DRYANDRA MANAGEMENT PLAN

INTRODUCTION

The Dryandra forest is one of the few remnants of the original wheatbelt vegetation found in the Narrogin District of the south west of W.A. The forest is isolated from the main south west forest belt. The forest is made up of discontinuous blocks totalling approximately 28 000 ha. Some 8 000 ha was converted to mallet plantation between 1926 and 1957.

The forest is predominantly wandoo (E. wandoo) woodland with occurrences of brown mallet (E. astringens). There are also more open areas of woodland with powderbark wandoo (E. accedens), marri (E. calophylla) and jarrah (E. marginata).

To satisfy the demands of a thriving tannin industry areas of brown mallet were extended by planting this species on some of the better wandoo sites. The tannin bark industry is no longer of importance, but other values have been placed on this forest.

Today the Dryandra forest is of particular significance for conservation of fauna and flora. It is one of the few sites of this forest ecotype remaining, and more significantly it has the potential to remain an important habitat for endemic species of fauna, some of which are considered rare and endangered.

The old Dryandra forestry settlement is today managed by Lions International as a recreation village.

The open woodland character of the Dryandra forest is popular with visitors for its aesthetic and recreation appeal.

It is primarily for its fauna conservation values that the Dryandra forest will be managed by the Forests Department as a Nature Conservation Forest.

HISTORY

To fully appreciate any proposals for management of the Dryandra forest it is important the past management of this forest be considered.

Early this century when vast areas of the wheatbelt were being developed for agriculture the Dryandra forest and similar areas were unattractive to clear because they contained a lot of high ground unsuitable for agriculture. This high ground generally contained rocky breakways, poorer soils and had heavy infestations of plants poisonous to stock (Gastrolobium species). These areas also contained stands of mallet and in particular brown mallet (E. astringens).

Early this century mallet bark was exported as part of a thriving tannin industry and provided a valuable source of income to those developing the land. As a result, vast tracts of mallet were stripped for their bark to the extent that the future of the tan/bark industry was threatened. In particular the brown mallet was exploited because of its superior tannin content and its tendency to grow in pure stands.

In 1924 the Forests Department recognized that over-exploitation of the mallet resource was rife and took steps to control the stripping of mallet bark from areas of Crown land reserved for mallet production.

In 1926 the Forests Department instigated a plantation scheme at Dryandra to extend the range of mallet to ensure the supply of tannin bark for export. These areas were dedicated State Forests Nos. 51, 52 and 53 in 1934 and 1935. Some 8 000 ha were established between 1926 and 1957.

Although the tannin bark industry was the major reason for dedication of these forests and the establishment of plantations, the situation has now changed at Dryandra. Mallet bark export ceased in 1969 because of the decline in world demand for natural tannins and competition from synthetic

materials. Today the mallet plantations constitute a useful resource for tool handles, fence posts and firewood.

In 1927 a resident overseer was stationed at Dryandra settlement by the Forests Department to administer matters associated with the mallet plantations. In 1952 the Department established its second commercial nursery at Dryandra settlement to provide plants at cost to foster tree growing in the rural areas to the south and the east. The nursery was subsequently transferred to the present Narrogin headquarters site in 1967 to provide better social and community amenities for the workforce. The settlement at Dryandra then became redundant. Today the old Dryandra forestry settlement is under long term lease to Lions International as a recreational village and is managed jointly by a committee comprising nominees from Lions and the Forests Department. The lease over 34 ha was issued in February 1972.

As well as the tannin bark industry the Dryandra forest supported a small salvage sawmill for wandoo during the 1950s and 1960s.

The Dryandra Forest is significant for the conservation of the floral speciation represented in it. Not only are mallet areas represented but interesting associations of wandoo, jarrah and marri woodlands are found. These are associated with an equally diverse range of understorey vegetation including the very poisonous plants which rendered the area unsuitable for agriculture. It is ironical that this vegetation is now highly valued for its potential to conserve native fauna populations.

Of recent time the Dryandra forest and its natural history has received considerable publicity. The main contribution being "Dryandra the story of an Australian Forest", V. Serventy, 1970. It is against this brief background that the plans for management of this forest must be made.

THE RESERVE

1.1 Location

The main part of the Dryandra Forest is located immediately 25 km north west of Narrogin on the Williams-Wandering Road.

The forest is comprised of many separate areas of forest which collectively cover some 27 950 hectares in the Narrogin District. The main forest area is approximately 145 km south east of Perth (Fig.1).

