

17.



# FOREST FOCUS

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FOCUS ON FOREST POLICY



▲ A small selection of northern jarrah forest flowers: 1. *Holly-leaved hovea* (*Hovea chorizemifolia*); 2. *Spindly grevillea* (*Grevillea endlicheriana*); 3. *Urchin dryandra* (*Dryandra praemorsa*); 4. \**Trymalium ledifolium*; 5. *Coral vine* (*Kennedia coccinea*); 6. *Honeybush* (*Hakea lissocarpa*); 7. *Slender tetratheca* (*Tetratheca viminea*); 8. *Star flower* (*Asterolasia pallida*); 9. \**Mirbelia spinosa*; 10. *Native hop* (*Dodonaea attenuata*); 11. *Woolly-flowered grevillea* (*Grevillea pilulifera*); 12. *Graceful honey-myrtle* (*Melaleuca radula*); 13. \**Bossiaea ornata*; 14. *Painted featherflower* (*Verticordia picta*); 15. *Blue leschenaultia* (*Leschenaultia biloba*). \*No common name recorded.

◀ Yellow-flowered variety of the popular coral gum (*E. torquata*) from the Goldfields area.





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# FOCUS on FOREST POLICY

It has become necessary to re-state forest policy to accommodate major changes that have taken place since formal control of the forest was first introduced in 1918. Recently, a revised outline for forest policy was approved by Cabinet and the major points of the submission are the subject of this issue of *Forest Focus*.

In 1918, the major requirements of policy were to provide for a permanent forest estate, to control the sawmilling industry and to protect the forest from fire and other destructive agencies.

In 1951, a Royal Commission stated forest policy as:

“The provision as far as is possible of a continuous yield from the forests in the interests of the requirements of the State in timber and the stability of employment in the timber industry.”

Demands on the State Forest which was created through the 1918 Act continue to expand. The growing population requires increasing volumes of wood and water to meet its needs. Affluence and improved awareness within the public sector have also placed higher values and demands on the less tangible forest benefits such as

aesthetics, recreation and biological preservation. To some extent, these requirements conflict with provision of the traditional productive values.

On the other hand, activities such as building of roads, power-lines, pipe-lines, town-sites, dams and mining have contributed to a reduced, effective forest area. So too, unfortunately, has jarrah dieback, a major plant disease established in many parts of the forest, resulting in the death of species over extensive areas.

Within the period of these changes, greater emphasis has been placed on multiple use of the forest although the requirement of timber production for industry remains. Greater attention to pine planting has been essential to provide a more efficient wood production operation to supplement timber of the native

### Front cover

*Numbat (Myrmecobius fasciatus) from the Forests Department's Perup fauna priority area near Manjimup (see Forest Focus, No. 10).*

### Back cover

*Water is one of the major forest products from the northern jarrah forests.*



The State Forests of Western Australia belong to the people.

As a finite resource, the forests must continue to be managed so that benefits can be shared by all sections of the community.

The role of government in forest management is to formulate and implement

policies which meet the requirements of people. At the same time, forest policy must take account of, and endeavour to provide for, the large number of

constantly changing uses and requirements for the state's forest areas.

Accordingly, the statement of government forest policy which appears in this issue of *Forest Focus* is based on a multiple-use concept.

The policy makes it clear that, by the adoption of the multiple-use concept, it will be possible for more people than ever before to use and enjoy this remarkable forest heritage.

Minister for Forests



▲ *Regrowth jarrah forest, near Dwellingup, killed by jarrah dieback.*  
(Les Harman)

resource. It is also very desirable that plantation grown wood should be employed to reduce the demand pressure on those native forest areas which are most suited to public use for alternative benefits.

Public demand for forest benefits has now developed over the total scope available and the resource or supply situation has reached the stage where scarcity imparts special values on each requirement.

