SOME NATURE RESERVES OF THE WESTERN AUSTRALIAN WHEATBELT

PART 16

TRAYNING SHIRE

B.G. MUIR

1979

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A NATURE RESERVE IN THE TRAYNING SHIRE

B.G. MUIR

Introduction

Trayning Shire lies in the eastern-central wheatbelt and has an area of 1632 square km. There are only 2 Nature Reserves within the Shire, totalling ca 21 sq. km or ca 1.3% of the area of the Shire. The majority of the land in the Reserves is contained in Billyacatting Hill Reserve (17746), which has an area of ca 20.5 sq. km.

Neither Reserve has 'A' classification and only Billyacatting Hill Reserve is vested (in the Minister for Water Supply, Sewerage and Drainage).

The current survey took place in March 1979 and consisted of a brief examination of Reserve 15570.

Methodology

Physical characteristics of the reserves were obtained directly from the most recently available lithographs as published by the Department of Lands and Survey, and interpreted from observations made on the reserve.

Reserves were examined by vehicle where tracks were available, and on foot. Local knowledge and air-photographs were consulted to find areas of particular interest. Only a very short time could be spent on each reserve, the smaller ones being examined in 1 or 2 hours, the larger ones in a full day.

Vegetation was classified using Muir's (1977) system (Table 1), which was designed specifically for describing wheatbelt vegetation. In the presentation of the abbreviated descriptions (in the section titled "Vegetation") capital letters in descriptive terms refer to specific classes of life form, height and canopy cover as used in the classification.

As the survey period on any reserve was very brief only the commonest plant species could be noted. Any species in which less than 3 individual plants were encountered within a space of 10-15 minutes examination of the vegetation were considered uncommon and are not listed. As much of the survey work was carried out rapidly and in unfavourable seasons, many plants were not flowering and so identifications were made from foliage alone. Only if an important dominant plant was not recognised were specimens bought back to the laboratory for examination.

Soil was examined very briefly and classified according to Northcote's (1971) texture groups and Munsell (1954) colour terms.

Fire history was determined from observation of the area, appearance of air-photographs and information from nearby farmers.

Fauna were not specifically sought, but some species (usually the most obvious) were encountered while examining vegetation. The lists provided are only a small fraction of the species present on nearly every reserve examined. Scats, footprints, burrows, nests and other indirect evidence is used only where identification is certain. Observations by farmers are used if considered reliable.

Opinion and recommendations expressed in these reports are entirely those of the author and are based on extensive experience in vegetation mapping and description in the wheatbelt, and association with faunal and habitat studies conducted by suitably qualified researchers.

Result and discussion

The features of Reserve 15570 can be summarised as a mosaic of Black Marlock mallee, Acacia shrubland and Broombush heath. Unlike many of the small wheatbelt reserves Reserve 15570 is relatively undisturbed because there is no road access to it.

The Reserve occupies low-lying land and contains some species e.g. Templetonia sulcata, which may indicate incipient salt accumulation in the soil. It is suggested the Reserve should be retained at all cost, as salting up is very likely should it be cleared.

The other reserve in the Shire, Billyacatting Hill Reserve (17746) has been surveyed in detail by Chapman, Dell, Kitchener and myself. These surveys, between 1972 and 1977, showed Billyacatting Hill Reserve to be vitally important as a conservation area for both fauna and flora. Currently the Reserve is vested in the Minister for Water Supply, Sewerage and Drainage and is allocated for "Catchment, Flora and Fauna". Considering the conservation value and the fact the Reserve has not been used for catchment for 40 years or more (local farmers, pers. comm.) it would be advantageous to transfer the vesting to the Western Australian Wildlife Authority. I strongly recommend such a transfer be made and that the status of Billyacatting Hill Reserve be elevated to 'A' class.

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Reserve 15570

Located ca 22 km SW of Bencubbin Townsite and ca 5.5 km E of Wallambin Lake. Shown on lithograph 55/80, B4.

Background

Originally set aside for a "Water Reserve" on 17 July 1914 and vested in the Metropolitan Water Supply, Sewerage and Drainage Board. The vesting was revoked and the title changed to "Flora" on 13 August 1954.

Physical characteristics

Reserve 15570 is rectangular, ca 0.8 km long (N-S axis) by ca 0.5 km broad (E-W axis) and has a total perimeter of ca 2.6 km and an area of 40.4686 ha. No contour maps or spot altitudes are available but I estimated (visually) an altitudinal range of ca 20 m, the highest point being the NE corner.

