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# **A Tourism Optimisation Management Model for Dryandra Woodland**

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# ***A Tourism Optimisation Management Model for Dryandra Woodland***

## **Summary**

Dryandra's importance in attracting tourists to the central western wheatbelt has been recognised in the preparation of a tourism optimisation management model (TOMM). Although the study area focuses on Dryandra Woodland it also incorporates several towns and shires. The objective of the TOMM is to identify optimal conditions for the tourism environment, determine how these conditions can be measured, and who should be responsible for data collection and analysis.

There are a number of issues that are critical to the success of the TOMM. A central issue is the recognition of the need for a shared responsibility for tourism services, information, products and management between tourism industry operators, local government and CALM. Optimal conditions can only be reached by a shared approach.

A TOMM implementation committee will be responsible for its implementation. In keeping with the concept of shared responsibility, the committee will comprise representatives from the CSTA, local businesses, local government authorities within the study area, the WATC, CALM and the WDC.

## **1. Introduction**

Recreation planning and management frameworks have been around for over 30 years. They have evolved from simple concepts of limiting visitor numbers to protect ecological and recreation values, to maintaining pre-determined environmental conditions irrespective of visitor numbers. The frameworks have focused on preventing ecological impacts or negative visitor experiences, and it is only recently that a framework has been developed that sets *optimal* conditions for tourism and recreation.

Known as the Tourism Optimisation Management Model (TOMM), the new framework identifies optimal conditions for the entire tourism environment<sup>1</sup> rather than just the ecological and visitor experience components. The additional environmental components (economic, market-opportunity and socio-cultural) require resource managers to think more about factors distant from the tourist attraction itself. In doing so they must also involve other stakeholders in the process.

There are two TOMMs in Australia: one prepared for Kangaroo Island, and now another for Dryandra Woodland. Although the Dryandra TOMM is quite simple compared to that of Kangaroo island, the methods employed in each are identical.

This document provides background information on Dryandra Woodland, outlines why a TOMM was seen as necessary, how it was prepared, and details how information for the TOMM will be collected and managed. It provides a basis for tourism planning, development and management at Dryandra Woodland within the context of the surrounding tourism environment.

## **2. Dryandra Woodland - background**

Dryandra Woodland is the single-most important area for conservation and recreation in the Department of Conservation and Land Management's (CALM) Wheatbelt Region. It comprises a

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<sup>1</sup> The term environment is often used in the context of the natural environment only. However, the correct definition, and the one used in this report, means 'all that surrounds', and includes social, economic, political, cultural and biophysical factors.

series of fragmented blocks, totalling approximately 28 000 hectares. Approximately two-thirds of Dryandra Woodland is natural vegetation, and one-third brown mallet plantation. The largest block of approximately 12 000 hectares is the focus of almost all tourism and recreation activity.

Dryandra's importance for conservation is heightened by the relatively small size of other reserves in the western Wheatbelt. It has also retained a relatively high proportion of its original mammal fauna. Twelve of the 27 mammal species (excluding bats) recorded or likely to have occurred in Dryandra are still found there. Several of these species (eg. Woylie, Numbat and Tammar) managed to persist throughout the 1970s, when fox predation reduced their numbers to critically low levels, and caused the local extinction of the Chuditch, Quenda and Brush-tailed Phascogale. Under the fox-baiting regime introduced in 1982 as part of the Numbat conservation program, remnant populations of Woylies, Numbats and Tammars have recovered to stable levels. CALM intends to extend the success of their fox baiting program by reintroducing a number of animals now locally extinct. The 'Return to Dryandra' project will see five mammal species, currently restricted to offshore islands in the midwest, reintroduced to Dryandra and other suitable sites in the southwest.

Although the nature conservation values of Dryandra are well known, it is becoming increasingly well known as a destination for nature-based tourism. The Dryandra Woodland Management Plan recommended most of Dryandra Woodland become national park, and the resultant publicity, as well as that gained through the installation of the State's first radio drive trail and other recreational facilities, has seen visitor numbers more than double to approximately 30 000 per year. The widespread success of CALM's Western Shield Program<sup>2</sup> has whet the public's appetite for greater accessibility to Western Australia's charismatic mammals. The 'Return to Dryandra' project can take advantage of this, and increase Dryandra's appeal to the nature-based tourism market. As such, visitor numbers will continue to grow as the area is promoted as one of the south-west's prime nature-based and cultural tourism destinations.