Within Western Australia approximately 20 million hectares of land remains as forest and woodlands. Of this area there are 3.06 million hectares of high forest, consisting of trees with an existing or potential stand height of 20 metres or more. This is restricted to the south-west

region and can be described in the following classes of land tenure:

State Forest and	
Timber Reserves	1 948 000 ha
National Parks	415 000 ha
Other public ownership	35 000 ha
Privately owned	662 000 ha

This south-west forest is the most critical part of the resource. It alone can provide total benefits of wood, water, biological conservation, recreation, honey, etc., on a continuing yield basis. It also has the greatest past use and its location, with respect to centres of population development, ensures that pressures for usage will continue.

The policy of the Forests Department mainly concerns the management of this critical, high forest area although it should not be overlooked

that the forests and woodlands of the eastern goldfields, the wheatbelt and the north-west have extremely high values for fauna and flora conservation, site protection and a high potential for recreation.

The policy is a set of principles guiding the use and management of the public owned forests. To be effective it must recognise both the objectives and desires of the public and the requirement for economic and social welfare.

It cannot be an end in itself but must be integrated within the framework of general land-use policy. The primary objective has always been to conserve the forest estate and its values. The means of achieving this, however, must change within the scope of public demand, improved management skills and total resource supply.



## FOREST MANAGEMENT OBJECTIVES

### Policy

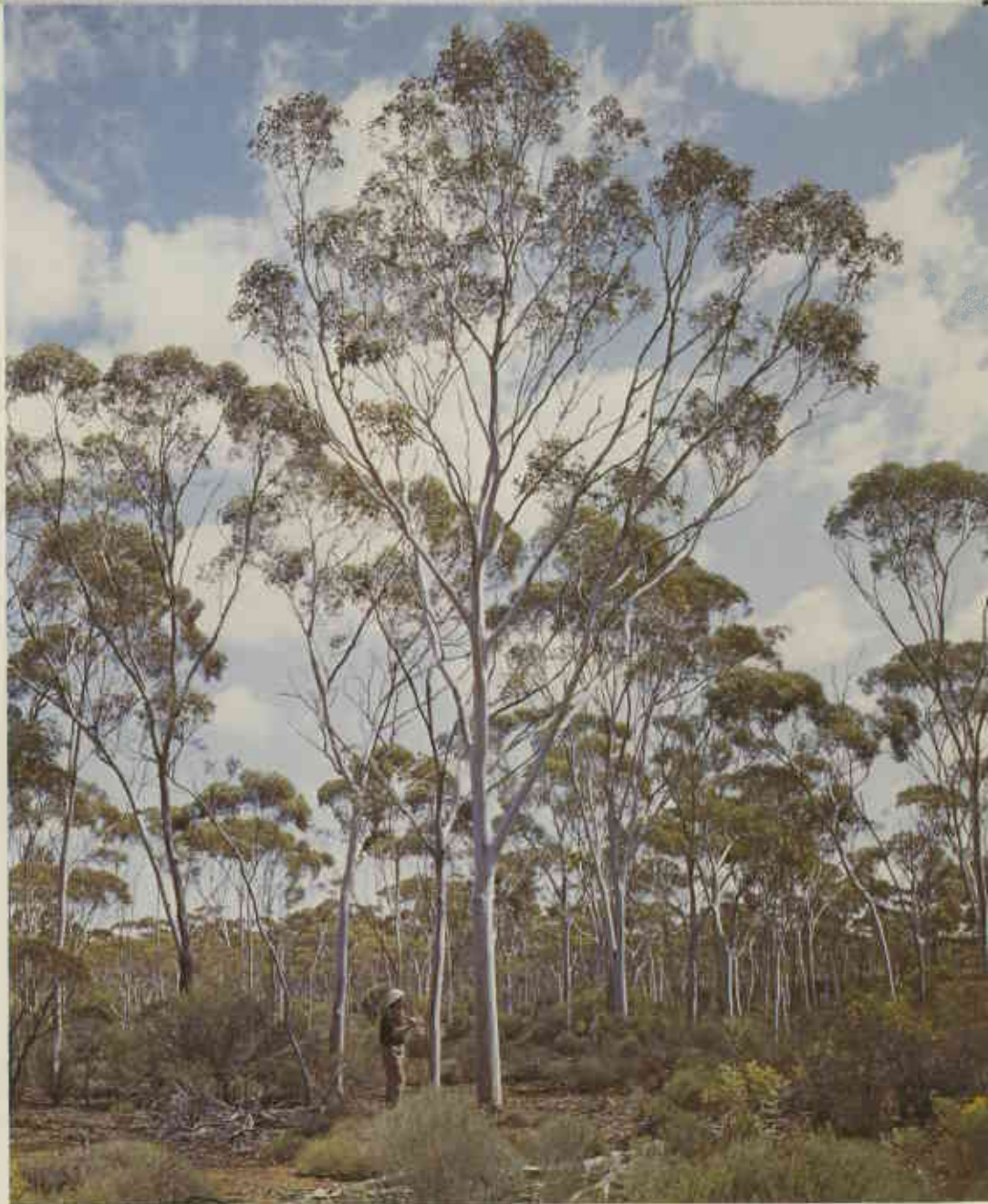
The forest policy recently revised and approved by Cabinet emphasises multiple-use management of State Forests and Timber Reserves.

