TECHNICAL REPORTS

The technical report series present data and its analysis, meta-studies and conceptual studies and are considered to be of value to industry, government and researchers. Unlike the Sustainable Tourism Cooperative Research Centre’s Monograph series, these reports have not been subjected to an external peer review process. As such, the scientific accuracy and merit of the research reported here is the responsibility of the authors, who should be contacted for clarifications of any content. Author contact details are at the back of this report.

EDITORS

Prof Chris Cooper  University of Queensland  Editor-in-Chief
Prof Terry De Lacy  Sustainable Tourism CRC  Chief Executive
Prof Leo Jago  Sustainable Tourism CRC  Director of Research

National Library of Australia Cataloguing in Publication Data

Hughes, Michael.
Tourism development in the southern Wheatbelt of Western Australia: from Dryandra woodland to Dryandra country.

Bibliography.

1. Tourist trade – Western Australia – Dryandra. 2. Dryandra (W.A.) – Economic conditions. I. Macbeth, Jim. II. Cooperative Research Centre for Sustainable Tourism. III. Title.

338.4791941

Copyright © CRC for Sustainable Tourism Pty Ltd 2005

All rights reserved. Apart from fair dealing for the purposes of study, research, criticism or review as permitted under the Copyright Act, no part of this book may be reproduced by any process without written permission from the publisher. Any enquiries should be directed to Brad Cox, Communications Manager (brad@crctourism.com.au) or Trish O’Connor, Publishing Manager (trish@crctourism.com.au).

Acknowledgements

The Sustainable Tourism Cooperative Research Centre, an Australian Government initiative, funded this research.

The authors acknowledge the support of the Department of Conservation and Land Management of Western Australia and Murdoch University for financial and in-kind support for this project. We also thank the staff in the Narrogin Regional and District Offices of CALM for their vital assistance along with the many other Dryandra community members who gave time to this project.
CONTENTS

ABSTRACT V

SUMMARY VI

PART I. TOURISM DEVELOPMENT IN THE WESTERN AUSTRALIAN PERIPHERY 1

CHAPTER 1 INTRODUCTION 1
The Tourism Periphery 1
Project Area Location and Historical Context 3

CHAPTER 2 TOURISM DEVELOPMENT, DRYANDRA WOODLAND AND BARNA MIA 6
Dryandra Woodland Focus Group 7
Barna Mia the Tourism Icon 7
Dryandra Tourism Development Officer 8
Shire Politics and Breakaways 9
From DWFG to DCVC 9

CHAPTER 3 THE REGIONAL TOURISM PRODUCT 11
Community Relationship with Barna Mia 11
Regional Coordination of Tourism Development 12
Dryandra Woodland is a CALM Managed Protected Area 13
Quality of Accommodation 15
Tourism Products 16
Tourism Activity 17

CHAPTER 4 BARNA MIA, DRYANDRA WOODLAND AND DRIVE TRAILS 18

CHAPTER 5 LOOKING TO THE FUTURE 20

PART II. BARNA MIA THE TOURISM ATTRACTION 21

CHAPTER 6 WILDLIFE TOURISM 21

CHAPTER 7 THE BARNA MIA EXPERIENCE 23
Visitor Satisfaction and the Barna Mia Experience 25
Overall Visitor Satisfaction with Barna Mia 26
Satisfaction in Relation to Segments of Barna Mia Experience 27
Negative Responses to the Barna Mia Experience 30
Visitor Impacts on Animal Wellbeing at Barna Mia 31
Visitor Survey Conclusion 32

CHAPTER 8 OPERATION OF BARNA MIA AS A COMPONENT OF DRYANDRA WOODLAND 33
Dryandra Woodland Visitor Data 33
Coordination of Barna Mia and Dryandra Village 34
Barna Mia Ticket Pricing 35
Operational Management of Barna Mia 37
Promotion of Barna Mia 37

CHAPTER 9 RECOMMENDATIONS 38
Recommendations – Barna Mia as a Tourist Attraction 38
Fee Structure / Costs 38
Shorten Length of Pre-Walk Talk 38
Develop a More Cost Effective ‘Behind the Scenes’ Tour 39
Employ Additional Guides 39
Expansion of Facility 39
Recommendations – Dryandra Woodland, including Barna Mia and Dryandra Village 40
TOURISM DEVELOPMENT IN THE SOUTHERN WHEATBELT OF WESTERN AUSTRALIA

Operational Structure – Base a Ranger at Dryandra __________________________________________ 40
Development of Integrated Niche Market Product ________________________________________ 40
Develop Facility for Dual Use _________________________________________________________ 40
Recommendations – Barna Mia and Dryandra Woodland as Part of Dryandra Country _______ 41
   CALM Recommendations ____________________________________________________________ 41
   Dryandra Country Recommendations ________________________________________________ 41

APPENDIX A: DESCRIPTION OF METHOD ______________________________________________ 42
APPENDIX B: DETAILED BARNA MIA SURVEY RESULTS __________________________________ 48
REFERENCES _______________________________________________________________________ 53
AUTHORS _________________________________________________________________________ 55

List of Figures

Figure 1: Map of central southern Wheatbelt project area _________________________________ 3
Figure 2: Dryandra Woodland, large remnant of native vegetation ________________________ 6
Figure 3: Barna Mia building, the tourism icon _____________________________________________ 7
Figure 4: Variation in shire boundary signs does not reflect a common regional identity ________ 13
Figure 5: Signs for attractions are lacking, those that exist vary in quality and style - a common regional theme is not evident __________________________________________________________ 13
Figure 6: CALM sign at main entry to Dryandra Woodland ________________________________ 14
Figure 7: Rustic accommodation - cabins at Dryandra Village, located in Dryandra Woodland _______________ 15
Figure 8: (left to right) Gnarojin Park and Foxes Lair in Narrogin are in need of significant upgrades to create greater tourism appeal ________________________________________________________ 16
Figure 9: Heritage in need of interpretation to convey significance to tourists ________________ 17
Figure 10: What remains of the Bicentennial Heritage Walk Trail around the Town of Narrogin, __________ 18
Figure 11: The Barna Mia experience ____________________________________________________ 24
Figure 12: Mean Barna Mia visitor satisfaction rankings segmented by chronological order of tour stages _______ 27
Figure 13: Root damage resulting from Bilbies foraging at the base of the few Casuarina trees _____________ 32

List of Tables

Table 1: Local government areas and relative population sizes originally included in the project area _________ 4
Table 2: Summary of Barna Mia visitor satisfaction survey questions __________________________ 25
Table 3: Hypothetical Barna Mia budget based on tour bookings for 15 adults every night ____________ 35
Table 4: Hypothetical budget for period between December 2002 and July 2003 assuming Barna Mia ticket prices were doubled ____________________________________________________________ 36
Table 5: Summary of Barna Mia survey respondent characteristics ________________________________ 48
Table 6: Mean overall and stage by stage satisfaction rankings of Barna Mia experience ___________ 49
Table 7: Categorised comments relating to reason for over-all satisfaction ranking _________________ 50
Table 8: Categorised comment frequencies for satisfaction with meeting guide at Old Mill Dam ________________ 50
Table 9: Categorised comment frequencies for satisfaction with driving from Old Mill Dam to Barna Mia __________________ 51
Table 10: Categorised comment frequencies for satisfaction with arrival at Barna Mia _______________ 51
Table 11: Categorised comment frequencies for satisfaction with listening to ________________________ 51
Table 12: Categorised comment frequencies for satisfaction with the interpretation ___________________ 51
Table 13: Categorised comment frequencies for satisfaction with guided walk through the enclosure ______ 52
Table 14: Categorised comment frequencies for satisfaction with stops at feeding stations during walk __________ 52
Table 15: Categorised comment frequencies for satisfaction with refreshments and browsing after walk ___________________________ 52
ABSTRACT

Tourism development is often viewed as a means to counter the social and economic decline of communities in regional areas of Australia. Such decline is prevalent, particularly in areas determined to be on the tourism periphery. Peripheral regions present special problems in terms of tourism development owing to a lack of product, market access and infrastructure. This report presents the findings of a case study focusing on the southern Wheatbelt of Western Australia, in an area known as Dryandra Country. This is a region that is seeking to develop tourism as a buffer against the varying fortunes of its grain and sheep based economy as well as a means to counter the social decline of the towns. Seven local government areas (LGAs), in league with the state conservation agency, Department of Conservation and Land Management (CALM) and various other interest groups, embarked on a tourism development initiative centred on Dryandra Woodland and the wildlife tourism product it potentially offered. The purpose was to develop Dryandra as an internationally significant nature-based destination. This was attempted partly through constructing an iconic captive wildlife tourism facility, Barna Mia, which housed some very rare fauna. Research during 2003 found that while Barna Mia provided a highly satisfying experience for its visitors, there was no indication that it was progressing toward the international tourism icon status as intended. The progress of the LGAs toward developing a coordinated regional product also appeared to be slow. Various issues were identified that contributed to the observed situation including: CALM’s role as the sole manager of the regional icon; the character of the tourism system in the region; a lack of adequate and accurate tourism data and poor communication. The report provides a detailed description of the situation as it was found in 2003. Recommendations to enable further progress in tourism development are made.
SUMMARY

Dryandra Woodland is a large area of remnant native vegetation located in the southern Wheatbelt region of Western Australia, about 165 km south east of Perth, the state’s capital. The woodland is significant for both its ecological and recreational value, primarily owing to its size and role as a refuge for often rare flora and fauna displaced from the rest of the Wheatbelt. In the 1990s, the Department of CALM recognised that Dryandra Woodland was under utilised as a tourism product and a potential contributor to the sustainability of its surrounding shires.

To rectify this, a CALM officer initiated a community based forum focused on developing Dryandra Woodland as a nature-based tourism icon for the seven local government areas (LGAs) that surround it. This was approached through the formulation of a tourism planning framework using the Tourism Optimisation Management Model (TOMM). The objective was to raise the profile of Dryandra Woodland as a tourism attraction, increase tourist numbers to the region and create economic benefits through increased tourist spending in the seven LGAs.

The key to achieving this was the construction of a captive wildlife tourism facility (Barna Mia) that was intended to act as an icon for the region. Barna Mia was conceived as a show case for rare and locally extinct small marsupials involved in a breeding and reintroduction program for Dryandra Woodland. This product was to value-add to the Dryandra experience through enabling close contact with very rare marsupials in a naturalistic and small group situation. The type of animals and the design of the experience were intended to be attractive to international and interstate tourists, drawing greater numbers of them into the Dryandra region. Barna Mia, Dryandra Woodland and the seven LGAs were intended to combine to form a distinctive regional tourism product.

In 2003, an investigation of the progress of tourism development in the Dryandra Woodland region was carried out. The investigation was comprised of two main parts: Part I deals with the political, geographical and historical issues influencing tourism development in the region; Part II investigates the management and operation of Barna Mia as a tourist attraction. The combination of knowledge presented in these two parts provides a picture of the processes influencing the success or otherwise of tourism development in the Dryandra region. This report presents an interesting case study of tourism development issues affecting regional areas on the tourism periphery.

Objectives of Study
The study objectives are listed as follows

- Identify the issues influencing progress of tourism development in the project area;
- Assess the potential for a regional tourism product incorporating the seven LGAs;
- Measure the satisfaction of visitors experiencing Barna Mia;
- Examine the relationship between Dryandra Woodland, Barna Mia and the LGAs in terms of creating a coordinated tourism product.

Methodology
This report presents some key findings resulting from archival research, visitor questionnaires and interviews in the participating shires during 2003. Information was gathered from past questionnaires, reports and the scant tourism research previously conducted in the region. Community representatives from each shire were also interviewed using a semi structured discussion format to gather information regarding tourism development and how Dryandra Woodland and Barna Mia fit into the greater picture. Local government CEO’s, state government agency representatives, business operators and members of tourism related NGOs were interviewed. This enabled a multifaceted view of tourism development in the region to be constructed. A final discussion forum was held at the conclusion of the research period that included all of those previously interviewed as well as some additional community representatives who had declined to be interviewed but expressed interest in the forum. The forum enabled discussion between the various stakeholders in terms of tourism development on the region and the role of Dryandra Woodland and Barna Mia. Observation of political relationships between various individuals and groups was also observed by the researchers. In addition, 85 visitors to Barna Mia were surveyed using self administered written forms with satisfaction scales and opportunities for open ended comments relating to satisfaction levels indicated. This provided an insight into the visitor experience of Barna
From Dryandra Woodland to Dryandra Country

Mia as a captive wildlife tourism facility. The results are presented in the form of a case study regarding the politics and management of Barna Mia as the focal point for tourism development for the group of shires. During the first year of operation (2003), visitors to Barna Mia were requested to complete a satisfaction survey. The Barna Mia satisfaction survey was intended to provide a detailed picture of what visitors thought about the facility and was custom designed for this purpose (Appendix A). The self administered written survey data was complimented with casual observations of tour groups and unstructured discussions with CALM staff. The survey form consisted of a series of questions relating to how satisfied the participant felt with their experience of Barna Mia. The survey sought to ascertain the overall satisfaction of respondents in combination with comments about the experience in general. This was preceded by a series of statements relating to the distinct stages of the evening’s experience. Satisfaction was quantified using a four point scale ranging from 1 (very low satisfaction) to 4 (very high satisfaction). Participants indicated their level of satisfaction on the scale then were requested to write a comment relating to the reason for the satisfaction rank they gave.

Key Findings

Key findings in relation to tourism development in the Dryandra region and the function of Barna Mia as a tourist attraction are presented as follows:

Tourism development in the Dryandra Region

- The actions of a CALM officer in initiating a community forum focusing on tourism development was a key factor in creating the climate for such development to take place.
- The factors that define the Dryandra region as being on the tourism periphery, lack of obvious attractions, lack of infrastructure, distance from mass travel routes, economic decline, diminishing populations, lack of adequate tourism data and so on, provide both the motivation and inhibition for tourism development.
- CALM as the sole manager of the intended tourism icon and instigator of a community approach to tourism development also inhibits tourism development owing to its conservation mandate and a corporate structure that fails to factor in essential tourism related roles.
- A lack of communication between key ‘players’ such as CALM, local governments, tourism interest groups and the then WATC seems to have contributed to a lack of progress in tourism development.

Barna Mia as a tourist attraction

- Barna Mia provides visitors with a highly satisfying experience owing to its theoretically ideal design
- Rather than a value adding icon, Barna Mia was a drain on Dryandra Woodland during 2003 owing to under pricing and CALM not incorporating tourism management related roles into its bureaucratic structure.
- Barna Mia has had minimal impact on tourism development due to a failure to integrate it with the Dryandra Woodland product and the surrounding LGAs.

Future Action

In this report we make a number of key recommendations, which are detailed at the end of the report. The bulk of the detailed report is analysis of various issues and research that have led us to our key recommendations. We recommend as follows:

Action and directions to be taken by CALM

2. Barna Mia should be run on at least a cost-neutral basis.
3. Entry fees for Barna Mia need to be raised to make this possible.
4. The operation of Barna Mia needs to be a clear responsibility within the relevant duty statements in the Narrogin District and Region.
5. This should include time dedicated to communicating with the Dryandra Country Visitor Centre.
6. Further, the operation of Barna Mia needs to be effectively integrated with the Dryandra Village and the Woodland itself.
7. To this end, CALM staff should be based at Dryandra.
8. An improved tour booking system to ensure visitors numbers are allocated in an efficient manner, avoiding overcrowding and unviable low attendance numbers
9. New products need to be developed for Barna Mia, including what we call a ‘fine print’ product.
10. Dryandra Village should be upgraded, including existing infrastructure and a caravan park.

11. CALM should maintain and strengthen its relationship with the tourism region known as Dryandra Country as part of its corporate objective of relating to its community.

12. This should involve an evaluation of the Tourism Optimisation Management Model (TOMM) planning framework applied to Dryandra Woodland in the 1990s to assess status of implementation and potential modifications.

**Action and directions to be taken by Dryandra Country**

13. Dryandra Country needs to establish a local tourism database to generate tourism related information specific to the region. Information should be shared between shires and stakeholders.

14. Dryandra Country needs to undertake further research work to develop relevant tourism product and linkage between products, e.g. drive trails, signs.

15. To this end, Dryandra Country needs to continue the development of a relevant image to use in marketing and product development.

16. Dryandra Country needs to work closely with adjacent tourism regions to develop integrated products, for example along the Great Southern Highway.

17. Dryandra Country needs to utilise the help of relevant government agencies and NGOs to access further research funds and to develop business plans in order to encourage private investment in tourism related businesses and infrastructure. Organisations include the Wheatbelt Development Commission, Heartlands Tourism Association, the WATC, The Area Consultative Committee, the Business Enterprise Centre, and so on.

18. Dryandra Country needs to find ways to improve its accommodation sector, including a comprehensive upgrade of the caravan park and the building of a new motel.
PART I – TOURISM DEVELOPMENT IN THE WESTERN AUSTRALIAN PERIPHERY

Part I of this report describes the historical, geographical and political context of tourist development in the project area. Chapters 1 and 2 provide the context and theoretical background in relation to the project area and tourism development in peripheral areas while the subsequent sections describe the process that occurred in the Dryandra region during 2003.

Chapter 1

INTRODUCTION

In the late 1990s the Department of Conservation and Land Management (CALM) began considering the establishment of a wildlife facility in the Dryandra Woodland. This significant remnant woodland is about 165 km southeast of Perth and in proximity to the regional centre of Narrogin. CALM conceived the captive wildlife facility as not only part of its wildlife conservation and public education programs but a tourism destination upon which the surrounding area could base further tourism development. The region has, for various reasons, suffered from an extremely low tourism profile. The intent was to raise the profile of the region by establishing an iconic wildlife tourism attraction that would draw in increased numbers of domestic and international tourists. The increased number of tourists would then provide benefits to the region’s communities in terms of increased tourism related revenue and a widening of the economic base.