Although much has been done in *planning* for recreation and tourism management within Dryandra, the wider implications of Dryandra as a nature-based tourism destination have rarely been considered. Measuring impacts, even at a biological level, have been largely ignored. To overcome this, a major study has been initiated to examine some of the social, experiential, ecological and economic impacts of tourism at Dryandra. The study area includes towns within the immediate area (Figure 1). Data is being gathered in a number of ways:

1. a visitor exit survey at Dryandra;
2. a survey of businesses in Narrogin, Williams, Pingelly, and Wandering;
3. analysing the behaviour of animals seen on organised spotlighting tours at Dryandra; and
4. research into the behaviour and health of woylies (a tourist attraction in their own right, and considered a key indicator species) at the Dryandra Settlement.

Selected components of this project will be continued, providing the background for monitoring of the Dryandra TOMM. Although CALM initiated the project, the long-term benefits of the research are also of great interest to local government, businesses and tourism industry operators. The role of these groups or individuals in implementing and maintaining the Dryandra TOMM is further discussed below.

### **3. A Tourism Optimisation Management Model for Dryandra**

A TOMM can be described as '...mechanism to monitor and manage tourism in natural areas' There are three parts to the process:

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<sup>2</sup> Western Shield is the name for CALM's fox baiting program. It covers nearly 5 million ha and includes reintroducing species into areas where they historically occurred.

1. placing the study area in context (ie. the existing policy and planning framework, the study area's identity, products, current market and future trends, and its position and 'branding' within the market).
2. developing a monitoring program. This involves identifying:
  - optimal conditions for the tourism environment (economic, market-opportunity, ecological, experiential and socio-cultural).
  - indicators of change;
  - an acceptable range for any changes; and
  - a way in which the data can be collected and assessed.
3. developing methods of response.

The Dryandra TOMM emphasises the first two points. Rather than spend resources developing methods of responding to problems that may never arise, it was felt that many of the possible pitfalls could be identified in scoping optimal conditions and indicators, and by ensuring that the optimal conditions were realistic.

### **3.1 Context identification**

#### *Existing policy and planning framework*

Apart from the Dryandra Woodland Management Plan, there are few strategic policy/planning documents that are relevant to Dryandra Woodland. However, Western Australia's Draft Nature Based Tourism Strategy contains some important principles, namely:

- the natural environment must be conserved;
- developments must involve and benefit local communities;
- the clients' knowledge of the environment must be improved by their experience;
- there must be a commitment to providing quality products and services; and
- the industry must be effective and efficient.

CALM's Recreation and Tourism Strategy further developed these concepts. Among the principles for future development and management is the need to develop a 'sense of place' for different recreation and tourism areas:

'The Department's aim is to develop a management ethos that recognises, protects and promotes those inherent qualities and cultural attributes that are distinctive to recreation and tourism areas'.

CALM also recognises that its management should have benefits to local communities, and that that it should not develop facilities on its own lands where these facilities could be developed on nearby private property.

The CSTA's Strategic Plan lists four main objectives:

- to improve the management of tourism within the region;
- to make more effective use of available resources and upgrade existing product where practicable;
- to increase visitor use and awareness of the region's tourism attractions and resources; and
- to establish and develop new products (having regard to the fact that visitation levels are relatively low and tourism growth will not be spectacular in the short to medium term).

Finally, CALM's objectives relating to recreation and tourism in Dryandra Woodland Management Plan include:

- encourage all visitors to appreciate and increase their understanding of Dryandra's natural and cultural environment.
- low impact, sustainable activities will be promoted.
- facilities are high quality, aesthetically harmonious and low impact.
- opportunities for viewing wildlife will be promoted, provided it can be done safely and without undue disturbance.
- Dryandra will continue to market itself to clientele with an appreciation of nature.

The objectives of the various strategies are complementary (overlapping in many instances) and are readily incorporated into the Dryandra TOMM.