Multiple-use is accepted to mean the use of an area for several different purposes. Since some are incompatible, a decision has to be reached as to which will be given priority and it becomes necessary to determine the use or combination of uses for which the various forest zones are suitable in the light of changing social, economic and ecological considerations. These decisions will not be taken without due consideration and co-operation with other departments and authorities concerned.

In order to overcome the problems imposed by limited forest areas, a system of management priorities will be established so that the greatest possible number of compatible uses can be practiced throughout most of the forest. Where dominant uses such as undisturbed biological reserves or intensive wood production are incompatible with secondary uses, carefully selected representative areas will be set aside and managed for this purpose.

The major forest values currently recognised for multiple-use management are: water supplies, timber production, recreation, tourism and education, flora and fauna, special scientific values, and other forest products such as honey, blossoms and dry plant specimens.

The primary objective will be conservation of the forest estate and



forest values, however, special provision must be made for service functions such as roads, dams, and power-lines, as well as mining.

▲ *Inland forests also have aesthetic and recreational appeal.*

(Government photographer)

## WATER SUPPLIES

In Western Australia, State Forests incorporate a major proportion of the metropolitan and country water catchments. Management of catchments with priority given to water production is an accepted responsibility of the Forests Department (see *Forest Focus* No. 2).

The incidence of dieback, mining activities, increased tourist demands and extensive farm clearing have accentuated the need for the department's continued and increased participation in the management of all forested water catchments and their adjacent headwaters.

The department's policy provides for:

- Protection of existing healthy forest catchment areas.

- Rehabilitation of degraded areas, where necessary, to ensure that water quality is maintained.
- Regulation of all other uses of forested catchments.
- Monitoring of streams where land use changes are involved.
- Research of land use to maximise water production.

Careful planning and control can ensure that human activities on catchment areas do not pose a risk to domestic and irrigation water supplies and management of catchments to the requirements of water supply authorities is a major departmental function.

## TIMBER PRODUCTION

### Hardwood

The present regeneration process of the jarrah and karri forests will be continued. Because jarrah forest grows more slowly, particular attention will be given to the karri/marri forests. Although the latter forest

*Although frequent fire is a natural factor of the jarrah forest environment, uncontrolled wildfires like this can do much damage.* (Les Harman)

*Washing down vehicles before they enter healthy forest reduces the risk of spreading jarrah dieback.* (Les Harman)



type occupies only 7 per cent of State Forest, it provides 37 per cent of the timber growth under current management.

The principal objective in native forest management for timber production will be to adjust log removals to a level that can be sustained by forest growth.