The initial group of local governments included in the tourism development region, then labelled ‘Greater Dryandra’ (see Table 1). These LGAs agreed to cooperate with CALM and other stakeholders in the creation of a tourism product centred on Dryandra Woodland, from which the name for the region was derived. A significant issue for the creation of a regional tourism product in Greater Dryandra is the absence of obvious tourists attractions outside Dryandra Woodland combined with inadequate tourism infrastructure and limited community interest in tourism development. These factors placed the then Greater Dryandra squarely in what is referred to as the tourism periphery. While being in the tourism periphery was a factor motivating the attempt to develop a regional tourism product, it may also act as an inhibitor to this end.

This report provides some background in relation to the development of captive wildlife tourism and tourism in peripheral areas as a theoretical grounding for the concepts raised and discussed. The report is presented in two parts. Part I examines the overall geographical and political context of tourism development in the Dryandra region while Part II presents data collected in relation to the performance of Barna Mia as a wildlife tourism attraction. Descriptions of the geographical, historical and political environment of the region in Part I provide a context for the tourism development initiative. The results of the Barna Mia Visitor Survey and associated research provide a specific insight into the operation of a captive wildlife tourism facility from the visitor and regional perspective. Together the two parts of this report trace the progress of the Dryandra tourism development initiative during 2003.

The Tourism Periphery

The construction of tourism attractions in peripheral areas is often seen as a means toward counteracting the economic decline that many such areas experience (Seaton 1999, Knowd 2001, Prideaux 2002a). Peripheral areas were defined by the often cited Wanhill (1997) as places that are a significant distance from the centre of population or economic activity and subsequently are less than readily accessible. Prideaux (2002a) commented that ‘peripheral’ was a difficult term to define in the context of tourism given the relativism inherent in perceptions of isolation and distance. He cited the advent of modern transport as a key factor in changing the relationship between distance and travel time and perceptions of accessibility, and therefore where the periphery lay. For example, rapid mass transport has altered once isolated and difficult to access locations, such as Nepal, the Amazon Basin and Central Australia to a steady stream of tourism. Prideaux (2002a) stated that ‘peripheral’ was defined by several factors such as difficulties with accessibility, significant distance from economic centres and visitor perceptions of the scale of peripherality. Peripheral areas are also characterised by sparse populations...
and an economy with limited local control, dominated by a limited range of primary industries (Wanhill 1997). The very nature of peripheral areas results in difficulties when attempting to identify tourism development opportunities.

Difficulties in developing tourism in the periphery may be associated with minimal tourism related infrastructure and a lack of obvious tourism attractions. Put simply, tourist attractions are places or experiences that are visited because of the perceived importance or significance to people acting as tourists (Leiper 1990, Jacobsen, Carson, Macbeth & Sharma 2002). Various forms of infrastructure (accommodation, transport, catering and so on) are required in order to support and encourage the presence of tourists in a given region that holds some attraction. While inadequate supporting infrastructure may be dealt with given motivation, time and money, the lack of tourist attractions may be a more difficult issue to address. When discussing the scarcity of attractions in relation to the tourism appeal of Kansas, an agriculturally dominated state in the USA, Hsu, Wolfe and Kang (2004) claimed that it was: ‘… not what a destination has, but more importantly how it utilises its resources.’ (p.121). This suggested that the creation of a successful and sustainable tourism in a peripheral region does not necessarily require installation of major new and obvious attractions for tourists, but rather, improvement and promotion of the existing positive aspects to a willing niche tourism market. In the case of Kansas, this was deemed to be older people, or people with family in the region, who enjoy sedentary road trips through rural landscapes.

Identifying niche market opportunities in a peripheral area is one method of developing tourism. Hsu et al (2000) approached this from the marketing of existing opportunities to a very specific market segment interested in the type of landscape prevalent in Kansas (which is 90% open farming land). The authors found that common attitudes and perceptions of Kansas as an (undesirable) holiday destination were very difficult to change in the absence of any obvious alteration in what the region had to offer. While changing perceptions and attitudes about a place may be difficult, it is not impossible given a large enough budget for a well targeted marketing campaign. Because peripheral areas often have limited funds for tourism development, expensive marketing campaigns are usually out of the question. In reality, promotion of Kansas as a holiday destination relied heavily on the local residents promoting the region by word of mouth to friends and family. Such a method requires active and positive community involvement and would seem to access a very select group in terms of potential tourists.

Seaton (1999) described a different approach to encouraging tourism in the periphery, focusing on the creation of something new and unique to attract the interest of would-be tourists. He described a strategy whereby a large quantity of low cost commercial and defunct public properties in a rural town were converted into retail outlets for antique and second hand books. The concentration of outlets selling old books created a critical mass of a single type of retail outlet that enabled the town to be packaged as a unique tourism destination. This concept involved the creation and promotion of a niche market attraction rather than seeking to promote sparse existing attributes to a niche market likely to draw tourists into the periphery. That is, rather than attempting to change demand for the existing destination, something new and unusual was added to cater to an existing tourism demand.

While such strategies may seem straightforward, Prideaux (2002a) highlighted four factors that are particularly important for the successful establishment and sustainable operation of attractions in peripheral areas. In summary, these were location factors, community support for tourism, management of the attraction and supporting tourism infrastructure in the surrounding region. Location factors relate to accessibility of the attraction, mainly in terms of transport costs. Higher transport costs may reduce the number or likelihood of tourists visiting the region. Community support is commonly cited as an essential requirement for success of a tourist attraction (Howell 1987, Hsu et al. 2004). This may be in the form of low cost or in-kind contributions that are particularly important in cash strapped peripheral areas. Careful management of the new attraction must allow for the limiting factors inherent in the tourism periphery and make reasonable judgments as to the potential demand for the attraction, its capacity and the subsequent contribution to the region based on sound knowledge of the target market (Prideaux 2002a). This may be easier said than done as many areas in the tourism periphery are characterised by a lack of tourism related data. This means any market analysis must be based almost entirely on conjecture and comparative estimates. Finally, the presence of supporting infrastructure also plays a significant part in the success of tourism in the periphery. Infrastructure such as accommodation, transport and tourism oriented businesses and services all function to support the success of a tourist attraction. The irony of much of this is that while such factors are deemed essential for the success of tourism in the periphery, locations are often deemed to be in the periphery by the lack of such factors.

Regions such as the Wheatbelt of Western Australia include prime examples of the tourism periphery. The region’s economy is almost entirely reliant on grain and sheep production and consequently subject to the widely varying fortunes of the grain market as well as the unpredictability of the natural elements’ influence on yield and subsequent revenue. The Wheatbelt is also a region, with the exception of some key locations, that has a generally low tourism profile with few obvious attractions and lacking in tourism oriented infrastructure. As a result, the Wheatbelt in Western Australia is experiencing a steady economic and social decline as populations migrate to larger centres of economic activity and more opportunity. Local governments and community groups
faced with this decline are increasingly turning to tourism development as a means of diversifying the economic base of their peripheral regions.

Project Area Location and Historical Context
The Central Southern Wheatbelt is a sub region of the Western Australian Wheatbelt, an elongated band of agricultural landscape that separates the temperate, relatively populous southwest corner of the state from the more isolated and arid southern central and south-eastern regions (Figure 1). The Central Southern Wheatbelt is comprised of a total of 15 local government areas southeast of Perth, the state’s capital. It is an area of about 45,000 km² with a population of approximately 18,000 residents (2001 census) and is dominated by grain and sheep based agriculture. As with the rest of the Wheatbelt, the Central Southern region is characterised by broad-acre landscapes, scattered blocks of remnant native vegetation and sparse population (average of 1 person per 2.5 km²). The climate is Mediterranean with long, hot and dry summers and mild winters (though winter minimum temperatures may fall close to zero degrees Celsius). Annual rainfall is approximately 500 mm with most falling in the months of June and July. The hottest months are usually January and February. Consequently, any visitation to the region is highly seasonal with most tourists reportedly visiting between April and September to avoid the hot, dry summer months.

This case study focuses on a cluster of seven local government areas in the Central Southern region of the Wheatbelt (Table 1) that, in the late 1990s, agreed to form a coordinated approach to tourism development. This area lies in the central western portion of the Central Southern Wheatbelt, between 100 and 200 km southeast of Perth. The seven shires cover about 9,080 km² with a total residential population of 9,022 (2001 census). The region has few immediately obvious tourism attractions, minimal tourism oriented infrastructure or services and virtually no tourism data specific to the area. The major travel routes connecting Perth with coastal centres to the south bypass the seven shires such that very little ‘through’ traffic is apparent. For these reasons, the project area is considered to be on the tourism periphery.
Narrogin is two local councils, a town council surrounded by a shire council, known as a 'donut shire'. The town has a residential population more than five times that of the shire within its 13 km². Although Narrogin Shire residents identify strongly with their farming identity, they still use the town as their facilities and services centre. Discussion with both the shire and town local government representatives indicated that the town dominates the shire in terms of issues that may affect both areas, such as tourism development. Interestingly, while the shire insisted that decisions regarding mutual issues were made jointly with the town, the town openly stated that they determined the outcomes of joint decision making that involved the shire. The latter scenario seems more likely given the town’s dominance in terms of population size and the reliance of shire residents on town facilities and services. Thus, for the purposes of this report, the town and shire of Narrogin will be combined and referred to simply as Narrogin. In addition, as the remaining five local government areas have relatively small populations and are experiencing similar issues in terms of sustainability and tourism development, they will be referred to collectively. Narrogin is the regional centre for the adjacent resource poor shires and is the dominant local government stakeholder with regards to tourism planning and development.

A brief summary of the Wheatbelt Southern subregion’s history may assist in understanding how the location came to be on the tourism periphery and provide a context for the current status of tourism development. The area was opened for agriculture in the 1880s with the building of a rail line through the western portion of the region connecting the state capital to the north, Perth, with the southern coastal centre of Albany. Narrogin was established as the transport and agrarian centre for the Southern subregion of the Wheatbelt that includes the seven local government areas (LGAs) (Tonts & Black 2002). This was to the developmental detriment of other nearby shires, such as Cuballing. Because of the close proximity of Narrogin, Cuballing’s town facilities and services were minimal to start and have been whittled away to nothing except a roadhouse and petrol station. The residents must use the facilities of Narrogin approximately 15 km to the south. The dominance of Narrogin as a regional centre with more than half the population of the project area has meant that facilities and services in the surrounding shires have been reduced and centralised to Narrogin Town. Thus, while Narrogin appears relatively prosperous, the surrounding shires are obviously suffering from the symptoms of severe rural decline.

While managing to recover from economic downturns during the 1930’s and Second World War, a steady decline in the fortunes of the region (as with other rural areas in Australia) has been taking place since the 1970s. This is a combined symptom of falling agricultural returns, on which the region was almost solely reliant, coupled with downsizing of government services such as railways. Centralisation of government services such as the railway resulted in significant population loss as well as loss of social identity. The result is a regional economic retraction in conjunction with migration of rural populations to larger coastal centres (such as Perth). These changes triggered a downward trend in population, in particular the youth population, in rural areas that has persisted until the present day. This has created the situation in which communities are seeking to expand their economic base in order to buffer against downturns in agricultural fortunes.

Narrogin’s role as a regional government service and retail centre has already provided a buffer against the worst effects of the agricultural economic decline experienced in the neighbouring shires. This also resulted in Narrogin acting as a population sponge for its region with people in neighbouring shires moving into the regional centre for better access to facilities and services. The reduction of permanent employees living in the region has resulted in an increase in the number of contracted and itinerant workers living on a short-term basis. Those permanent government workers remaining tend to live in the town of Narrogin for their two to three year position then move on to perceived better opportunities in larger centres. These changes have resulted in a new community dynamic that is still driven by the significant presence of government services but that has adapted to the change from permanence to the current itinerant nature of individuals and groups.

Narrogin Town has experienced at least a slower rate of decline than its neighbouring shires owing to its broader economic base and role as a government service centre while the remaining shires are still primarily reliant on agriculture (Tonts & Black 2002). This is evident in the population of the town of Narrogin slowing its decline to a near steady state between 1996 and 2003 while the remaining shires continue to lose residents.

### Table 1: Local government areas and relative population sizes originally included in the project area

<table>
<thead>
<tr>
<th>LOCAL GOVERNMENT AREA</th>
<th>POPULATION (2001 CENSUS)</th>
<th>% OF TOTAL POPULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cuballing</td>
<td>685</td>
<td>7.6%</td>
</tr>
<tr>
<td>Narrogin (shire and town)</td>
<td>5,281</td>
<td>58.5%</td>
</tr>
<tr>
<td>Pingelly</td>
<td>1,122</td>
<td>12.4%</td>
</tr>
<tr>
<td>Wandering</td>
<td>318</td>
<td>3.5%</td>
</tr>
<tr>
<td>Wickepin</td>
<td>716</td>
<td>7.9%</td>
</tr>
<tr>
<td>Williams</td>
<td>900</td>
<td>10.0%</td>
</tr>
<tr>
<td><strong>Total Population</strong></td>
<td><strong>9,022</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
(mostly youth) to the larger centres (Austats 2003). This history has shaped the relationship between the LGAs within the project area and their current fortunes, with most of the shires seeking a way out of their decline through tourism development while the town of Narrogin seems to have a lesser incentive owing to its regional centre status.
Chapter 2

TOURISM DEVELOPMENT, DRYANDRA WOODLAND AND BARNA MIA

The seven local government areas cooperating in developing tourism are located within close proximity to a unique and extensive cluster of remnant bush-land and native mallet tree plantations known as Dryandra Woodland (Figure 2). Most of the Wheatbelt remnant vegetation pockets are no more than a few isolated hectares of severely degraded habitat (Hobbs 2003). For this reason, Dryandra Woodland stands out as unusually large. The woodland is actually not a single area of bush-land but a group of 17 closely clustered remnant blocks connected by 'corridors' of native vegetation along fence lines and roads that collectively cover about 28,000 ha (approximately 70,000 acres). The largest of the remnant blocks is 12,000 ha (approximately 30,000 acres), many times the size of the average for the Wheatbelt region. Its size and location within an agricultural landscape has established Dryandra Woodland as a refuge for native fauna and flora populations unable to live in the cleared agricultural areas. CALM, the State Government agency responsible for managing natural areas in Western Australia, identified the woodland as, ‘… the single most important area for conservation and recreation in the … Wheatbelt region of Western Australia’ (Moncrieff 1998a). While Dryandra Woodland was identified as a potentially significant tourism asset by both CALM and the seven local governments, a study by Moncrieff (1998a) found the woodland was under-utilised, with a narrow range and low number of tourists contributing very little to the local shires in terms of economic benefits.

Figure 2: Dryandra Woodland, large remnant of native vegetation

As the state conservation agency, CALM has sole jurisdiction over Dryandra Woodland even though it occupies a significant area of land within the shires, particularly Cuballing Shire. CALM’s mandate clearly states that it is primarily responsible for the management of the ‘natural estate’ in Western Australia in the context of conservation and responsible use (CALM 2000). This encompasses protection of ecologically important areas, sustainable use by the public and commercial interests and rehabilitation of degraded habitats. Involvement of other interests, including local governments, in planning and management of natural areas occurs entirely at CALM’s discretion.
Dryandra Woodland Focus Group

In the late 1990s a CALM officer initiated a cooperative arrangement between the conservation agency and stakeholders within the seven local government areas. The cooperative arrangement was part of an initiative by the CALM Officer to develop a tourism planning framework for Dryandra Woodland based on the 'Tourism Optimisation Management Model (TOMM). The central plank of TOMM is community involvement through public forums and focus groups that include all stakeholders, government, non-government, commercial and residential. The intent is to ensure responsible tourism development while maximising positive benefits for stakeholders. Thus, as part of applying the TOMM framework to Dryandra, the Dryandra Woodland Focus Group (DWFG) was formed. The DWFG included representatives from CALM, the local governments, the chambers of commerce, Wheatbelt Development Commission and tourism development interest groups. All members were involved on a voluntary basis. The Dryandra Woodland Focus Group was conceived as a point of contact between CALM, as the sole manager of Dryandra Woodland, and the representatives of stakeholders from the communities that hoped to benefit from tourism development centred on the woodland.

The fundamental aim of the DWFG was to increase tourism spending in the region surrounding Dryandra Woodland (Dryandra Woodland Focus Group 1999). This was in response to research conducted by Moncrieff (1998a) that identified a very low level of tourism spending within the neighbouring shires. The aim was to be achieved by first defining long-term objectives relating to the identification of key tourism assets and opportunities and how best to coordinate the region in terms of creating a viable and sustainable tourism product (Moncrieff 1998a). The wildlife tourism opportunities within Dryandra Woodland was the primary focus of this process with the development of a captive wildlife ‘tourist facility’, later to be named Barna Mia a central pillar. Barna Mia was a concept initially flagged in a 1996 CALM tourism marketing plan and further developed as a concept by the previously mentioned CALM Officer that received backing from the agency. It was intended as a ‘value adding’ project that would enable tourists to see rare animals they would normally not easily see ‘in the wild’. This facility was intended to be a wildlife tourism icon for the seven shires and establish Dryandra Woodland as an internationally significant wildlife tourism destination.

Barna Mia the Tourism Icon

The development of Barna Mia was based on a dual purpose, it was to serve as a catalyst for increasing tourism numbers and associated economic benefits for the shires while also serving as a public education and promotion facility for CALM (CALM 2001). This reflected the two primary philosophies operating behind the DWFG. One strand consisted of CALM as an agency focused on nature conservation and public education as decreed by its legal mandate. CALM had been operating a feral predator extermination program in conjunction with a native animal reintroduction and breeding program. The two programs had successfully increased the size of certain rare marsupial populations in the woodland. CALM sought to capitalise on the potential afforded by these rare and charismatic animals (such as the Bilby) through the development of an attraction centred on the breeding program itself. In this context, Barna Mia (the public relations interface) was constructed for the purpose of educating tourists, using close encounters with some of the rare species being bred for reintroduction. This was a means of raising public awareness about wildlife conservation and the profile of CALM as an agency successfully carrying out its conservation mission (Figure 3).

