | 4 | 9.06 | 0.4 | |
| | ALTH 2 | *Atriplex* sp 2 | 1 | 7.27 | 0.5 | |
| | ALTH 11 | *Frankenia* sp | 3 | 0.44 | 0.2 | |
| 2B | ALTH 9 | *Halosarcia* sp. | | 2 | 0.2 | |
| | ALTH 11 | *Frankenia* sp | 2 | 4.14 | 0.55 | |
| | ALTH 17 | *Atriplex vesicaria* | 1 | 5 | 0.5 | |
| | ALTH 2 | *Atriplex* sp 2 | 1 | 5.62 | 0.7 | |
| | ALTH 14 | *Lomandra micrantha* subsp. *teretifolia* | 4 | 6.27 | 0.45 | |
| 2C | ALTH 9 | *Halosarcia* sp. | | 10 | 0.3 | |
| | ALTH 2 | *Atriplex* sp 2 | 9 | 18.01 | 0.36 | |
| 2D | ALTH 16 | *Carpobrotus* sp. | | 12 | 0.05 | |
| | ALTH 9 | *Halosarcia* sp. | | 5 | 0.3 | |
| | ALTH 2 | *Atriplex* sp 2 | 3 | 11.08 | 0.53 | |
| | ALTH 1 | *Enchylaena tomentosa* | 2 | 0.65 | 0.4 | |
| 2E | ALTH 9 | *Halosarcia* sp. | | 40 | 0.2 - 0.6 | |
| | Melaleuca sp 1 | *Melaleuca halmaturorum* | 1 | 0.14 | 0.4 | |
| | ALTH 17 | *Atriplex vesicaria* | 1 | 3.22 | 1 | |

## YAALUP - Transect 1

| Plot | Species # | Species | Number | % Cover | Mean height (m) | Notes |
|---|---|---|---|---|---|---|
| 1A | YAAL 1 | *Centipeda minima* | | 2.5 | 0.05 | |
| 1B | YAAL 1 | *Centipeda minima* | | 6 | 0.05 | |
| | YAAL 2 | *Atriplex* sp. | 4 | 0.1 | 0.1 | |
| 1C | YAAL 1 | *Centipeda minima* | | 1 | 0.05 | |
| | YAAL 2 | *Atriplex* sp. | 3 | 0.07 | 0.11 | |
| 1D | YAAL 2 | *Atriplex* sp. | 4 | 0.01 | 0.08 | |
| 1E | | NO UNDERSTOREY | | | | |
| 2A | YAAL 1 | *Centipeda minima* | | 0.01 | 0.05 | |
| 2B | YAAL 1 | *Centipeda minima* | | 2 | 0.05 | |
| | YAAL 2 | *Atriplex* sp. | 2 | 0.004 | 0.125 | |
| 2C | YAAL 1 | *Centipeda minima* | | 7.5 | 0.05 | |
| | YAAL 2 | *Atriplex* sp. | 2 | 0.01 | 0.1 | |
| 2D | YAAL 1 | *Centipeda minima* | | 5 | 0.05 | |
| 2E | YAAL 1 | *Centipeda minima* | | 2.5 | 0.05 | |
| 3A | YAAL 1 | *Centipeda minima* | | 0.1 | 0.05 | |
| | YAAL 2 | *Atriplex* sp. | 2 | 0.001 | 0.05 | |
| 3B | | NO UNDERSTOREY | | | | |
| 3C | YAAL 1 | *Centipeda minima* | | 1 | 0.05 | |
| | 3D - 3E | WATER | | | | |

## YAALUP - Transect 2

| Plot | Species # | Species | Number | % Cover | Mean height (m) | Notes |
|---|---|---|---|---|---|---|
| | 1A - 3E | NO UNDERSTOREY | | | | |

## BENNETTS - Transect 1

| Plot | Species # | Species | Number | % Cover | Mean height (m) | Notes |
|---|---|---|---|---|---|---|
| 1A | BENN 3 | *Schoenus* sp. | | 2 | 0.1 - 0.5 | |
| | BENN 4 | *Frankenia* sp | 2 | 3.46 | 0.1 | |
| 1B | BENN 4 | *Frankenia* sp | 8 | 6.08 | 0.13 | |
| | BENN 3 | *Schoenus* sp. | | 0.01 | 0.7 | |
| | BENN 5 | *Gastrolobium pusillum* | 1 | 3 | 0.05 | |
| 1C | BENN 3 | *Schoenus* sp. | | 1 | 0.1 - 0.3 | |
| | BENN 4 | *Frankenia* sp | 4 | 0.44 | 0.1 | |
| | BENN 6 | *Sarcocornia* sp | | 1 | 0.15 - 0.25 | |
| 1D | BENN 6 | *Sarcocornia* sp | | 2.5 | 0.15 - 0.25 | |
| | BENN 4 | *Frankenia* sp | 1 | 0.03 | 0.1 | |
| | BENN 3 | *Schoenus* sp. | | 0.01 | 0.2 | |
| 1E | BENN 6 | *Sarcocornia* sp | | 2.5 | 0.1 - 0.3 | |
| | BENN 4 | *Frankenia* sp | 1 | 0.1 | 0.15 | |
| 2A | BENN 6 | *Sarcocornia* sp | | 1 | 0.3 | |
| 2B | BENN 6 | *Sarcocornia* sp | | 7.5 | 0.2 - 0.6 | |
| | BENN 4 | *Frankenia* sp | 1 | 0.38 | 0.3 | |
| 2C | BENN 6 | *Sarcocornia* sp | | 5 | 0.1 - 0.5 | |
| | BENN 7 | *Lawrencia squamata* | 1 | 0.44 | 0.3 | |
| 2D | BENN 8 | *Halosarcia indica* | | 10 | 0.1 - 0.25 | |
| 2E | BENN 8 | *Halosarcia indica* | | 15 | 0.1 - 0.35 | |

## BENNETTS - Transect 2

| Plot | Species # | Species | Number | % Cover | Mean height (m) | Notes |
|---|---|---|---|---|---|---|
| 1A | BENN 9 | *Schoenus caespititius* | | 2.5 | 0.2 - 0.6 | |
| 1B | BENN 9 | *Schoenus caespititius* | | 7.5 | 0.1 - 0.6 | |
| 1C | BENN 9 | *Schoenus caespititius* | | 5 | 0.2 - 0.6 | |
| 1D | BENN 6 | *Sarcocornia* sp. | 1 | 0.5 | 0.25 | |
| | BENN 9 | *Schoenus caespititius* | | 5 | 0.2 - 0.5 | |
| 1E | BENN 9 | *Schoenus caespititius* | | 2.5 | 0.2 - 0.5 | |
| 2A | BENN 9 | *Schoenus caespititius* | | 0.1 | 0.2 | |
| | BENN 6 | *Sarcocornia* sp. | 1 | 0.06 | 0.05 | |
| | BENN 4 | *Frankenia* sp. | 1 | 1.56 | 0.2 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **2B** | BENN 9 | *Schoenus caespititius* | | 1 | 0.1 - 0.5 | |
| | BENN 6 | *Sarcocornia* sp. | | 5 | 0.2 - 0.5 | |
| | BENN 4 | *Frankenia* sp. | 11 | 5.41 | 0.15 | |
| **2C** | BENN 9 | *Schoenus caespititius* | | 0.5 | 0.2 | |
| | BENN 6 | *Sarcocornia* sp. | | 1 | 0.2 - 0.45 | |
| | BENN 4 | *Frankenia* sp. | 12 | 2.5 | 0.1 - 0.25 | |
| **2D** | BENN 9 | *Schoenus caespititius* | | 0.01 | 0.05 - 0.15 | |
| | BENN 4 | *Frankenia* sp. | 7 | 1 | 0.1 - 0.2 | |
| **2E** | BENN 9 | *Schoenus caespititius* | | 2.5 | 0.1 - 0.25 | |
| | BENN 4 | *Frankenia* sp. | 15 | 5 | 0.1 - 0.25 | |
| **3A** | BENN 4 | *Frankenia* sp. | 2 | 0.01 | 0.05 - 0.1 | |
| **3B** | BENN 6 | *Sarcocornia* sp. | | 1 | 0.2 | |
| | BENN 4 | *Frankenia* sp. | 4 | 1 | 0.05 - 0.15 | |
| **3C** | BENN 6 | *Sarcocornia* sp. | | 1 | 0.15 - 0.3 | |
| **3D** | BENN 6 | *Sarcocornia* sp. | | 2.5 | 0.15 - 0.4 | |
| | BENN 10 | *Disphyma crassifolium* | 2 | 0.09 | 0.4 | |
| **3E** | BENN 6 | *Sarcocornia* sp. | | 1 | 0.1 - 0.3 | |
| | BENN 10 | *Disphyma crassifolium* | 3 | 0.26 | 0.05 | |

## RONNERUP - Transect 1

| Plot | Species # | Species | Number | % Cover | Mean height (m) | Notes |
|---|---|---|---|---|---|---|
| 1A | RONN 4 | *Atriplex vesicaria* | 8 | 4.85 | 0.44 | |
| | RONN 5 | *Chenopodium sp.* | 3 | 0.96 | 0.15 | |
| 1B | RONN 4 | *Atriplex vesicaria* | 12 | 14.97 | 0.7 | |
| | RONN 6 | *Gahnia trifida* | | 1.5 | 0.8 | |
| | RONN 7 | *Billardiera? lehmanniana* | 1 | 1 | 0.65 | |
| | RONN 8 | *Threlkeldia diffusa* | 2 | 3 | 0.125 | |
| 1C | RONN 4 | *Atriplex vesicaria* | 2 | 1.68 | 0.625 | |
| | RONN 9 | *Olearia axillaris* | 6 | 15.81 | 0.625 | |
| 1D | RONN 6 | *Gahnia trifida* | | 2.5 | 0.5 | |
| | RONN 10 | *Chenopodiaceae* | 1 | 2.1 | 0.02 | |
| | RONN 7 | *Billardiera? lehmanniana* | 1 | 5 | 1.2 | |
| 1E | RONN 9 | *Olearia axillaris* | 3 | 7.5 | 0.5 | |
| | RONN 11 | *Rhagodia drummondii* | 1 | 2.6 | 0.05 | |
| | RONN 12 | *Lomandra effusa* | 1 | 5.6 | 0.55 | |
| 2A | RONN 7 | *Billardiera? lehmanniana* | 1 | 0.75 | 0.7 | |
| | RONN 6 | *Gahnia trifida* | | 2 | 0.5 | |
| | RONN 9 | *Olearia axillaris* | 1 | 16.25 | 0.9 | |
| 2B | RONN 9 | *Olearia axillaris* | 3 | 11 | 0.48 | |
| | RONN 6 | *Gahnia trifida* | | 0.5 | 0.5 | |
| 2C | RONN 9 | *Olearia axillaris* | 3 | 8.72 | 0.43 | |
| | RONN 12 | *Lomandra effusa* | | 1 | 0.5 | |
| | RONN 11 | *Rhagodia drummondii* | 1 | 4.87 | 0.2 | |
| 2D | RONN 9 | *Olearia axillaris* | 7 | 34.9 | 0.75 | |
| | RONN 6 | *Gahnia trifida* | | 10 | 1.1 | |
| 2E | RONN 6 | *Gahnia trifida* | | 20 | 1.1 | |
| | RONN 4 | *Atriplex vesicaria* | 1 | 12.65 | 0.85 | |
| | RONN 9 | *Olearia axillaris* | 2 | 5.76 | 0.62 | |
| | RONN 13 | *Halosarcia indica* | | 1 | 0.65 | |
| | RONN 14 | *Disphyma crassifolium* | | 0.01 | 0.5 | |
| 3A | RONN 11 | *Rhagodia drummondii* | 1 | 0.31 | 0.1 | |
| | RONN 6 | *Gahnia trifida* | | 25 | 1.2 | |
| | RONN 14 | *Disphyma crassifolium* | | 5 | 0.05 | |
| 3B | RONN 14 | *Disphyma crassifolium* | | 2.5 | 0.05 | |
| | RONN 6 | *Gahnia trifida* | | 5 | 1.1 | |
| | RONN 8 | *Threlkeldia diffusa* | 2 | 0.97 | 0.2 | |
| | RONN 15 | *Rhagodia drummondii* | | 5 | 0.3 | |
| 3C | RONN 13 | *Halosarcia indica* | | 15 | 0.1 - 0.8 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | RONN 6 | *Gahnia trifida* | | 1 | 0.3 | |
| | RONN 15 | *Rhagodia drummondii* | | 0.1 | 0.35 | |
| | RONN 8 | *Threlkeldia diffusa* | 3 | 7.78 | 0.3 | |
| 3D | RONN 13 | *Halosarcia indica* | | 8 | 0.2 | |
| | RONN 8 | *Threlkeldia diffusa* | 1 | 7.43 | 0.25 | |
| | RONN 14 | *Disphyma crassifolium* | | 5 | 0.05 | |
| | RONN 16 | *Stipa juncifolia* | | 0.5 | 0.3 | |
| 3E | RONN 14 | *Disphyma crassifolium* | | 7.5 | 0.05 | |
| | RONN 16 | *Stipa juncifolia* | | 1 | 0.3 | |
| | RONN 13 | *Halosarcia indica* | | 8 | 0.1 - 0.4 | |
| | RONN 17 | *Frankenia* sp. | | 10 | 0.1 | |

## RONNERUP - Transect 2

| Plot | Species # | Species | Number | % Cover | Mean height (m) | Notes |
|---|---|---|---|---|---|---|
| 1A | RONN 14 | *Disphyma crassifolium* | 1 | 1 | 0.01 | |
| | RONN 16 | *Stipa juncifolia* | | 1 | 0.2 - 0.5 | |
| | RONN 9 | *Olearia axillaris* | 2 | 1.18 | 0.25 | |
| | RONN 18 | *Maireana* sp. | 2 | 7.75 | 0.65 | |
| | RONN 19 | *Stackhousia scoparia* | 2 | 0.945 | 0.175 | |
| 1B | RONN 12 | *Lomandra effusa* | | 2.5 | 1.1 | |
| | RONN 15 | *Rhagodia drummondii* | 1 | 1.83 | 0.15 | |
| | RONN 18 | *Maireana* sp. | 1 | 0.16 | 0.2 | |
| 1C | RONN 14 | *Disphyma crassifolium* | | 0.01 | 0.05 | |
| | RONN 9 | *Olearia axillaris* | 4 | 1.66 | 0.28 | |
| | RONN 7 | *Billardiera? lehmanniana* | 1 | 0.31 | 0.28 | |
| | RONN 12 | *Lomandra effusa* | | 8 | 0.9 | |
| | RONN 6 | *Gahnia trifida* | | 1 | 0.5 | |
| 1D | RONN 12 | *Lomandra effusa* | | 10 | 1.1 | |
| | RONN 6 | *Gahnia trifida* | | 1 | 0.5 | |
| | RONN 14 | *Disphyma crassifolium* | | 0.01 | 0.05 | |
| | RONN 20 | *Rhagodia preissii* | | 15 | 1.3 | |
| 1E | RONN 16 | *Stipa juncifolia* | | 1 | 0.05 | |
| | RONN 14 | *Disphyma crassifolium* | | 0.5 | 0.05 | |
| 2A | RONN 16 | *Stipa juncifolia* | | 2.5 | 0.2 - 0.5 | |
| | RONN 14 | *Disphyma crassifolium* | | 1 | 0.05 | |
| | RONN 18 | *Maireana* sp. | 1 | 4.2 | 0.25 | |
| | RONN 13 | *Halosarcia indica* | | 2.5 | 0.1 | |
| 2B | RONN 16 | *Stipa juncifolia* | | 2.5 | 0.05 - 0.25 | |
| | RONN 14 | *Disphyma crassifolium* | | 1 | 0.05 | |
| | RONN 18 | *Maireana* sp. | 1 | 2.5 | 1 | |
| | RONN 13 | *Halosarcia indica* | | 0.01 | 0.1 | |
| 2C | RONN 16 | *Stipa juncifolia* | | 35 | 0.85 | |

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|---|---|---|---|---|---|---|
| | RONN 13 | *Halosarcia indica* | | 20 | 0.5 | |
| | RONN 14 | *Disphyma crassifolium* | | 2.5 | 0.05 | |
| | RONN 18 | *Maireana* sp. | 1 | 0.56 | 0.1 | |
| **2D** | RONN 16 | *Stipa juncifolia* | | 20 | 0.18 - 0.75 | |
| | RONN 13 | *Halosarcia indica* | | 25 | 0.2 - 0.55 | |
| | RONN 14 | *Disphyma crassifolium* | | 1 | 0.05 | |
| **2E** | RONN 16 | *Stipa juncifolia* | | 10 | 0.2 - 0.5 | |
| | RONN 13 | *Halosarcia indica* | | 2.5 | 0.1 - 0.4 | |
| | RONN 9 | *Olearia axillaris* | 1 | 1.62 | 0.5 | |
| | RONN 14 | *Disphyma crassifolium* | | 0.01 | 0.05 | |
| | RONN 15 | *Rhagodia drummondii* | 1 | 0.25 | 0.2 | |