#### *Community values*

Discussions with local government authorities have provided a statement of what they consider to be the character of the area—a progressive, thriving community with an enhanced lifestyle. In relation to Dryandra Woodland, a useful insight into community values towards Dryandra Woodland can be drawn from submissions made to the Dryandra Woodland Draft Management Plan (published in 1995). Only seven submissions were made by people/organisations residing within a 50 kilometre radius. Although this could mean that most residents were satisfied with the plan and did not think it necessary to comment, it more likely relates to a general lack of knowledge/interest in Dryandra's recreation and tourism potential. Most submissions commented on maintaining timber production from the mallet plantations, whereas non-residents were more concerned with maintaining Dryandra's nature conservation values and existing recreation values.

Dryandra has clearly been undervalued by the local community as a recreation and tourist, and hence economic, resource. There is a need for them to be made more aware of Dryandra's importance as a nature-based and cultural tourism destination—without community support, many of the optimal conditions described in the TOMM cannot be met.

#### *Product characteristics*

CALM has identified the main features of Dryandra as:

- natural values, particularly the presence of observable and charismatic animals such as numbats, woylies, brush-tail possums, western grey kangaroos, tammar wallabies and brush wallabies (observable only at night).
- one of the richest temperate floras in the world, culminating in spectacular seasonal wildflower displays.
- a strong cultural history (both Aboriginal and European).
- the architectural attraction of the cottages ('rustic' appeal).
- CALM's nature-based and cultural tourism services (guided walks featuring Aboriginal history, radio-tracking, bird watching; spotlighting; slide shows, etc).
- the provision and high quality of recreation facilities/products. The 'Sounds of Dryandra Woodland' Radio Drive Trail is the only one of its kind in Australia and is accessible to conventional vehicles and small tour buses. CALM has also developed an extensive walking track network, and several picnic sites.
- proximity to Wandering wineries. Wandering is only 30 km from Dryandra and on one of the two travel routes between Dryandra and Perth.
- clear night skies free of pollution, providing perfect opportunities for star-gazing.
- it is largest patch of remnant vegetation in the western wheatbelt, showing landforms that were once more widespread.

This is backed up by visitor surveys conducted in April - May 1997. When asked the question "How important were the following in your decision to visit Dryandra?", visitors provided the following ranking:

1. to see wildlife generally
2. cultural features
3. natural features
4. scenery
5. to see woylies
6. to see numbats
7. walking/cycling
8. CALM's guided activities
9. being on your own

Data from the April-May period of the Dryandra visitor survey revealed other sites most commonly visited on a trip to Dryandra include Wagin Historical Village, Albert Facey Homestead and Boyagin Rock. Unfortunately, there is little data available on the appeal of farmstays, recognised by the CSTA as a major attraction. The Australian Bureau of Statistics does not collect farmstay data, as most are too small to be incorporated into the survey for tourist accommodation. However, there is some information on the economics of farmstays in the Central South Region through a private study completed in 1995. The 24 farmstays surveyed contributed in the order of \$395 445 to the regional economy (although three operators contributed approximately 70% of the total).

#### *Trends and opportunities*

Tourism is the single largest industry in the world, and one of the fastest growing tourism market sectors, if not the fastest, is ecotourism. Ecotourism is an experience in a natural environment that:

- is ecologically sustainable.
- fosters environmental and cultural understanding, and an appreciation of natural environments.
- produces economic opportunities that make the conservation of natural resources financially beneficial to local citizens.

Dryandra's natural environment and CALM's activities mean that it can take advantage of this trend. This is especially the case if local efforts can be co-ordinated to add high quality, authentic local products. However, at present local communities may not be reaping the value of Dryandra's proximity. Initial results of the Dryandra visitor survey indicate that as little as 55 per cent of expenditure on a trip to Dryandra occurs within the study area. Most of this is in accommodation expenses at the Dryandra Village. If accommodation is excluded, the percentage of local expenditure drops to only 37 per cent. In comparison, the 'leakage' from the farmstay study (see above) was 15-18 per cent except in the three largest farmstays where it was closer to 40 per cent. The 'leakage' from tourism at Dryandra is a major concern, and must be addressed if many of the optimal conditions are to be met.