1.2 Tenure and Area

Most of the area known as Dryandra Forest is classified as State Forest No. 51, 52 and 53 plantation areas. These forests were dedicated in 1934 and 1935 for the purpose of preserving a source of mallet. As can be seen from Fig. 2. the Dryandra forest is made up of a number of discontinuous forested blocks surrounded by private property. Within the main forest block there is a large area of 1 270 ha (Reserve 16201) which is held in trust by the Minister for Water Supply for the purposes of Water and Timber. This is virgin forest and is being managed in conjunction with adjacent State forest by the Forests Department.

Land tenure is illustrated in Appendix I and lists areas for each forest block comprising Dryandra forest.

DESCRIPTION

Climate

The climate of the Dryandra forest is typical of that found in the 500 mm zone of the wheatbelt. It can be described as Mediterranean with marked winter rainfall and hot dry summers. The average annual rainfall for Narrogin is 507 mm.

SOILS AND GEOMORPHOLOGY

In general geomorphology of this area consists of the laterite mantled plateau, modified by erosion and deposition (McArthur, et al, 1977). This is the basis for subdivision into landform units. The units have a characteristic range of soils, which are described using the CSIRO notation (Northcoate, et al, 1967). Delineation requires recognition of plateau, slope and valley floor. The units have been given local geographic names.

The elevation of these landform units varies about 100m above and below Narrogin, which is 340m above sea level. These landform units make up gently undulating countryside sometimes interrupted with sharp breakaways midslope.

(i) Plateau Type

This (Norrine unit) occupies the upper landscape of the Dryandra area and comprises small, gently sloping laterite residuals, bounded in parts by duricrust, small escarpments and spurs which may reach the valley floor. The associated soils are gravelly sands, sand, duplex yellow soils, laterite boulders and duricrust.

(ii) Slope Type

This (Noombling unit) comprises gently sloping terrain, which may extend over local divides from one valley to the next (and includes the local interfluves). Yellow earths exist on slopes below scarps, with associated granite and dolerite outcrops.

(iii) Valley Type

This (Biberkine unit) consists of valley floors, major tributary streams and has an irregular outline because it extends into minor tributaries. The valley floor has gradients of about 1 : 300 in the Dryandra area. It consists of alluvial material which generally forms a simple soil pattern whereby the upper terraces have a yellow duplex soil and the lower terrace adjacent to the stream consists of undifferentiated alluvium.

VEGETATION

The indigenous vegetation is typical of that found on the western margins of the wheatbelt in the south west of W.A. It is generally of low open woodland interspersed with areas of more open forest and sometimes dense thickets. The vegetation types are closely associated with soils and topography and distinct vegetation types can be found on the 3 landforms identified.

(i) Plateau type (Norrine unit)

A high lateritic plateau which usually contains an open woodland of powderbark wandoo (E. accidens), jarrah (E. marginata) and marri (E. calophylla). The latter two species are relatively common where sandy soils predominate. A mixed scrub layer is usual and is often dominated by thickets of Dryandra nobilis and occasionally the non-commercial sandalwood (Santalum lanceolatum).

Low, dense E. drummondii mallee associations without tree overstorey development occupy part of this landform.

(ii) Slope type (Noombling unit)

From the lip of the breakaways the land usually falls steeply for a short distance, then gradually becomes more gentle and eventually merges imperceptibly with the Valley type. Brown mallet (E. astringens) is common in small pockets immediately below the breakaways but gives way to wandoo (E. wandoo) and powderbark wandoo (E. accedens) downslope.

The open woodlands of wandoo and powderbark wandoo on the slopes are usually associated with a dense thicket of sandplain poison (Gastrolobium microcarpum) understorey.* In other areas Casuarina huegeliana forms thickets in association with granite outcrops.

* The 1927 Forests Department Working Plan No.42 described these as having an abundance of poison plants which made them unsuitable for pasturage without expensive destruction of poison by grubbing. This by the way is still a problem in certain areas.

(iii) Valley type (Biberkine unit)

The main vegetation component on this landform unit is an open wandoo woodland with a ground cover of grasses and sedges. The form and vigour of wandoo is best developed in these areas. On heavier soils wandoo is replaced by thickets of Raspberry Jam (Acacia acuminata). Where granite is exposed or overlain by shallow sands, these stands are replaced by Casuarina huegeliana.

Much of the Valley type has been alienated because of the ease of access and high water retention properties of the soils which explains the fragmented nature of forest blocks.