Figure 3: Barna Mia building, the tourism icon

The second strand on which the DWFG was functioning related to the perceived benefits of increasing tourist numbers visiting Dryandra Woodland and the surrounding region. In this sense, Barna Mia (the tourism icon) was viewed as a means for encouraging more tourists to visit the region through the opportunity to view
Tourism development in the Southern Wheatbelt of Western Australia

Rare nocturnal marsupials close at hand in an 'uncontrived' setting. The requirement for night time tours to view the strictly nocturnal marsupials would at least require an overnight stay in the region, encouraging visitors to use the accommodation and other facilities in the surrounding shires (Moncrieff 1998b, CALM 2001). The charismatic nature of the rare marsupials coupled with the unique design of the experience was seen as a catalyst for increasing tourist numbers in the region and increasing the associated 'spin offs' for nearby businesses (Moncrieff 1998b). It may be reasoned that increasing numbers of visitors to the woodland potentially compromises CALM's function as a nature conservation and preservation agency in charge of the most significant ecological remnant in the Wheatbelt. The two fundamental philosophies upon which Barna Mia was conceived would arguably lead to the issues regarding its management and operation discussed later in this chapter.

While Barna Mia was the primary concern of the DWFG, efforts were made to create a regional tourism plan for the seven local government areas that included other potential tourism attractions outside Dryandra Woodland. The idea was to incorporate Dryandra Woodland as an integrated part of a regional product. The woodland itself, and in particular Barna Mia, would act as a tourism beacon to attract the interest of tourists. The tourists would then ideally move beyond the woodland to other tourism experiences in the region. A tourism and marketing strategy was commissioned, prepared by a private consultant using a grant won (with significant assistance from the Wheatbelt Development Commission) from the Department of Education, Employment, Training and Youth Affairs. The tourism and marketing strategy was completed in 1999. Similar to the past CALM reports, the marketing strategy identified Dryandra Woodland and its fauna as well as indigenous heritage as key tourism assets, together with the colonial heritage and agricultural landscape of the surrounding areas. Significant problems identified by the report related to the lack of effective promotion and the lack of coordination of attractions along with a lack of tourism data specific to the region. The report recommended the DWFG establish itself as the driver of tourism development in the region and employ a tourism development officer to facilitate this process. Meanwhile, as mentioned earlier, Moncrieff in 2000 initiated moves to obtain funding to support a research project that set out to further the aims of community based regional tourism development in conjunction with Barna Mia (not constructed at this point).

**Dryandra Tourism Development Officer**

Interviews with representatives of the DWFG during 2003 indicated that the organisation considered it had reached the limits of its capabilities in relation to development of a regional tourism product at the time the tourism and marketing strategy was written. This was both in terms of expertise as well as available time; given the DWFG was an entirely voluntary organisation. The employment of a professional tourism development officer by the DWFG was considered advantageous as it would inject knowledge and expertise as well as more focus and time commitment into the development of a regional tourism product.

Before the employment of the tourism development officer, the Wheatbelt Development Commission (WDC) had played a significant role in writing funding applications for concepts devised by the DWFG. However, tourism development was considered a minor aspect in the context of the WDC's central role. For this reason the board had indicated that WDC staff should allocate more time to priority areas such as electricity and communication infrastructure, leaving tourism development to agencies such as the WATC and other local tourism groups. The combination of the DWFG reaching its perceived limits in expertise and the WDC wishing to scale down its involvement in tourism development provided the motivation for employment of a full time tourism development officer. With the assistance of the Wheatbelt Development Commission the DWFG successfully applied to the Department of Employment, Workplace Relations and Small Business (DEWRSP) in 2000 for the funding of a tourism development officer position. A tourism development officer, Dale Sanders, was subsequently employed in 2001 on a fifteen month contract as a means of furthering the development of tourism in the region on a professional basis.

The primary role of the development officer was the administration of tourism related development activities, media liaison, and marketing and promotion of the region around Dryandra as a tourism destination (Sanders 2003). The officer coordinated community based workshops on tourism development, promoted Dryandra Woodland and the shires at regional tourism conferences and liaised between the numerous tourism related voluntary organisations, government agencies, local government and commercial operators in an effort to create a coherent and distinctive product for the region. During this time, some representatives considered the DWFG's role became largely redundant as a development body and more a forum for progress reports relating to the development officer’s activities. This was rather ironic, given that the DWFG employed the tourism development officer in order to further their capabilities as a tourism development organisation in the region. The perceived lack of purpose in the group coincided with the withdrawal of the Chamber of Commerce and Narrogin Business Enterprise Centre representatives. Other community representatives also withdrew their voluntary involvement apparently along the same premise of having little to offer. As a result, the DWFG
appeared to evolve into a forum for the tourism development officer to report to the shires and Narrogin on the progress made toward establishing a tourism product in the region.

Shire Politics and Breakaways

As the DWFG community membership shrunk, two of the shire members, Williams and Wandering, also decided to withdraw from the tourism development group altogether, reducing it from seven LGAs to five. While it is not clear exactly why Williams decided to break away, the information gleaned from representatives of the remaining shires considered Williams had in a sense betrayed them in an attempt to ‘go it alone’. Representatives of the DWFG suggested that Williams had always tried to link in with the areas toward the west coast that were already established as tourism destinations rather than toughing it out with the Dryandra Country shires in the tourism periphery. In a sense, the break away of Williams from the DWFG appeared inevitable as the shire lies across the main tourist and commercial travel route between the centres of Perth and Albany. The Town of Williams is also the halfway point between Perth and Albany, meaning many travellers and tourists stop to refuel or rest. The high level of through traffic has enabled the successful establishment of the ‘Woolshed’, a tourist oriented facility in the town that draws large numbers of visitors.

While it is not clear exactly why Williams decided to break away, the information gleaned from representatives of the DWFG suggested that Williams had always tried to link in with the areas toward the west coast that were already established as tourism destinations rather than toughing it out with the Dryandra Country shires in the tourism periphery. In a sense, the break away of Williams from the DWFG appeared inevitable as the shire lies across the main tourist and commercial travel route between the centres of Perth and Albany. The Town of Williams is also the halfway point between Perth and Albany, meaning many travellers and tourists stop to refuel or rest. The high level of through traffic has enabled the successful establishment of the ‘Woolshed’, a tourist oriented facility in the town that draws large numbers of visitors.

Williams further riled the remaining shires in the DWFG by successfully applying in 2003 to be a Western Australian Tourism Commission (WATC) Network Visitor Centre. Network visitor centres enable tourists to access information on destinations and tourism operators and make bookings directly from the region they are interested in visiting. Network centres raise the profile of the location in which they are placed and are considered to bring economic benefits also, although this is as yet untested. The installation of a visitor network centre requires the LGA in which it is to be installed to meet certain criteria within a tourism development context. This includes the establishment of a centralized visitor centre and visitor centre manager, something the DWFG shires did not have at the time. The establishment of the network centre in Williams resulted in the WATC refusing Narrogin’s initial application to establish one for the Dryandra Woodland shires. The main reason given was Narrogin’s close proximity to Williams (30 km east) obviated the need for it to be a network centre. Williams was therefore perceived not only as a trouble maker for withdrawing from the DWFG but was also considered, by representatives, to have undermined the development of tourism in Narrogin and the shires. The establishment of a centre in Narrogin was viewed as a vital step in furthering tourism development in the Dryandra area as highlighted in the final report of the tourism development officer.

Wandering Shire was the second to withdraw its membership from the group. Discussion with the Wandering Shire CEO did not reveal any particular reason for withdrawing apart from a simple lack of interest in tourism development. As with the SWOT analysis of Pingelly and Narrogin, the absence of community support with the Dryandra Country region may have functioned as a brake on progress in tourism development. There may be a number of factors contributing to Wandering’s withdrawal. For example, Wandering town is located in an out of the way place, even in comparison to the remaining Dryandra Country shires and Narrogin. The CEO commented that they had about two tourists making enquiries at the information desk (located in the shire office on the main road through town) during 2002. This may indicate the shire considered tourism development centred on Dryandra Woodland would be of little consequence in terms of the potential benefits to Wandering. Further, indications are that there existed in the Shire an antipathy toward tourism developed through past close association with a developed tourism location.

Whatever the reasons, the remaining shires and Narrogin appeared not to view Wandering’s departure with the same ire as that of Williams. This may be because Wandering’s lack of interest may have acted as an inhibiting factor, so its withdrawal from the group could be viewed as a benefit to tourism development in one sense. In contrast, Williams was and still is very interested and active in tourism development. Consequently the withdrawal of Williams from Dryandra Country meant that not only had the region lost the potential positive tourism contribution of Williams, the shire may be subsequently viewed as a rival. This was especially the case when Williams successfully applied for a WATC networking centre to be established in the shire, initially preventing Narrogin from obtaining the same status. In this sense, Wandering was definitely not viewed as a tourism rival given its lack of interest in tourism and the apparently infinitesimal number of tourists frequenting the shire.

From DWFG to DCVC

At the end of her tenure, the tourism development officer produced a state of the industry report that summarised the status of tourism in the Greater Dryandra Area. Key recommendations of this document included the following points (Sanders 2003):

- The Narrogin and Districts Tourist Bureau should restructure to become the Dryandra Visitor Centre (DVC) with committee representation endorsed from each of the participating local governments if required. The DVC should be opened seven days and employ a full time administrator as a prerequisite for becoming a WATC network centre
The remaining shires should replace staffed visitor information centres with un-staffed satellite tourist information points be set up at telecentres or other suitable locations in each of the main towns. The DVC is to liaise with and assist coordinating activities in the satellite visitor information centres.

The DWFG should be dissolved and all its assets, equipment and tourism knowledge are transferred to the new Dryandra Visitor Centre. The DVC should maintain strong network linkages with neighbouring local governments, regions and relevant tourism associations.

This report essentially reinforced the recommendations made in the earlier tourism and marketing strategy for the region. Central to the recommendations was a simplification of the complex tourism development bureaucratic structure in the region by establishing a single entity, the Dryandra Visitor Centre, in Narrogin, the regional centre. The shires commenced implementation of the recommendations in mid 2003, in cooperation with the WDC, with some compromises. The DWFG was dissolved with all assets transferred to the newly established tourist centre, located in what was the Narrogin Tourist Bureau. As indicated, the new entity adopted the name Dryandra Country, a significant indication of cooperation between Narrogin and the other shires.

Recommendations regarding the centralisation of visitor information management to Narrogin were not carried through as the shires preferred to retain their visitor centres and the control they have over the content and dissemination of tourism information. This was perhaps a stand by the shires against the already dominant role Narrogin played in regional affairs. Deborah Hughes-Owen (Narrogin Tourism Bureau President) described the situation as follows:

‘The idea would be for the shires outside Narrogin to nominate their preferred location for visitor information and the Dryandra Visitor Centre would then service and work with those satellite [tourist information nodes]. It is [currently] not the intention to provide unmanned information nodes [in the shires], unless of course grants can be obtained over time to provide these in addition to the manned information sources, such as the Wickepin Telecentre’ (pers. comm. 15/5/03).

Although the reason for this compromise is partly financial, there is a suggestion that the shires adjoining Narrogin are somewhat reluctant to surrender total control of tourism information provision and management to the then proposed Dryandra Visitor Centre. This may be related to concerns for ensuring the less resourced shires gain some benefit from the development of a regional tourism product.

While tension relating to this issue was not overtly expressed, the concern was evident during discussions with shire representatives. Discussion with Pingelly representatives highlighted concerns that the dominating presence of Narrogin in the tourism development process may result in most tourism related benefits bypassing the smaller, less resourced shires. This was also based on the geographic location of Pingelly some distance away from Dryandra Woodland and any potential tourist access routes by road. Pingelly viewed tourism development in Dryandra to be more beneficial to Narrogin and Cuballing, the areas immediately adjacent to the woodland, as tourists were required to pass through these areas as a means of access.

The adoption of the core of the report’s recommendations came at a time when the WATC had reversed its decision and allowed the establishment of a network visitor centre in Narrogin, subject to meeting the requirements. The installation of a WATC network visitor centre in Narrogin is considered to be a significant move toward greatly improving tourism business and development for the region. The primary pre-requisite for becoming a network centre is the employment of a full time tourist visitor centre manager.

Concurrent with the progress toward streamlining management of tourism development, the WDC is in the process of appointing an Indigenous Economic Development Officer and an Officer that will ‘basically replace [the tourism development officer]’ (Evans, pers. comm. 30/4/03). That is, a position should be established to assist business enterprises in accessing funding though bureaucratic channels and directing inquiries to appropriate information sources. While these positions are not solely or specifically focused on tourism development, businesses or individuals seeking to develop tourism related operations fall under the economic development umbrella and will receive assistance. The amount of time spent specifically on tourism initiatives by the new WDC employees may be tempered, as in the past; by the relative proportion tourism contributes to regional economic and social development. At this point in time, the WDC considers tourism development to be a minor aspect of their overall responsibilities in the region. However, the combination of the WDC appointments and the restructuring of the Narrogin Tourism Bureau and employment of a Dryandra Country Visitor Centre manager will potentially create a strong leadership base over a long time period and more effective co-ordination of tourism development and activities.
Chapter 3

THE REGIONAL TOURISM PRODUCT

Barna Mia was intended to be the icon attraction that would provide ‘spins offs’ for the local community by being the cornerstone of an integrated regional tourism product. This was supposedly in the form of increasing numbers of tourists to the region resulting in increased tourism based revenue for local business establishments. Estimating the Benefits of Barna Mia in terms of regional tourism in Dryandra Country is virtually impossible to verify as information relating to tourism in the Dryandra region is sparse to non-existent. CALM traffic counters in the Dryandra woodland provide indications of the number of vehicle movements within a set period of time. However, there is little or no information about visitors in terms of demographics, expectations, perceptions, activities and travel habits. Thus, assessing the impact of Barna Mia on tourism in the Dryandra Region is extremely difficult given the lack of historical and contemporary data specific to this area.

Community Relationship with Barna Mia

An analysis of tourism strengths, weaknesses, opportunities and threats (SWOT analysis) conducted as part of community based workshops in Narrogin and Pingelly identified what was termed ‘community apathy’ as a weakness and a threat to tourism development. In this instance, the ‘community’ appeared to refer to the residents living within the shires. Rather than apathy, which suggests a state of depression or hopelessness, the SWOT analysis and interviews with representatives suggested the community was just not interested in tourism development – manifesting as a lack of motivation for involvement in tourism initiatives. The lack of interest regarding tourism development in the community may be a significant factor contributing to the currently low status of the area as a tourism destination.

An example of the lack of urgency in Narrogin regarding tourism development is the reluctance to expand and upgrade the Narrogin town caravan park, owned by the town council. The caravan park is currently a relatively small bituminised area with an ablution block and some powered sites on the main road between Williams and Narrogin and is restricted in terms of the number and type of tourist able to use it. Stakeholders do not wish to create a ‘resort style’ caravan park meaning there are no onsite cabins for rental and the facility will not be expanded or modified in the near future, limiting this form of tourism expansion. In contrast the other shires of Dryandra Country have relatively little resources and view tourism development as a possible path to rejuvenation of their communities. At the core of this issue is Narrogin’s status as a regional centre with most of the government, retail and service industries for the area of Dryandra Country centralized in Narrogin Town. As a regional centre, Narrogin is buffered against the downturns in agriculture on which the neighbouring shires depend because of its relatively diverse economic base (Tonts & Black 2002). The consequence of this is that there is no perceived need to develop tourism as a form of diversification to counter agricultural uncertainties.

According to Hall (1995), the attitudes of the community toward tourism development is a primary factor determining how successful tourism development will be. He observed that successful tourism development occurred when the general community was supportive of tourism related ventures. Community support was more likely to manifest if the benefits of tourism development were plainly evident. Howell (1987) and Blank (1989) had earlier stressed the importance of fostering positive community attitudes toward tourism development to ensure success. Howell (1987) commented that one of the most important factors in developing tourism in small towns was the active and positive involvement of the general community. This was primarily based on the concept of the ‘intangible host-guest’ role played by community members that influence tourists’ perceptions of the place. In the absence of active community support, successful tourism development is difficult to achieve.

The Wheatbelt Development Commission pointed out that businesses in the region do not perceive the required voluntary effort justified the benefits gained. While business not specifically involved in tourism may hold this view owing to a primarily non-tourism support base, this attitude was also evident in some businesses
Regional Coordination of Tourism Development

A lack of coordination in regional development of tourism is apparent in terms of tourism oriented signs in Dryandra Country. Such signs within the Dryandra Country area are obvious in their absence. While there are prominent entry and exit signs for shire boundaries and some directional signs for neighbouring towns, tourism related signs are to a large extent nonexistent. This is a significant issue considering that Dryandra Country is primarily a self drive tourism destination with attractions that are not easily located by chance. Those attractions that are signposted are done so in an ad hoc manner with no common theme or style reflecting the region labelled Dryandra Country. As a result, navigation within Dryandra Country can prove difficult even with a detailed map (Figure 4, 5 & 6).

Signs within Dryandra Woodland, being the responsibility of CALM, are somewhat more extensive though could be improved to facilitate tourist navigation. Comments by visitors to Barna Mia suggested that many had difficulty locating the Old Mill Dam muster point and were unsure whether they were in the correct location once there. While signs within the Dryandra Woodland are the responsibility of CALM, those in the surrounding Dryandra Country region require the cooperation of the five local governments and the state level Main Roads Department. The lack of adequate signage is somewhat exasperated by the diverse quality and selective focus of information provided for tourists in the region.

Many key people involved in the development of tourism in the region have moved to other locations, taking with them a significant amount of knowledge, expertise and motivation. For example, the Shire of Pingelly no longer has a Tulip Festival as the individuals who organised it lost interest. During 2003, the shire CEO was attempting to resurrect the festival by encouraging community members to participate in organising the event. Pingelly also has a heritage museum of sorts, owned by a local resident. According to one informant it consists of ‘basically a room full of junk’ that if put in to some order would make an interesting display of local heritage artefacts. Unfortunately, the owner has become ‘old and grumpy’ and is not interested in developing his collection into a marketable experience. It seems that initiatives and systems developed for tourism initiatives are highly dependant on individuals, who take the knowledge with them when they leave or lose interest.