## PLEASANT VIEW - Transect 1

| Plot | Species # | Species | Number | % Cover | Mean height (m) | Notes |
|---|---|---|---|---|---|---|
| 1A | | *Xanthorrhoea preissii* | 3 | 12.56 | 1.5 | |
| | PLE 1 | *Gahnia trifida* | | 25 | 1.75 | |
| | PLE 2 | *Anarthria scabra* | | 15 | 0.6 | |
| | PLE 3 | *Patersonia occidentalis* | | 1 | 0.45 | |
| | PLE 4 | *Baumea juncea* | | 50 | 0.4 | |
| | PLE 5 | *Loxocarya flexuosa* | | 5 | 0.3 | |
| | PLE 6 | *Dryandra sp* | 1 | 10.96 | 0.7 | |
| | PLE 7 | *Leucopogon obovatus* | 7 | 20.29 | 1.05 | |
| | PLE 8 | *Hovea trisperma* | | 0.1 | 0.65 | |
| | PLE 9 | *Bossiaea linophylla* | 3 | 2.65 | 1.1 | |
| | PLE 10 | *Opercularia hispidula* | | 2.5 | 0.3 | |
| | PLE 11 | *Stipa sp.* | | 0.5 | 0.65 | |
| | PLE 12 | *Anarthria prolifera* | | 2 | 0.3 | |
| | PLE 13 | *Comesperma virgatum* | | 0.1 | 0.25 | |
| | PLE 14 | *Lepidosperma sp.* | | 1 | vine | |
| | PLE 15 | *Hardenbergia comptoniana* | | 1 | 0.5 | |
| | PLE 16 | *Isopogon attenuatus* | | 1 | 0.45 | |
| 1B | | *Xanthorrhoea preissii* | 2 | 67.5 | 2 | |
| | PLE 1 | *Gahnia trifida* | | 15 | 1.6 | |
| | PLE 2 | *Anarthria scabra* | | 25 | 0.65 | |
| | PLE 4 | *Baumea juncea* | | 70 | 0.3 | |
| | PLE 5 | *Loxocarya flexuosa* | | 12.5 | 0.2 | |
| | PLE 6 | *Dryandra* sp | 3 | 8.37 | 0.8 | |
| | PLE 7 | *Leucopogon obovatus* | 3 | 18.18 | 1.43 | |
| | PLE 8 | *Hovea trisperma* | | 2 | 0.45 | |
| | PLE 9 | *Bossiaea linophylla* | 1 | 1.6 | 1 | |
| | PLE 10 | *Opercularia hispidula* | | 8 | 0.3 | |
| | PLE 11 | *Stipa* sp. | | 1.5 | 0.8 | |
| | PLE 12 | *Anarthria prolifera* | | 1 | 0.3 | |
| | PLE 17 | *Xanthosia rotundifolia* | | 2 | 0.4 | |
| | PLE 18 | *Petrophile rigida* | | 1 | 0.3 | |
| | PLE 19 | *Hakea trifurcata* | 2 | 9.4 | 1.75 | |
| | PLE 13 | *Comesperma virgatum* | | 1 | 0.5 | |
| | PLE 20 | *Melaleuca* sp. | 1 | 1.78 | 0.3 | |
| | PLE 21 | *Spyridium glaucum* | 1 | 1.29 | 1.2 | |
| | PLE 15 | *Hardenbergia comptoniana* | | 1 | 0.4 | |
| | PLE 16 | *Isopogon attenuatus* | | 0.5 | 0.3 | |
| | PLE 22 | *Cyperaceae* sp. | | 10 | 0.5 | |
| 1C | | *Xanthorrhoea preissii* | 1 | 11.16 | 1.5 | |
| | PLE 1 | *Gahnia trifida* | | 15 | 1.3 | |
| | PLE 2 | *Anarthria scabra* | | 12 | 0.4 | |
| | PLE 3 | *Patersonia occidentalis* | | 2 | 0.4 | |
| | PLE 4 | *Baumea juncea* | | 35 | 0.2 | |
| | PLE 5 | *Loxocarya flexuosa* | | 2.5 | 0.2 | |
| | PLE 6 | *Dryandra* sp. | 3 | 24.32 | 0.53 | |
| | PLE 7 | *Leucopogon obovatus* | 3 | 6.19 | 1.13 | |
| | PLE 8 | *Hovea trisperma* | | 2 | 0.3 | |
| | PLE 10 | *Opercularia hispidula* | | 4 | 0.25 | |

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|---|---|---|---|---|---|---|
| | PLE 12 | *Anarthria prolifera* | | 0.5 | 0.2 | |
| | PLE 15 | *Hardenbergia comptoniana* | | 0.1 | 0.15 | |
| | PLE 17 | *Xanthosia rotundifolia* | 2 | 0.61 | 0.3 | |
| | PLE 18 | *Petrophile rigida* | 1 | 7 | 1.8 | |
| | PLE 15 | *Hakea trifurcata* | 1 | 7.7 | 0.9 | |
| | PLE 22 | *Cyperaceae* sp. | | 35 | 0.2 | |
| | PLE 23 | *Hibbertia commutata* | | 0.5 | 0.15 | |
| | PLE 24 | *Agrostocrinum scabrum* | | 0.1 | 0.15 | |
| | PLE 25 | *Cassytha* sp. | | 0.1 | vine | |
| **1D** | PLE 1 | *Gahnia trifida* | | 10 | 1.75 | |
| | PLE 2 | *Anarthria scabra* | | 1 | 0.65 | |
| | PLE 4 | *Baumea juncea* | | 40 | 0.4 | |
| | PLE 5 | *Loxocarya flexuosa* | | 2.5 | 0.35 | |
| | PLE 7 | *Leucopogon obovatus* | 6 | 16.3 | 0.7 | |
| | PLE 8 | *Hovea trisperma* | | 0.5 | 0.2 - 0.7 | |
| | PLE 10 | *Opercularia hispidula* | | 20 | 0.3 | |
| | PLE 11 | *Stipa* sp. | | 1 | 0.45 | |
| | PLE 12 | *Anarthria prolifera* | | 5 | 0.3 | |
| | PLE 15 | *Hardenbergia comptoniana* | | 20 | 0.4 | |
| | PLE 17 | *Xanthosia rotundifolia* | | 0.5 | 0.55 | |
| | PLE 21 | *Spyridium glaucum* | 1 | 0.07 | 0.5 | |
| | PLE 22 | *Cyperaceae* sp. | | 40 | 0.4 | |
| | PLE 23 | *Hibbertia commutata* | | 1 | 0.3 | |
| | PLE 24 | *Agrostocrinum scabrum* | | 1 | 0.4 | |
| | PLE 25 | *Cassytha* sp. | | 1 | vine | |
| | PLE 26 | *Hypolaena exsulca* | | 5 | 0.4 | |
| | PLE 27 | *Conostylis laxiflora* | | 0.5 | 0.3 | |
| | PLE 28 | *Gompholobium polymorphum* | | 0.5 | 0.3 | |
| | PLE 29 | *Tricoryne elatior* | | 1 | 0.45 | |
| | PLE 30 | *Sollya heterophylla* | 2 | 2.03 | 0.55 | |
| **1E** | PLE 3 | *Patersonia occidentalis* | | 5 | 0.4 | |
| | PLE 4 | *Baumea juncea* | | 20 | 0.4 | |
| | PLE 5 | *Loxocarya flexuosa* | | 2.5 | 0.2 | |
| | PLE 7 | *Leucopogon obovatus* | 4 | 16.85 | 0.75 | |
| | PLE 8 | *Hovea trisperma* | | 1 | 0.3 | |
| | PLE 12 | *Anarthria prolifera* | | 4 | 0.4 | |
| | PLE 15 | *Hardenbergia comptoniana* | | 15 | 0.55 | |
| | PLE 17 | *Xanthosia rotundifolia* | | 2.5 | 0.4 | |
| | PLE 22 | *Cyperaceae* sp. | | 20 | 0.35 | |
| | PLE 26 | *Hypolaena exsulca* | | 1 | 0.3 | |
| | PLE 28 | *Gompholobium polymorphum* | | 0.1 | 0.1 | |
| | | *Dianella revoluta* | | 0.5 | 0.45 | |
| | PLE 31 | *Lyginia barbata* | | 1 | 0.35 | |
| | PLE 33 | *Thomasia pauciflora* | | 2 | 0.4 | |
| **2A** | PLE 3 | *Patersonia occidentalis* | | 0.5 | 0.3 | |
| | PLE 4 | *Baumea juncea* | | 20 | 0.45 | |
| | PLE 7 | *Leucopogon obovatus* | 3 | 2.98 | 0.6 | |
| | PLE 11 | *Stipa* sp. | | 0.5 | 0.45 | |
| | PLE 12 | *Anarthria prolifera* | | 6 | 0.4 | |
| | PLE 24 | *Agrostocrinum scabrum* | | 0.1 | 0.1 | |
| | PLE 31 | *Lyginia barbata* | | 10 | 0.4 | |

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|---|---|---|---|---|---|---|
| | PLE 32 | *Platytheca compressa* | 1 | 1.37 | 0.6 | |
| | PLE 22 | *Cyperaceae* sp. | | 20 | 0.5 | |
| **2B** | PLE 4 | *Baumea juncea* | | 30 | 0.3 | |
| | PLE 7 | *Leucopogon obovatus* | 1 | 0.19 | 0.3 | |
| | PLE 8 | *Hovea trisperma* | | 0.1 | 0.2 | |
| | PLE 11 | *Stipa* sp. | | 2 | 0.45 | |
| | PLE 22 | *Cyperaceae* sp. | | 20 | 0.4 | |
| | PLE 24 | *Agrostocrinum scabrum* | | 0.1 | 0.1 | |
| | PLE 29 | *Tricoryne elatior* | | 1 | 0.4 | |
| | PLE 31 | *Lyginia barbata* | | 30 | 0.5 | |
| | PLE 32 | *Platytheca compressa* | 1 | 2.36 | 0.3 | |
| | PLE 33 | *Thomasia pauciflora* | 1 | 2.84 | 0.4 | |
| **2C** | PLE 4 | *Baumea juncea* | | 60 | 0.45 | |
| | PLE 8 | *Hovea trisperma* | | 0.1 | 0.3 | |
| | PLE 22 | *Cyperaceae* sp. | | 25 | 0.4 | |
| | PLE 31 | *Lyginia barbata* | | 5 | 0.45 | |
| | PLE 34 | *Cyperochloa hirsuta* | | 35 | 0.35 | |
| **2D** | PLE 13 | *Comesperma virgatum* | | 0.01 | 0.5 | |
| | PLE 29 | *Tricoryne elatior* | | 0.1 | 0.45 | |
| | PLE 31 | *Lyginia barbata* | | 2 | 0.3 | |
| | PLE 4 | *Baumea juncea* | | 70 | 0.4 | |
| | PLE 34 | *Cyperochloa hirsuta* | | 20 | 0.4 | |
| | PLE 21 | *Spyridium glaucum* | 2 | 3.74 | 0.55 | |
| | PLE 35 | *Brachysema bracteolosum* | | 5 | 0.45 | |
| | PLE 36 | *Xanthosia huegelii* | | 1 | 0.2 | |
| **2E** | PLE 13 | *Comesperma virgatum* | | 0.01 | 0.5 | |
| | PLE 19 | *Hakea trifurcata* | 1 | 1.48 | 1 | |
| | PLE 29 | *Tricoryne elatior* | | 1 | 0.35 | |
| | PLE 17 | *Xanthosia rotundifolia* | 2 | 0.92 | 0.4 | |
| | PLE 35 | *Brachysema bracteolosum* | | 5 | 0.3 | |
| | PLE 34 | *Cyperochloa hirsuta* | | 20 | 0.4 | |
| | PLE 4 | *Baumea juncea* | | 70 | 0.5 | |
| | PLE 37 | *Hakea tuberculata* | 2 | 22.8 | 1.35 | |
| **3A** | PLE 34 | *Cyperochloa hirsuta* | | 15 | 0.45 | |
| | PLE 4 | *Baumea juncea* | | 10 | 0.4 | |
| | PLE 17 | *Xanthosia rotundifolia* | 1 | 1.31 | 0.45 | |
| | PLE 35 | *Brachysema bracteolosum* | | 5 | 0.35 | |
| | PLE 38 | *Schoenus sp.* | | 40 | 0.5 | |
| **3B** | PLE 13 | *Comesperma virgatum* | | 0.01 | 0.7 | |
| | PLE 17 | *Xanthosia rotundifolia* | 2 | 4.38 | 0.8 | |
| | PLE 35 | *Brachysema bracteolosum* | | 2.5 | 0.35 | |
| | PLE 38 | *Schoenus* sp. | | 90 | 0.45 | |
| | PLE 39 | *Baumea articulata* | 1 | 5.99 | 0.8 | |
| **3C** | PLE 29 | *Tricoryne elatior* | | 0.5 | 0.5 | |
| | PLE 35 | *Brachysema bracteolosum* | | 6 | 0.5 | |
| | PLE 38 | *Schoenus* sp | | 75 | 0.45 | |
| | PLE 39 | *Baumea articulata* | 4 | 11.79 | 0.57 | |

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|---|---|---|---|---|---|---|
| 3D | PLE 29 | *Tricoryne elatior* | | 0.1 | 0.4 | |
| | PLE 38 | *Schoenus* sp. | | 90 | 0.6 | |
| 3E | PLE 38 | *Schoenus* sp. | | 80 | 0.6 | |
| | PLE 39 | *Baumea articulata* | | 5 | 1.7 | |
| 4A | PLE 38 | *Schoenus* sp. | | 60 | 1.2 | |
| | PLE 39 | *Baumea articulata* | | 30 | 1.5 | |
| 4B | PLE 40 | *Baumea rubiginosa* | | 40 | 0.6 | |
| | PLE 38 | *Schoenus* sp. | | 30 | 1 | |
| | PLE 39 | *Baumea articulata* | | 15 | 1.5 | |
| 4C | PLE 40 | *Baumea rubiginosa* | | 80 | 0.6 | |
| | PLE 39 | *Baumea articulata* | | 5 | 1.5 | |
| 4D | PLE 40 | *Baumea rubiginosa* | | 70 | 0.6 | |
| | PLE 41 | *Lepyrodia muirii* | | 5 | 0.7 | |
| | PLE 39 | *Baumea articulata* | | 1 | 1.5 | |
| 4E | PLE 39 | *Baumea articulata* | | 1 | 1.5 | |
| | PLE 40 | *Baumea rubiginosa* | | 60 | 0.6 | |
| | PLE 44 | *Lepyrodia muirii* | | 4 | 0.6 | |

## PLEASANT VIEW - Transect 2

| Plot | Species # | Species | Number | % Cover | Mean height (m) | Notes |
|---|---|---|---|---|---|---|
| 1A | PLE 38 | *Schoenus* sp. | | 40 | 0.5 | |
| | PLE 33 | *Thomasia pauciflora* | | 0.5 | 0.1 | |
| 1B | PLE 38 | *Schoenus* sp. | | 25 | 0.4 | |
| 1C | PLE 38 | *Schoenus* sp. | | 20 | 0.35 | |
| 1D | PLE 38 | *Schoenus* sp. | | 15 | 0.5 | |
| 1E | PLE 38 | *Schoenus* sp. | | 30 | 0.65 | |
| 2A | PLE 38 | *Schoenus* sp. | | 60 | 0.6 | |
| 2B | PLE 38 | *Schoenus* sp. | | 75 | 0.5 | |
| 2C | PLE 38 | *Schoenus* sp. | | 80 | 0.6 | |
| | PLE 11 | *Stipa* sp. | | 0.1 | 0.3 | |
| 2D | PLE 38 | *Schoenus* sp. | | 80 | 0.6 | |
| | PLE 11 | *Stipa* sp. | | 0.1 | 0.3 | |
| 2E | PLE 38 | *Schoenus* sp. | | 95 | 0.65 | |
| 3A | PLE 38 | *Schoenus* sp. | | 90 | 0.7 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | PLE 39 | *Baumea articulata* | | 1 | 1 | |
| 3B | PLE 38 | *Schoenus* sp. | | 70 | 0.65 | |
| 3C | PLE 38 | *Schoenus* sp. | | 85 | 0.7 | |
| | PLE 39 | *Baumea articulata* | | 2 | 1 | |
| 3D | PLE 38 | *Schoenus* sp. | | 65 | 0.6 | |
| | PLE 39 | *Baumea articulata* | | 1 | 1 | |
| 3E | PLE 38 | *Schoenus* sp. | | 70 | 0.65 | |