Dryandra's current overnight market is highly seasonal, with the majority of visits falling between Easter and October. Weekend occupancy rates are almost three times that of weekday rates. Strategies have been developed to increase overnight visitation, including expanding into other markets that have a high interest in nature-based tourism (eg. backpackers), and by providing guided activities.

At present, 30 000 people a year visit Dryandra. The potential impact of the Return to Dryandra project could see a further increase in visitor numbers, and as most of the wildlife-based tourism activities would take place at night, it is likely that there will be an increase in the number of overnight stays.

The Narrogin Town Council has provided a vision for tourism in its Four Year Strategic Plan:



“...To develop a tourism strategy so that funding, co-ordination and implementation are improved for the benefit of tourists, tourist businesses and potential employees”.

Council considers that tourism can to be enhanced by the development of a Nyoongar ‘keeping place’, and encouraging local operators to provide first class transient-style accommodation. The employment of an executive officer for the local tourism association is identified as critical in providing an effective tourist information service.

#### *Positioning and branding*

The CSTA’s Strategic Plan stops short of defining a tourism position or brand, but lists Wave Rock and farmstays as the main attractions in the region, catering primarily for Free Independent Travellers and day trippers. Wave Rock is to be promoted as the focus for attracting tourists to the region.

The following ‘vision’ statement is taken from CALM’s Nature-based and Cultural Tourism Marketing Plan:

“Dryandra is recognised as one of the prime nature-based and cultural tourism destinations in the State, catering for increasing numbers of visitors over the next ten years yet continuing to provide a ‘getting away from it all’ experience. Visitor satisfaction with Narrogin District’s Nature-based and Cultural Tourism Program, and the management of Dryandra generally, will remain high.

CALM and the lessee of the accommodation complex will continue to strive towards a common goal of providing a unique and enriching experience for visitors by integrating management wherever possible. Most of the visitors to the accommodation complex will partake in activities provided by CALM.”

Coupled to this is the Town of Narrogin’s desire for first class, transient style accommodation and the development of cultural tourism opportunities.

To achieve these objectives, products and services of excellence must be achieved in the following areas:

- a range of accommodation types;
- nature-based and cultural tourism products and services;
- farmstay experiences;
- information and interpretation; and
- integration between local operators to demonstrate a collective, organised approach to tourism.

### **3.2 Monitoring program**

A stakeholder workshop was held in Narrogin in April 1997 (a list of attendees is included as Appendix 1). Stakeholders were presented with a draft set of optimal conditions based largely on the TOMM for Kangaroo Island. These were reworked to accommodate input from the group. Suitable indicators and a monitoring program were also discussed. A table was then circulated with a general summary of the workshop for further comment. Comments received back from stakeholders were incorporated into the TOMM, a summary of which is attached as Table 1.

## **4. Implementation**

Much of data collected by CALM as part of the study is of direct relevance to many stakeholders. As such, the data will be available to all stakeholders either via newspaper reports, public meeting or direct request.



Although all the data has been collected by CALM in the first year, from now on the collection and ownership of the data will be entrusted to an implementation committee formed to administer the TOMM. If some data is considered confidential (ie. there is an economic disadvantage for some stakeholders in revealing their tourism statistics), one of the State agency representatives (eg. WATC) could be used to aggregate the data before it goes to the implementation committee.

Some of the data needed to implement the TOMM is already available from the Australian Bureau of Statistics (ABS). Much of the remainder has only been collected since April 1997, and will form the benchmark for future monitoring.

It is recommended that the implementation committee be established from within the CSTA, local government authorities within the study area, local businesses and representatives from the WATC, CALM and the WDC. However, the annual reporting process must be open to all stakeholders.

It will be the responsibility of the implementation committee to ensure that stakeholders are kept informed of the progress of the model. The most appropriate means of doing so are:

1. publication of relevant results in the local media
2. an annual public meeting

Altering components of the model will also be the responsibility of the implementation committee, but should only be made following a discussion of all stakeholders at an annual meeting.