The Significance of the Vegetation

As evidenced by the vegetation types, there is a great diversity of vegetative types and a large number of species represented (see species list Appendix). One can only presume that since there is such a small area of native vegetation reserved in this part of the wheatbelt that the Dryandra Forest is and will continue to be significant to floral conservation. The only other areas of Crown land of importance in this vegetation type are flora and fauna. Reserves vested in Department of Fisheries and Wildlife. See Fig . These were original Crown land reserves of mallet. Most significantly this forest contains a reserve of virgin wandoo, is one of the principal remaining areas of brown mallet (E. astringens), contains some specimens of blue mallet (E. gardneri) and provides some of the most eastern occurrences of jarrah (E. marginata), powderbark wandoo (E. accedens) and E. decipiens. The sward form of E. wandoo and powderbark wandoo are fine examples of adaptation to an environment.

Natural mallet areas are characterised by a lack of an understorey or gound flora. In natural non mallet areas, the reverse is true, especially in the sandy soils and near granite outcrops. These areas contained dense thickets of poisons and are believed to contain a number of very rare plant species (eg the red flowering leschenaultia formosa). More investigation is probably required on collection and identification.

Of significance to the Dryandra forest vegetation are the brown mallet (E. astringens) plantations. These cover approximately 8 000 ha of the forest. The plantations were generally sown on or near the original mallet sites and on the better wandoo sites. It is significant that these sites no longer carry the dense thickets of poisons described in early reports.

FAUNA

The importance of the fauna of Dryandra is inherently related to the flora and the habitat it provides. Early reports from inland parts of W.A., before European settlement of the area between the 400 mm and 650 mm rainfall confirm that the area was very rich in native mammals and birds. Following agricultural development with its extensive clearing of bushland and the introduction of exotic animals, plants and disease, both the number of species and the area inhabited by them has been reduced. In the wheatbelt few pockets of bushland remain which are large and varied enough to provide an adequate habitat for the remaining extant species. Of these areas, Dryandra Forest is the largest and most diverse and it therefore presents the best long term chance of continuing to provide for the species now present. For this reason, the proper management of the area, as well as its permanent retention as bushland, is of great importance.

From fauna studies carried out a wide range of mammals, frogs, lizards, snakes and birds have been recorded in the area. These are listed in Appendix III. The range for many of these species has been greatly reduced in recent decades. Some species are now considered to be relatively rare, eg Woylie (Bettongia penicillata), Numbat (Myrmecobius fasciatus), Quenda (Isoodon obsesulus). The area also provides a valuable habitat for the mallee fowl.

Studies have shown (Christensen, Burbridge) the survival of the Woylie is very dependent on the maintenance of dense thickets for protection from predators and as a food source. Concern is mounting that unless these thickets are preserved and regenerated the Woylie and other native mammals associated with this habitat may be endangered.

Any list of fauna must include mention of the fox, feral cats and rabbits. Although concentrated mainly around the boundaries close to private property they constitute a threat to some native fauna species. Initially fox populations and introduced predators were kept to a low level because they were killed by predating on native fauna which had browsed on the Gastrolobium species containing a poisonous substance sodium fluro acetate (1080). This poisoning was artificially reinforced by 1080 poisoning for rabbits. However more recently with the use of the myxomytosis virus for rabbit control and the decline in "poisons" the native fauna population appear to be threatened by the increase in fox numbers.

HYDROLOGY

The majority of areas comprising the Dryandra Forest lie within the Murray River drainage system and more particularly, between the main eastern branches of the Hotham and Williams Rivers. Some outlying blocks of State Forest south of Narrogin are located within the Blackwood drainage system. These rivers are all saline, particularly the eastern tributaries, due to the vast amount of agricultural clearing.

The value of this forested area for water production is therefore insignificant other than on a local basis.

FACTORS INFLUENCING MANAGEMENT

Recognised Land Uses or Demands on the Dryandra Forest

A. Conservation Demand

Society today places high values on the conservation of flora and fauna which indirectly implies a conservation demand on this forest. These conservation values have been recognized specially by

1. Serventy's book.
2. CTRC report - Red Book recommendations. See Appendix
3. Wildlife studies conducted by Government Departments.

The conservation values which have been recognized are in the Dryandra Forest are:

1. It is a remnant of a rich natural ecosystem which is very rare in the south west of W.A. In this case management practices should not be permitted which may affect the floral distribution and diversity in the long term.

2. It has the potential to maintain viable populations of rare mammals found in few areas. The maintenance of the habitat is therefore inportant and places an obligation on management to ensure the habitat needs of fauna are not jeopardized, eg burning cycles.