## PLEASANT VIEW - Transect 3

| Plot | Species # | Species | Number | % Cover | Mean height (m) | Notes |
|---|---|---|---|---|---|---|
| 1A | PLE 1 | *Gahnia trifida* | | 20 | 1.7 | |
| | PLE 3 | *Patersonia occidentalis* | | 4 | 0.3 | |
| | PLE 4 | *Baumea juncea* | | 10 | 0.4 | |
| | PLE 5 | *Loxocarya flexuosa* | | 5 | 0.2 | |
| | PLE 8 | *Hovea trisperma* | | 1 | 0.6 | |
| | PLE 22 | *Cyperaceae* sp. | | 40 | 0.5 | |
| | PLE 29 | *Tricoryne elatior* | | 0.5 | 0.4 | |
| | PLE 34 | *Cyperochloa hirsuta* | | 5 | 0.4 | |
| | PLE 42 | *Leucopogon? glabellus* | | 12.5 | 0.4 | |
| | PLE 43 | *Dampiera linearis* | | 1 | 0.3 | |
| | PLE 32 | *Platytheca compressa* | | 0.1 | 0.4 | |
| | PLE 36 | *Xanthosia huegelii* | | 1 | 0.2 - 0.4 | |
| 1B | PLE 3 | *Patersonia occidentalis* | | 1 | 0.35 | |
| | PLE 4 | *Baumea juncea* | | 20 | 0.4 | |
| | PLE 16 | *Isopogon attenuatus* | | 0.5 | 0.15 | |
| | PLE 22 | *Cyperaceae* sp. | | 3 | 0.4 | |
| | PLE 24 | *Agrostocrinum scabrum* | | 1 | 0.3 | |
| | PLE 29 | *Tricoryne elatior* | | 0.1 | 0.25 | |
| | PLE 34 | *Cyperochloa hirsuta* | | 20 | 0.4 | |
| | PLE 37 | *Hakea tuberculata* | 3 | 1.7 | 0.35 | |
| | PLE 42 | *Leucopogon? glabellus* | | 7 | 0.4 | |
| | PLE 36 | *Xanthosia huegelii* | | 0.5 | 0.3 | |
| | PLE 44 | *Schoenus submicrostachyus* | | 20 | 0.4 | |
| 1C | PLE 3 | *Patersonia occidentalis* | | 0.1 | 0.2 | |
| | PLE 4 | *Baumea juncea* | | 5 | 0.35 | |
| | PLE 16 | *Isopogon attenuatus* | | 2 | 0.2 | |
| | PLE 34 | *Cyperochloa hirsuta* | | 20 | 0.4 | |
| | PLE 37 | *Hakea tuberculata* | 1 | 0.05 | 0.4 | |
| | PLE 42 | *Leucopogon? glabellus* | | 2.5 | 0.15 - 0.3 | |
| | PLE 44 | *Schoenus submicrostachyus* | | 20 | 0.4 | |
| | | *Stylidium spathulatum* | | 1 | 0.4 | |
| 1D | PLE 4 | *Baumea juncea* | | 0.5 | 0.45 | |
| | PLE 11 | *Stipa* sp. | | 0.1 | 0.4 | |
| | PLE 16 | *Isopogon attenuatus* | | 3 | 0.15 | |
| | PLE 24 | *Agrostocrinum scabrum* | | 0.5 | 0.5 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | PLE 29 | *Tricoryne elatior* | | 0.1 | 0.2 | |
| | PLE 34 | *Cyperochloa hirsuta* | | 15 | 0.35 | |
| | PLE 37 | *Hakea tuberculata* | 1 | 1.71 | 0.6 | |
| | PLE 42 | *Leucopogon? glabellus* | | 1 | 0.3 | |
| | PLE 36 | *Xanthosia huegelii* | | 2 | 0.15 | |
| | PLE 44 | *Schoenus submicrostachyus* | | 10 | 0.4 | |
| | | *Stylidium spathulatum* | | 1 | 0.4 | |
| **1E** | PLE 1 | *Gahnia trifida* | | 6 | 1.2 | |
| | PLE 3 | *Patersonia occidentalis* | | 0.1 | 0.35 | |
| | PLE 4 | *Baumea juncea* | | 12 | 0.3 | |
| | PLE 6 | *Dryandra* sp. | 1 | 0.03 | 0.15 | |
| | PLE 11 | *Stipa* sp. | | 1 | 0.3 | |
| | PLE 16 | *Isopogon attenuatus* | | 2 | 0.3 | |
| | PLE 25 | *Cassytha* sp. | | 0.01 | vine | |
| | PLE 29 | *Tricoryne elatior* | | 0.01 | 0.15 | |
| | PLE 34 | *Cyperochloa hirsuta* | | 5 | 0.35 | |
| | PLE 42 | *Leucopogon? glabellus* | | 0.1 | 0.25 | |
| | PLE 44 | *Schoenus submicrostachyus* | | 12 | 0.4 | |
| | PLE 43 | *Dampiera linearis* | | 0.1 | 0.2 | |
| | | *Stylidium spathulatum* | | 1 | 0.3 | |
| **2A** | PLE 29 | *Tricoryne elatior* | | 3 | 0.35 | |
| | PLE 44 | *Schoenus submicrostachyus* | | 0.01 | 0.15 | |
| **2B** | PLE 7 | *Leucopogon obovatus* | 1 | 2.28 | 0.9 | |
| | PLE 31 | *Lyginia barbata* | | 70 | 0.5 | |
| | PLE 44 | *Schoenus submicrostachyus* | | 4 | 0.45 | |
| | PLE 11 | *Stipa* sp. | | 2 | 1 | |
| | | *Dianella revoluta* | | 1 | 0.7 | |
| **2C** | PLE 1 | *Gahnia trifida* | | 8 | 1.55 | |
| | PLE 4 | *Baumea juncea* | | 10 | 0.3 | |
| | PLE 16 | *Isopogon attenuatus* | | 0.5 | 0.2 | |
| | PLE 31 | *Lyginia barbata* | | 50 | 0.7 | |
| | PLE 34 | *Cyperochloa hirsuta* | | 10 | 0.35 | |
| | PLE 39 | *Baumea articulata* | | 0.5 | 0.25 | |
| | PLE 36 | *Xanthosia huegelii* | | 1 | 0.15 | |
| | PLE 44 | *Schoenus submicrostachyus* | | 5 | 0.45 | |
| **2D** | PLE 31 | *Lyginia barbata* | | 80 | 0.5 | |
| **2E** | PLE 31 | *Lyginia barbata* | | 90 | 0.5 | |

## PLEASANT VIEW - Transect 4

| Plot | Species # | Species | Number | % Cover | Mean height (m) | Notes |
|---|---|---|---|---|---|---|
| **1A** | PLE 40 | *Baumea rubiginosa* | | 40 | 0.8 | |
| | PLE 39 | *Baumea articulata* | | 5 | 1.7 | |
| **1B** | PLE 40 | *Baumea rubiginosa* | | 20 | 0.8 | |
| | PLE 39 | *Baumea articulata* | | 15 | 1.7 | |
| | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 1C | PLE 40 | *Baumea rubiginosa* | | 15 | 0.75 | |
| | PLE 39 | *Baumea articulata* | | 40 | 1.8 | |
| 1D | PLE 40 | *Baumea rubiginosa* | | 10 | 0.6 | |
| | PLE 39 | *Baumea articulata* | | 60 | 1.75 | |
| 1E | PLE 40 | *Baumea rubiginosa* | | 10 | 0.8 | |
| | PLE 39 | *Baumea articulata* | | 25 | 1.7 | |

## PLEASANT VIEW - Transect 5

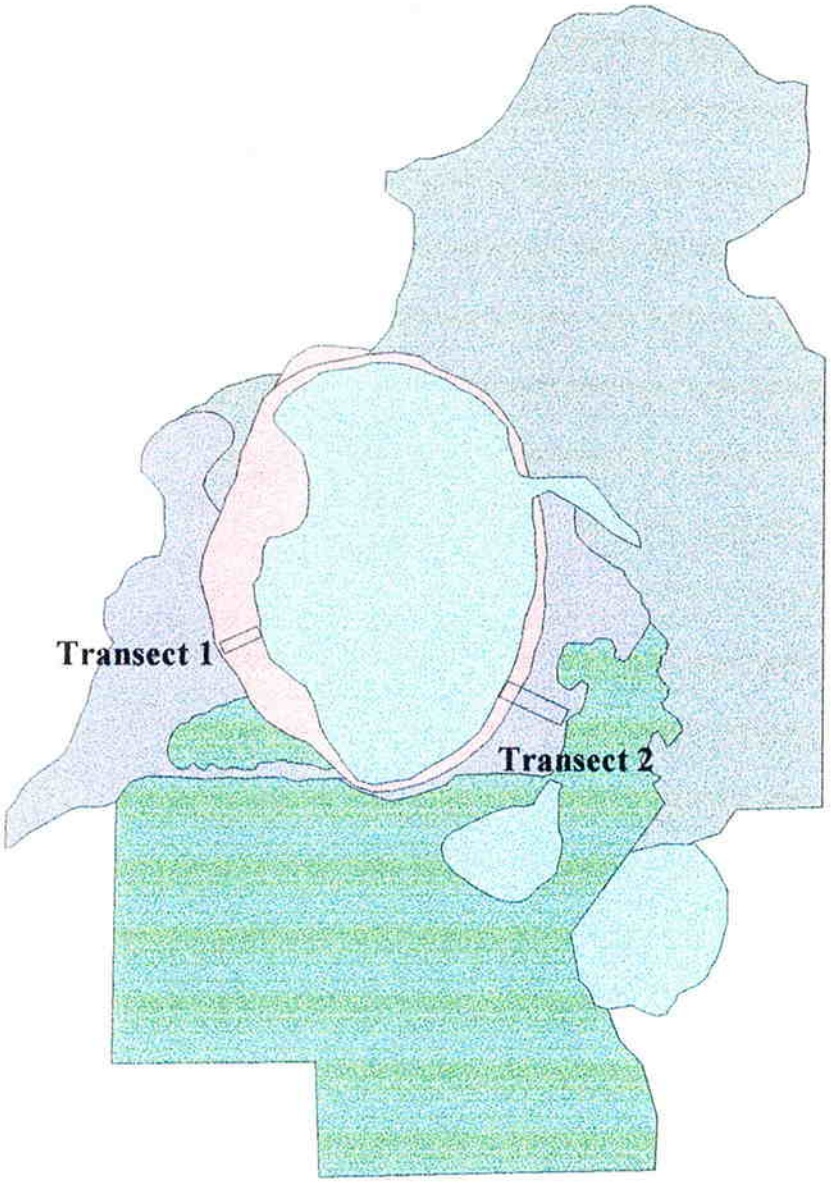
| Plot | Species # | Species | Number | % Cover | Mean height (m) | Notes |
|---|---|---|---|---|---|---|
| 1A | PLE 3 | *Patersonia occidentalis* | | 3 | 0.3 | |
| | PLE 4 | *Baumea juncea* | | 40 | 0.4 | |
| | PLE 13 | *Comesperma virgatum* | | 5 | 1.2 | |
| | PLE 11 | *Stipa* sp. | | 5 | 0.7 | |
| | PLE 46 | *Meeboldina crebriculmis* | | 5 | 0.45 | |
| | PLE 47 | *Viminaria juncea* | 2 | 4.55 | 1.4 | |
| 1B | PLE 3 | *Patersonia occidentalis* | | 30 | 0.4 | |
| | PLE 4 | *Baumea juncea* | | 2 | 0.4 | |
| | PLE 13 | *Comesperma virgatum* | | 2 | 1.2 | |
| | PLE 11 | *Stipa* sp. | | 2 | 0.6 | |
| | PLE 46 | *Meeboldina crebriculmis* | | 25 | 0.4 | |
| | PLE 47 | *Viminaria juncea* | 2 | 6.34 | 1.3 | |
| 1C | PLE 4 | *Baumea juncea* | | 60 | 0.5 | |
| | PLE 13 | *Comesperma virgatum* | | 4 | 1.1 | |
| | PLE 11 | *Stipa* sp. | | 0.5 | 0.8 | |
| | PLE 46 | *Meeboldina crebriculmis* | | 5 | 0.4 | |
| | PLE 47 | *Viminaria juncea* | 1 | 0.62 | 1.4 | |
| | PLE 48 | *Chorizandra enodis* | | 3 | 0.6 | |
| | PLE 49 | *Acacia? Cyclops* | 3 | 9.68 | 1.36 | |
| 1D | PLE 4 | *Baumea juncea* | | 60 | 0.35 | |
| | PLE 46 | *Meeboldina crebriculmis* | | 20 | 0.4 | |
| | PLE 47 | *Viminaria juncea* | 1 | 0.33 | 0.6 | |
| | PLE 48 | *Chorizandra enodis* | | 2 | 0.5 | |
| | PLE 49 | *Acacia? Cyclops* | 1 | 15 | 1.8 | |
| 1E | PLE 3 | *Patersonia occidentalis* | | 4 | 0.25 | |
| | PLE 4 | *Baumea juncea* | | 30 | 0.35 | |
| | PLE 11 | *Stipa* sp. | | 0.5 | 0.5 | |
| | PLE 46 | *Meeboldina crebriculmis* | | 50 | 0.4 | |
| 2A | PLE 4 | *Baumea juncea* | | 65 | 0.3 | |
| | PLE 44 | *Schoenus submicrostachyus* sp. | | 4 | 0.3 | |
| | PLE 11 | *Stipa* sp. | | 0.1 | 0.7 | |
| | PLE 46 | *Meeboldina crebriculmis* | | 5 | 0.3 | |
| | PLE 50 | *Eutaxia parvifolia* | 1 | 0.99 | 0.4 | |
| 2B | PLE 1 | *Gahnia trifida* | | 18 | 1.8 | |
| | PLE 3 | *Patersonia occidentalis* | | 2 | 0.3 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | PLE 4 | *Baumea juncea* | | 30 | 0.35 | |
| | PLE 24 | *Agrostocrinum scabrum* | | 0.1 | 0.4 | |
| | PLE 34 | *Cyperochloa hirsuta* | | 30 | 0.4 | |
| | PLE 11 | *Stipa* sp. | | 0.5 | 0.5 | |
| **2C** | PLE 1 | *Gahnia trifida* | 1 | 23 | 1.8 | |
| | PLE 3 | *Patersonia occidentalis* | | 1 | 0.3 | |
| | PLE 4 | *Baumea juncea* | | 30 | 0.4 | |
| | PLE 7 | *Leucopogon obovatus* | 1 | 3.09 | 0.5 | |
| | PLE 24 | *Agrostocrinum scabrum* | | 1.5 | 0.45 | |
| | PLE 34 | *Cyperochloa hirsuta* | | 30 | 0.3 | |
| | PLE 43 | *Dampiera linearis* | | 1 | 0.3 | |
| | | *Dianella revoluta* | | 1 | 0.4 | |
| **2D** | PLE 1 | *Gahnia trifida* | | 20 | 1.7 | |
| | PLE 4 | *Baumea juncea* | | 30 | 0.4 | |
| | PLE 24 | *Agrostocrinum scabrum* | | 1 | 0.4 | |
| | PLE 34 | *Cyperochloa hirsuta* | | 40 | 0.3 | |
| | PLE 33 | *Thomasia pauciflora* | 1 | 0.9 | 0.5 | |
| | PLE 11 | *Stipa* sp. | | 1 | 0.5 | |
| **2E** | PLE 3 | *Patersonia occidentalis* | | 2 | 0.35 | |
| | PLE 4 | *Baumea juncea* | | 85 | 0.4 | |
| **3A** | PLE 3 | *Patersonia occidentalis* | | 1 | 0.25 | |
| | PLE 4 | *Baumea juncea* | | 70 | 0.35 | |
| | PLE 24 | *Agrostocrinum scabrum* | | 0.5 | 0.4 | |
| | PLE 34 | *Cyperochloa hirsuta* | | 5 | 0.4 | |
| | PLE 11 | *Stipa* sp. | | 0.1 | 0.4 | |
| | PLE 51 | *Daviesia incrassata* | 2 | 4.78 | 0.6 | |
| **3B** | PLE 4 | *Baumea juncea* | | 75 | 0.5 | |
| | PLE 17 | *Xanthosia rotundifolia* | | 8.45 | 0.6 | |
| | PLE 34 | *Cyperochloa hirsuta* | | 5 | 0.4 | |
| | PLE 42 | *Leucopogon? glabellus* | | 0.1 | 0.3 | |
| **3C** | PLE 4 | *Baumea juncea* | | 70 | 0.4 | |
| | PLE 6 | *Dryandra* sp. | 1 | 3.25 | 0.4 | |
| | PLE 17 | *Xanthosia rotundifolia* | | 39.6 | 0.3 | |
| | PLE 34 | *Cyperochloa hirsuta* | | 5 | 0.3 | |
| | PLE 11 | *Stipa* sp. | | 0.01 | 0.7 | |
| **3D** | PLE 4 | *Baumea juncea* | | 60 | 0.35 | |
| | PLE 34 | *Cyperochloa hirsuta* | | 5 | 0.4 | |
| | PLE 17 | *Xanthosia rotundifolia* | 1 | 0.43 | 0.3 | |
| | PLE 43 | *Dampiera linearis* | | 2 | 0.25 | |
| **3E** | PLE 4 | *Baumea juncea* | | 35 | 0.4 | |
| | PLE 13 | *Comesperma virgatum* | | 1 | 0.75 | |
| | PLE 24 | *Agrostocrinum scabrum* | | 0.01 | 0.2 | |
| | PLE 34 | *Cyperochloa hirsuta* | | 5 | 0.4 | |
| | PLE 44 | *Schoenus submicrostachyus* sp. | | 5 | 0.3 | |
| | PLE 11 | *Stipa* sp. | | 1 | 0.4 | |