Tourism development in the region had been hampered by the existing complex tourism development structure. There were a number of groups functioning at four levels of responsibility. These included local level tourism and special interest groups; tourism development associations at the sub-regional and regional level and government tourism development and natural area management organisations at the state level. The complex
structure created problems in terms of incompatible or poorly communicated agendas, duplication of activities and funds being spread across numerous groups working to develop tourism in the same region (Sanders 2003). Aside from low level community interest, the bureaucratic complexities appeared to have been another major factor contributing to the lack of progress in tourism development in the Dryandra Country region. This was somewhat improved with the employment of a tourism development officer to act as a focus for ideas and administration. The establishment of the Dryandra Country Visitor Centre and professional manager seems to be another step toward simplification of the tourism development structure potentially enabling further progress to be made.

Figure 4: Variation in shire boundary signs does not reflect a common regional identity

![Figure 4](image1.png)

Figure 5: Signs for attractions are lacking, those that exist vary in quality and style - a common regional theme is not evident

![Figure 5](image2.png)

Dryandra Woodland is a CALM managed protected area

While the Woodland is the key tourism icon, if not attraction, for Dryandra Country, it is managed by a government agency whose core business is conservation and land management (Figure 6). Of course, partly due to budget constraints and partly due to changes in ideology, agencies such as CALM increasingly perceive themselves to be in the tourism business. In this case, CALM’s reintroduction of rare wildlife to Dryandra Woodland has led it to view this protected area as an important tourism and community development opportunity. However, the duty statements and resourcing of CALM staff in regional offices means very little
time is spent on tourism oriented matters. This time restriction plays out in relation to wider issues of tourism policy and planning as well as in the relationships to other stakeholders.

Figure 6: CALM sign at main entry to Dryandra Woodland

Entwined in the complex organisational structure of tourism development in the region were difficulties relating to a lack of time spent on tourism development issues as a result of primary organisational responsibilities taking priority. An interview with a local government CEO in 2003 highlighted the significance of this issue. The CEO had decided that the Barna Mia viewing enclosure would benefit from additional promotion to tourists and local residents. He contacted CALM with a proposal to sell merchandise from the shire visitor information desk (in the Shire Offices) and have his staff wear T-shirts with the Barna Mia logo. CALM responded with mild interest but did not follow-up the issue. This discouraged the CEO who thought that CALM was not interested in his idea. It also created confusion in his mind as to the agenda of CALM in managing what was supposedly a tourism icon, designed to benefit neighbouring shires in the region that was seemingly being under utilised through a lack of promotion. The CEO perceived that CALM was not interested in cooperation with local governments in terms of tourism development and was mildly annoyed with this seemingly aloof stance.

Discussion with staff at the CALM district office subsequently revealed that they were very interested in cooperating with shire offices to promote Barna Mia. The ideas of the CEO had been taken on board but staff simply had not had the time to follow-up with the CEO. This was largely due to the primary responsibilities of staff as part of a natural area conservation agency taking precedence over tourism development issues. Liaison with local governments in relation to tourism development issues falls outside the job description of CALM Narrogin district staff. Thus, such activities must be carried out once all other tasks have been completed. Given that CALM staff have considerable workloads, tasks secondary to the core role often take time to be addressed. The misunderstanding that occurred between the shire CEO and the CALM was primarily a result of the mandate of the organisation responsible for the tourism icon, Barna Mia, is as a natural area conservation and management agency, not a tourism development agency.

The lack of an official CALM community liaison officer could be viewed as a significant impediment to the development of Barna Mia as a regional tourism icon and contributor to the community. Such a position may not necessarily require a CALM staff member solely dedicated to marketing of Dryandra and Barna Mia. Allocating staff time to contacting community stakeholders may serve to demonstrate CALM’s commitment to providing a tourism product that benefits the community as well as improving co-ordination between Barna Mia, Dryandra and other tourism products in the region. A liaison officer may be given the responsibility to co-operate with the Dryandra Country tourism promotions and management officer employed by the Dryandra Country Visitor Centre.

This arrangement would improve efficiency of communication as CALM would not be required to communicate with the large number of individuals and groups involved in tourism development in the region. Discussion with the CALM regional manager responsible for the area defined by Dryandra Country indicated that the diversity of tourism promotion and number of groups and individuals involved resulted in some
hesitancy as to who to approach and what publication to use when prompting Barna Mia. This circumstance was
accentuated by the lack of CALM staff time available for pursing contacts and the limited funds allocated to
promotion of Barna Mia. A single point of contact that intends to function as the central point of tourism
development management in the region would remove the need for CALM to liaise with a wide variety and large
number of tourism interests in the region. This may also reduce the risk of misunderstandings and negative
perceptions between CALM and the Dryandra Country Community.

Quality of Accommodation

Accommodation within the Dryandra Country region is of a low key type and is mainly located within the Town
of Narrogin. Each town within the region has a hotel that provides rooms of fairly low quality. Most of the hotels
are in need of renovation, generally having decor dating back to the 1970s and understandably deteriorated. The
Hotel in Cuballing was undergoing renovation during 2003 but does not offer tourist accommodation. Narrogin
Town has three hotels, two motels of moderate quality as well as a bed and breakfast and guest house. Owing to
the large number of itinerant workers and sales representatives passing through, accommodation in Narrogin is
frequently full to the exclusion of tourists who have not pre-booked well in advance. Each Town also has a
caravan park of modest proportions with limited amenities. There are no onsite vans, thus excluding tourists
without caravans or tents.

The low quality of accommodation limits the diversity of tourists who may wish to stay in the region. This is
particularly so for the ‘rustic’ accommodation offered by the Dryandra Village, an ex-timber cutters’ village
situated within the woodland and leased by the Lions Club from CALM (Figure 7). The weatherboard shacks are
popular but require visitors to provide all food and bedding limiting the potential for attracting fly-drive tourists
who do not usually carry such equipment. Temperatures during the winter peak season may drop close to zero
meaning the accommodation at the village, heated by open fires and electric bar heaters, can prove to be
uncomfortably cold for the unprepared. The village also has no store selling provisions that tourists may need
with the nearest outlets at the Cuballing road house 10 km to the east or in Narrogin Town, 27 km southeast.
Limited research and bookings data indicated the style of accommodation provided by the Dryandra Woodland
village seems to favour family groups from the local region and Perth Metropolitan area. It seems that these
types of tourists are likely to be able to supply their own bedding and food as required. Given that Barna Mia
was aimed at a niche wildlife tourism market that tends to consist of well educated and financed tourists
(Shackley 1996), there may be a mismatch between what accommodation is offered and the type of people that
may be interested in Barna Mia. The caretakers (Lions Club) and the landlord (CALM) are extremely reluctant
to further develop the village as they perceive that it may destroy the current experience offered and result in
additional impacts on the surrounding protected area.

Figure 7: Rustic accommodation - cabins at Dryandra Village, located in Dryandra Woodland

Undoubtedly, there is an unwarranted assumption that the Dryandra Woodland could be turned into a resort
so that the region would lose its rustic charm to the influence of resort based tourism. The Narrogin Caravan
Park and the Dryandra Village in particular express a strong concern about this while indicating a clear
preference to remain ‘rustic’. This may be partly related to the preference of community leaders and stakeholders
to maintain a low key approach to tourism in the region which in turn is linked with preserving the lifestyle
many people move to the area for (Anon 1999). For example, the Narrogin Caravan Park is owned by the Town of Narrogin and is fairly limited in its capacity and facilities. The caravan park is currently a relatively small bituminised area with an ablution block and some powered sites on the main road between Williams and Narrogin. It is restricted in terms of the number and type of tourist able to use it. Stakeholders do not wish to create a ‘resort style’ caravan park meaning there are no onsite cabins for rental and the facility will not be expanded or modified in the near future, limiting this form of tourism expansion.

The irony and futility of this perspective is manifest. First, there is no reason in tourism planning to see these two scenarios as polar extremes on even the most simplistic continuum. The ‘rustic vs. resort’ extremes are simply two oversimplified scenarios that, in the context of the region, are not worth arguing over. This is the second point: the region could not support a resort of the nature envisaged in this sort of rhetoric. Put another way, both Narrogin and Dryandra Village could be developed considerably without losing their rustic charm and without becoming ‘resorts’.

Tourism Products

While the Dryandra Country representatives identify the Dryandra Woodland as the region’s major icon, the presence of other obvious attractions in the region is somewhat sparse. A report by Complete Marketing Solutions (1999) pointed to the lack of obvious attractions outside Dryandra Woodland and suggested the development of a niche market product focusing on Dryandra Woodland and ecotourism. This is essentially Barna Mia.

Other tourism attractions promoted within the Dryandra Country region are disparate and lacking in co-ordination and tourism appeal. There are several large granite outcrops that provide views of the surrounding agricultural landscape, Narrogin Town has a nature reserve (Foxes Lair) and a cultural park (Gnarojin Park) that are both in need of maintenance owing to littering and vandalism (Figure 8). There are various dams and lakes in the region that afford picnicking opportunities but have little or no other infrastructure beyond concrete or wooden picnic tables and occasional BBQ facilities. Pingelly is home to an observatory for astronomy related purposes. This attracts astronomy enthusiasts as well as school groups. Cuballing has little or no attractions aside from a pioneer cemetery. All of the heritage buildings in Cuballing, apart from the CWA Hall, are private residences and have been modified at various times in the past. Consequently, integration of Barna Mia and Dryandra Woodland may prove to be difficult given the scarcity of other obvious attractions in the region.

Wickepin has a strong focus on the homestead and personal history of Albert Facey, a Western Australian author known for his autobiographical book, A Fortunate Life. The book describes Facey’s experiences of growing up in the local Dryandra Country Wheatbelt area in the early 20th Century, joining the army and being involved in the Gallipoli campaign during World War I and the returning to regional Western Australia to continue his life. The strength of association with this historical figure is reflected in the shire slogan, ‘A Fortunate Place’, a play on Facey’s book title. However, for those unfamiliar with Albert Facey or his book, such an attraction holds little interest or relevance.

The recent construction of a power generating plant using the native Oil Mallee, grown in plantations, as a fuel source may provide some attraction for tourists. Tourism development interests in Dryandra Country have identified the power station as a potential tourism attraction owing to the unique nature of the operation and the focus on sustainable energy production. The renewable energy facility will have a multiple purpose in the provision of power as well as valuable by-products such as Eucalyptus oil. There has been little indication of the demand for such an experience although the giant wind turbines of the wind farm providing energy to Albany appear to attract a significant number of tourists. This may be partly owing to the wind farm being in close
proximity, and on the main route, to the popular coastal attractions (The Gap, blow holes, Natural Bridge and Whale World) Albany is well known for.

Several people pointed out that the majority of potential lies in the history and culture of the Dryandra Country region (Figure 9). Interestingly, a discussion of tourism development focusing on a peripheral area in the USA put forward this idea as a potential means of tourism development. Hsu et al. (2004) discussed the issue of tourism development in Kansas, an area that parallels the Western Australian Wheatbelt in terms of being dominated by agriculture and having little in the way of obvious attractions. The authors suggested that the landscape and rural environment itself could be the attraction given an appropriate market segment was targeted by promotional material. They considered that in order to be successful, the residential community must play an active role in tourism development of the region, primarily through promoting a positive image of the region by word of mouth.

Figure 9: Heritage in need of interpretation to convey significance to tourists

As intangible assets, heritage, culture and social history may not be immediately apparent to visitors unfamiliar with the area. For example, a particular location of historical significance but with no physical evidence remaining (such as a heritage school site) would most probably not be given a second glance by those ignorant of the history of that place. The battle fields of the American war of independence and civil war are prime examples. Many of these are popular tourist destinations, and are basically paddocks or large areas of landscape since put to other uses. In the absence of tour guides, booklets and signs, such places may not be recognized as historically significant. Similarly, the potential attractions identified by the Dryandra Country shires are perceived by those interviewed to require ‘good knowledge’ to fully communicate their significance. In other words, guided tours or other forms of intensive interpretation are required to maximise the tourism potential of the Dryandra Country region. Given the current lack of financial and material resources, these ideas are at best a long term vision.

Tourism Activity

As is common for much of regional Australia, there is simply no reliable visitation data. Limited data is available for Barna Mia (approximately 1,000 visits in 2003), Dryandra Village (about 5,000 in 2003), and Narrogin accommodation (132 beds available). The bulk of those using the accommodation in Narrogin are apparently business travellers related to Narrogin’s role as a regional centre. Beyond some anecdotal evidence through discussion with local representatives, there is very little tourism related data for Dryandra Country. There is tourism data available for the wider Wheatbelt region, quoted in past tourism reports for Dryandra Country, but this information is significantly skewed toward the established and popular tourism destinations outside the Dryandra Country region (e.g. Wave Rock Pinnacles). General data provided by WATC indicated that international tourists comprised 6% of the total visitor population which was dominated by WA residents (more than 85%). Trend data for the Wheatbelt region also indicated that while a decline in general tourist visitation from 2000 to 2002 was starting to climb back in 2003, the trend for international tourist visitation was still in decline for this region. The trend for domestic tourist visitation to the Wheatbelt appeared to have remained constant from 1999 to 2003 (TWA 2004). This would suggest that constructing a facility with the intent of encouraging more international tourists to visit the region was working against the market trend. However, this data should be approached with caution given its extremely generalised character.
Chapter 4

BARNA MIA, DRYANDRA WOODLAND AND DRIVE TRAILS

Creation of tourism drive trails is a popular method of tying a region together as a tourism product. The intent is to link a series of attractions into a coherent product whereby the whole is greater than the collection of individual attractions (Lane 1999, Prideaux 2002b). Tourism Drive trails are purported not only to create a coordinated tourism product but also encourage movement of tourists through the whole region rather than concentrating at specific locations. This is achieved by creating trails that encourage the movement of tourists through sparse areas when travelling from one attraction to the next. However, information relating to the contribution of drive trails to regional tourism and communities is close to non-existent. Most information relates to best practice in trail design and the processes of linking attractions by themes (Carson, pers. comm. 1/7/2003; Hardy, pers. comm. 4/7/2003). If this is placed within the sparse tourism information available for Dryandra Country, the influence of drive trails is pure conjecture.

There are a number of tourism trails in the region including the bicentennial heritage trail network, the innovative Dryandra woodland radio drive trail and an initiative titled 'stay another day in the Wheatbelt.' The Bicentennial heritage trail network appears to have fallen into disrepair (Figure 10). Interestingly, some local government representatives were hesitant to use the term heritage in relation to their towns as it was perceived to disadvantage other development. Labelling a town a heritage destination is perceived to increase the likelihood of building projects or renovations being rejected in order to preserve the heritage value of the area. This seems ironic as heritage has been identified as a key product the region has to offer.

Figure 10: What remains of the Bicentennial Heritage Walk Trail around the Town of Narrogin, other signs could not be located

The radio drive trail is situated within Dryandra Woodland and is entirely owned managed by CALM. The trail is a self contained route around the woodland consisting of signs and audio transmitted to a particular radio frequency that tourists can tune into. As tourist progress around the trail, successive transmitters broadcast a sequential story about the cultural and ecological attributes of Dryandra Woodland. The radio drive trail is not integrated with tourism products outside CALM’s jurisdiction.

In addition to some marked trails, there are several publications with suggested itineraries for self drive tourists that attempt to link the various attractions in the region. The Narrogin Town brochure details attractions within the region with suggested itineraries for varying lengths drives. The Heartlands Tourism Association also has a similar brochure that provides suggested driving itineraries for the wheat belt region as a whole, including the Dryandra region. The apparent independent and ad hoc creation of drive trail brochures by the various tourism related organisations in the region highlights the often uncoordinated and unplanned approach to tourism development.
Those advocating drive trail development in the Wheatbelt region, such as the WATC and the Heartlands Tourism Association (HTA) are developing strategies and products supposedly to draw tourist from the major travel routes that bypass the region. In this sense, the Dryandra region is not a destination in itself, more a diversion that would aim to add value to the travel route. The WATC and HTA tend to consider that local tourism groups within the Dryandra region are too narrow in their focus of creating drive trails self-contained within the participating shires. The WATC and HTA consider that the Dryandra area does not have the resources to accommodate a stand alone drive trail product but must link with neighbouring regions and plan on a wider scale. Past attempts to create products based on cooperation between neighbouring regions (for example, linking Avon, Southern Wheatbelt and Great Southern along the Great Southern Highway) have failed due to politically driven bickering. In addition, Dryandra Country drive tourism interests criticise this strategy as they suggest that most tourists passing through the region may stop for a self-catered picnic at the town park, use the toilets and thus end up costing the town money rather than contributing to the economy. In the absence of any real data pertaining to the effectiveness of drive trails in increasing tourist numbers or as contributors to local communities in regional Australia, such negative or positive opinions cannot be verified. This means that the differences in Dryandra Country in relation to the preferred style of drive trail rest on personal preference and perhaps political agenda more than factual knowledge. While past failures should not prevent renewed future attempts, the negative attitude toward inter regional drive trails may prove hard to overcome in the absence of hard evidence supporting their positive contribution.

It may be speculated that while the benefits of drive trails on tourism productivity and development may be questionable, the process of creating a drive trail may work to enhance social capital. This is on the premise that a drive trail functions on a foundation of networks and cooperative arrangements within the community. Creating a drive trail involves linking a series of attractions within a region or across regions into a common theme. A significant level of cooperation is required at many levels in order for a drive trail to come into being as a coherent, logical entity.