B. Recreation Demand

The main demand for recreation in the Dryandra Forest can be measured by the use of the Dryandra Village since the lease was granted over the village in February 1972. The village has received approximately 3500 visitors. See Appendix IV

The Dryandra Forest itself is used for many forms of recreation including picnicking, nature study, photography, art, camping, orienteering and bushwalking. It also has been used for navigational car rallying.

No formal surveys have been conducted but local observations suggest that the majority of visitors are local, though many are from elsewhere in the State and interstate. The main use periods are spring and autumn.

The demand for recreation and amenity is expected to increase as the forest becomes more widely known for its natural beauty and aesthetic appeal. Advertising takes place through Lions International (Dryandra Village lessees) local Shires and the Lazerway Holiday Camp near Cuballing.

Other than the Dryandra Village the area has little specific development to cater for destine orientated activities. Three circular walk trails emanate from the village through adjacent forest.

C. Economic Demands

1. Timber Production

i) Tool handles : High quality mallet stems for tool handle production, are produced from the mallet plantations. A.B. Hunter of Narrogin holds FP(S)L 1612 to cut mallet to produce tool handles at his Narrogin factory. The license is for 816 tonnes. This operation is very selective, taking only the larger defect-free stems. The operation annually cuts over approximately 80 ha.

7 men are employed directly by this operation.

ii) Fence posts : A license is issued annually to Dryandra wood products, Cuballing for 100 000 posts. This is usually supplied from thinnings and follows the tool handle operation. This operation covers approximately ha annually.

5 men are employed by this operation.

iii) Firewood : Minor Forest Produce licenses are issued for commercial and domestic firewood demand. This operation is directed behind thinnings for posts and tool handles. Only residue from these operations is utilised.

iv) Salvage sawlogs : Although there is a continuing demand for wandoo sawlogs, no license is current for sawlogs or salvage sawlogs. Only trees which are blown over or are the results of silvicultural operations may be salvaged. Little of this material has been available in the past.

2. Gravel

There is an ongoing demand from local shires for gravel for new road construction and repairs. Gravel Lease No. 70 is held by the Cuballing Shire. Local shires and Government Departments only have been supplied with gravel.

3. Honey Production

Apiary sites are currently issued where there is no conflict with the primary land use of recreation. There are currently 44 apiary sites current in Dryandra Forest. The current policy is to space sites no less than 3 km apart. Dryandra Forest is almost saturated with sites. In addition many beekeepers place hives on private property adjacent to forest blocks.

The frequency of site use is usually low. Flowering cycles tend to be erratic and hence sites are mainly used as a reserve by beekeepers holding sites elsewhere.

4. Wildflowers

There are no commercial wildflower picking licenses issued, although the Forests Department usually supplies specimens for the Kings Park and Royal Show wildflower displays.

D. Fire Protection Demands

An additional demand placed on the forest is the need to provide adequate protection for neighbours from fire coming out of forested areas.

A policy of fire exclusion was practiced in State forest until 1954 when prescribed burning was introduced. However it was not until the devastating fires of 1961 that the application of this policy was widened to cover all State forest on a regular rotation. Until recently most areas in Dryandra were burnt in spring every 6 years. Since 1979 the period between successive burns has been extended following a change in land use priority for the area.

E. Scientific Study

F. Utility

RESOLUTION OF CONFLICT OVER LAND USES

Having identified the major demands or potential land uses of the Dryandra Forest it is inevitable that some of these demands compete and compete with one another for use of a particular alrea. For example - recreation and honey production, fauna habitat and mining uses for particular areas. In order to resolve conflicts over competing demands a priority of management has been determined for the Dryandra Forest. This was done by allocating a primary land use - Conservation of Flora and Fauna (with particular emphasis placed on fauna). Any other uses of a particular area are described as secondary and tertiary uses and these should be compatable with the primary land use. Conservation of Flora and Fauna was determined on the area because of the high value placed on this forest for nature conservation. This particular forest is described as a Nature Conservation Forest.

In deciding how this forest will be managed as a Nature Conservation Forest, there were 3 broad options open to the Department:

Option 1 Allow for no other demands within the forested area, ie preservation and exclusion of all other land uses.

Option 2 Allow for other demands in particular areas where the primary land use will not be diminished. The other demands are termed secondary and tertiary uses.

Option 3 Allow all uses in all areas.

When considering these options it was important to describe how the events of past management of the Dryandra Forest have affected the potential of the Dryandra Forest to be managed for flora and fauna conservation. The effects of past management are described particularly with emphasis on the effects that past management might have had on the endemic fauna.