# APPENDIX 4

## GIS and Aerial Photographs – Transect Locations

# Coomelberrup Swamp



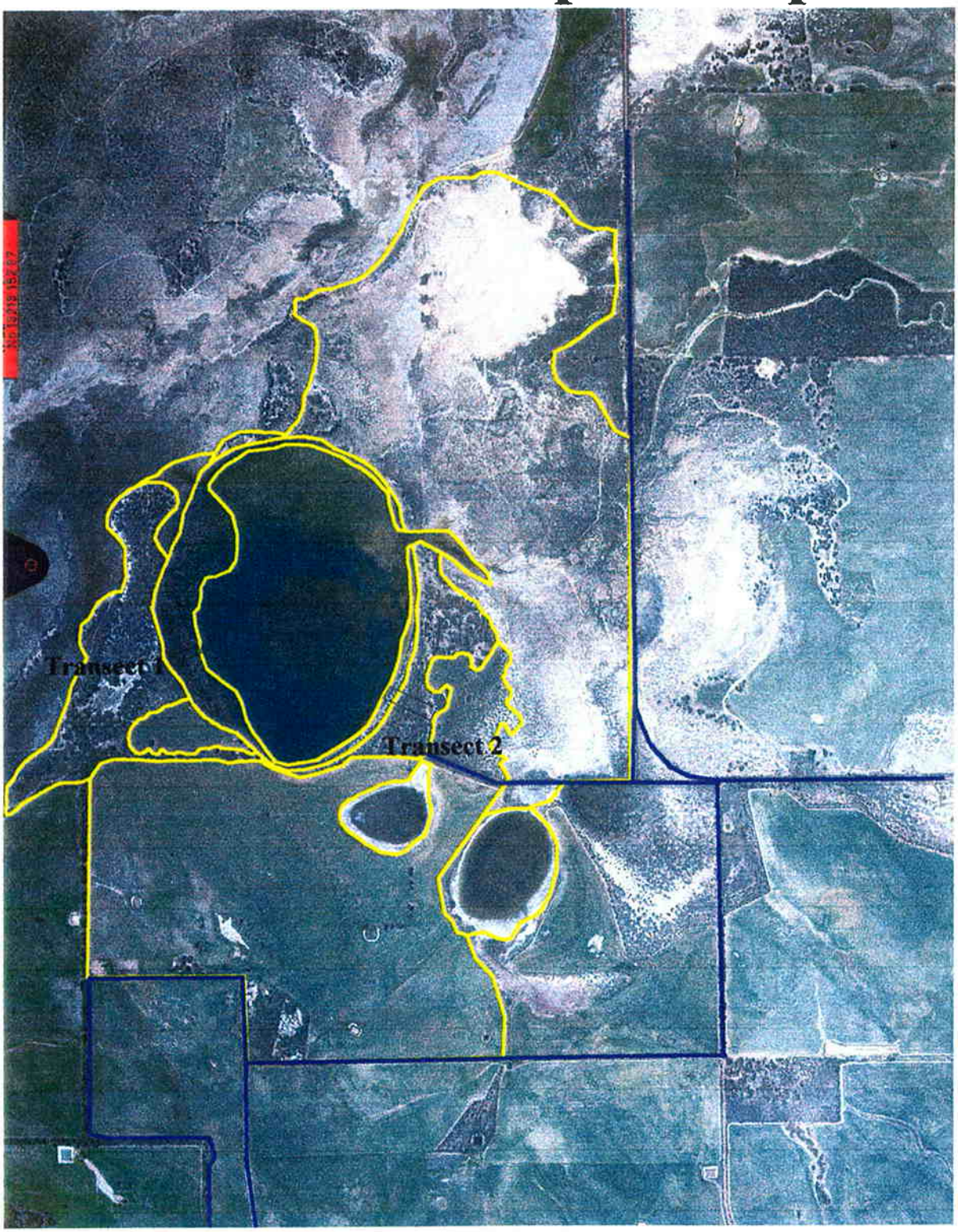

1000 0 1000 2000 Meters

Coomelberrup swamp vegetation

- Allocasurina huegliana
- C. obesa woodland
- Open water
- Paddock/cleared
- Severely salt affected

N
W E
S

# Coomelberrup Swamp

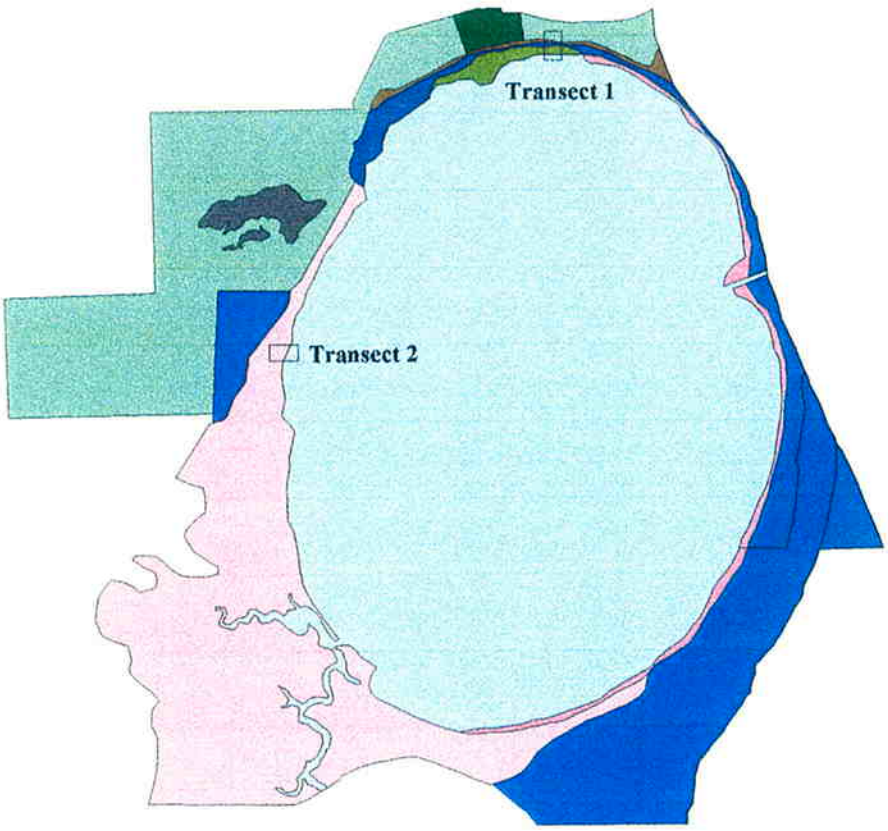



Roads
Plant Communities

600 0 600 1200 Meters

N
W E
S

# Lake Parkeyerring

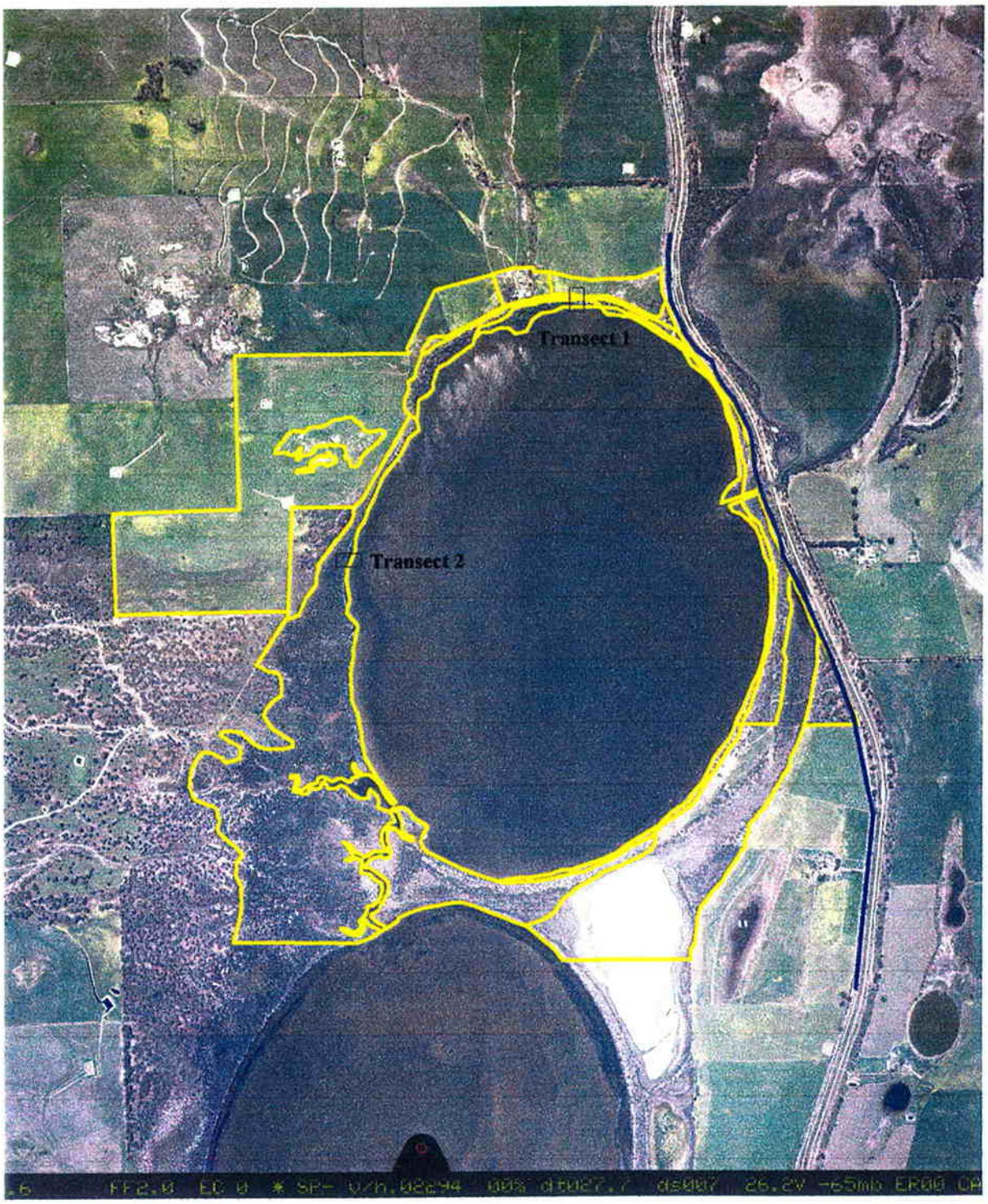



Plant Communities
- Open water
- C.obesa woodland
- Remnant vegetation
- Paddock
- Granite outcrop
- Farmhouse
- M.halmaturorum
- M.halmaturorum/C.obesa
- E.rudis/C.obesa
- C.obesa
- E.loxophleba/A.accuminata
- Paddock/grass

700 0 700 1400 Meters

N
W E
S

# Lake Parkeyerring

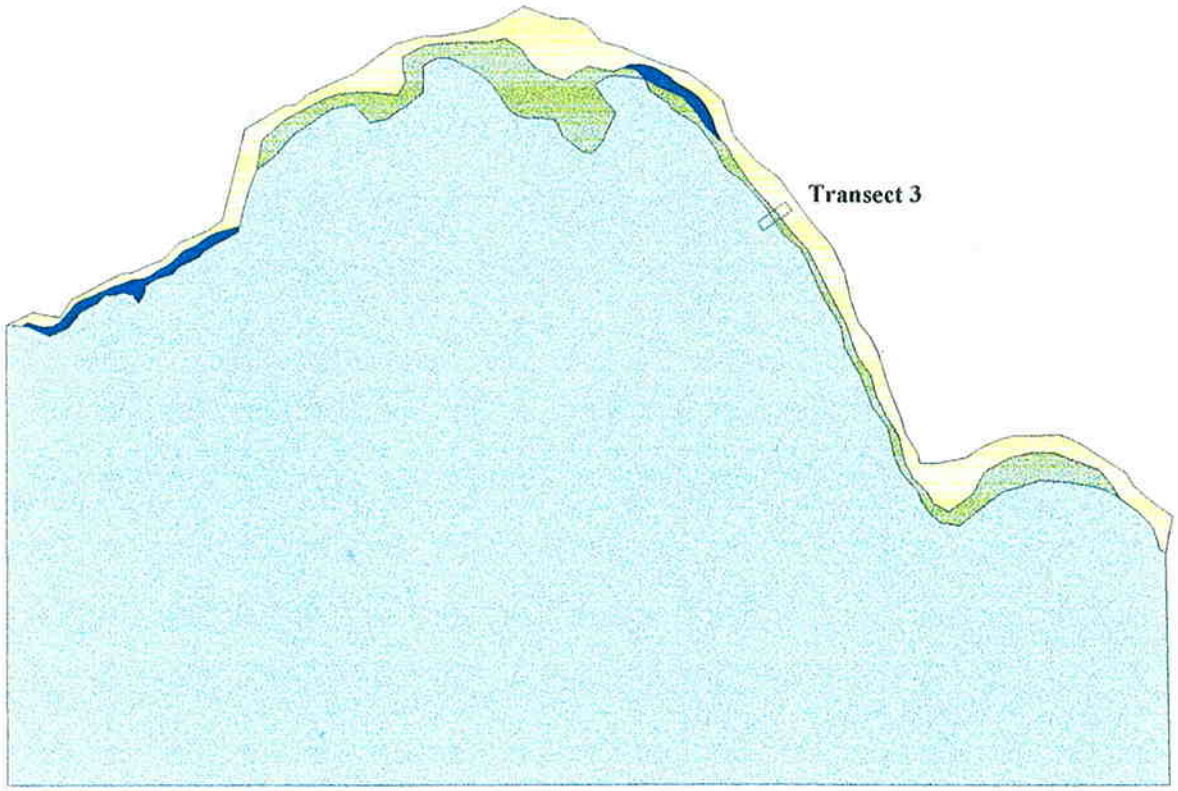



800 0 800 1600 Meters

Roads
Plant Communities

N
W E
S

# Dumbleyung - Northern section

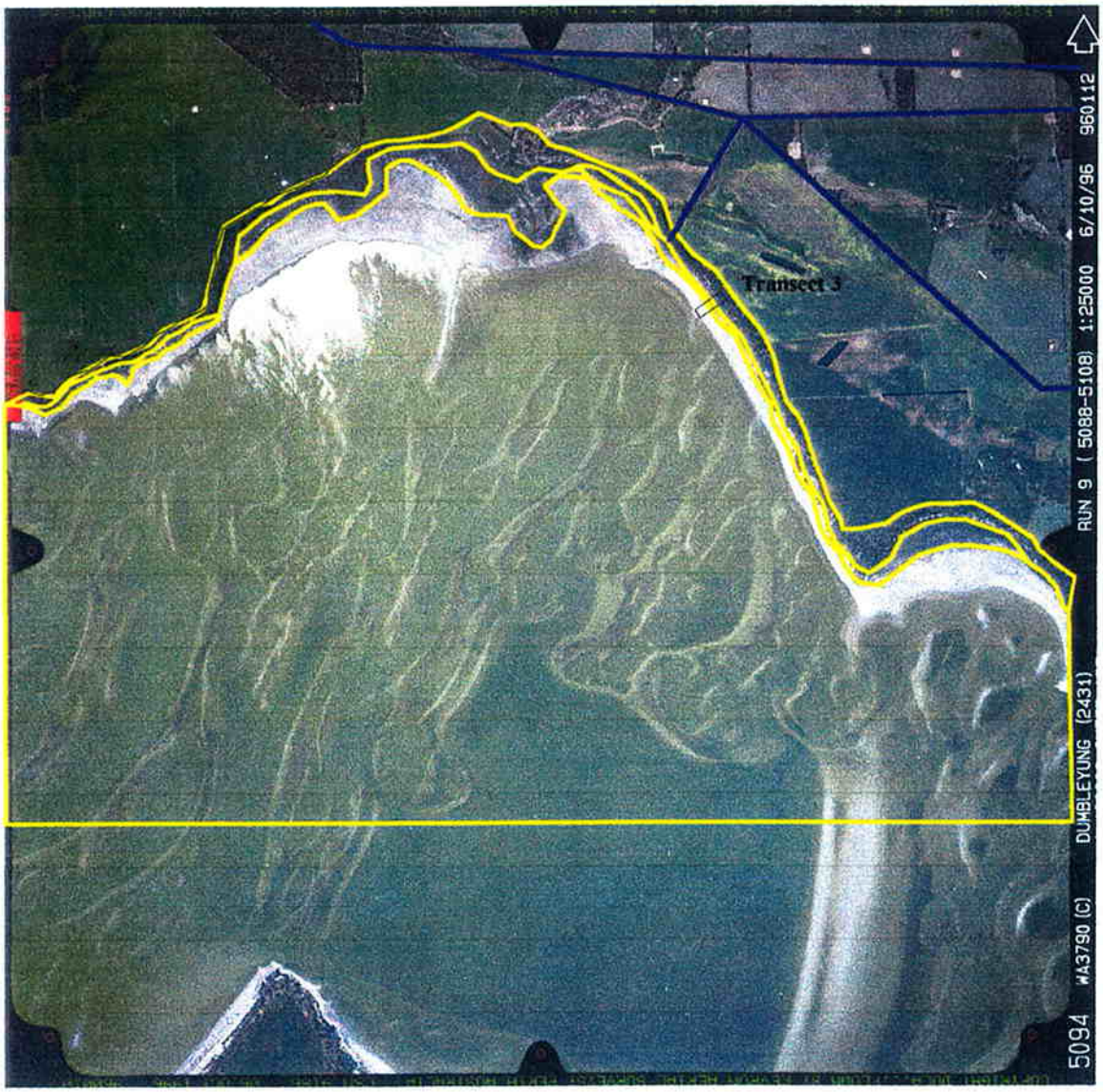



1000 0 1000 2000 Meters

Dumbleyung-North
- Lake bed
- Samphire zone
- E.rudis/M.strobophylla/C.obesa
- C.obesa/M.halmaturorm