Prior research suggests that a successful touring route requires several key factors to come to fruition. These include community enthusiasm and involvement, consistent presentation of the route as a whole product, protection of natural and cultural heritage (Hardy 2003). While it was proposed that these elements must be in place in order for a tour route to come into being successfully, the creation of a tour route may start with development or facilitation of these underlying factors. This of course would prove very difficult where social capital is weak while areas with strong social capital may find the creation of a drive route relatively straightforward. However, if there is an interest in creating a drive route and the elements stated above are required to achieve this, the route must start with the building of networks and ties before mapping can be considered. This may involve actions such as facilitation of communication between isolated attractions and associated tourism operations that otherwise would not have the time allocated to such activities. This approach has been adopted by the Great Southern Development Commission in the Central Great Southern region of Western Australia in order to build the community base before development and marking are undertaken. Thus, aside from the hypothetical direct benefits of the functioning tour route itself, the act of creating a tour route may have benefits for the communities involved.
Chapter 5

LOOKING TO THE FUTURE

The 2001, a Strengths, Weaknesses, Opportunities, Threats (SWOT) analysis of Narrogin and Pingelly (the two shires with the largest populations) listed over twenty distinct aspects considered to be strengths but about half of these were lifestyle related, such as sports and leisure activities, medical facilities, educational facilities, spiritual communities, safety and a movie theatre. Similarly, community representatives interviewed in 2003 pointed to the major asset of the region being its lifestyle, rather than any specific attractions, something not easily marketed as a tourism product to tourists.

Dryandra Country does have a tourism product in its Wheatbelt and rural ambience along with the significant Dryandra Woodland. Decisions made in late 2003 to agree on the name Dryandra Country are significant, if for no other reason than they reflect the willingness of the remaining key stakeholders to work together. With the leadership of local government and key state agencies, there is a clustering of resources with a focus and a mission. Watch this space for innovation and incremental change.

In reviewing the outcomes in relation to tourism development within the region, there appears to be several key issues worth noting. First, the entrepreneurial role of Daryl Moncrieff as a CALM officer has to be acknowledged as a key catalyst to early efforts, including this project. Second, the networks developed and undeveloped are important. The original group of seven shires came together to form the Dryandra Woodland Focus Group that worked successfully with the WDC and CALM to obtain funds to undertake planning and development work. Despite the defection of two shires and withdrawal of some local business representatives, the DWFG then successfully evolved into Dryandra Country. This is an organisation whose membership is more focused and committed and who have already hired long-term staff and obtained a WATC network centre designation.

The third aspect worth reinforcing is the advantage taken of institutional infrastructures. This includes not only the Shires working together but also the inclusion of the three core government agencies, CALM, WDC, and WATC. Last, but not least, it is time for a realistic vision that can build on the capacity for innovation existing in the region (see Carson, Macbeth & Jacobsen 2005, for detailed discussion of innovation in regional tourism). The visioning done in the 1990s needs updating and core products need to be identified and investment sourced. Narrogin needs a new motel – but, we are jumping the gun! Their visioning needs to identify where to move and how to get there as far as planning and development for sustainable tourism.
PART II. BARNA MIA THE TOURISM ATTRACTION

Part II of this report presents findings in relation to the operation of Barna Mia as a tourist attraction. The discussion is derived from visitor surveys, discussion with CALM rangers, guides and managers and documentary evidence. A brief theoretical discussion of wildlife tourism provides grounding for the results presented.

Chapter 6

WILDLIFE TOURISM

Wildlife tourism is a significant part of Australia’s tourism identity owing to the diversity of charismatic animals unique to the continent (Green, Higginbottom & Jones 1999, Fredline & Faulkner 2001, Higginbottom et al. 2003). For example, a survey of international visitors by Fredline and Faulkner (2001) indicated that approximately 67% of international visitors specifically stated they wanted to see wildlife during their visit while 71% reported having seen wildlife during their visit to Australia. Wildlife tourism involves a broad sweep of experiences that includes all of the aspects of the tourism genre with the distinguishing feature of animals as the primary attraction. Such experiences may involve aquatic or terrestrial animals, indigenous, endemic or feral animals as well as captive or non-captive animals (Burns & Howard 2003). The uniqueness of Australian wildlife in combination with factors such as remoteness and rarity appear to have provided the ideal context for successful wildlife tourism operations.

Green et al. (1999) stated that the important components required for the popularity of a wildlife tourism experience include in the perceived charisma of certain species; vulnerability; uniqueness and the ease of viewing the species of interest. Ease of viewing relates to the daily activity cycle (waking hours, peak foraging times, seasonality) and the geographic location, range and habitat of species. For example, it may be assumed that nocturnal wildlife are more difficult to view than diurnal wildlife as would wildlife in geographically isolated and restricted habitats compared with widely distributed habitats. Commonly, rare and difficult to find wildlife can present a lucrative tourism market (e.g. whale shark and gorilla tourism) that is generally accessible only by those with the time and the money to spend (Shackley 1996). Wildlife that presents difficulties in viewing may also appeal to a narrow audience of enthusiasts and professional interests more than ‘the mass market’ given the patience and dedication often required for a successful viewing experience. As wildlife tourism demand is apparently directly related to the rarity of a species (Moscardo, Woods & Greenwood 1999), removal of accessibility barriers such as difficulty of viewing may open the experience to a broader audience. One method of providing ease of viewing rare nocturnal animals, and therefore improving the success of a wildlife tourism venture, is through use of a captive wildlife facility.

The viewing of captive wildlife comprises a spectrum ranging from heavily manipulated through to more authentic wildlife experiences. At the highly controlled end sits the traditional zoo in the urban environment. There are also situations where wildlife may be viewed from vehicles in park and garden environments and/or people may mix with animals in walk-through enclosures that are part of the zoo environment. More naturalistic encounters can be achieved when the captive wildlife occurs in a semi-natural or natural environment and where visitors gain close access unrestricted by cages or visible barriers.

Many species of Australian wildlife pose difficulties with viewing access while at the same time having great charisma, uniqueness and rarity. Consequently, captive wildlife tourism is a significant industry in Australia with a total annual visitation rate of approximately 8 million people in 2000. One third of those visitors were international tourists indicating captive wildlife tourism is a significant component of the Australian wildlife tourism product (Tribe 2001). In terms of the type of tourists captive wildlife viewing experiences attract, Tribe (2001) stated that very little was known in terms of who they are and what they demand. Shackley (1996) had earlier mentioned that captive wildlife tourism attracts an audience who otherwise could not afford a wildlife watching holiday in a non-captive setting.

Traditionally, the primary reason for visiting wildlife in captivity appears to be related to ‘entertainment’ (Tribe 2001). However, what visitors find to be entertaining has changed over time from a focus on circus act style presentation and the ‘freak show’ to a preference for more naturalistic representations of wildlife. This change in focus of what visitors find entertaining is reflected in the change in the nature and design of captive wildlife facilities. Historical examples of perceived entertainment such as the London Zoo Chimpanzee Tea
Party, dancing bears and anthropomorphised circus animals have lost much of their appeal (Jamieson 1995). Shackley (1996) described what she considered to be positive examples of ‘entertainment’ based around encouraging captive animals to simulate natural behaviour in enclosures designed to look like natural habitat. This generally centres on feeding regimes in which animals must forage for food or solve problems to obtain food. Artificial termite mounds for chimpanzees to poke sticks into, trees that exude honey at particular times of the day for bears to find, and scattering food around the enclosure such that gorillas must seek it using foraging behaviour are used as examples. Writing from an anthropocentric perspective, Shackley (1996) justified this form of ‘entertainment’ by stating: ‘There can be few ethical objections to animals performing natural food-gathering functions which also happen to entertain visitors…’. This seems to be a validation based on the end justifying the means where the use of animals for human entertainment is acceptable as long as it has the guise of naturalistic behaviour.

Dengate (1993) had also supported the idea of emphasising visitor expectations for education about captive animals in the context of their natural origins rather than anthropomorphizing them. Of course, in the end, the animals are in an artificial environment and fed a regulated (artificial) diet while being watched by onlookers so any appearances of behaving naturally are simply that. Indeed, Midgeley (1984) commented that: ‘captive animals are neither fully domesticated nor are they fully wild, they exist in a mixed context.’ This might suggest that naturalistic captive wildlife facilities salve the tourist conscience by providing ‘entertainment’ on the pretext of witnessing natural behaviours in a natural setting.

Moscardo et al. (1999) stated that captive wildlife tourists are particularly attracted by naturalistic enclosures and pleasant, natural outdoor settings while also being able to touch and feed the animals in what could be construed as more of a domesticated animal interaction. In recognition of this, Tribe (2001) went on to suggest that captive wildlife tourism may be most effective if it incorporates opportunities for interactive experiences both between tourists and animals and between tourists and guides. He also inferred that removing barriers between visitors and captive wildlife can function as a popular draw card. This may be in the form of ‘walking wildlife through the zoo’ or could be interpreted as a captive environment in which the tourists and the animals are in the enclosure together. This ideally would take place in a naturalistic setting that simulates the animal’s natural habitat. As mentioned previously, Dengate (1993) identified education with a strong conservation message as an important component of appealing wildlife tourism.

The demand for such styles of experience is reflected in the refocusing of traditional zoos (captive facilities usually in metropolitan areas) from showcasing a wide variety of exotic species to specializing in a few. The shift also encompasses an emphasis on conservation of species by preserving specimens in captivity where survival in the wild is threatened with the potential for reintroduction or restocking of depleted non-captive populations (Shackley 1996, Tribe 2001). Thus the ideal captive wildlife tourism facility incorporates conservation and education with the opportunity for interaction with rare, charismatic animals in a naturalistic setting. This reflects the changing expectations of visitors to captive wildlife facilities, which in turn, may influence their satisfaction with the experience. So it seems that captive wildlife tourism is a type of ‘entertainment’ based compromise focused on a blend of experiencing ‘wild’ animals in a naturalised context while still being able to view them easily and perhaps get close and touch them akin to interacting with a domesticated animal.
Chapter 7

The Barna Mia Experience

A description of Barna Mia and the visitor experience is warranted to understand the survey results presented in subsequent sections. Barna Mia is made up of a 2.5 ha enclosure and an architecturally designed visitor centre. The enclosure is surrounded by electrified, vermin proof fencing to keep feral predators out and the captive fauna in. At the time of the survey, the facility housed five native fauna species involved in a Dryandra Woodland breeding and re-introduction program. These were: the Bilby (Macrotis lagotis), Rufous Hare-wallaby (Lagorchestes hirsutus), Banded Hare-wallaby (Lagorchestes fasciatus), Burrowing Bettong (Bettongia penicillata) and the Western Barred Bandicoot (Perameles bougainville). These are small, rare marsupials that were either endangered or locally extinct prior to the breeding program owing to land clearing and fox predation. A fox eradication program coupled with the breeding program has resulted in the re-establishment of rare marsupial populations in Dryandra Woodland. Barna Mia was built as a means of allowing tourists to view the rare fauna involved in the breeding program that is carried out in the much larger (20 ha) enclosure nearby. The facility is located a relatively remote section of Dryandra Woodland without sign posting. This was intended to minimise the risk of vandalism and unsolicited public visitation. For this reason, visitors do not access Barna Mia directly but meet a guide at a designated location who then leads the group (in their own cars) to the facility.

A tour of Barna Mia involves several distinct stages (Figure 11). As the animals within the enclosure are nocturnal, all tours are conducted at night. Small groups of visitors meet the guide at a location in Dryandra Woodland known as Old Mill Dam. From there, the guide leads the visitors in a convoy of cars through the woodland (on gravel roads) to the actual facility, about 7 km away. The act of travelling from the meeting point to an undisclosed location on the woodland may add to the sense of journeying into an isolated, wilderness type area. On arrival at the car park, the guide gives a brief introduction and summary of important behavioural rules (such as being quiet, no rapid movement, no torches) then leads the group into the visitor centre itself. The visitors are seated in an open plan area inside the building and the guide presents a 45 minute description of the history of Dryandra Woodland, fox eradication program, the breeding program and Barna Mia itself. The presentation is followed by a walk through the enclosure that may last from 45 minutes to over an hour depending on how many animals are seen. The guided walk incorporates a defined walk trail loop of packed sand through the enclosure with four 'feeding stations'. The feeding stations are small clearings with log seating for a small group of visitors. During the guided walk, the animals are fed fresh chopped fruit and feed pellets by the guide in order to attract them to the visitor groups. Visitors take part in this process by placing the trays of food allocated to them by the guide in the clearings. The guide then points out the animals as they approach the feed trays using a spotlight with a red filter (to minimise disruption of the animals’ night vision). This process is repeated at each of the four feeding stations. On return to the building, visitors are provided with a hot drink and a snack. There is time to browse the available merchandise or chat with the guide before visitors make their own way back to their night accommodation.

Based on the literature, Barna Mia is theoretically an ideal captive wildlife tourism attraction. It presents rare and charismatic fauna in a natural setting and in an interactive manner. There is an educational focus based on a strong conservation ethic that is communicated to visitors in a personalised way. The direct association of the enclosure with the Dryandra Woodland breeding program emphasizes the practical contribution made to the conservation of native fauna. The free range the captive animals have within the enclosure supposedly reduces the impression of a zoo type confinement, particularly as there are no barriers between the animals and the visitors. Having the tour presented by a guide to small groups of visitors also personalizes the experience and facilitates the potential for customising the tour to the given visitor group. All of these factors appear to appeal directly to the contemporary captive wildlife tourist profile in terms of the style of enclosure in demand and the type of experience preferred.
Figure 11: The Barna Mia experience

(Clockwise from top left) Old Mill Dam meeting point; view of Barna Mia building from visitor car park; presentation room at Barna Mia; walk trail through the enclosure; a feeding station; fauna using feed tray during guided walk; area in building for hot drinks, a chat and browsing merchandise after guided walk.
Visitor Satisfaction and the Barna Mia Experience

A visitor survey of satisfaction was conducted at Barna Mia between April and September 2003, the peak visitation period for the Dryandra Country region. The Barna Mia satisfaction survey was intended to provide a detailed picture of what visitors thought about the facility and was custom designed for this purpose. It is important to note that 2003 was the first year of operation for Barna Mia meaning that it is unlikely to have yet reached its full potential as an attraction. In addition, the survey was carried out during the mid year period when dusk commenced shortly after 6pm and the nights were cold. The experience of Barna Mia may be quite different during the warmer summer evenings, from November to February, with sunset after 8pm. The self administered written survey data was complimented with casual observations of tour groups and unstructured discussions with CALM staff.

The survey forms were provided to the guides by the researcher for distribution to visitors. Tour guides were requested to mention the survey during the introductory segment of the tour and again at the conclusion of the tour. Visitors were then given the option to complete a survey at the conclusion of the evening tour. This represents an opportunistic form of sampling where-by members of the visitor group made a decision as to whether they would participate rather than being randomly selected. Hence the data presented should be viewed in this light.

The survey form consisted of a brief introduction as to the purpose of the survey followed by a series of questions relating to how satisfied the participant felt with their experience of Barna Mia. Satisfaction was quantified using a four point scale ranging from 1 (very low satisfaction) to 4 (very high satisfaction). Participants indicated their level of satisfaction on the scale then were requested to write a comment relating to the reason for the satisfaction rank they gave. This enabled assessment of the cause of the rank given. The survey began with a question relating to the experience as a whole before addressing each designated stage of the experience individually. The satisfaction questions were followed by some basic demographic and tourism activity related questions summarised in Table 2.

<table>
<thead>
<tr>
<th>Table 2: Summary of Barna Mia visitor satisfaction survey questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Question</strong></td>
</tr>
<tr>
<td>Please indicate your overall satisfaction with the Barna Mia experience</td>
</tr>
<tr>
<td>What is the main reason for your satisfaction score?</td>
</tr>
<tr>
<td>Please indicate your level of satisfaction for each stage of the experience as indicated below. What do you remember most about each stage?</td>
</tr>
<tr>
<td>Meeting the guide at Old Mill Dam</td>
</tr>
<tr>
<td>Driving from Old Mill Dam to Barna Mia</td>
</tr>
<tr>
<td>First arriving at Barna Mia</td>
</tr>
<tr>
<td>Presentation before the guided walk</td>
</tr>
<tr>
<td>Guided walk through the enclosure</td>
</tr>
<tr>
<td>Stopping at the feeding stations during the walk</td>
</tr>
<tr>
<td>Drinks and browsing on return to the building</td>
</tr>
<tr>
<td>Are there any questions that have not been answered during your experience?</td>
</tr>
<tr>
<td>Are there any improvements you can suggest for the Barna Mia Experience?</td>
</tr>
<tr>
<td>What age group do you belong to?</td>
</tr>
<tr>
<td>What gender are you?</td>
</tr>
<tr>
<td>How did you find out about Barna Mia?</td>
</tr>
<tr>
<td>Who are you visiting with?</td>
</tr>
<tr>
<td>Where is your place of residence?</td>
</tr>
<tr>
<td>Have you visited Barna Mia before?</td>
</tr>
<tr>
<td>Where you staying tonight?</td>
</tr>
<tr>
<td>What other activities have you taken part in during this trip?</td>
</tr>
</tbody>
</table>
The survey sought to ascertain the overall satisfaction of respondents in combination with comments about the experience in general. This was preceded by a series of statements relating to the distinct stages of the evening’s experience. These enabled evaluation of specific segments of the experience in terms of how visitors responded as the evening progressed. The demographic questions enabled some basic analysis to determine the influence of independent variables on responses provided. The highly controlled character of the experience meant that all respondents experienced the facility in the same manner as outlined in the survey. Some variations may have occurred in relation to the content of presentations and the animals viewed. Content variation may have occurred owing to the interactive design of the experience whereby guides respond to visitor questions throughout the evening. The appearance of animals may have varied owing to weather conditions though using food as an attractant ensured that all groups viewed at least some of the species within the enclosure.

During 2003, an estimated 1,000 visitors toured Barna Mia with approximately 780 visits during the period of the survey. A total of 85 surveys were completed equalling just over 10% of the visitors attending the facility during that time.