The effect of reducing the hardwood cut will be offset to a large degree by the introduction of a softwood timber industry during the 1980s. By this time softwood plantations will be able to support the first economic production units.

The transition process will be handled so as to minimise social and economic disruption for those employed in the industry, and their families.

As sawmill capacity now exceeds the estimated current and future growth of the native forests, additional mills cannot be accommodated on State Forests. Current intakes will be progressively reduced.

A phased reduction in hardwood intake for the next ten to fifteen years

will involve gradual restructuring of the industry. This will include:

- Amalgamation of sawmills into a reduced number of units of economic size.
- Variations of permits and licenses to provide the management flexibility necessary for multiple-use forestry.
- Relocation of mills and processing facilities in more socially favoured localities.
- Integration of processing systems with a trend towards more complete use of the available resource through a higher degree of manufacture.
- Increasing production of specialty items such as hardwood veneer and composite timbers. This will achieve more effective use of small logs which will become available in increasing proportions.
- Transferring part of the workforce to remanufacturing activities and into the developing pine processing industry which will be established in the south-west, but not





necessarily at those centres currently occupied by the hardwood industry.

- Improved use of wood residues by processes such as wood-chipping and particle board manufacturing.

The economic, social and environmental aspects of these changes will be discussed with relevant government departments, the industry and local groups.

## Softwood

Initially, exotic pines were established to overcome the lack of commercially available native softwoods. In more recent years the rate of planting was increased to supplement local hardwood resources which are slow-growing and under pressure from excessive demand.

Pine production can be carried out in areas where it will not be detrimental to the major native forest values and is the most efficient procedure for meeting deficits in State wood demand (see *Forest Focus* No. 16).

Softwood yields based on the current planting programme of 2400 hectares a year will not be sufficient to meet anticipated demands of the population in the early 1990s. It is therefore proposed to increase the planting rate to 4000 hectares a year, provided sufficient land and money are available.

Despite this increased programme, future yields will fall short of increasing demands and will be sufficient only to offset reductions in hardwood supplies.

## Private forestry

Private forestry directed to long term production is restricted to relatively small areas of land carrying indigenous forest, or to softwood afforestation.

Management of indigenous forest is carried out mostly by timber companies, while plantation establishment is undertaken by timber companies and private investors.

Private investment in plantations over the past decade has been significant and it is estimated that approximately 8000 hectares had been established by December 1975.

While the contributions made by private owners to the pine plantation area are most valuable, they can only compliment and not replace the departmental programme.

The Forests Department's role in

private forestry is limited but private owners will continue to be provided with technical information derived from extensive research and experience. There will be further investigation of ways and means by which to assist private forestry.

## Trees for farm planting

As an extension role the department has established more than 50 plots (arboreta) of appropriate tree species on a range of sites within the main settled districts of the south-west.



▲ Gleneagle picnic area.