N
W E
S

# Dumbleyung North

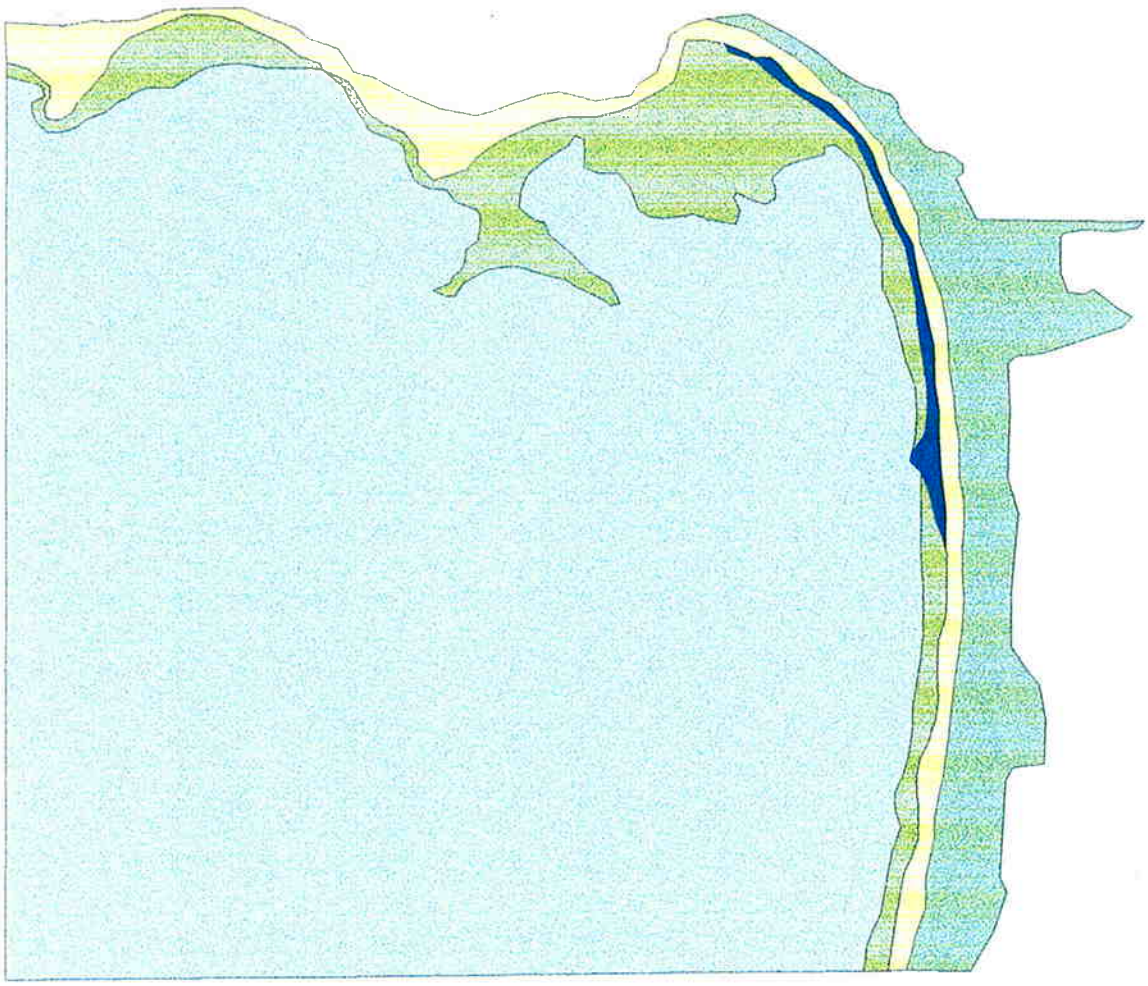



1000 0 1000 2000 Meters

N
W E
S

Roads
Plant Communities

# Dumbleyung - North-eastern section

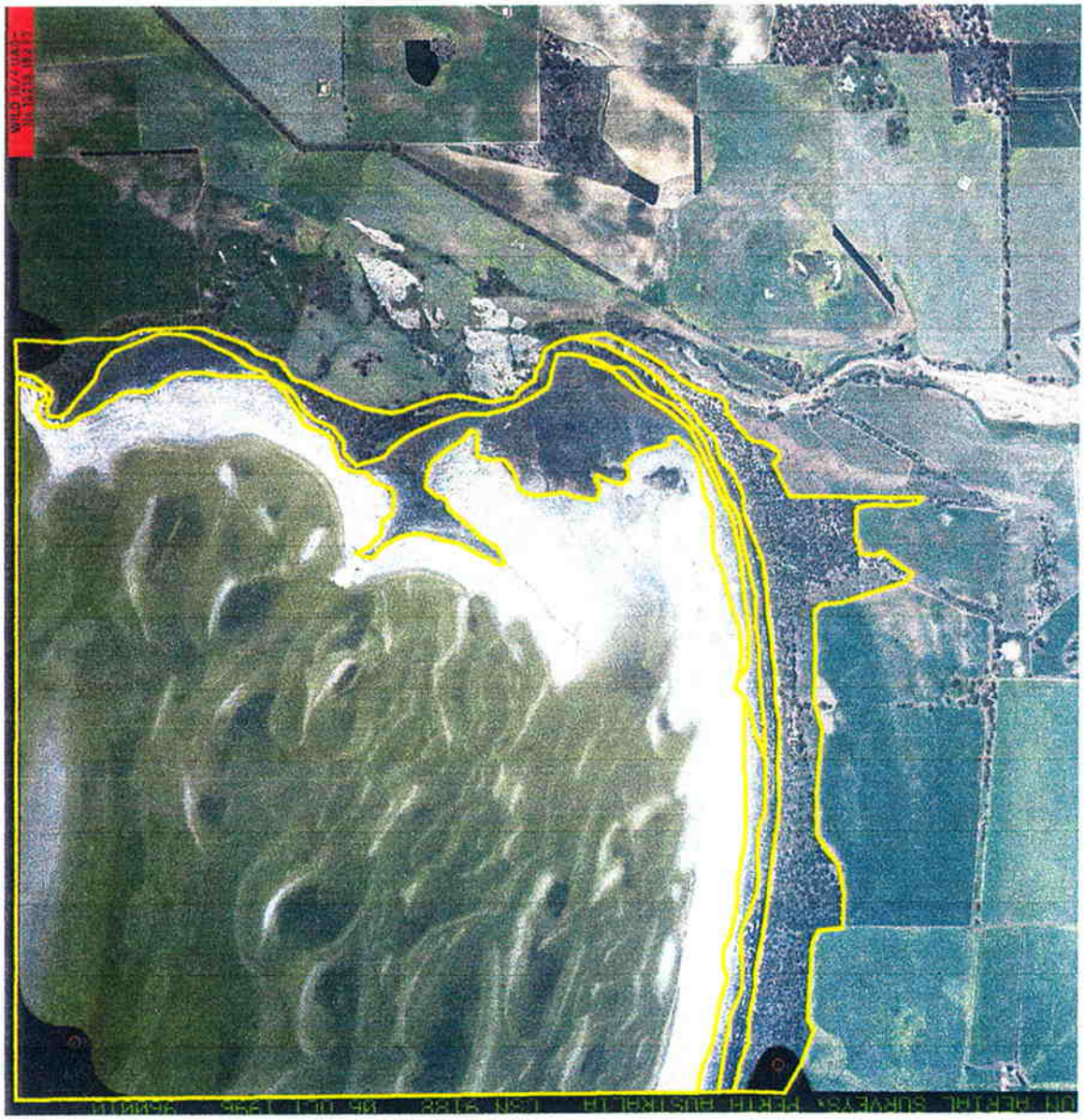


600 0 600 1200 Meters

Dumbleyung - North-east
- Paddock/Cleared land
- Lake bed
- Samphire zone
- E.rudis/M.strobophylla/C.obesa
- C.obesa/M.halmaturorum

N
W E
S

# Dumbleyung - North-east section

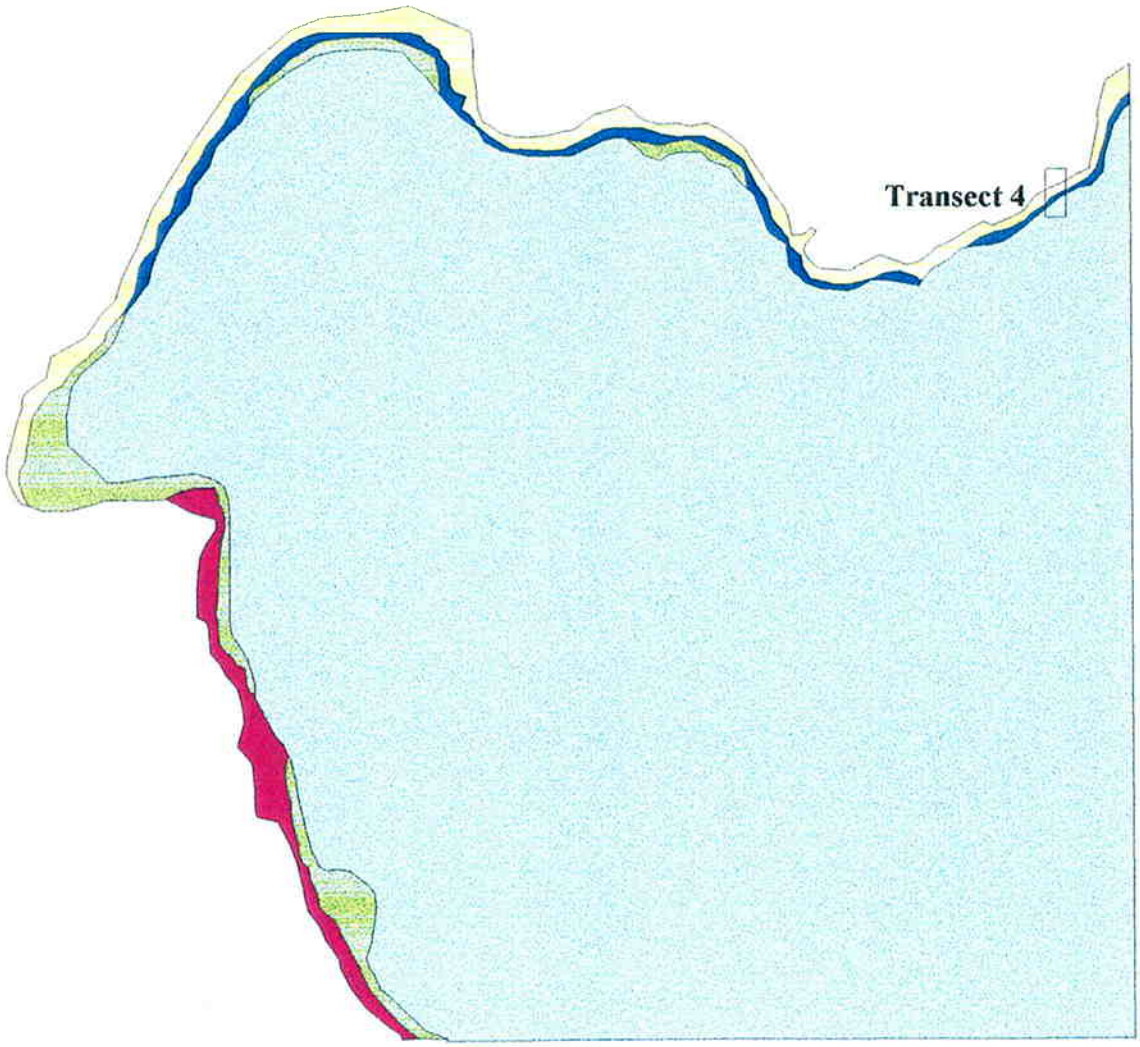


1000 0 1000 2000 Meters

Plant Communities

N
W E
S

# Dumbleyung - North-western section




900 0 900 1800 Meters

Dumbleyung - North-west
- Lake bed
- Samphire zone
- C.obesa/E.rudis/E.loxophleba/A.accuminata
- E.rudis/M.strobophylla/C.obesa
- C.obesa/M.halmaturorum

N
W E
S

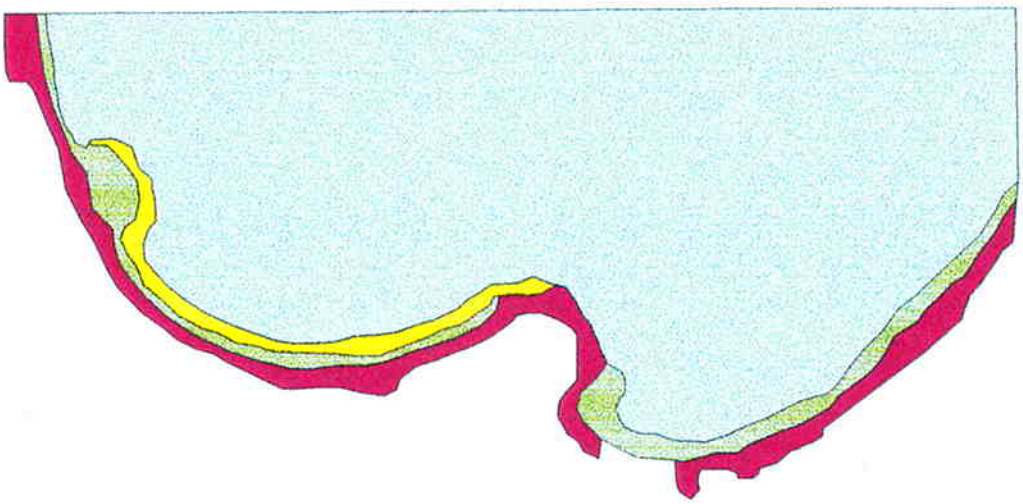
# Dumbleyung - North-west section


1000 0 1000 2000 Meters

Roads
Plant Communities

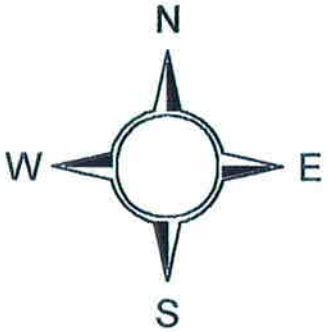
N
W E
S

# Dumbleyung - South-west section

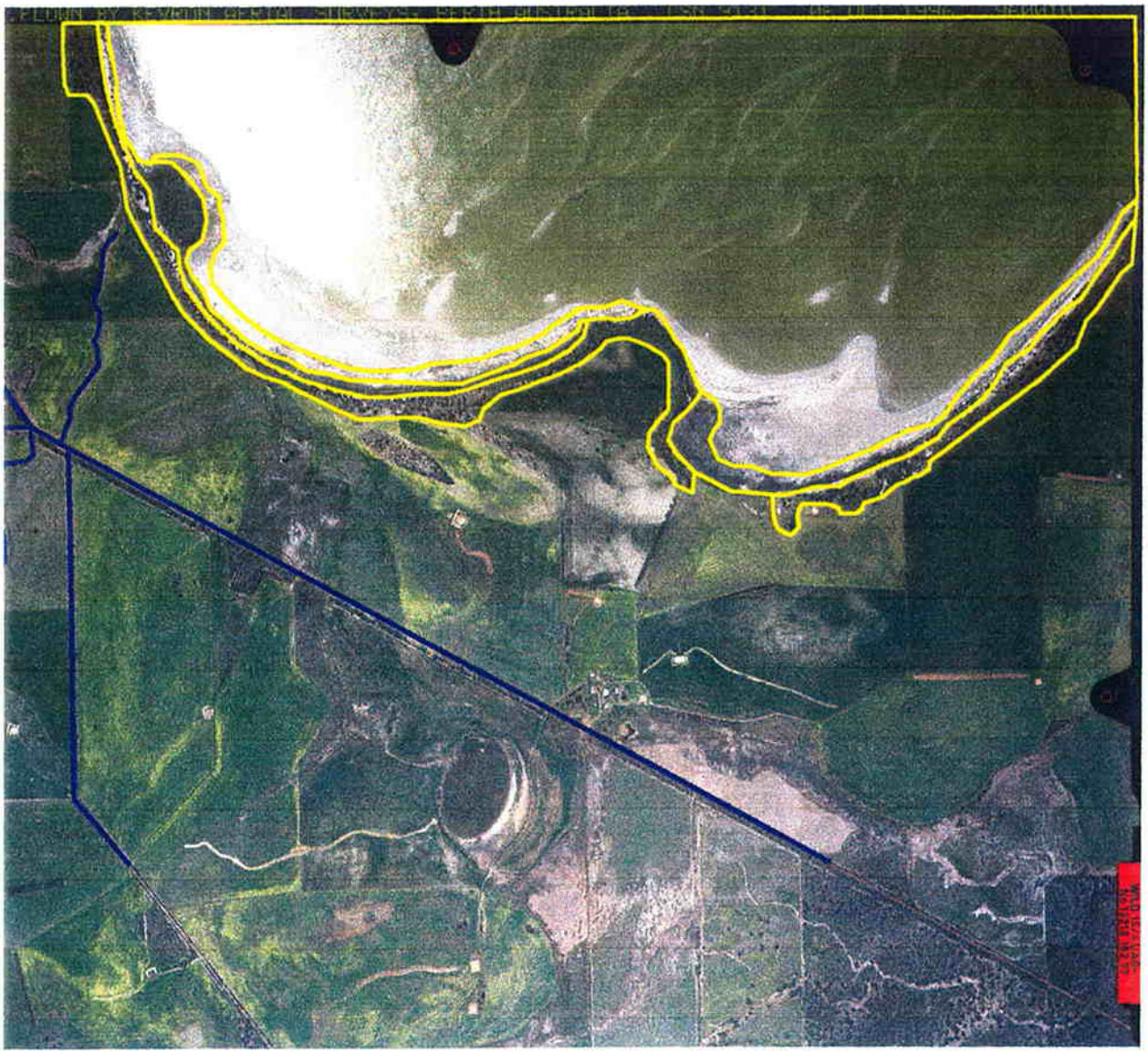


900 0 900 1800 Meters

Dumbleyung - South-west
- Lake bed
- Samphire zone
- C.obesa/E.rudis/E.loxophleba/A.accuminata
- Foreshore