## **List of Abbreviations**

ABS	Australian Bureau of Statistics
CALM	Department of Conservation and Land Management
CSTA	Central South Tourism Association
LAC	Limits of Acceptable Chance
TOMM	Tourism Optimisation Management Model
VIM	Visitor Impact Management
WATC	Western Australian Tourism Commission

## **Appendix 1. List of Attendees of Public Meeting**

Jan Jones	Albert Facey Homestead
Bob Adams	Williams Hotel
Noelene Scally	Pingelly Hotel
Lesley Page	Pingelly Tourist Committee
Mark Hook	CEO, Shire Of Pingelly
Ron O'Brien	President, Shire of Pingelly
Peter Leppinus	President, Central South Tourism Association
Dawn Box	Member, Central South Tourism Association
June Fairclough	Narrogin Tourist Centre
Jim Epiro	CEO, Shire of Williams
Anthony Desmond	CALM
Claire Treasure	Hubbles Guest House, Narrogin
Chris Tate	WATC Regional Manager, Northam
Robyn Rock	Narrogin Chamber of Commerce
Warren Adams	Narrogin Business Enterprise Centre, Chamber of Commerce
Steve Tindale	CEO, Town of Narrogin
Anne Battley	Gelfro Farmstay, Williams
Coral Mahony	Narrogin Tourist Centre
David Russell	Narrogin Chamber of Commerce
Ann Sands	The Gully Farmstay, Williams
Phil Kelly	Narrogin Motel
Daryl Moncrieff	CALM
Colin Morrison	Wheatbelt Development Commission

This is a detailed topographic map of the Mount Kokeby area in Western Australia. The map shows the town of Mount Kokeby at the center, with a large circular area around it. Major roads like the Southern Highway (115) and Eastern Highway (94) are visible. Numerous smaller towns and villages are labeled, including Northam, York, Beverley, Brooking, Aldersyde, Pingelly, Popanyinning, Narrogin, Williams, Dardadine, Darkan, and Wagin. The map also shows various hills, mountains, and geographical features. A scale bar at the bottom indicates distances in kilometers.