Overall Visitor Satisfaction with Barna Mia

The results of a visitor survey suggest the experience provided a great sense of satisfaction amongst respondents. This indicates that the facility has potential as a tourist attraction. Respondents consistently rated their overall satisfaction very highly although satisfaction for specifically identified segments of the experience, as discussed later, varied slightly. The mean overall satisfaction ranking for the experience was 3.75 (n = 85, std.dev. = 0.47) indicating a very high level of satisfaction on the four point satisfaction scale. The main aspects of the experience respondents identified in connection with their overall satisfaction rating were:

- Viewing rare wildlife
- Educational aspects of the experience
- Friendly and enthusiastic guides
- Natural appearance of the enclosure and animal behaviour
- Close encounters with animals
- Evidence of progress toward wildlife conservation

The responses suggest that the design of the facility and the visitor experience combine to present a generally highly satisfying encounter for participants. The reaction of visitors to the overall Barna Mia experience may be encapsulated in responses such as:

- A memorable experience watching animals I have never seen before and having a good view of them (Respondent #67)
- Loved the close interaction with the animals. Tour was well organised and very informative. A very unique way of viewing rarely seen native animals (Respondent #18)
- It was fantastic to see the animals in their natural environment. I’d never seen a Bilby before. The guide was also very knowledgeable and enthusiastic about the facility and animals’ (Respondent #22)
- Seeing some successful result to counter the loss of our wildlife (Respondent #23)

Of particular interest was the apparent perception of some respondents that the relatively small enclosure at Barna Mia provided an experience of animals in a wild or non-captive context. This affirms the intentions in the original plans for the provision of an uncontrived experience of rare marsupials. Almost a quarter of the respondents (23%) commented on the natural surroundings or the positive experience of seeing animals in a natural setting. For example:

- The opportunity of seeing Bilbies in the wild (Respondent #20)
- … seeing the animals in the bush (Respondent #53)
- Able to see rare animals in natural habitat (Respondent #83)
- I was impressed by the variety of native animals which I saw, such as the Bilby, it was the first time I’d ever seen one in the wild! (Respondent #46)
- I saw several animals I have never seen before, to see these animals in their own habitat was extra special (Respondent #3)

The feeling of being ‘in the wild’ may have been enhanced by the lack of barriers between visitors and the animals and the absence of constraints on animal movement through the enclosure (Tribe 2001). In addition, the necessity for nocturnal tours of the enclosure meant the perimeter fence was obscured by the night darkness. While the enclosure vegetation is primarily low scrub with a few scattered trees that do little to obscure vision, the low level of lighting and location of the walk trail in the centre of the enclosure meant that perimeter fencing was difficult to see. The illusion may also be enhanced by visitors not having to pass through a gate in a fence to enter the enclosure but rather, pass from the main building and through a glass door.
Comments suggesting the respondent had experienced animals in a natural setting seem at odds with the artificial feeding regime used to attract animals to the viewing areas. This is done in an overt way, using plastic feed trays and including audience participation that is by no means natural. This perhaps is indicative of attitudes toward the feeding of animals in a wildlife tourism context where-by the use of food to attract animals may be seen as acceptable when used to provide access to animals of interest. In addition, the feeding regime may be legitimised in the eyes of the visitor by the officially condoned nature of the activity and the controlled way in which it is carried out.

While a significant minority of respondents commented on their experience of wild animals in a natural habitat, most appeared conscious of the captive nature of the experience. This did not seem to detract from the satisfaction rating as the comments were associated with high rankings. This was probably because the captive experience enabled viewing of animals that would be very difficult to find in a non-captive setting.

- We saw all of the animals that were kept in the enclosure (Respondent #36)
- a great viewing experience that we will probably never have in the wild (Respondent #73)
- Done as naturally as possible – perfect (Respondent #41)
- Large enough enclosure to give that natural/wild feel but small enough to make a comfortable experience (Respondent #24)

The awareness of the captive nature of the experience was also viewed in a positive light as it was often connected to the privilege of being able to see such rare, elusive animals that would otherwise never be seen and with conservation of the species viewed in the enclosure. There was also evidence of appreciating the effort put into the design of the enclosure to look as natural as possible. In one case, the respondent seemed to think the animals were better off as captive specimens as opposed to being exposed to feral predators and other dangers in a non-captive situation.

**Satisfaction in Relation to Segments of Barna Mia Experience**

When respondents were asked to rank their satisfaction with the respective stages of the experience, some variation was evident although the mean rank remained between 3 and 4. Examination of the rankings of each stage in chronological order demonstrated a gradual rise in satisfaction rank until the peak with the climatic event of interacting with the wildlife then a decline with the anticlimax of refreshments and drinks back at the building (Figure 12). While most respondents allocated a satisfaction rank to each stage, only about 40% of those who provided a ranking also wrote comments in the spaces provided to indicate reasons for their ranking. This may have been owing to the perceived complexity of this survey section and the time taken to write comments for each stage.

**Figure 12: Mean Barna Mia visitor satisfaction rankings segmented by chronological order of tour stages**

![Figure 12](image)

It is interesting to note that the mean overall satisfaction ranking was equivalent to the highest ranked segment of the experience (guide presentation and viewing animals). This suggests that the experience of close interaction with the marsupials had the greatest influence and over-rode the less satisfactory elements of the
experience. The lowest ranked segment of the experience was the drive from the Old Mill Dam to Barna Mia and the post walk refreshments and browsing of merchandise. In addition, while the range of ranking of the overall satisfaction was 3 – 4 the ranges for the separate stages was generally 2 – 4 and in two cases 1 – 4 (Arrive at Barna Mia and Post walk refreshments). This indicates that while all visitors were at least satisfied with the experience as a whole, there were particular stages that were considered unsatisfactory by some visitors for various reasons.

The initial phases of the evening’s experience received somewhat lower, but still positive, rankings relative to the later stages of the experience. The satisfaction of visitors when mustering at the Old Mill Dam site was dominated by first impressions of the guide. While 82 of the respondents gave a rank, only 41 wrote comments (50%) of which the most common related to the ‘friendly and welcoming’ guide (n = 19) and the ‘punctual’ guide (n = 8). For example:

- guide was on time and friendly (Respondent #68)
- friendly guide! (Respondent #79)
- on time, made us feel welcome (Respondent #50)
- the guide’s welcome (Respondent #19)

As the guide was the focus of respondent comments at this stage, it seems that this was an important moment to establish a positive rapport with the participants through being personable and on time. The lower ranks for this stage included comments about the guide being late to the meeting point.

The drive to Barna Mia was a relative low point in the experience with a mean ranking of 3.44 (range = 2 – 4, std dev = 0.78) with the most common ranking being 3. Of the 81 respondents who ranked this stage, 32 also wrote a comment. Comments associated with the lower ranks mainly identified the dustiness of the unsealed roads as a problem (n = 8) while some others felt disoriented or unsure about their location and finding their way back (n = 6). The most frequent positive comment was associated with the ease of following the guide from Old Mill Dam to Barna Mia in convoy. The emphasis on the ease of following the guide could be construed as being suggestive of some prior uncertainty about the ability to carry out this exercise, though there was no evidence to support this hypothesis.

On arrival at Barna Mia, respondents were most aware of the design and presentation of the building and low level lighting along the entry path in an isolated woodland setting. This is reflected in comments such as:

- building lit up down path. Great window. [stained glass surrounding door] (Respondent #2)
- the Barna Mia structure (Respondent #13)
- adequate lighting without being intrusive (Respondent #35)
- façade and subdued lighting very attractive (Respondent #78)
- the bush is beautiful and the enclosure fits well (Respondent #22)

The comments praising the low level lighting and naturalistic design were contradicted by other respondents who were not so impressed. For example:

- maybe some more lighting may assist to reduce a feeling of insecurity (Respondent #4)
- couldn’t see much at all (Respondent #12)
- it was very dark (Respondent #19)

The three highest ranked stages of the experience represent the core of the tourism product. That is, the educational presentation by the guide, the walk and the stops at feeding stations to view animals. They combine CALM’s education agenda with the tourism oriented viewing of wildlife at close quarters. This is seemingly a mutually successful combination where the government conservation agency is afforded the opportunity for public education and promotion of their wildlife conservation program while visitors have the benefit of close encounters with charismatic wildlife. Comparative analysis of the ranking of these three stages indicated no significant difference. It is important to note that the visitors were also generally satisfied with the information provided during the presentation. However, it would be interesting to assess the response to such a presentation in the absence of the animal viewing facility and the promise of close encounters with rare marsupials.

The presentation received a mean satisfaction ranking of 3.7 (n = 83, range = 2 – 4, std dev. = 0.58). While the most frequently occurring rank for this stage was 4, the presence of rankings indicating low satisfaction was also important to note as these were absent in the ranking of the overall experience. Of the 83 survey participants allocating a rank to this stage, only 41 wrote a corresponding comment (49.5%). The most frequent comments related to the informative and well presented nature of the talk and the educational value afforded in an interesting way (82% of comments). Most negative responses indicated the visitor found the presentation boring or too long. The more common positive comments included:

- easy to understand, easy style (Respondent #73)
- very educational as well as entertaining (Respondent #78)
- very comprehensive (Respondent #19)
- very informative, good pre-walk information/history (Respondent #10)
Observation of visitors during the talk reinforced these results with the audience maintaining interest for the full duration. The semi-formal style, opportunities for discussion, props and the manner of the guide were important components that contributed as well as an apparently sympathetic audience. Audience support seems to have been established through the initial positive socialization at the Old Mill Dam meeting point. On several occasions when children were present, there was no obvious sign that they had lost interest by the end of the talk suggesting that the guide was able to present the information in a broadly appealing manner although personal charm may also play a part.

Discussion with the ranger responsible for Barna Mia indicated that there were plans to design three different styles of presentation for the three categories of visitor. Results from the survey indicated there are three main types of group that visit Barna Mia: Families, school groups and special interest groups. While the survey data suggested that the presentations were already broadly appealing, customizing content and style for different groups may be prudent in terms of creating a more effective educational vehicle. Authors writing about effective environmental education methods such as Magill (1995) and Ballantyne, Packer and Beckman (1998) supported the targeting of messages and a tailored presentation style to improve the transfer of meaning to the intended audience. While a broad approach will get some of the message across, tailored communication is more likely to have a positive influence and leave a lasting impression.

This point was made clear during one presentation at which a local 'Land for Wildlife' interest group (comprised mainly of local Wheatbelt farmers) disputed some of the fine detail in the presentation about the local history of the area and some minor comments about farming practices at the turn of the century. While the exchange was good natured, there appeared to be some difference between the presented ‘facts’ and the memories and perceptions of the audience. This may mean that historical information must be fully verified and carefully presented but it may also suggest that such detail is unnecessary for that particular audience.

Following on from the guide’s presentation, the guided walk through the enclosure was the highlight of the experience as was reflected in the overall comments and ranking. The high ranking of the guided walk was accompanied by positive comments relating to general feelings of excitement and wonder and comments about the wildlife in general (78% of comments made, n=38). The mean rank was 3.77 (n = 84, range = 2–4, std dev = 0.46) with the most common ranking being 4. Examples relating to the guided walk section were:

- Watching animals bounding in and out of the darkness seemingly oblivious to humans (Respondent #3)
- brilliant will not forget it (Respondent #5)
- Great, very relaxing and got to see some amazing wildlife (Respondent #10)
- plenty of animals to see (Respondent #78)

This section of the experience was equally ranked with the feeding stations where visitors sat and observed the animals as they entered a small clearing, attracted by feed in plastic trays. The mean rank for the feeding station was 3.73 (n = 84, range = 2–4, std dev = 0.58) with the most common rank also 4. Of those respondents that wrote comments, the most frequent were general expressions of amazement and excitement about the experience, similar to the walking stage. There were more specific comments about the close proximity of the animals and being able to watch them feed. This is reflected in comments such as:

- highlight of my experience here (Respondent #17)
- great to be amongst our native animals (Respondent #37)
- watching feeding (Respondent #33)
- very interesting seeing the animals feed (Respondent #49)

The key component of this stage of the experience appeared to be the lack of barriers between the animals and the visitors and the feeding of the animals. Observations by the researcher also confirmed that the visitors were excited by the movement of the animals amongst the tour group and the behaviour of the animals as they fed from the plastic feed trays. Expressions of amazement were noted when animals displayed aggressive behaviour, or dragged the feed trays away from competitors. The presence of charismatic fauna such as Bilbies, Hare-wallabies and Bettongs that are able to range freely amongst the visitor group, seemingly oblivious to the presence of humans was a major factor contributing to the positive response of visitors to the experience.

On return to the building after the walk, visitors were provided with a hot drink and small snack and the guide mingled with the group in an informal debriefing exercise. As with the Old Mill Dam and drive to Barna Mia, the ranking for this stage was significantly lower than the presentation and walk stages. Mean ranking was 3.45 (n = 78, range = 1–4, std dev =0.81). Of those who allocated a rank, 27 also wrote comments. The majority of comments related to appreciation of the hot drink on a cold night (with surveys being completed during winter) with some positive comments about the merchandise and the chance to talk with the guide:

- welcome hot drink (Respondent #50)
- …good range of merchandise… (Respondent #18)
- Chatting to a great host about what was seen (Respondent #3)

The lower rankings of this stage by some visitors were primarily due to the tour running over time, a result of having a large group of people. On nights where a large group must be split into two consecutive walks may
finish after 11 pm. The finishing time for a standard group of 15 or less was usually about 9.30 pm. Subsequently, visitors felt tired and sometimes hungry as they had not yet had dinner (start time was 6.30 pm).

**Negative Responses to the Barna Mia Experience**

While the survey data indicated that Barna Mia was a very satisfying experience for visitors, and therefore a potentially successful tourism attraction, there were some negative reactions to the experience. The negative responses were primarily associated with issues relating to crowding and the cold weather. There were some comments relating to the perception that the animals in the enclosure were too tame, the noise of the diesel generator (power source for the facility) disturbed the experience or that the same animals kept appearing at each consecutive feeding station. These were isolated and infrequent comments.

Comments about the cold outdoor temperature pervade all exterior stages of the experience. While it may be argued that CALM cannot control the weather, these comments are significant in terms of a clash between the possibly peak viewing times at Barna Mia and the peak tourism season in the Dryandra Country region. While most visits to the region are between April and September to avoid the heat of summer, this period also represents the time of year when night temperatures in the region can get close to 0°C. Arguably, the most comfortable time for a nocturnal experience of Barna Mia would be in the warmer months between September and March when night temperatures tend to be mild. This creates a dilemma as day time conditions during this period can be very unpleasant, with high temperatures, low humidity, dust and swarms of very insistent flies to contend with. A positive outcome of this situation may be that Barna Mia encourages visitors to the region during its traditionally off peak summer period. A negative outcome may be that the strong seasonality of Dryandra Country as a tourism destination works to stymie the potential of Barna Mia during its prime viewing season.

Crowding issues manifested during the walk and post walk refreshment stages. Comments about crowding were associated with perceptions that the animals were not making an appearance owing to the large group or viewing of the animals was obstructed owing to the limited space at the feeding stations. Comments on the late night were indirectly related to crowding as previously stated. The current operational arrangements dictate that groups over 20 should ideally be split into two separate walking groups. As there is only one guide the groups must walk the enclosure consecutively. This results in the evening experience being extended for up to one hour or more. Comments about crowding occasionally referred to the operation not adhering to the limit of 15 individuals advertised by CALM. Barna Mia was originally designed as an intimate experience, both in terms of the low visitor to guide ratio and the small group interaction with the animals. Larger groups limit the ability of the guide to cater to all visitors and limit the opportunities for visitor discussions with the guide. The comments also hint that the respondent feels a lack of intimacy or that the experience has been depersonalised. For example:

- too many people causes too little time (Respondent #19)
- as we were the 2nd group to go through we finished quite late so we wanted to go straight home for dinner (Respondent #22)
- tall people in front blocked view a bit … (Respondent #52)

This suggests that Barna Mia is susceptible to crowding. This may be partly owing to the nature of the operation and also the advertising of small group sizes for the experience. The design of the facility caters to small groups in terms of the physical space provided for visitors. For example, the feeding stations have logs for seating no more than 10 people at a time. Subsequently a group of 15 results in five people having to stand; more than 15 creates a situation where the number of standing people takes on the appearance of a significant crowd. Observation of large groups demonstrated that having a large number of people standing around the feeding station obstructs the movement of animals and the ability of visitors to see them. The narrow walk trail also results in large groups spreading out over a relatively long distance when walking between feeding stations. With the guide at the front of the group, those toward the back cannot hear what is being said and have little opportunity to ask questions. This issue at a similar sanctuary, Karakamia animal enclosure near Perth, is solved by having two guides, one leading and one at the rear of the group.

Booking a tour of Barna Mia may also present difficulties for tourists in terms of cancellations and predictability of group size. The booking arrangement at Barna Mia is ad hoc with tours going ahead or being cancelled with very short notice at times (a few hours). Cancellation may occur owing to unexpectedly bad weather or inadequate group sizes. The operation of the facility is almost of an opportunistic character where the stated maximum limit of numbers is ignored when large groups book a tour. Some visitors expressed disappointment when attending Barna Mia as part of an unexpectedly large group. They were unimpressed by the situation where CALM advertises a maximum tour group of 15 while the night of their tour, there are upwards of 15 or 20 people. This occasionally occurs when interest groups, such as clubs and sporting groups, book a tour on a night when a number of members of the general public are also booked. Interest groups can have ten or more members attending, and occasionally thirty. If two groups of a significant size book on the same night, this
can result in crowding issues, especially if non-group members are also present. This suggests that interest
groups or school group bookings should be allocated tours separately to members of the general public.
In addition, larger groups belonging to clubs and other organisations could be required to book over several
nights with a maximum of 15 people per night. This will reduce the occurrence of disappointment amongst
visitors who were expecting an intimate, close up experience of rare animals. While this may create a likelihood
of visitors being unable to attend due to tours being booked out, improvements in the booking system could
enable arrangement of tours on alternative nights. Such a system could allocate bookings to ensure the maximum
number of visitors is not exceeded while the minimum number of visitors for a viable tour is achieved.