# Dumbleyung South-west section

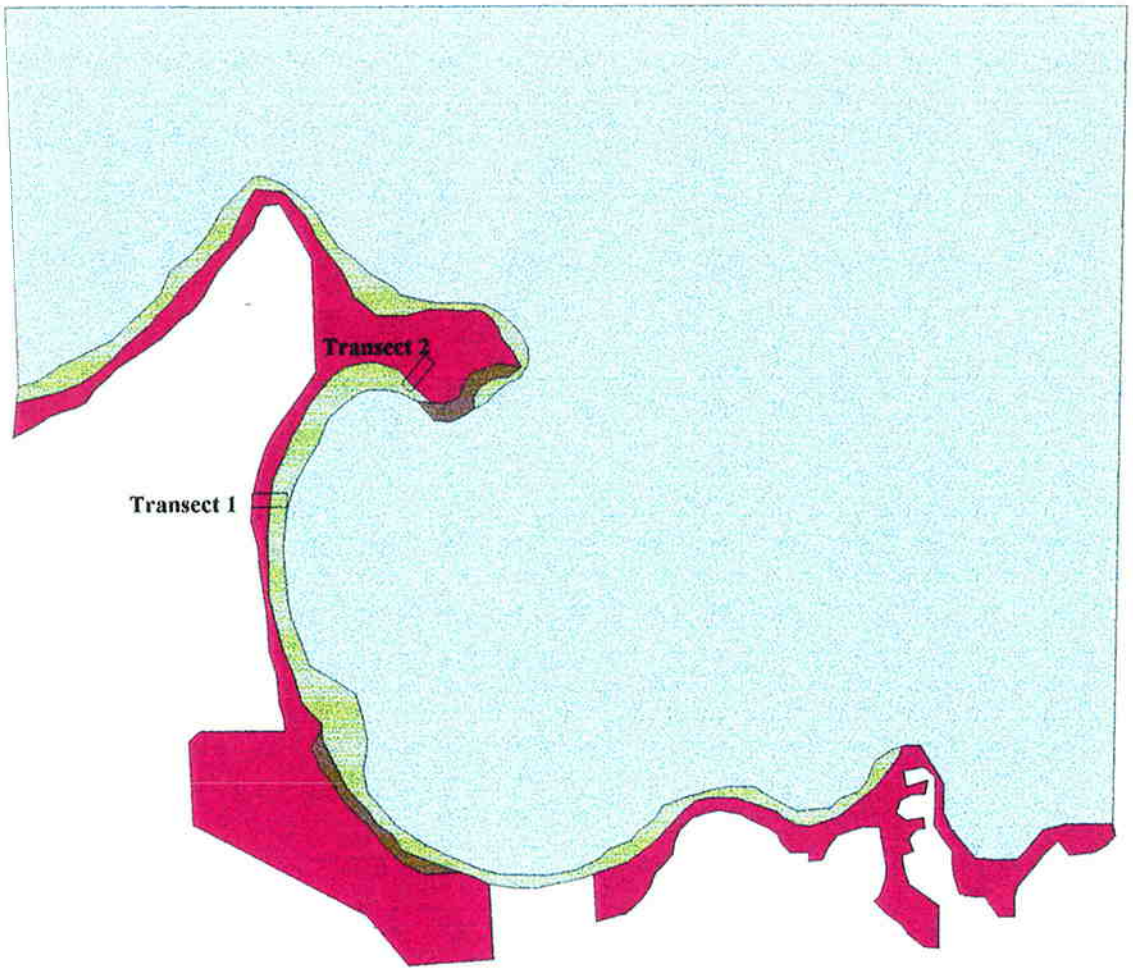


1000 0 1000 2000 Meters

Roads
Plant Communities

N
W E
S

# Dumbleyung - South-east section 1

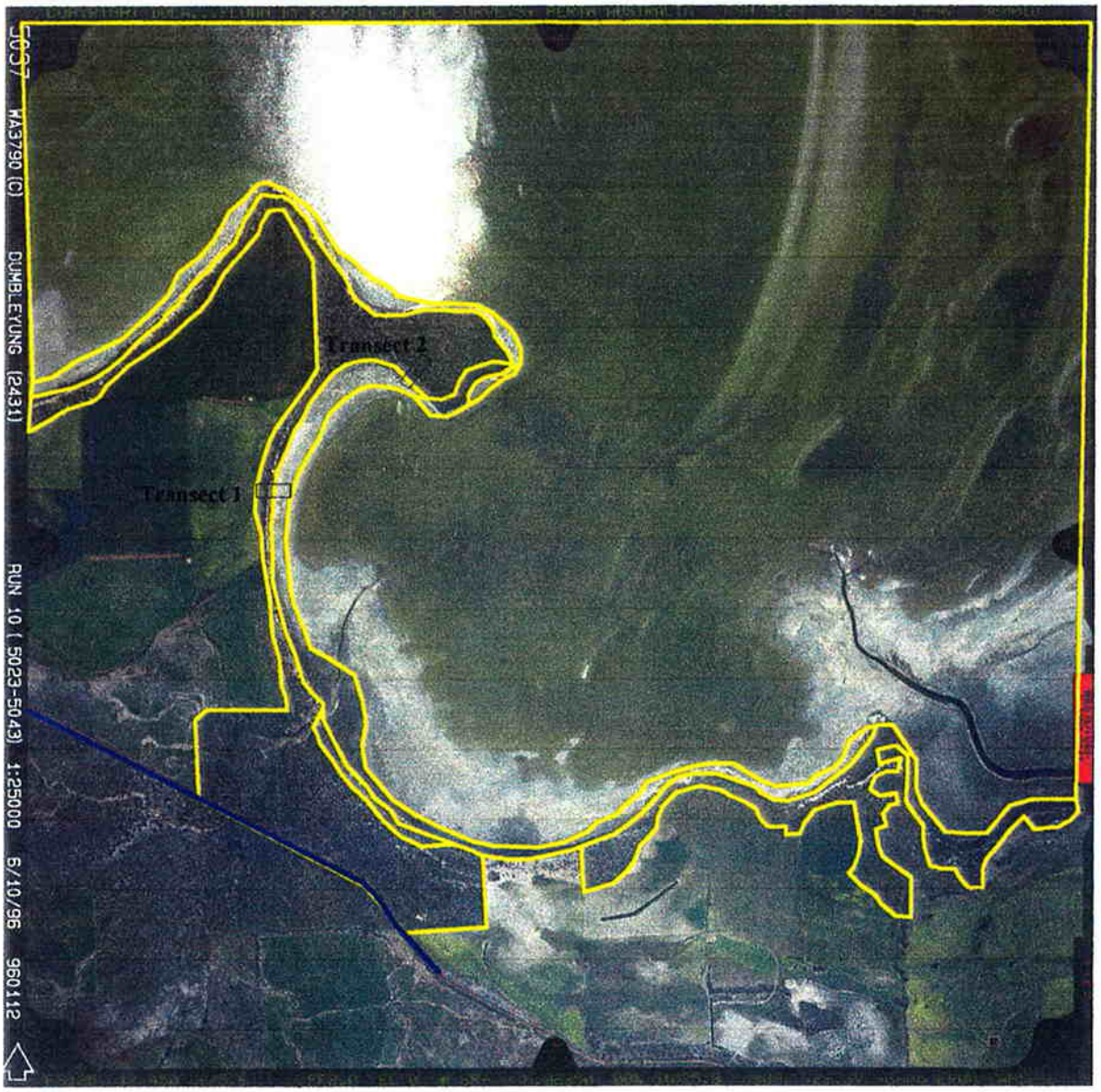



1000 0 1000 2000 Meters

N
W E
S

Dumbleyung - South-east 1
- Lake bed
- Samphire zone
- C.obesa/E.rudis/E.loxophleba/A.accuminata
- C.obesa/E.rudis

# Dumbleyung - South-east 1 section

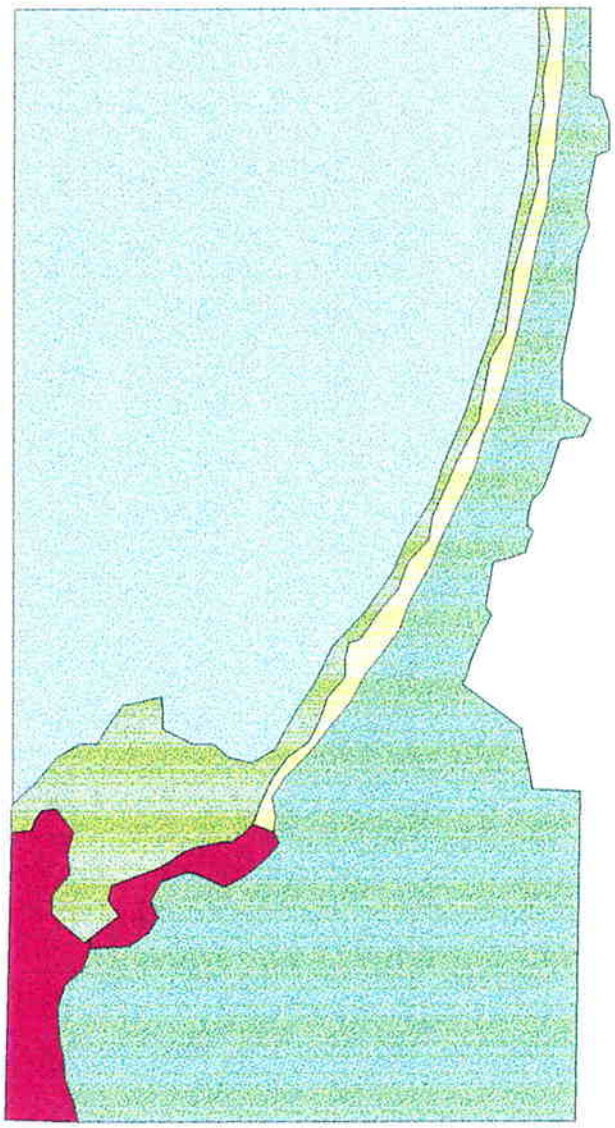



1000 0 1000 2000 Meters

N
W E
S

Roads
Plant Communities

# Dumbleyung - South-east section 2

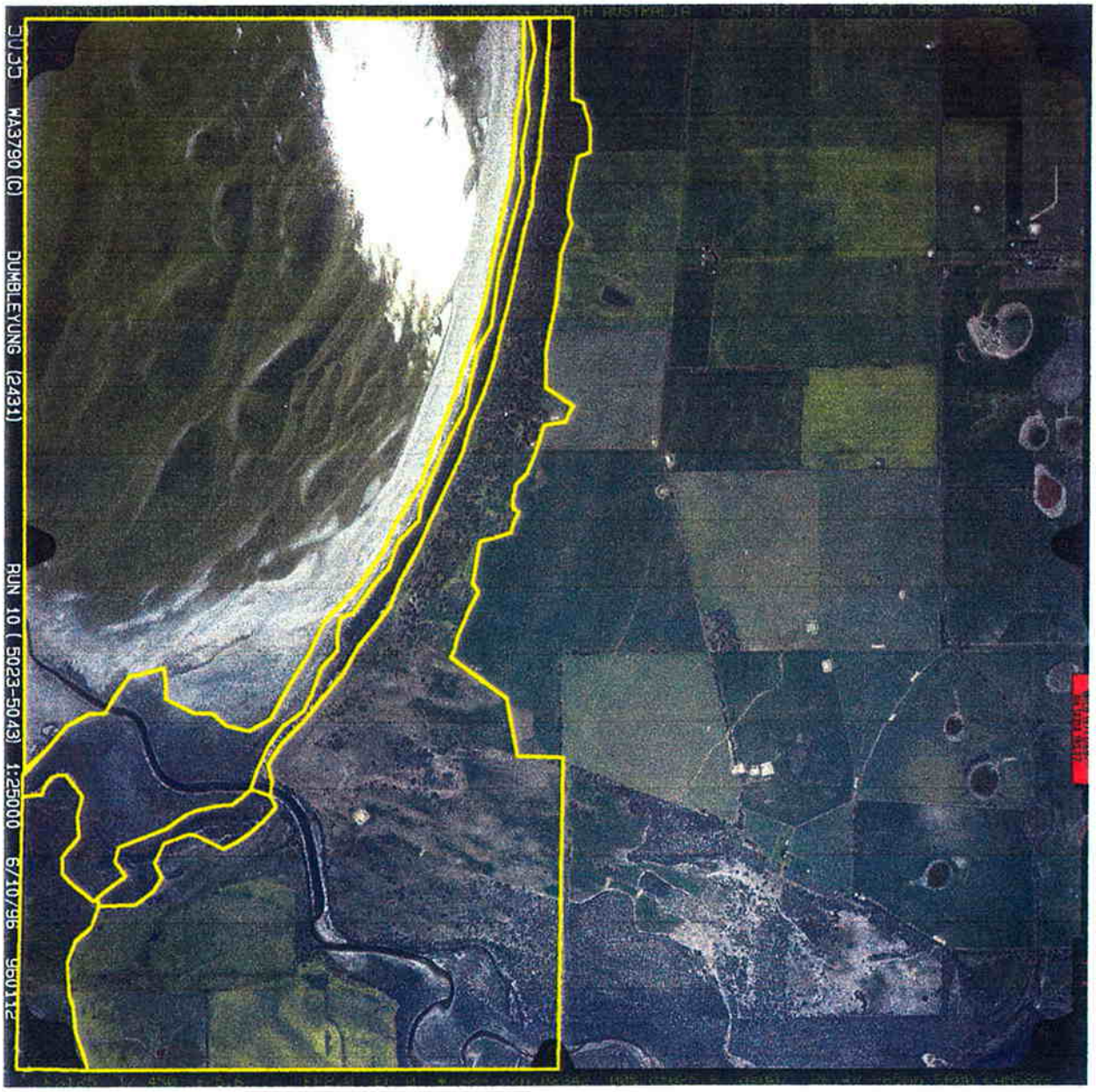


1000 0 1000 2000 Meters

Dumbleyung - South-east 2
- Cleared land/Paddock
- Lake bed
- Samphire zone
- C.obesa/E.rudis/E.loxophleba/A.accuminata
- E.rudis/M.strobophylla/C.obesa

N
W E
S

# Dumbleyung - South-east 2 section

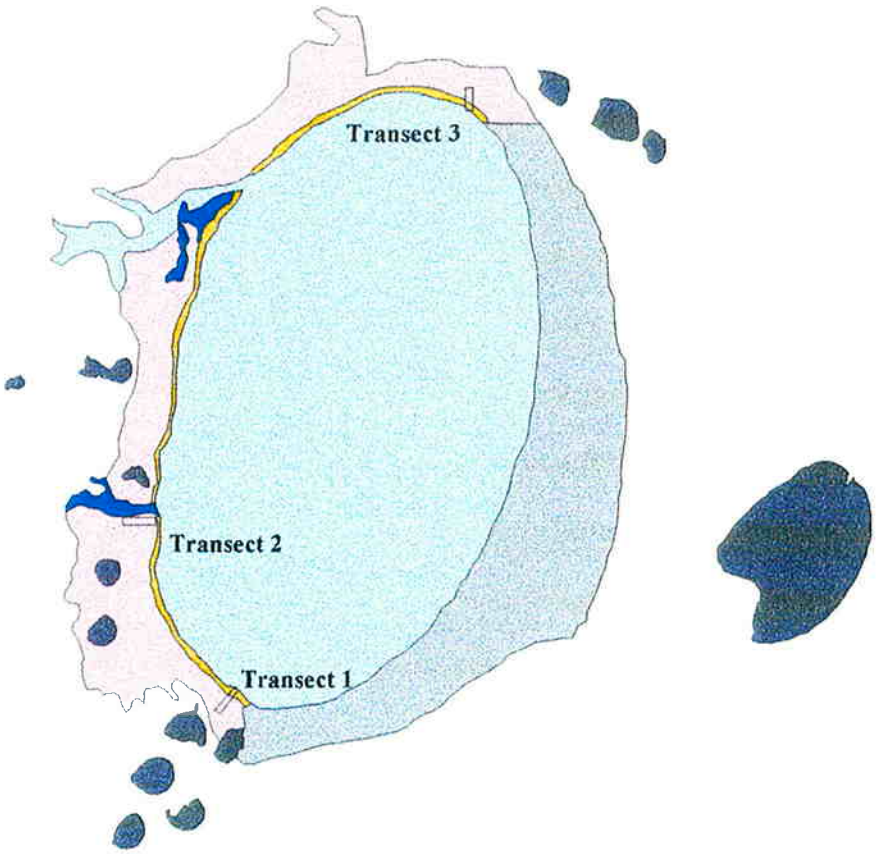



1000 0 1000 2000 Meters

Plant Communities

N
W E
S

# Lake Altham




700 0 700 1400 Meters

Lake Altham
- 0
- Lake Bed
- Saline depressions
- Inflow/outflow channel
- M.lateriflora/H. preissii
- M. halmaturorum/M. uncinata
- Severely salt affected