Bush-walking in the Murray Valley. ▼







1. Selected high quality "seed" trees provide seed for forest regeneration.



2. Regeneration burn under karri forest. (Roger Underwood)



## KARRI LIFE CYCLE

5. The massed appearance of good karri regeneration. (Brian Stevenson)

6. Four-year-old regeneration. Growth on ashbed is outstanding.







3. Karri forest immediately after regeneration burn. (Roger Underwood)



4. New growth starting to appear after first rains. (Roger Underwood)

**CLE** (ABBREVIATED VERSION)

7. Good quality karri regenerated after logging 40 years previously.



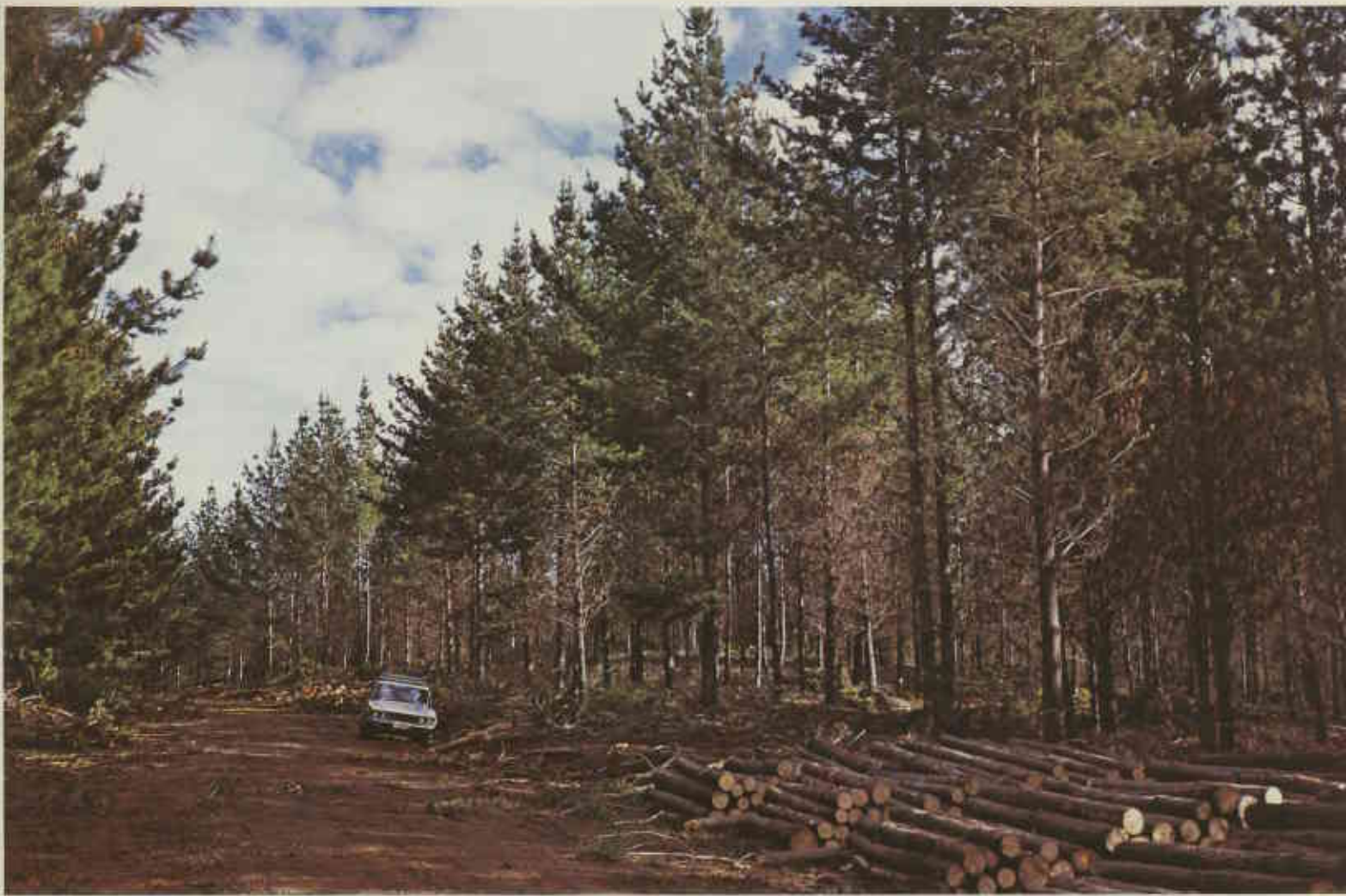
8. Karri forest, 95 years old, regenerated after clearing for agriculture.











These plots are providing valuable information to farmers, shires and others wishing to plant trees for shelter, shade and ornamental value in rural areas. Trees are available for these purposes, at cost, from departmental nurseries located at Hamel and Narrogin.