The Effects of Past Management of the Forest in Respect of Fauna and Flora Management

1. The History of Settlement

The process by which land was alienated in this area has affected the distribution of forested areas. Since the forest is largely made up of discontinuous blocks of forest in a sea of farmland the effect of outside influences cannot be ignored when constructing a management plan. The introduction of predators, weeds and disease from neighbouring areas cannot be ignored in creating a realistic fauna habitat. In particular outlying forest blocks cannot be regarded as a realistic longterm fauna habitat. They are too small.

2. The Dryandra Village

The old Dryandra forestry settlement provides a natural centre to the forest for recreation development. The settlement is currently run by Lions International, is wellknown and has a water supply and other amenities. Obviously people can have an effect on fauna, but by and large they are concentrated around the settlement and only participate in passive forms of recreation in other areas. It is important to note that the native fauna populations have survived despite the existence of the Dryandra forestry settlement.

3. Establishment of Mallet Plantations Off Site

The brown mallet plantations in most cases were established on sites where brown mallet was not previously growing. These sites were predominantly upper slope wandoo which contained in the understorey a high component of poisons, often in thickets. With the exclusion of burning from plantations these poisons and the dense thickets have largely disappeared from the plantations, since brown mallet is very susceptible to fire. Studies have shown that the mallet plantations are poor habitats for native mammals, providing limited food and no shelter.

It is important to note that not all areas planted to mallet succeeded, in fact it is estimated that approximately 50% of area failed and to some extent returned to the native vegetation.

4. Fire Management

Prescribed burning in the Dryandra Forest was initiated to protect neighbours and the mallet plantations, however this protection policy has not proved optimal for maintenance of a desirable fauna habitat.

Until 1979 fire had been excluded from plantations. The forest surrounding the plantations has been burnt at regular intervals in spring and autumn by prescribed burns. The only exception being some scientific 'no burn' areas *and small wildfires. Research has shown these prescribed* burns of low intensity and short rotation do not favour the formation of Dryandra species thickets on the plateau and 'poison' thickets on the slope areas. Low intensity fires do not stimulate regeneration of thickets and only tend to destroy existing thickets. Research suggests, higher intensity burns in autumn on a longer rotation are required to promote the formation of thickets, believed to be important to endemic fauna.

History shows there have been few wildfires of consequence in the forest but this does not mean a wildfire is not possible. It will be necessary to protect any fauna reserves from fire.

5. Timber Production

In addition to the present timber demands and procurement on the Dryandra Forest, most of the forest was cut over for salvage wandoo sawlogs between 1950 and 1969. This was a very light selection cut and will not create a constraint to management of the area in the future. The only area of virgin wandoo is in Reserve No. 16201 which is presently vested in the Minister for Water Supply.

ZONING

The results of past management have left this forest with different potentials to satisfy the primary land use of flora and fauna conservation. These different potentials have been identified by creating the following zones:

1. Alienated land cleared for agriculture.

2. Areas of mallet plantation.

3. State Forest – Wandoo areas not cut over for wandoo sawlog (virgin forest)

– Wandoo areas cut over for sawlog.

These zones were recognized as influencing the forest structurally and therefore might be ascribed different conservation values. These are described on Figure IV. Past fire history has not been considered in zoning because its value changes with time. Nevertheless, fire is considered an important part of conservation management and is considered in detail later.

Recreation associated with the Dryandra could have been described as an influence zone surrounding the settlement but because of the lack of knowledge for determining the radius of this zone, a special zone was not created. Recreation must be thought of as being present particularly in the vicinity of the settlement.

Vegetation type was not considered as the basis for zoning other than to distinguish between natural vegetation and mallet plantations. In general vegetation patterns are similar throughout the forest and didn't necessarily help by describing them as separate zones. Because of the scale involved failed areas of plantations have not been shown but it must be remembered they exist, blending in with changes in soil depth drainage and soil fertility.

From examination of Figure IV the discontinuous pattern of the forest blocks is evident. The main single block of continuous forest is in an area surrounding the Dryandra settlement. The forest blocks to the south of Williams Narrogin Road and other blocks peripheral to the main Dryandra block vary between ha and ha. The dispersed nature of the forested areas at Dryandra meant that the only area where a viable sanctuary for fauna conservation could be maintained was in the area to the west of the Dryandra settlement. The focal point of this area is the area of virgin wandoo (Reserve 16201). A sanctuary area has been ascribed in this area. No mallet plantations were included in the sanctuary.