N
W E
S

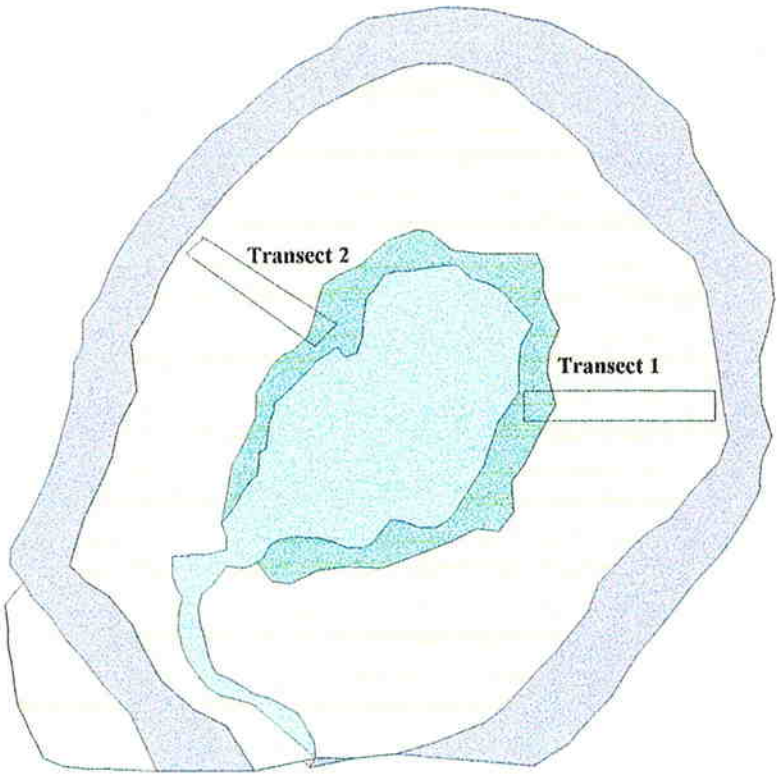
# Lake Altham


1000 0 1000 2000 Meters

N
W E
S

Roads
Plant Communities

# Yaalup Lagoon

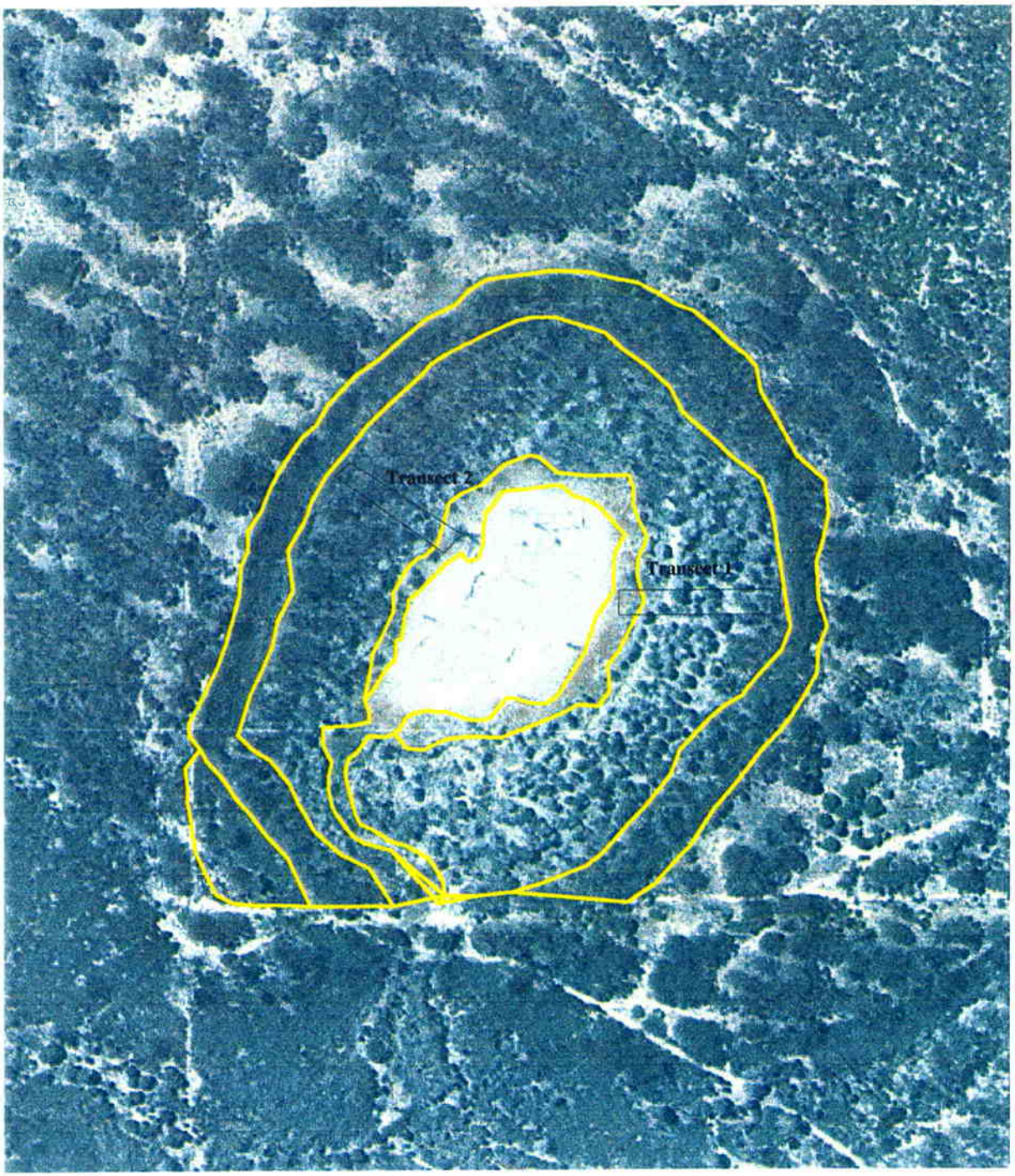



80 0 80 160 Meters

Yaalup lagoon
- M. strobophylla regeneration
- Stressed E. occidentalis
- Healthy E. occidentalis & M. strobophylla
- Lake bed

N
W E
S

# Yaalup Lagoon

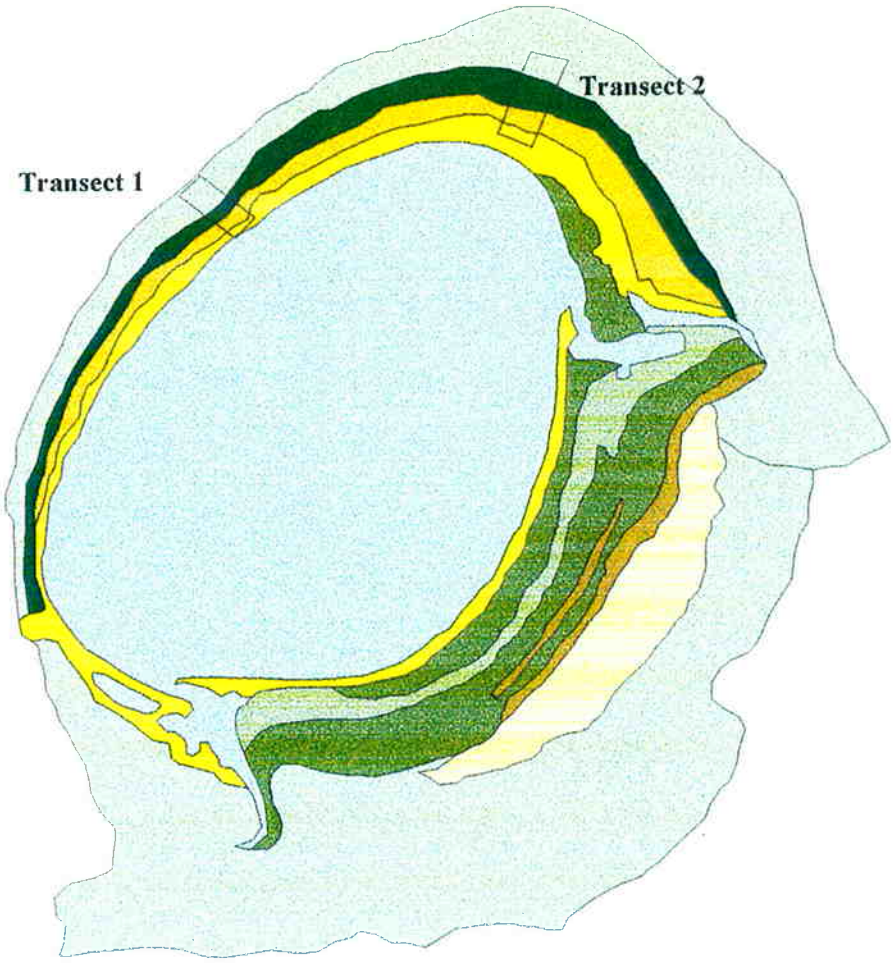



100 0 100 200 Meters

N
W E
S

Plant Communities

# Bennetts Lake

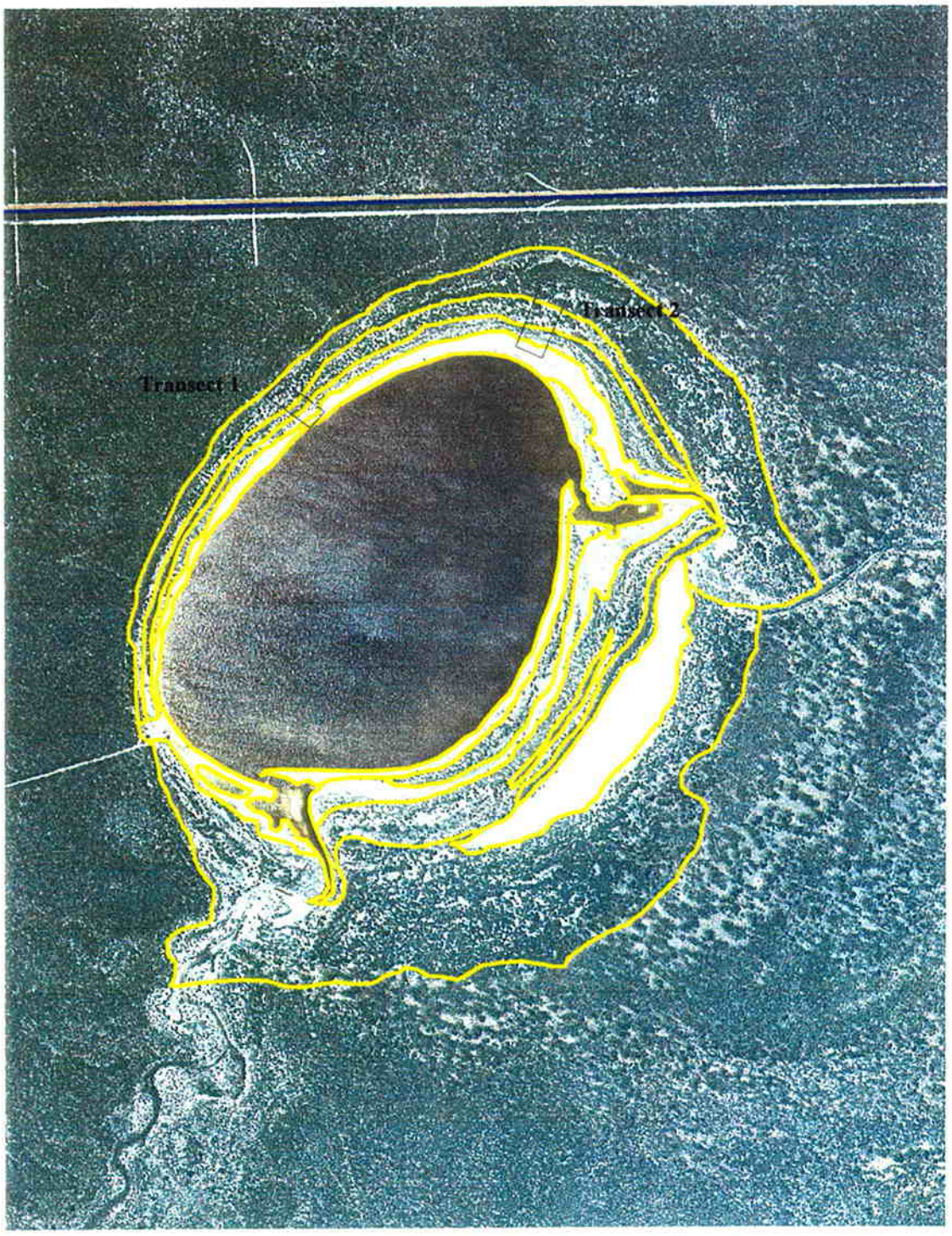



600 0 600 1200 Meters

Bennetts Lake
- Lake bed/Open water
- Lake bed/Sand
- Sand bar
- Samphire community
- M. halmaturorum
- M. halmaturorum and M. hamulosa
- Dense woodland (M. strobophylla)
- E. occidentalis etc
- M. hamulosa/M.halmaturorum

N
W E
S

# Bennetts Lake

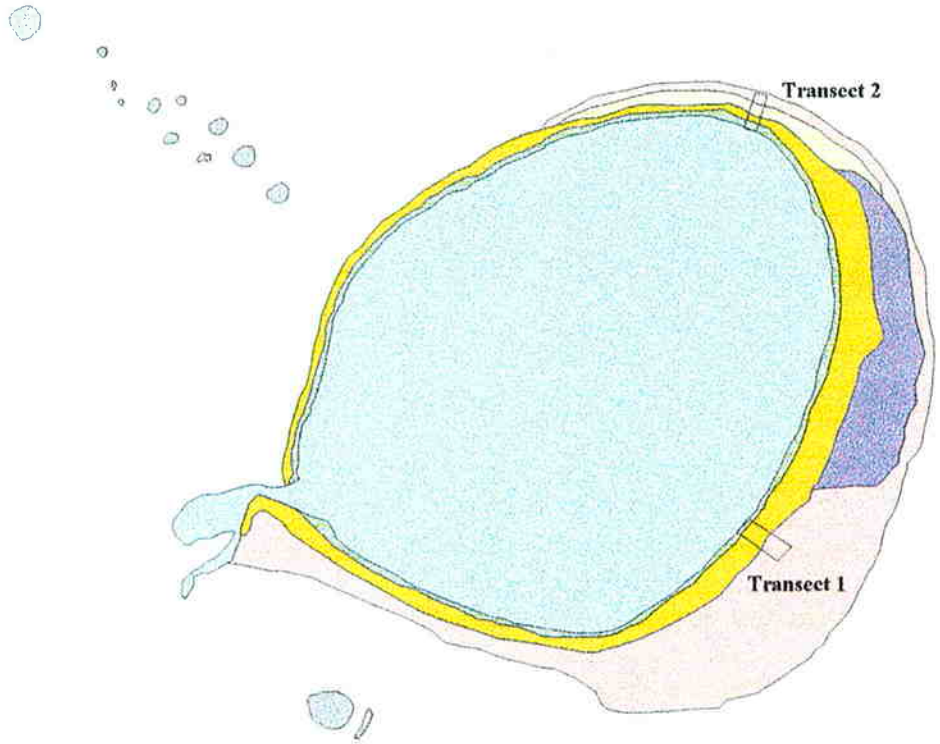



Bennetts roads
Plant Communities

N
W
E
S

400 0 400 800 Meters

# Ronnerup Lake

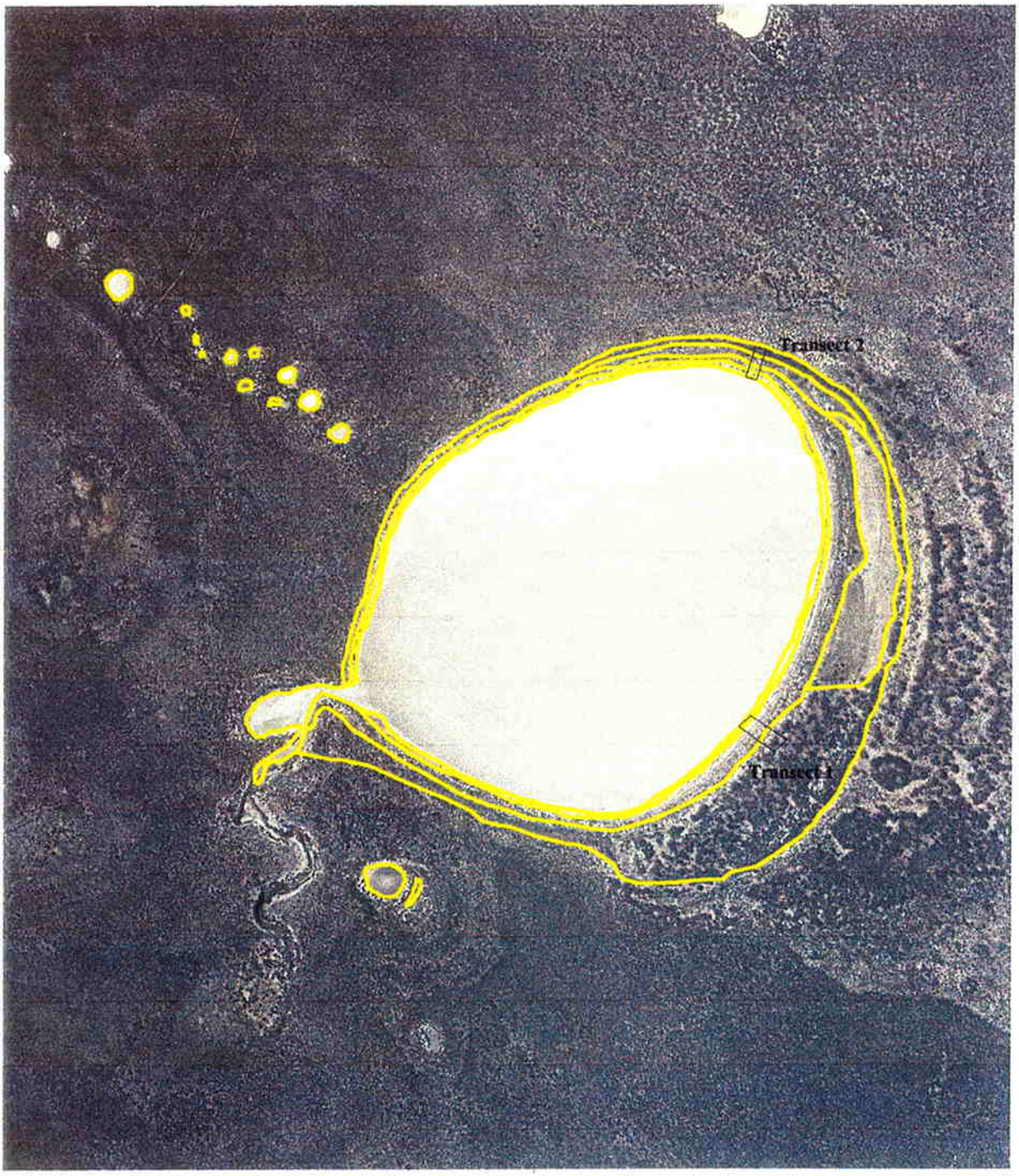



600 0 600 1200 Meters

Ronnerup Lake
- Lake bed
- Saline depressions
- Samphire community
- E.occidentalis/A.saligna
- E.occidentalis & samphire
- M.cuticularis/E.occidentalis
- Dense regen. E.occidentalis/M.cuticularis