Vegetation

Black Marlock Open Shrub Mallee over scattered shrubs covers most of the southern one-third of the Reserve. The remainder is Acacia Scrub over Broombush Scrub over Thryptomene Dwarf Scrub D or Broombush Heath A over Phebalium and Melaleuca Open Dwarf Scrub C.

Plant species

Thirty plant species were recorded, of which 6 are exploited by the wild flower seed trade.

Nest hollows

Some small hollows are present in the mallee area.

Weeds

None recorded.

Fire history

The heaths are less than 20 years old, the shrubland and mallee older than 30 years.

Fauna

Grey Kangaroo (Macropus fuliginosus) : 2 in Acacia shrubland.

Bronzewing Pigeon (Phaps chalcoptera) : 2 in Acacia shrubland.

Crested Pigeon (Ocyphaps lophotes) : 2 in Acacia shrubland.

Port Lincoln Parrot (Platycercus zonarius) : 1 in mallee area.

Galah (Cacatua roseicapilla) : 14 in Acacia shrubland.

Red-capped Robin (Petroica goodenovii) : 1 female seen in Acacia shrubland.

Western Shrike-thrush (Colluricincla harmonica rufiventris) : 1 in mallee area.

Crested Bell-bird (Oreoica gutturalis) : 1 in mallee.

White-browed Babbler (Pomatostomus superciliosus) : 2 in Broombush heath.

Weebill (Smicrornis brevirostris) : common in mallee.

Magpie-lark (Grallina cyanoleuca) : several in mallee.

Western Magpie (Cracticus tibicen dorsalis) : 1 in mallee.

Grey Currawong (Strepera versicolor) : 1 in mallee.

Exotic fauna

Rabbit scats and diggings in Acacia shrubland.

Firebreaks and fences

Well maintained firebreaks on all sides and fenced on all sides.

Human usage

No extensive human usage. Occasional sheep escapes into Reserve.

Adjacent uncleared land

Abundant uncleared to north of Reserve.

Remarks

There is no road access to the Reserve. The closest approach is along the N boundary of C.G. 20308 from Mandiga - Trayning Road. Lockyer Road terminates at Mandiga - Trayning Road and does not extend through to the Reserve. Owing to an omission, no photographs were taken of the Reserve.

Opinion and recommendations

Reserve 15570 is in excellent condition and little disturbed by human influence, mostly because of its isolation from roadways. It carries 4 associations and is fairly rich in plant species and fauna. It occupies a low area and may be important for soil conservation. Some of the land has a potential to become salt if clearing occured. I recommend Reserve 15570 be retained in its present condition and be vested in the Western Australian Wildlife Authority.