The sanctuary area has been protected or buffered from the influences of alienation and fires by describing a managed conservation forest around the sanctuary forest as in Figure V. These areas included the many mallet plantations and all other forested areas outside the sanctuary and in outlying forested blocks. The managed conservation forest will be both a buffer to the sanctuary and a forest managed silviculturally for perpetuation of the brown mallet species.

The particular zones which have been recognized in this plan are all included in either Forest Sanctuary or Managed Conservation Forest. Separate management strategies are recognized for the following zones.

Primary Land Use ie Nature Conservation Forest	Description of Zone
Forest Sanctuary	Natural wandoo woodland including the virgin wandoo and mallet areas. (ha)
Managed Nature Forest	Non plantation areas. 1) Native forest surrounding sanctuary and outlying areas which were not converted to mallet plantations. 2) Mallet plantations (8000ha). Includes failed and successful plantation areas.

MANAGEMENT OBJECTIVES FOR ZONES WITHIN THE NATURE CONSERVATION FOREST

Forest Sanctuary

The objective of the Forest Sanctuary at Dryandra is to preserve the native vegetation within this forest ecotype in the least disturbed condition possible while optimizing the potential of this habitat to support viable populations of small native mammals.

Managed Nature Conservation Forest

Non Mallet Areas

The objective of these areas is to buffer the Forest Sanctuary and its values from the impact of external management practices while at the same time providing an important source for the conservation of the original forest ecotype and speciation.

Mallet Plantations

The objective of these areas is to buffer the Forest Sanctuary and its values from the impact of external management practices while at the same time providing a genetic source for the conservation of brown mallet.

Allocation of Secondary and Tertiary Land Uses

Besides the primary land uses allocated to the Dryandra Forest, the Forests Department recognizes that other demands (primary and secondary land uses) on the forest can be satisfied while satisfying primary demand (land use) of conservation of flora and fauna. The Department believes Option 2 is possible and allows for other demands in particular areas where the primary land use will not be diminished by secondary and tertiary uses eg passive recreation and honey production in buffer areas and mallet plantation.

The following tables summarise the secondary and tertiary land uses which are considered compatible with the primary land use.

TABLE !

FOREST SANCTUARY	Primary Uses	Secondary Uses	Tertiary Uses
Fauna conservation			
Flora conservation			
Recreation: Active			
Passive			
Timber production			
Scientific study			
Gravel			
Wildflowers			
Utility: SEC lines			
Roads			
Water Production			
Honey Production			
Mining			

Management:

Fire	Yes, for fauna
Access	Limited, discouraged
Silviculture	No

TABLE II

MANAGED CONSERVATION	Primary Uses	Secondary Uses	Tertiary Uses
1) Non Mallet Plantations			
Flora Conservation			
Fauna Conservation			
Recreation: Active			
Passive			
Timber Production			
Scientific Study			
Protection of private property			
Gravel			
Wildflowers			
Utility			
Water Production			
Honey Production			
Mining			

Management:

Fire	Yes - protection
Access	Free
Silviculture	No

TABLE III

MANAGED CONSERVATION	Primary Uses	Secondary Uses	Tertiary Uses
2) Mallet Plantations			
Flora			
Fauna			
Recreation: Active			
Passive			
Timber Production			
Scientific Study			
Protection of private property			
Gravel			
Wildflowers			
Utility			
Water Production			
Mining			
Management:			
Fire	No except for regeneration		
Access	Encouraged		
Silviculture	Yes		

Appendix I

LAND TENURE AND AREA STATEMENT

(A) Area Managed by the Forests Department

Forest Block Name	Area (ha)	Remarks
Bald Rock	3 049	
Borgey	2 057	Includes 813 ha proposed S.F.
Contine	3 025	
Dryandra	6 615	Includes 1 150 ha Reserve 16201
Dwarda	1 146	
Highbury	2 151	Includes 435 ha proposed S.F.
Lol Gray	2 444	
Penny	1 769	
Skelton	3 253	Includes 120 ha Reserve 16201
Stokes	2 438	
	27 947	

(B) Other Small Reserves (not managed by Forests Department)

Reserve No.	Area (ha)	Remarks
24791	186	Timber for Settlers Requirements
20182	281	Timber for Settlers Requirements
30394	74	Timber Reserve (Land Act)
19107	98	Timber Reserve (Land Act)
20985	63	Timber Reserve (Land Act)
19794	236	Timber Reserve (Land Act)