N
W E
S

# Ronnerup Lake

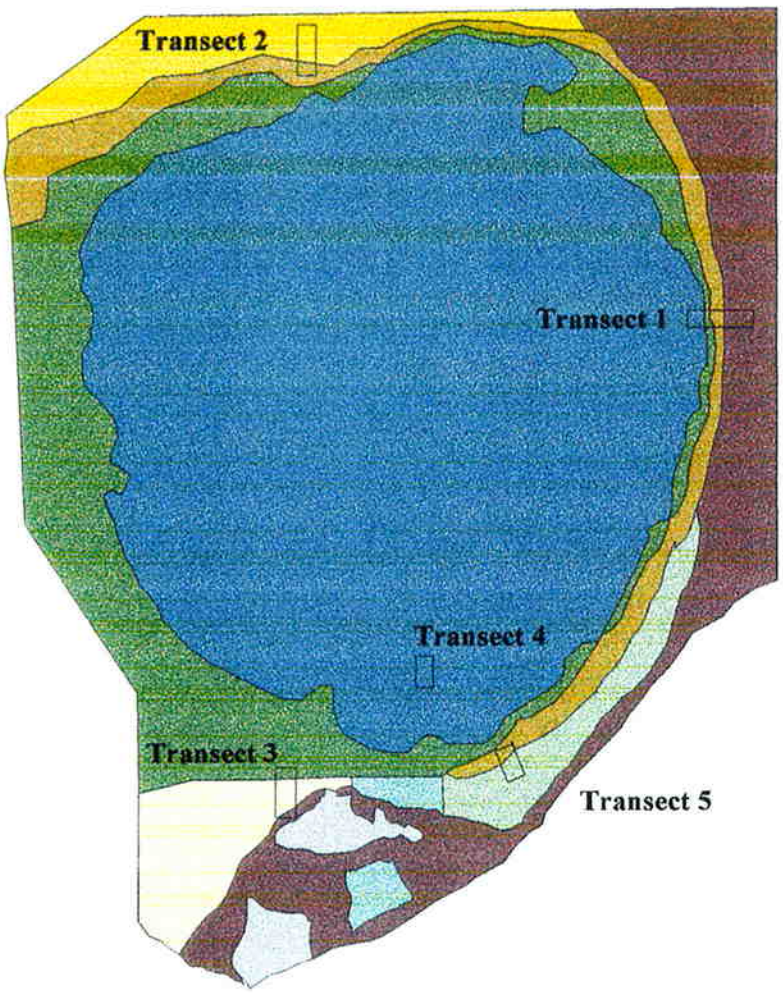



700 0 700 1400 Meters

N
W E
S

Plant Communities

# Lake Pleasant View

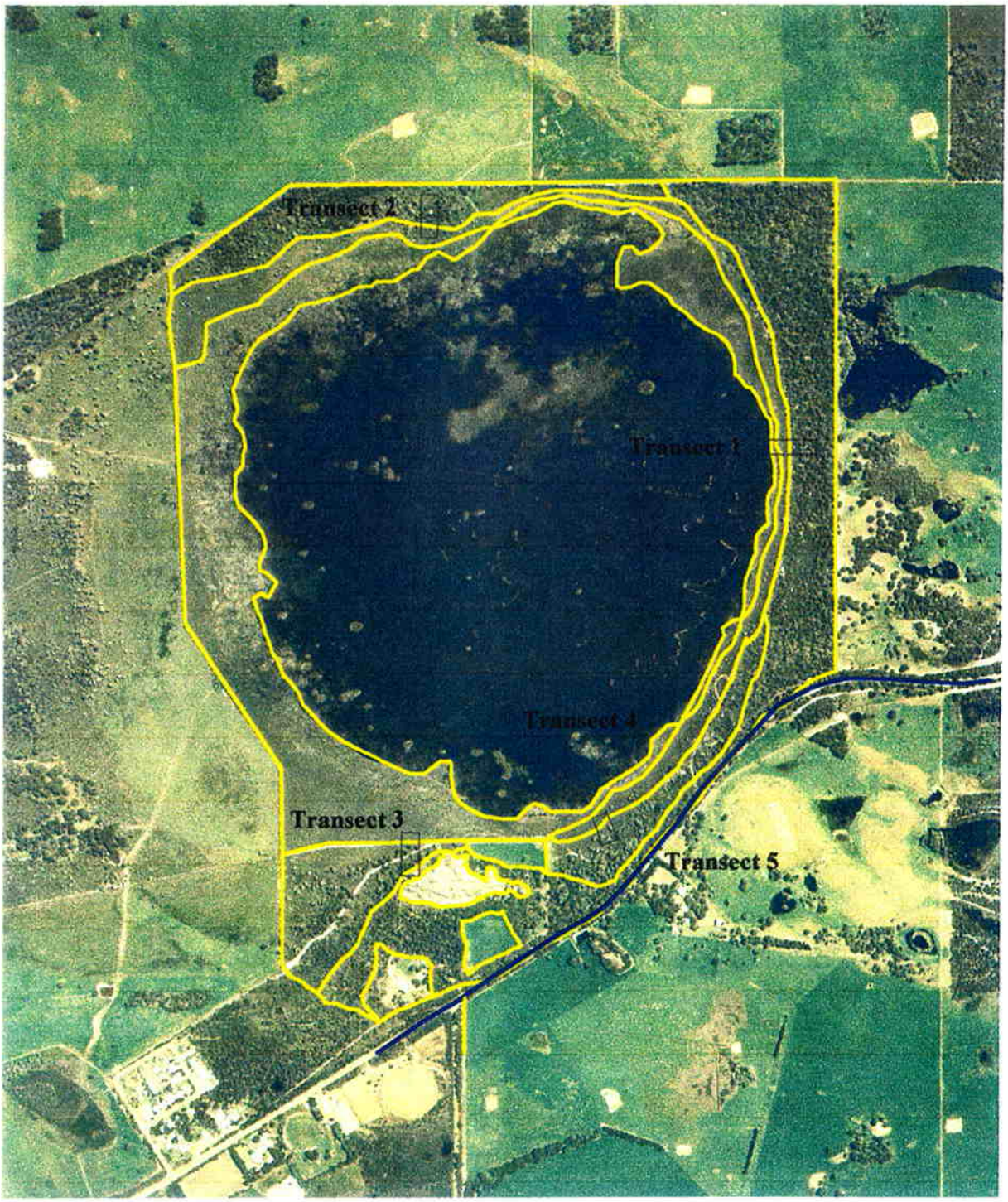



Lake Pleasant View
- E.marginata woodland
- M. cuticularis woodland
- M.cuticularis regeneration
- Paddock
- Granite outcrop
- M. cuticularis/E.occidentalis
- Mixed sedge
- Mixed sedge and shrub
- M. cuticularis/E.occidentalis with com.understorey

400 0 400 800 Meters

N
W E
S

# Lake Pleasant View




400 0 400 800 Meters

N
W E
S

Roads
Lake Pleasant View

# APPENDIX 5

## Species List and Symbols

| Species | Veg. Type | Symbol |
|---|---|---|
| *Acacia acuminata* | Sm Tree | |
| *Acacia? Cyclops* | Lge Bush | |
| *Acacia erinacea* | Med Bush | |
| *Acacia insolita* sub sp. *insolita* | Sm Bush | |
| *Acacia saligna* | Sm Tree | |
| *Agrostocrinum scabrum* | | "-" |
| *Allocasuarina huegeliana* | Sm Tree | |
| *Alyogyne huegelii* | Med Bush | "-" |
| *Alyxia buxifolia* | Med Bush | "-" |
| *Anarthria prolifera* | | "-" |
| *Anarthria scabra* | | "-" |
| *Atriplex* sp | Med Bush | |
| *Atriplex vesicaria* | Sm Bush | |
| *Baumea articulata* | Sedge / Rush | |
| *Baumea juncea* | Sedge / Rush | |
| *Baumea rubiginosa* | Sedge / Rush | |
| *Billardiera lehmanniana* | Vine | "-" |
| *Bossiaea linophylla* | Med Bush | |
| *Brachysema bracteolosum* | Sm Bush | |
| *Carpobrotus* sp. | Herb | |
| *Cassytha sp.* | | "-" |
| *Casuarina obesa* | Sm Tree | |
| *Centipeda minima* | Herb | |
| *Chenopodium sp* | Herb | |
| *Chorizandra enodis* | Sm Bush | |
| *Comesperma virgatum* | Sm Bush / Vine? | |

| Species | Symbol | Veg. Type |
|---|---|---|
| *Conostylis laxiflora* | Herb | "-" |
| *Corymbia calophylla* | Lge Tree | |
| *Cyperaceae sp.* | | "-" |
| *Cyperochloa hirsuta* | | "-" |
| *Cyperus gymnocaulos* | Sm Bush? | |
| *Dampiera linearis* | Sm Bush | |
| *Daviesia* sp | Sm Bush | "-" |
| *Dianella revoluta* | Herb | |
| *Disphyma crassifolium* | Herb | |
| *Dodonaea viscosa* | Lge Bush | |
| *Dryandra sp* | Med Bush | |
| *Enchylaena tomentosa* | Sm Bush | |
| *Eucalyptus kondininensis* | Med Tree | |
| *Eucalyptus loxophleba* | Med Tree | |
| *Eucalyptus marginata* | Lge Tree | |
| *Eucalyptus occidentalis* | Lge Tree | |
| *Eucalyptus rudis* | Lge Tree | |
| *Eucalyptus spathulata* | Med Tree | |
| *Eutaxia parvifolia* | Sm Bush | |
| *Frankenia* sp. | Sm Bush | |
| *Gahnia trifida* | Sedge / Rush | |
| *Gahnia* sp. | Sedge / Rush | |
| *Gastrolobium pusillum* | Med Bush | |
| *Gompholobium polymorphum* | Vine | "-" |
| *Hakea oleifolia* | Lge Bush | |
| *Hakea preissii* | Lge Bush | |

| Species | Veg. Type | Symbol |
|---|---|---|
| *Hakea trifurcata* | Med Bush | |
| *Hakea tuberculata* | | |
| *Halosarcia ?halocnemoides* | Sm Bush | |
| *Halosarcia indica* | Med Bush | |
| *Halosarcia* sp. | | |
| *Hardenbergia comptoniana* | Vine | "-" |
| *Hibbertia commutata* | Sm Bush | "-" |
| *Hovea trisperma* | Sm Bush | |
| *Hypolaena exsulca* | | "-" |
| *Isopogon attenuatus* | Sm / Med Bush | |
| *Jacksonia sp.* | Med Bush | |
| *Kennedia eximia* | Sm Bush | |
| *Lawrencia squamata* | | "-" |
| *Lepidosperma* sp. | Sedge / Rush | "-" |
| *Lepyrodia muirii* | | "-" |
| *Leucopogon? glabellus* | Sm Bush | |
| *Leucopogon obovatus* | Sm Bush | |
| *Lomandra effusa* | Sedge / Rush | |
| *Lomandra micrantha* subsp. *teretifolia* | Sedge / Rush | |
| *Loxocarya flexuosa* | | "-" |
| *Lyginia barbata* | | "-" |
| *Maireana sp* | Sm Bush | |
| *Meeboldina crebriculmis* | | "-" |
| *Melaleuca cuticularis* | Lge Bush | |
| *Melaleuca halmaturorum* | Lge Bush | |
| *Melaleuca hamulosa* | Lge Bush | |

| Species | Symbol | Veg. Type |
|---|---|---|
| *Melaleuca lateriflora* | | |
| *Melaleuca sp.* | | |
| *Melaleuca strobophylla* | | |
| *Melaleuca uncinata* | Lge Bush | |
| *Mesembryanthemum nodiflorum* | Herb | |
| *Olearia axillaris* | Med Bush | |
| *Opercularia hispidula* | Herb | |
| *Parapholis incurva* | | "-" |
| *Patersonia occidentalis* | Herb | |
| *Petrophile rigida* | Sm Bush | "-" |
| *Platytheca compressa* | Sm Bush | |
| *Rhagodia drummondii* | Sm Bush | |
| *Rhagodia preissii* | Sm Bush | |
| *Santalum acuminatum* | Lge Bush | |
| *Santalum murrayanum* | Sm Tree | |
| *Sarcocornia* sp | Sm Bush | |
| *Schoenus caespititius* | Sedge / Rush | |
| *Schoenus submicrostachyus* | Sedge / Rush | |
| *Schoenus* sp. | Sedge / Rush | |
| *Sollya heterophylla* | Vine | "-" |
| *Sporobolus virginicus* | | "-" |
| *Spyridium glaucum* | Sm Bush / Herb | |
| *Stackhousia scoparia* | Herb | |
| *Stipa elegantissima* | | "-" |
| *Stipa juncifolia* | | "-" |
| *Stipa trichophylla* | | "-" |

| Species | Veg. Type | Symbol |
|---|---|---|
| *Stylidium spathulatum* | Herb | "-" |
| *Templetonia sulcata* | Sm Bush |  |
| *Thomasia pauciflora* | Med Bush |  |
| *Threlkeldia diffusa* | Herb |  |
| *Tricoryne elatior* | Herb |  |
| *Viminaria juncea* | Med Bush |  |
| *Xanthorrhoea preissii* | Grass Tree |  |
| *Xanthosia huegelii* | Sm Bush |  |
| *Xanthosia rotundifolia* | Sm Bush |  |

# APPENDIX 6

GIS Metadata Statement

# SALINITY ACTION PLAN METADATA STATEMENT

## TITLE: Salinity Action Plan (SAP) – Wetland Monitoring

**Custodian Details:**

**Name:** Department of Conservation and Land Management (CALM)

**Jurisdiction:** Western Australia

## DESCRIPTION

**Abstract:** As part of the SAP, a series of transects on 25 wetlands scattered across the agricultural zone was monitored at 3 year intervals for size and condition of overstorey, seedling recruitment and changes in understorey composition.

The current datasets cover the baseline data for transects for all 25 wetlands.

**Search words:**

AGRICULTURE Monitoring
POLLUTION Soil
LAND Use Conservation
WATER Salinity
WATER Wetlands

**Geographic Extent Names:**

**Geographic Extent Polygons:**

-29.5 114.5, -29.5 12.5, -35.0 114.5, -29.5 114.5

## CURRENCY AND STATUS

| | | | |
|---|---|---|---|
| **Beginning Date:** | 01 June 1998 | **Progress:** | In Progress |
| **Ending Date:** | Not Known | **Maintenance and Update Frequency:** | As required |
| **Metadata Date:** | 29 June 2000 | | |

## ACCESS

**Stored Data Format:** DIGITAL Data has been stored on CD

**Available Format Types:** DIGITAL Arcview

**Access Constraints:** Available to CALM staff upon approval by custodian

## DATA QUALITY

**Lineage:** Transects and vegetation boundaries located on aerial photography and in the field. The vegetation communities were captured from 1:25,000 scale aerial photographs. Transects were identified from GPS.

**Positional Accuracy:** Transect coordinates obtained using GPS and 1:100,000 topographic maps. The estimated positional accuracy of vegetation polygon boundaries is within 25m on 1:25,000 map.

**Attribute Accuracy:** The vegetation communities were identified from air-photo interpretation and ground-truthing. Full definitions of each vegetation classification are included in the theme properties. Vegetation categories are based on dominant vegetation type.

**Logical Consistency:** Polygons have been checked to verify that errors have been minimised using Arcview software. Vegetation codes have been checked to avoid duplication and error.

**Completeness:** Vegetation polygons have been mapped at a scale of 1:25,000. It is estimated that small areas, those less than 2ha in size or 50m in width have not been represented or have been amalgamated into adjacent relevant polygons.

The legend contains limited descriptive information on each vegetation category. A complete description of each is included within the Arcview theme properties.

## CONTACT INFORMATION

**Organisation Name:** Conservation and Land Management (CALM)

**Position:** Senior Research Scientist

| | | | |
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