Optimal Conditions	Indicator	Acceptable Range	Monitoring method	Details of monitoring	Responsibility
<b>Economic</b>					
The majority of tourists to the area stay longer than 2 nights.	Average number of visitor nights spent in area.	3-6 nights	ABS data. (2) Direct question in visitor survey.	(1) ABS data for shires (2) Occupancy information from Dryandra.	(1)CSTA (2) CALM/lessees
The tourism industry is undergoing steady growth in tourism yield.	Annual average growth in tourism expenditure in area per number of visitors.	CPI to 3% growth	Expenditure estimate in survey.	(1) Exit surveys at Dryandra. (2) Seasonal interviews at Pingelly and Narrogin tourist centres (50 per season). Supply pre-paid envelopes to visitors at tourist centres.	(1) CALM, (2) Tourist Centres
The growth of employment within the tourism industry is consistent	Annual average growth in tourism employment.	>60% of the State average in tourism employment sector	(1) Survey of tourism operators in area or using area. (2) Business house survey	(1) CALM records of licensed tour operators. (2) Biennial business house survey.	(1) CALM, (2) Shire Tourism Committees
Visitors spend their money locally.	Percentage of expenditure locally.	>70%	Direct question in visitor survey, and extrapolation from accommodation figures.	(1) Dryandra Visitor Survey pro-rated across all Dryandra visitors.	CALM
Seasonal fluctuations in the number of visits are limited and relatively smooth	Annual variation in visitor nights between peak and low season.	Annual occupancy rates between 35-60%.	(1) ABS data for shires. (2) Direct question in Dryandra survey	(1)ABS data for shires (2) Occupancy information from Dryandra.	(1) CSTA (2) CALM
Tourists pay entrance fees for Dryandra and other CALM services. (Unlikely until Dryandra becomes National Park).	(1) Percentage of tourists paying entrance fees (2) Revenue collected exceeds collection costs.	(1) >60% (2) Increase in revenue >CPI.	(1) CALM on-site monitoring. (2) Number of Park Passes issued for Dryandra.	(1) Spot checks by CALM staff. (2) CALM Park Policy Section records.	CALM
<b>Market Opportunities</b>					
Operators use market data to assist in matching product with identified market opportunities	Number of operators using market data in targeting clients	>50%	Survey of tourism operators/service providers that use the area	Annual survey of tour operators/service providers via CSTA.	CSTA?
There is integration of local, regional and state marketing programs	Number of co-operative marketing efforts, or	>75%	Tourism operator/service provider survey	Annual survey of tour operators/service providers via CSTA.	CSTA?
Dryandra attracts cultural/nature-based segments of the domestic and international markets.	(1) Number of visitors that visit for wildlife/cultural attractions. (2) Number of international visitors.	>80%	Question in Dryandra visitor survey	Annual compilation of results of Dryandra visitor survey.	CALM
Local operators develop tour packages with each other.	Number of packages developed between local operators.	1997 baseline =zero packages. Annual growth of 10% until plateau at 50%.	Survey of tourism operators/service providers that use the area	Annual survey of tour operators/service providers via CSTA.	CSTA?
<b>Environmental</b>					
The majority of visitors to Dryandra visit defined visitor service zones	The proportion of the area's visitors that visit areas designed specifically for tourist visitation.	>80%	Axle count surveys.	Strategically placed traffic counters.	CALM
Ecological processes are maintained or enhanced in areas where tourism activity occurs.	Vegetation cover at specific sites.	Vegetation loss <0%.	Survey by CALM	Erosion pins/photo monitoring points at popular locations.	CALM
Wildlife that attracts visitors remains abundant and healthy where tourism activity occurs.	Number of woylies, numbats and other specified animals.	(1) Woylies are seen with ease at the Settlement. (2) Numbat observations > XX /km.	CALM surveys	(1) Seasonal CALM spotlight surveys and annual trapping. (2) Annual numbat survey.	CALM
Dryandra remains free of litter.	Amount of litter at main visitor sites.	No litter	(1) Direct observation by CALM staff. (2) Records of complaints from visitor surveys.	(1) Seasonal inspection of main visitor sites.	CALM
<b>Experiential</b>					
Tourism promotion of wildlife, farmstay and other holiday experiences is realistic and truthful to that actually experienced by most visitors.	Proportion of visitors who believe they had an intimate nature-based, farm-based or country lifestyle experience.	>80%	Question in visitor survey as to expectations, and whether these expectations were met.	Annual compilation of results of Dryandra visitor survey.	CALM
A visit to Dryandra and surrounding area is distinctive from other nature-based attractions in the south west.	Proportion of visitors who believe they could only have got that experience in local area.	>80%	Question re importance of wildlife and other attractions in survey.	Annual compilation of results of Dryandra visitor survey.	CALM
Visitors have the opportunity to experience unique and innovative interpretation.	Proportion of visitors who were satisfied with interpretation provided by on-ground or interpretation guide.	>90%	Question in visitor survey.	Annual compilation of results of Dryandra visitor survey.	CALM
The majority of visitors leave the area highly satisfied with their experience.	Proportion of visitors who were satisfied with their experience	>90%	Satisfaction questions in visitor survey.	Annual compilation of results of Dryandra visitor survey.	CALM
All tourism operators visiting Dryandra have attended Dryandra Woodland Ecology Course.	Level of compliance.	100%	Monitor applications.	Assess all applications through CALM's Parks Policy Section.	CALM
<b>Socio-cultural</b>					
Residents feel they can influence tourism-related decisions.	Proportion of residents who feel capable of influencing tourism decisions.	1997 business house survey as baseline.	Business House Survey.	Biennial business house survey.	Shire Tourism Committees?
Residents feel comfortable that tourism contributes positively to their lifestyle.	Proportion of residents who perceive tourism has positive community benefits.	1997 business house survey as baseline.	Business House Survey.	Biennial business house survey.	Shire Tourism Committees?
Residents are able to access tourism/ recreation opportunities not frequented by tourists.	Proportion of residents who feel they can visit areas of their choice with acceptable numbers of tourists present.	1997 business house survey as baseline.	Business House Survey.	Biennial business house survey.	Shire Tourism Committees?