Visitor Impacts on Animal Wellbeing at Barna Mia
The question of whether visitors impact on the wellbeing of the animals in the Barna Mia enclosure was not able
to be fully addressed within the confines of this project. A shortened time frame coupled with a lack of historical
data meant that a legitimate scientific investigation of the relationship between visitor interaction and animal
well-being was not possible. Assessing the status of animal wellbeing requires a longitudinal study over several
years to detect trends in population dynamics (Shackley 1996). This is necessary both to minimise the influence
of individual animals on the data collected as well as to differentiate between natural variation and fluctuation of
the animal populations and external influences such as visitor interaction. Any data collected over the few
months of the present project may not be representative of the relationship between animal wellbeing, the captive
nature of their existence and any influencing factors brought in by visitors. Given that the officer responsible for
the enclosure has observed that the animals are breeding successfully and feeding regularly, it appears little or no
detrimental effects are evident with respect to the animals. This may be due to the highly controlled management
of both the animals and the visitors within the enclosure together with the habituation of the marsupials to the
presence of humans.

The highly structured nature of the visitor experience and the constant presence of a ranger or guide
effectively act as a policing mechanism that prevents undesirable visitor behaviour. In addition, small visitor
group size may also reduce the potential for undesirable visitor behaviour as the interaction with the ranger or
guide occurs on a more personal level than would be possible with larger groups. Finally, a clearly defined
gravel path with low level lighting serves to contain visitors within a confined area and minimises stress
responses in the marsupials that could otherwise result from visitors pursuing, crowding and/or cutting off
animal escape routes.

The animals within the enclosure have also become habituated to the presence of people, positively
associating food with the rangers, guides and visitor groups. The character of the enclosure, being a relatively
small area with a correspondingly small population of marsupials, results in repeated exposure of the same
marsupials to human contact on a predictable time basis. In addition to the predictable contact over time, the
defined pathway creates a spatial predictability for the animals. That is, the marsupials are likely to have become
habituated to the fixed location of feeding stations and the pathway humans use to move through the enclosure
on a nightly basis. Subsequently, the marsupials are attracted by the predictably repeated presence of people, in
association with food, at a given time and place and display positive response behaviour.
Population density and food availability are also carefully managed in order to avoid any associated
detrimental effects. Overpopulation is avoided by removing any offspring to the primary breeding enclosure
nearby. If the population were to decline, it may be restocked to ensure the continuing success of the Barna Mia
enclosure as a tourism attraction. Careful husbandry of the enclosure population was said to minimise stresses
associated with variable food availability. Observation of feeding during tours indicated that the nature of food
source has created tensions in the animal population. That is, animals were seen to be competing for possession
of the food trays meaning aggressive behaviour was displayed owing to the spatially limited access to food.
Thus, the combination of visitor and animal management means the wellbeing of the animals may reflect more
on the management of the enclosure than the influence of visitors.
While the management of the enclosure appears to function to minimise impacts on animals and maximise
their well-being, the design may work against this. Some evidence of deterioration of the habitat within the
closure suggests well-being of the animals may be adversely affected as time passes. The small size of the
enclosure limits movement of the animals and restricts locations in which burrows may be excavated and
foraging may take place. In addition, the enclosure has a limited number of certain tree species that some of the
animals focus on when searching for food sources. For example, there are few Casuarina trees in the enclosure.
These attract the attention of Bilbies who dig around the base in search of fungus associated with that particular
tree species. Repeat foraging seems to be having a detrimental effect on the se plants (Figure 13). It seems that
the site needs careful management in relation to the animal population impact on vegetation as well as
environmental impacts more so than visitor impacts.

The site is also susceptible to erosion due to poor drainage and surface runoff. The winter season of 2003
resulted in the track through the enclosure being washed out (as well as the building flooded) as a result of an
average quantity of rainfall.
Visitor Survey Conclusion

Based on the literature Barna Mia represents the ideal wildlife tourism product with its interactive experience of rare and charismatic animals in a natural setting, interaction with the guide and the fact it is all underpinned by a strong educational focus and conservation oriented agenda. The success of this formula is supported by the reaction of visitors where-by all surveyed were either satisfied or very satisfied with the experience as a whole. Aside from high visitor satisfaction, there appears to be some issues relating to the degradation of the habitat within the enclosure due to its small size and susceptibility to erosion. While this is primarily a site management issue, degradation of the enclosure habitat may negatively impact on visitor satisfaction and adversely affect the well-being of the animal inhabitants.

It seems that the visitor experience reflects the intent of creating an iconic tourism attraction. However, this in itself may not be enough to generate the increased tourist numbers in the Dryandra Country region with the associated ‘spin offs’ to the community. The following sections demonstrate that while an innately appealing tourism product is an important component of success, its operation within the wider context of the region is of equal importance.
Chapter 8

OPERATION OF BARNA MIA AS A COMPONENT OF DRYANDRA WOODLAND

Barna Mia is seen as a path to value adding to the wildlife tourism experience and a means of increasing the number of visitors to the woodland, particularly interstate and international visitors. While the data indicate Barna Mia is an effective attraction within itself, assessment of the success of Barna Mia in contributing to tourism numbers and benefits to the region are more difficult to discern. Data for visitor use of Dryandra Woodland is scant, based on standard CALM visitor surveys with a very low return rate; vehicle counters on the roads within the woodland area and accommodation data for the Dryandra Village. The CALM standard survey is made available for visitors to the Dryandra Woodland but the return rate for 2001 and 2002 was about 0.06% of the estimated visitor numbers stated. Results from this survey cannot provide any meaningful information beyond the views of those visitors who completed the form. Tourist information for the Heartlands Tourism Region is readily available and has been used in past tourism planning documents for the Dryandra Country region (e.g. Anon 1999; Sanders 2003). However, this data refers to the entire Wheatbelt area and includes Lancelin and Wave Rock. Given the status of these sites as popular tourism destinations, data from the Heartlands cannot be applied to the Dryandra Region specifically as the sample is skewed towards the already established attractions. Some survey work was carried out by Moncrieff (1998a) that mainly involved interviews with local business but also included some limited self administered visitor surveys. As a result, there is very little data available aside from some very basic visitor numbers and non-representative tourist response statistics.

Dryandra Woodland Visitor Data

What data were available indicated that the Dryandra Woodland received approximately 30,000 visits per year. This was said to comprise approximately 5,000 overnight stays and 25,000 day visitors (Moncrieff 1998a). The overnight stays primarily refer to tourists using the Dryandra Village. Available occupancy statistics for Dryandra Village for the years 1999 to 2000 revealed the number of visitors staying (in order of years) was 5,523, 4,899 and 5,546 (Hassall 2003). This indicated the estimated number of people staying at the village was accurate. However, the oft quoted 30,000 visitors to Dryandra Woodland as a whole may be an over estimate. CALM’s own VISTATS database recorded an average of 15,500 visits per year over the past ten years with a declining trend in visitation since 1999 where 16,000 visits were estimated in the 2000/01 financial year and 13,000 in the 2001/02 periods. This was down from 19,000 visits for each financial year from 1997 to June 2000. This is significantly less than the figures quoted by Moncrieff (1998b) and the Barna Mia Business Plan (2001).

In addition the distinction in terminology between ‘visitors’ and ‘visits’ is important as they are suggestive of very different tourist quantities. Citing 30,000 visitors suggests that 30,000 separate individuals visited the area in the stated period whereas 13,000 visits allows for the possibility that the same people visit a number of times over the course of a year. Research by Moncrieff (1998a) estimated there to be more than a 50% repeat visitation rate to the woodland. Combined with the figures obtained from CALM VISTATS, this suggested that the number of people visiting Dryandra Woodland during 2001/02 was more likely to be approximately 6,500. At the peak of visitation in the last decade, there were approximately 9,500 people visiting per year. Presumably these figures include those people staying at the village, meaning at least half the visits were associated with overnight stays while the number of day visits has been in decline.

Tourism numbers are important as the Barna Mia business plan (CALM 2001) pinned much of the facility’s success on sourcing tour participants from the Dryandra Woodland Village. This assumption was given support by statistics obtained from the limited visitor survey carried out at Barna Mia during 2003. The survey results revealed that 53.8% of those completing the survey, excluding local residents, were staying in Dryandra Woodland, the vast majority at the village while a small proportion were camping (7.1% of the total surveyed). Most of the remaining respondents indicated they were staying in Narrogin Town overnight after the tour (32%). Thus the Dryandra Woodland Village was an important source of visitors for Barna Mia.

Day visitors were also cited as a potential revenue source, either by encouraging them to stay overnight or by contriving a day time use for Barna Mia (Anon 2001). The Business Plan explores a number of alternatives for accessing the apparently large day time visitor market, mainly through keeping diurnal animal species in the Barna Mia enclosure and offering day time tours. This idea was based on the assumption that the number of day time visitors to Dryandra Woodland was about five times the number staying at the village over night.
Supposedly, this large underused resource of visitors would provide a boost to the relatively small pool staying at the village. The reality appears to be that the number of day time visitors is at most the same as the number staying at the village down to possibly half the number or less. While accessing the day time visitor market may increase revenue, the increase is unlikely to be significant given the small numbers of day visitors to Dryandra. This would indicate that night tours are most viable with tourists staying the Dryandra Village are the primary source of visitors for Barna Mia.

Coordination of Barna Mia and Dryandra Village

Based on the dominant number of Barna Mia visitors staying at Dryandra Village, it would seem sensible that Barna Mia and Dryandra Village were operated in close association with each other. This is doubly so given that CALM is in control of both facilities. Currently, all bookings for Barna Mia must be processed through the CALM district office in Narrogin. That is, people staying at the Dryandra Village must contact CALM staff in Narrogin if they are interested in a tour, except on weekends when bookings are made at the village presumably because the district office is unmanned during this time. Weekday bookings from the village can prove difficult given that there is no mobile phone coverage and the single public telephone at the caretaker’s office seemed to frequently break down during the time of the researcher’s field trips to the region. Weekend bookings may be potentially easier from the visitor’s point of view as they simply inform the caretaker before close of business on Friday that they wish to participate in a tour on Saturday or Sunday. CALM then has an arrangement with the caretaker whereby the district office phones the village to verify how many tentative tour bookings have been made at the village before 4.00 pm on Friday. The care taker and Lions board member described the process as follows: (R = researcher, B = caretaker, Y = village board member)

R: Do you know if there are people booked in [to Barna Mia] tonight (Wednesday)?
B: I don’t know.
Y: No I wouldn’t. You’d have to phone CALM’s office. See, they do all the mid-week bookings and the only time people phone here to book for tours, … generally, is on the weekend.
B: Yeah, see they send up a fax, Friday, and ask if we’ve got anybody to ring them back and let them know, by the time they close. Then Saturday, they ring us a four o’clock and um…..actually we’re gonna have to change it a bit when it gets busy cause I got a call on the phone the other day, and by the time I got off the phone I did all the bits and pieces [administrative paperwork] then thought, ‘Oh, I should have checked messages’ and it was seven o’clock …or quarter to seven, so, David and I took this girl that was booked in and we wondered around the forest out there for an hour and a half trying to [spot some animals] [laughs]. It did eventually work but, it was a bit, and I said to [the CALM ranger] today, I said ‘oh something’s gotta, we gotta do something different with that because we’re kind of busy here….’
Y: There’s a few teething problems like that, as we get into our busy season it’ll be their busy season as well. I guess a lot of that stuff will be sorted out.
B: Yeah, it’s worked good till now but it was just one of those days where the phone didn’t stop and if it wasn’t ringing there was someone outside so I was in and out. And then all of a sudden, I was just sitting down to have tea, and I thought, ‘Oh my gosh.’ And I raced to the phone, and sure enough……but anyway, it worked out [laughs]. Another little bother, but never mind. We had a nice drive around the forest at night.

This interchange demonstrates the weaknesses of the Barna Mia booking system for tourists staying at the village. The current arrangement appears to delegate the village to a secondary point of access to the tour. That is, visitors who contact the district office directly are given priority by default over those who are staying at the village owing to the booking arrangements. The inconveniences posed by contacting the CALM office in Narrogin while at Dryandra Woodland may discourage some or result in ‘mix-ups’ where village occupants miss out on a tour as demonstrated in the above transcript. The arrangements also appear to be further constrained by the requirement for all bookings to be made during the office hours of the CALM district office in Narrogin. This situation may be improved by either having the booking system located at the caretaker’s office in Dryandra Village, having a ranger stationed in Dryandra Woodland who may be responsible for tour bookings, or cooperating with the newly established Dryandra Visitor Centre as the central point for booking tours. Implementing a centralised booking system that is easily and instantly accessible by those making and taking tour bookings would also facilitate a more efficient distribution of visitors across tour nights to avoid over crowding or inadequate tour numbers.
Barna Mia Ticket Pricing

Aside from the booking arrangements, the fee structure for tours is also problematic with ticket revenue being significantly less than the cost of operation. Fiscal data for the operation of Barna Mia between December 2002 and July 2003 indicated the facility was run at a significant loss. This means the facility was a drain on resources that may otherwise contribute to development of Dryandra Woodland as a wildlife tourism destination. Tours were run on four nights per week during 2003. Barna Mia operational costs were approximately $144 for each night without a tour, $244 per tour night with a group of 15 or less and upwards of $277 on nights with groups larger than 15 individuals. Tickets cost $12 per adult, $6 per child and $32 per family where families are comprised of two adults and any number of children. Examining monthly average budget statements revealed that revenue was approximately one quarter of the running costs for each month, including merchandise sales.

The tickets sales made up the bulk of revenue while merchandise based revenue was minor. For experimental interest, profitability was assessed on the assumption that a tour was booked every night over the same period with the ideal number of 15 individual adults attending for maximum ticket revenue. The group size of 15 was cited as the ideal size for which Barna Mia was designed. Survey data also suggested groups larger than this detracted from satisfaction with the experience. The same pricing system was used and the figures, excluding revenue from merchandise sales, were as indicated in Table 3, still making a loss.

### Table 3: Hypothetical Barna Mia budget based on tour bookings for 15 adults every night from December until July

<table>
<thead>
<tr>
<th>MONTH</th>
<th>TOUR NIGHTS</th>
<th>NON TOUR NIGHTS</th>
<th>REVENUE</th>
<th>COST</th>
<th>BALANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec-02</td>
<td>31</td>
<td>0</td>
<td>$5,580.00</td>
<td>$7,564.00</td>
<td>-$1,984.00</td>
</tr>
<tr>
<td>Jan-03</td>
<td>31</td>
<td>0</td>
<td>$5,580.00</td>
<td>$7,564.00</td>
<td>-$1,984.00</td>
</tr>
<tr>
<td>Feb-03</td>
<td>28</td>
<td>0</td>
<td>$5,040.00</td>
<td>$6,832.00</td>
<td>-$1,792.00</td>
</tr>
<tr>
<td>Mar-03</td>
<td>31</td>
<td>0</td>
<td>$5,580.00</td>
<td>$7,564.00</td>
<td>-$1,984.00</td>
</tr>
<tr>
<td>Apr-03</td>
<td>30</td>
<td>0</td>
<td>$5,400.00</td>
<td>$7,320.00</td>
<td>-$1,920.00</td>
</tr>
<tr>
<td>May-03</td>
<td>31</td>
<td>0</td>
<td>$5,580.00</td>
<td>$7,564.00</td>
<td>-$1,984.00</td>
</tr>
<tr>
<td>Jun-03</td>
<td>30</td>
<td>0</td>
<td>$5,400.00</td>
<td>$7,320.00</td>
<td>-$1,920.00</td>
</tr>
<tr>
<td>Jul-03</td>
<td>31</td>
<td>0</td>
<td>$5,580.00</td>
<td>$7,564.00</td>
<td>-$1,984.00</td>
</tr>
</tbody>
</table>

**TOTAL**  
243 0 $43,740.00 $59,292.00 -$15,552.00

**Monthly Average**  
$5,467.50 $7,411.50 -$1,944.00

**Extrapolated yearly total**  
$65,610.00 $88,938.00 $23,328.00

This suggests that to break even with the current ticket pricing system, in an ideal situation, Barna Mia would rely on about $8,000 worth of merchandise sales each month (in order to net about $2,000). This seems unlikely, aside from the actual circumstances of a tour of 15 adults every night of the year, because to date monthly merchandise sales have been no more than $500 per month since the opening of the facility. A factor in the low sales of merchandise may relate to poor promotion. Some survey responses included comments suggesting that if the individual had known there was merchandise available at Barna Mia, they would have brought more money with them. While Barna Mia has credit card facilities, it seems that visitors presently do not come prepared to buy souvenirs as part of their experience. Creating more awareness may improve merchandise sales though tripling or quadrupling sales through advertising may be unlikely. Profitability must therefore be based primarily on ticket sales and cost minimalisation.

Table 4 demonstrates that increasing ticket prices may improve the economic viability of Barna Mia significantly. Doubling ticket prices to $25 per adult and $12 per child would cover all costs, including non tour nights, assuming an average tour group size of 10 made up of 6 adults and four children. Superimposing this fee structure over the tour data for December 2002 to July 2003 suggests the increased prices would have covered all costs when group sizes were between 10 and 15 as demonstrated in the months of April and May. This fee structure would enable the maintenance of the small group experience, a key component that enhances the niche quality of Barna Mia, preferred by the original operational plans and surveyed visitors.

The Barna Mia Business plan expressed some concern about offering a competitive ticket price structure so as not to price itself out of the market. Based on the report, it is possible that price increases may make Barna Mia uncompetitive with some other captive wildlife tourism experiences. For example, Karakamia offers nocturnal spotlighting tours of native fauna in a large enclosure and charges $10 per adult and $7 per child. However the Barna Mia experience is quite different to Karakamia as it affords very close contact with rare, small marsupials, small group sizes and a more formal tour structure. During 2003, Karakamia offered more of a standard spotlighting night walk with most animals being fairly common species maintaining a significant distance from the group. Karakamia is also able to easily cater for very large groups of up to 30 or 40 on any
given night. Based on this, the two facilities are not directly comparable, with Barna Mia having a more intensive investment in infrastructure and presentation.