APPENDIX

Reserve 15570

Black Marlock mallee

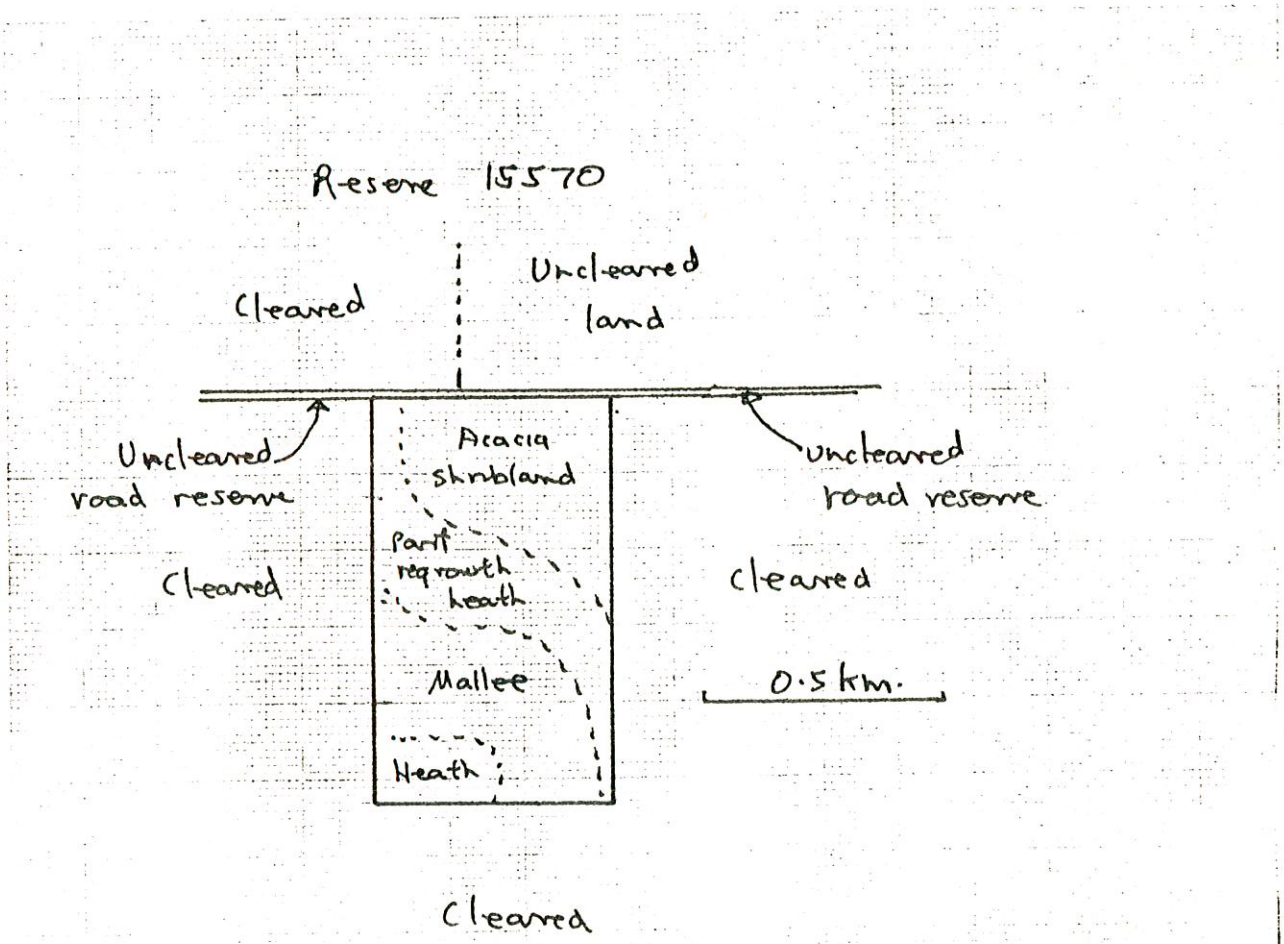
Eucalyptus redunca shrub mallee, 2-9 m tall, 10-30% cover over scattered shrubs, locally up to 5% cover. Other species recorded were *Acacia acuminata*, *A. colletioides*, *A. graffiana*, *A. leptopetala*, *Borya nitida*, *Dianella revoluta*, *Eremophila clarkii*, *E. oppositifolia*, *Eucalyptus loxophleba*, *Exocarpus sparteus*, *Grevillea acuaria*, *Melaleuca adnata*, *Olearia muelleri*, *Templetonia sulcata*, *Westringia cephalantha*. Soil red brown, light clay with some grit. Poorly drained.

Acacia shrubland

Acacia resinomarginea shrubs, 4-6 m tall, 10-30% cover over *Melaleuca uncinata* shrubs, 2-3 m tall, 10-30% cover over *Thryptomene* sp. 0.5 m tall, 10-30% cover. Also recorded were *Acacia chrysella*, *Baeckea muricata*, *B.* sp. 9, *Phebalium tuberculosum*, *Thryptomene* sp. 4 and *Wehlia* affin. *thryptomenoides*. Soil yellow, loamy sand. Well drained.

Broombush heath

Melaleuca uncinata shrubs, 1.5 - 2.0 m tall, 30-70% canopy cover over *Phebalium tuberculosum*, *Phebalium* ? *brachycalyx* and *Melaleuca laxiflora* shrubs 1 m tall, 2-10% cover. Other species recorded were *Acacia* sp., *A. graffiana*, *Alyxia buxifolia*, *Amphipogon debilis*, *Brachysema daviesioides*, *Eriostemon deserti*, *Eucalyptus leptopoda*, *Hakea subsulcata*, *Santalum acuminatum*, *Stipa elegantissima*. Soil pinkish brown, sandy clay. Poorly drained.


Reserve 15570
Cleared
Uncleared land
Uncleared road reserve
Acacia shrubland
Part regrowth heath
Mallee
Heath
Uncleared road reserve
Cleared
Cleared
0·5 km.
Cleared