Within recent years, performance results from the arboreta have proved valuable for planning site restoration, stabilisation of mine

◀ *Mature karri can be a beautiful sight when open to view. The foreground vegetation was suppressed to allow for recreational use. As can be readily seen by the background vegetation, karri forest undergrowth is normally too dense and impenetrable for almost all recreation requirements.*

(Government photographer)

sites and general landscaping. The arboreta information and seed collected locally have wide application for afforestation in countries overseas.

## RECREATION AND TOURISM

The present level of use of forest areas for recreation and tourism is expected to continue increasing.

The intensity of demands placed on forests for recreation is directly related to the major areas of population or the tourist centres. The jarrah forests near the metropolitan area attract considerable numbers of visitors. Major tourist centres and forest

▲ *Early commercial thinnings in the Milward plantation, Nannup.*

areas in the extreme south-west also attract large numbers.

The Forests Department has provided facilities in State Forests from Yanchep to Walpole, and under the updated policy, will continue catering for both passive and active recreation and tourism through:

- Further picnic sites and facilities.
- Walking tracks and nature trails.
- Self-guiding scenic motor tours.
- Areas set aside for horse and trail bike riding.
- Access for organised car club rallies.
- Protection of areas for water sports, such as fishing and canoeing.



◀ *Radiata pine (38 years old) at Grimwade.*

- Provision of conditions representing the full range of the life cycle of forest types.
- Monitoring flora and fauna populations.
- Research into special habitat requirements.
- Co-ordinating State Forest flora and fauna management priorities with the requirements of other authorities.

## SPECIAL SCIENTIFIC VALUES

Forests have particular values for study and public education in the fields of biology and land use.

The department's policy is to set areas aside for study, for example:

- Forest relatively unaffected by activities of man.
- Effects of various forest management procedures such as cutting, planting, prescribed burning and alternative land use forms such as clearing and mining.
- Effects of disease, insect attack and wildfire damage.
- Basic aspects of forest composition, structure and development.
- Fauna habitats.
- Stream catchments.

Several other subjects for which areas are set aside for ecological study are listed under the heading "Flora and fauna".

## OTHER FOREST PRODUCTS

There are several less well-known industries based on forest products, such as:

- Poles, piles and bridge timbers
- Honey
- Sandalwood
- Fence posts and rails
- Mining timber
- Blossoms

- Recreation as a priority use where appropriate.

The department will continue to favour access to the forest except where there is a risk to either the individual or the forest itself.

## FLORA AND FAUNA

The Forests Department is responsible for flora and fauna on all State Forests and Timber Reserves, subject to the provisions of the Forest Act and other Acts where applicable.

Because of the upsurge of interest in the environmental aspects of

forest operations and in particular their effect on flora and fauna, the department is undertaking extensive research and retaining areas of indigenous forest in an undisturbed condition where this is essential to conservation of values.

The objective is to conserve flora and fauna values by:

- Preservation of relevant ecological type areas as reference units for management guidance, scientific study purposes and maintenance of genetic diversity.
- Zoning forest areas where fauna management is given priority.



Though perhaps not widely known, these industries form a significant part of the forest multiple-use scene and provide employment for many people.

It is the department's policy to ensure the future livelihood of people involved in these industries within the associated management guidelines for major forest values such as water production and protection of the forest.

## MINING

Within State Forest boundaries mining claims and leases have been registered for coal, tin, mineral sands and bauxite. The area of claims and leases cover almost 50 per cent of State Forest.

Multiple-use planning recognises that priority may be given at particular times to one land use on a short-term basis, providing that the land use does not permanently interfere with other forest values.

Given this understanding, and allowing for the provisions of relevant Acts, the department's policy on mining is to guide it into areas where there will be least immediate conflict with other land uses and away from areas where it will be permanently damaging to them.

The rehabilitation of mined areas will always be a foremost consideration in forest management decisions. Co-operation between the mining companies and the Forests Department is currently most satisfactory in this endeavour.

There will be continuing provision made for compensation to cover re-establishment of forest values to replace those affected by mining.

*Loading jarrah for haulage to mill.*  
(Government photographer)

## FOREST PROTECTION

The first attempt at forest protection taken in the early years of this century was to control the unrestricted exploitation for timber production.

The sequence of protection measures undertaken over the years has been:

- Legislative provision to secure the tenure of forests and control cutting.
- Dedication of forests and safeguarding of the forest estate.
- Preparation of working plans to regulate the forest cut.
- Implementation of field control over production operations.
- Protection against the ravages of fire.

- Control of forest pests and diseases.

Protection of State Forest has become complex and more difficult to achieve. The department recognises the need to protect a wider range of values and the protection services must accommodate the objectives of all land uses. Disease control measures must be planned to minimise conflict with various forms of land management. Prescribed burning must cater for protection of flora, fauna and ecological needs while continuing the protection of community life and assets.

Recognising this complexity and diversity of interests, the department will continue existing traditional protective roles. The forest estate will be kept intact and increased wherever possible. Fire protection will continue using the most advanced techniques of fire prevention, detection, suppression and prescribed burning, and these techniques will be amended as knowledge is expanded in both technical and environmental fields.





◀ *Twin circular saws breaking down jarrah log.*

(Brian Stevenson)

Dieback control will be continued through quarantine and hygiene measures. Other management techniques will be implemented as the results of further research work become available. Research into dieback and other forest pests and diseases will be accelerated.

Safety, health and welfare of all forest users will be protected. Those involved will include people in the fields of research, recreation, industry and forestry.

## IMPLEMENTATION

The first of a series of working plans covering various aspects of forest activities will be completed by the end of 1976. Once approved by government, these working plans will become public documents and be available to interested parties.

The working plans will be reviewed annually, taking into account changing conditions and forest research.



## ERRATA

*Forest Focus* No. 16, titled "Sunlands Multiple Use Management", incorrectly attributed the term "Donnybrook Sunlands" to J. T. Jutson. The term was in fact used by J. Gentili and R. W. Fairbridge to describe all the area south of Bunbury and west of the Darling fault.

As used in *Forest Focus*, the term refers to the State Forest lying between the Darling and Dunsborough faults.

In the same edition, on page 9, the picture title should read: Mountain marri (*E. haematoxylon*), named for the reddish colour of its heartwood.



◀ *Gang circular saws processing slabs into dimensioned scantling timber. The slabs for this unit come directly from the twin circular breakdown saws shown above.*

(Brian Stevenson)



# *Forest Policy*

The Forests Department will manage the state-owned forests and timber reserves in Western Australia according to a policy that will ensure provision for the optimum social and material needs of the people. At the same time the policy will provide for the environmental well-being of the forests themselves.

The policy involves the following objectives:

## *Water Supplies*

To protect, control and rehabilitate where necessary, those forest areas that contribute to the water supply requirements of the state.

## *Timber Production*

To regulate the removal of produce from the native forests to a level that can be sustained by the forest growth.

To increase the rate of softwood planting to create a resource that will be adequate to provide timber that will not longer be available from the native forests.

## *Recreation and Tourism*

To extend access to the forests wherever this is possible and to provide additional facilities for people to enjoy the many forest values that are available to them.

## *Flora and Fauna*

To conserve areas that provide the habitats for the many species of flora and fauna that exist in the forests of Western Australia.

## *Special Scientific Values*

To set aside specific areas of forests for the purposes of education, reference, and scientific study.

## *Mining*

To rehabilitate and stabilise those forest areas upon which the original vegetation has been destroyed in the course of mining operations.

## *Forest Protection*

To maintain and add to the areas of permanently reserved forests; to protect these forests from fire, insects and other harmful agencies; to maintain and improve the health and vigour of the forest area.

## *Private Forestry*

To encourage and assist private owners to establish and manage commercial forests and to provide land-holders with advice for planting trees for their shelter and protective values in rural areas.