Table 4: Hypothetical budget for period between December 2002 and July 2003 assuming Barna Mia ticket prices were doubled

<table>
<thead>
<tr>
<th>MONTH</th>
<th>ADULTS</th>
<th>CHILDREN</th>
<th>TOUR NIGHTS</th>
<th>NON TOUR NIGHTS</th>
<th>VISITORS PER TOUR</th>
<th>TICKET REVENUE</th>
<th>RUNNING COSTS</th>
<th>BALANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec-02</td>
<td>18</td>
<td>6</td>
<td>10</td>
<td>4</td>
<td>2.4</td>
<td>$522.00</td>
<td>$976.00</td>
<td>-$454.00</td>
</tr>
<tr>
<td>Jan-03</td>
<td>61</td>
<td>18</td>
<td>9</td>
<td>22</td>
<td>8.8</td>
<td>$1,741.00</td>
<td>$3,058.00</td>
<td>-$1,317.00</td>
</tr>
<tr>
<td>Feb-03</td>
<td>42</td>
<td>9</td>
<td>6</td>
<td>22</td>
<td>8.5</td>
<td>$1,158.00</td>
<td>$3,091.00</td>
<td>-$1,933.00</td>
</tr>
<tr>
<td>Mar-03</td>
<td>68</td>
<td>32</td>
<td>13</td>
<td>18</td>
<td>7.7</td>
<td>$2,084.00</td>
<td>$3,058.00</td>
<td>-$974.00</td>
</tr>
<tr>
<td>Apr-03</td>
<td>97</td>
<td>120</td>
<td>14</td>
<td>16</td>
<td>15.5</td>
<td>$3,865.00</td>
<td>$3,058.00</td>
<td>$807.00</td>
</tr>
<tr>
<td>May-03</td>
<td>118</td>
<td>64</td>
<td>16</td>
<td>15</td>
<td>11.4</td>
<td>$3,718.00</td>
<td>$3,058.00</td>
<td>$660.00</td>
</tr>
<tr>
<td>Jun-03</td>
<td>57</td>
<td>14</td>
<td>9</td>
<td>21</td>
<td>7.9</td>
<td>$1,593.00</td>
<td>$2,814.00</td>
<td>-$1,221.00</td>
</tr>
<tr>
<td>Jul-03</td>
<td>58</td>
<td>45</td>
<td>10</td>
<td>21</td>
<td>10.3</td>
<td>$1,990.00</td>
<td>$2,814.00</td>
<td>-$824.00</td>
</tr>
</tbody>
</table>

On the other hand, the doubling of ticket prices for Barna Mia would place it on a par with other specialty commercial wildlife tourism operations. Pemberton Karri Forest Adventures charges $50 pp for a 4 hr walk and 4wd tour including lunch for group sizes greater than 10 people. AQWA, a captive marine wildlife tourism operation in the Perth Metropolitan area, charges $16.50 per adult and $11 per child for general entry (fully self guided) while specialty experiences such as the following cost about $70 to $90 plus equipment hire:

‘…the chance to become a seal trainer for a day. Groups of up to four can help with feeding, observe [seal] behaviour, check on the orphans and even join in the daily seal presentation.

…snorkellers or qualified divers can jump into AQWA’s main aquarium and spend up to forty-five minutes face to face with these majestic creatures [sharks]’.


Barna Mia was intended as a niche captive wildlife tourism product that was to add value to the Dryandra Woodland experience. While this may be so in terms of the visitor experience, the economic reality is quite the opposite. Barna Mia has a large investment in infrastructure with a low visitor to guide ratio. It also affords the opportunity to view extremely rare marsupials in close quarters in combination with a highly personalised guided tour in a naturalistic setting. Considering that the literature suggests a strong demand for experiences such as that offered by Barna Mia and the survey indicated a strong positive reaction by visitors, an increase in ticket prices is justified and would vastly improve the viability of the operation.

Increasing the ticket pricing of Barna Mia dovetails with the movement of CALM management to self funding attractions. Examples such as the Tree Top Walk (TTW) on the south coast of Western Australia, near the town of Walpole, provide some evidence that profitable natural area attractions are possible. The TTW currently attracts approximately 200,000 visitors per year, of which one third are interstate and one third international. The site offers a relatively low fee of about $7 per adult but is designed for high volume flow through of visitors. The TTW structure itself is a narrow one way catwalk with very few signs while the car park is modest in size. Visitors generally spend about 50 minutes at the site before moving on. The location of the TTW on a major touring route, the South Coast Highway that runs between to significant tourist centres (Albany and Pemberton) in conjunction with a high profile advertising campaign ensured a steady flow of visitation. The character of the TTW lends itself to being a low cost but significant revenue raiser purely on the quantity of visitors it can accommodate per day.

In contrast, Barna Mia is a restricted experience with a limited number of people confined to one tour per night. This limits the revenue base although the demand for such an experience could support a higher ticket price in relation to the TTW. While the TTW is designed as a mass tourism attraction, Barna Mia was intended as a niche market personalised experience. The location of the Facility in an isolated location, away from major tourist destinations may function in favour of this intent although the low key approach needs to be countered with appropriate charges for tours. The satisfaction of those visiting the site coupled with the demand for the Barna Mia style of experience suggests a higher ticket price would be acceptable and would create a profitable operation.
Operational Management of Barna Mia

The operation of Barna Mia is disadvantaged by the centralisation of staff and resources in Narrogin, more than 27 km away. On non-tour nights, the ranger in charge of the facility must travel to Barna Mia from Narrogin to feed the animals. Guides employed on nights when tours are booked must also first collect equipment from the office in Narrogin before travelling to the Woodland. Thus, travel involves approximately 40 to 50 minutes of the time spent by guides and rangers operating Barna Mia each night. The travel time between the district office and Barna Mia adds significantly to the cost of operation. The cost of travel could be minimised by basing a ranger in the Woodland itself, as is the case in other protected areas around the state. An on-site ranger may also work to promote the tour to people staying in the village by raising the profile of CALM in Dryandra Woodland by increasing the contact between CALM staff and tourists. This may also serve to better integrate Barna Mia as a component of the Dryandra Woodland as was the original intent of the concept. Thus, having a ranger stationed in Dryandra Woodland, possibly in the village, may simplify the process for booking tours as well as reduce travel time.

Promotion of Barna Mia

The promotion of Barna Mia as a wildlife tourism product has proved problematic owing to the lack of resources applied to this end. This appears to be primarily related to a combination of a lack of staff time within CALM, a lack of cohesion between Barna Mia and the rest of Dryandra Woodland as a product and a lack of co-ordination of tourism promotion in the Dryandra Country region as a whole. This does not necessarily mean that CALM needs to employ a dedicated promotions officers for Barna Mia although allocating time for community liaison may prove worthwhile.

Dedicated CALM staff time for communication with community representatives may work to improve the promotion of Barna Mia and its co-ordination with other regional tourism development operations. It may also allow co-operative arrangements to be made with the new Dryandra Country Visitor Centre. That is, promotion of Barna Mia could be carried out through the centralized tourism marketing facility for Dryandra Country, a particularly prudent move considering that the DCVC has become a network centre. Network centres are responsible for arranging tourist bookings for the region in which they are located as well as promoting tourism experiences. This would prove to be an efficient way for Barn Mia to raise its profile as a tourism destination. However, in order to be effective, CALM would need to allocate staff time to liaison with the tourism centre.
Chapter 9

RECOMMENDATIONS

Our recommendations are aimed at making more effective use of Barna Mia as a tourism and educational facility and fall into three basic categories:

1. Barna Mia itself,
2. Dryandra Woodland, including Barna Mia and Dryandra Village and

Our recommendations make some fundamental assumptions.

- We assume that CALM intends to continue to operate Barna Mia as a visitor education ecotourism product.
- We assume that CALM is still committed to Barna Mia contributing to the wider tourism product of Dryandra Country.
- There is a potential market for this product in domestic and international visitors.
- This product is unlikely to be accessed and utilized by tour operators using large coaches.
- CALM requires Barna Mia to be cost neutral at worst and profitable at best. However, such costing could account for synergies with other operational objectives in the Narrogin region.
- The potential of Barna Mia cannot be met without clearly articulated policy objectives and dedicating staff time (and duty statements).
- Entry fees will have to be increased.
- The relationship of Barna Mia with Dryandra Village will need to be addressed.

Recommendations – Barna Mia as a Tourist Attraction

As it stands at present, the use of the facility is extremely limited and will likely have little effect on the region, let alone being a value adding experience for Dryandra Woodland specifically. The key issues as an attraction appear to be the limited capacity for tours per night, the limited number of visitors per tour, the solely nocturnal use of Barna Mia with no day time application and the limited marketing and promotion of the facility and integration with Dryandra Woodland as a whole. In all fairness, it must be kept in mind that Barna Mia has only been operational for a short time and so CALM has not had to time re-think its operation from that originally proposed. Likewise, there is still very limited longitudinal data about Barna Mia.

Fee Structure / Costs

The current fee structure is grossly inadequate as it covers at most 50% of the operating costs of Barna Mia. Based on the average group attendance of 8.5 adults and 4 children, doubling ticket prices to $25 per adult and $12 per child would cover costs for a standard tour with a small profit of about $16 per tour night not including merchandise sales.

This fee structure is in line with other products in Australia, for example entry costs for various destinations:

- Adventure World, WA
- Hartley’s Crocodile Park, Qld
- Australia Zoo; Queensland

It is not clear how price elastic specialist products such as this are. If CALM decides to increase entry fees in the future, current prices of other similar or competing attractions should be obtained.

Shorten Length of Pre-Walk Talk

As the initiator of the Barna Mia development concept, Moncrieff (pers. comm. email 28/5/2004) was of the opinion that the present format of the tour had too much emphasis on a lecture style presentation. He suggested a shorter presentation would be more appropriate than the current 45 minute one because, ‘[the] original idea was for this to be about 15 minutes. People don’t want to sit around listening to a head on a stick when the real attraction is outside the window’. Although survey respondents were mostly positive about the talk, shortening its length may reduce the occurrence of late finishes and grumpy visitors, especially if the group is split into two sequential guided walks.
Develop a More Cost Effective ‘Behind the Scenes’ Tour

An informal style of ‘behind the scenes’ tour could be conducted on nights when few people are booked. This product, conducted as it is with a necessary animal husbandry process (feeding and care), would contribute some funds for no additional staff costs. Further, and ironically, this could be a very popular product in its own right because of its potential to enhance the experience for visitors who would be assisting with the feeding and observations of the enclosure animals. The greater authenticity and intimacy afforded by this type of tour could create higher levels of satisfaction than the formal tours (where satisfaction is already high).

There could also be minor cost savings as less time would be required by guides, for example there would be no need to prepare building before hand or drive to the dam meeting point. Further, visitors would be assisting with food preparation and there would be no formal slide show. However, we suspect that the informal nature of the tour would lead to more, not fewer, questions from visitors.

Educational benefits of the facility would still be realized through conversations between visitors and guides. A small number of visitors may result in greater effectivenes of educational impact. There may be use for further automatic interpretation through, for example, interactive computer programs.

This tour could be separately marketed in two ways. First, it will be possible to identify times (experience already gives us some idea) of least demand and at these times only offer this tour. This would be a very useful product for last minutes bookings by Village residents. Second, this could be shown as a ‘fine print’ tour. That is, it would be included in the main tour as an alternative if too few people book the main tour. Consistent with the point above, main tours would only be offered at times of expected high demand so that the ‘fine print’ tour would be activated only if the main tour did not reach a minimum patronage, say 5.

On the assumption that 15 people is the absolute maximum number for an effective standard tour group, there would seem to be three basic booking scenarios for which costings and planning should be done:

- Bookings of less than 5 people, which become the ‘fine print’ tour;
- Bookings of 5 –15, single normal full tour; and
- Bookings of 16 – 30 where two tours are necessary.

Employ Additional Guides

When large groups are booked (e.g. more than 15), employ two guides per tour night and split large visitor group into two. Possible scenarios are as follows:

- One guide can present the talk while the other conducts the walk with groups rotating. Success relies on the importance of sequencing. i.e. is it important that visitors hear the talk before the walk to enhance meaning? Will the experience of the walk make the talk an anticlimax – decreasing visitor satisfaction with the experience? This would ensure the evening does not run as late as it currently does with large groups.
- Guides present talk to whole group, one guide takes half group on walk while the second guide leads the remaining half in an additional activity inside the building with groups rotating on completion. Evenings activities may still run late but keeping visitors occupied may distract them from the time spent waiting for the first walking group.
- Guides present talk to whole group then each guide takes half the group on walk simultaneously, each starting at opposite ends of the walking trail loop. Problems may arise when groups pass each other on the single path loop. The low scrub and sparse trees may enable groups to see each other during much of the walk, causing distractions or perceptions of crowding. Having two groups moving in opposite directions may stress the animals, especially when the groups pass each other.
- This option requires redesign of the path configuration and/or changes to the enclosure (see elsewhere for discussion of this).

Employment of an additional guide will increase the loss made unless ticket prices are increased because ticket prices don’t cover labour and travel costs.

Expansion of Facility

The existing enclosure could be expanded and a second walk trail loop constructed enabling simultaneous walking groups. The open character of the woodland may still enable groups to see each other during the walk. This may promote feelings of crowding and decrease the intimacy of the experience.

Second enclosure may be built to allow two simultaneous walks, increasing the visitor capacity of the facility while creating a greater distance of separation between the walking groups. Assuming the existing building would not need altering, the most significant expense would be the additional fencing required. This would also require the employment of two or more guides on any given tour night when bookings are sufficient.

This may not be viable given the current loss making operation.
Recommendations – Dryandra Woodland, including Barna Mia and Dryandra Village

Operational Structure – Base a Ranger at Dryandra

- There is a need for better operational coordination between Dryandra Village and Barna Mia, with recognition of the village as the primary source of visitors through package deals.
- Upgrade some cabins to serviced accommodation (possibly with breakfast provisions provided) at Dryandra Village to cater for a wider range of visitor.
- Consider allowing a shop with basic travelling supplies at Dryandra Village.
- The coordination could be facilitated and running costs reduced by basing a CALM officer in Dryandra Woodland, possibly at the Dryandra Village -
  - This would significantly reduce guide travel time to Barna Mia;
  - It would improve communication (and thus tour booking arrangements) between the village caretakers and CALM. A CALM office in Dryandra Village may be used as a tour booking facility, thus removing the need for caretakers to act as a mediator between visitors and CALM.
  - A CALM ranger office based in Dryandra Woodland with a centralised tour booking system (possible computer database link with Narrogin office) could facilitate a more efficient booking system. Ensuring tour numbers are spread across tour nights as effectively as possible would improve visitor experience.

We believe that better coordination between Barna Mia and the Village are necessary to maximise opportunities at Barna Mia. We believe it would also be useful to view the operation of the Village and its facilities as a way to enhance the product(s) at Barna Mia and thus to broaden its appeal.

This has significant implications for CALM structures and budgets, beyond the scope of this report. We are aware that this recommendation requires considerable variation on the existing structure of the Narrogin region and would have to be considered in light of other operational demands.

Development of Integrated Niche Market Product

Create a tour package that integrates accommodation at Dryandra Village with tour of Barna Mia. This may be in the form of a packaged weekend where accommodation costs and tour costs are combined with a pre-arranged evening tour. In this format, the guide could meet visitors at the village rather than Old Mill Dam. This could potentially include the guide driving a van or minibus to collect the visitors from the village, saving the convoy drive that was consistently ranked low by visitors in the survey. This arrangement is common for other wilderness style accommodation facilities such as the villages at Cradle Mountain. This requires closer co-ordination between management of the village and Barna Mia.

Develop a tour based in Perth for off season (summer months) in the form of an evening tour and return to Perth. The tour could incorporate a BBQ dinner at the Dryandra Village, followed by a tour of Barna Mia and return trip to Perth. This would extend the season of the facility to cover the entire year rather than depending on the locally seasonal tourism pattern with the peak between April and September. Contribution of such tours to local community would be minimal as visitors do not stay in the region over night and participate in a ‘self contained’ package tour.

On the other hand, if an evening tour to Barna Mia could be followed by a night in Narrogin and a trip to Wave Rock, considerable income would be generated. Such a tour would be restricted to mini-bus or coaster size due to capacity at Barna Mia and Narrogin. Such a tour would be possible during January and February.

Develop a wildlife tourism trail including other sanctuaries and wildlife tour operators in a mutual promotion arrangement. This may also include discount vouchers to encourage visits to other participating facilities and operators.

Tour companies in Perth are pessimistic about the potential for organised bus tours to the region and view Dryandra as a self drive destination. Once self drivers arrive in the region there may be potential for locally operated bus tours.

Develop Facility for Dual Use

The Business Plan explores avenues for maximising profits by using the Barna Mia facility during the day. This encompassed the introduction of diurnal species into the enclosure to tap the day visitor market. This may enable greater revenue from day and night operation by attracting day visitors as well as overnight stays.

Addition of the generally larger marsupial diurnal species such as wallabies and Kangaroos may place unsustainable pressure on the enclosure environment (vegetation loss, trampling, crowding). Introduction of more common or familiar species may also reduce the uniqueness of the facility as a sanctuary for rarely seen marsupial species and erode its status as a facility associated with the rare marsupial breeding program.
Smaller marsupial species such as numbats may be a more feasible option but are more difficult to see. Alternative species may also include reptiles.

The building could be used as a base for organised pre-booked daytime activities in Dryandra Woodland, such as interpretive walks through the woodland or culturally based activities.

The Barna Mia building could be open during the day as the CALM information and merchandise Kiosk for Dryandra Woodland area as well as bookings for Barna Mia Night tours and other activities in the Dryandra Woodland. This may maximise merchandise sales and raise the profile of Barna Mia but does have serious budgetary implications because of staffing.

Improving the operation of Barna Mia as an attraction in itself and as part of the Dryandra Woodland product may serve to somewhat improve its success as an attraction. However, as the data demonstrates that an innately attractive tourism experience cannot work without appropriate management within the specific wildlife tourism product of Dryandra Woodland, coordination with tourism on a regional scale is also important. This is both in terms of improving the performance of Barna Mia and Dryandra Woodland as well as the benefits of the wildlife tourism product to the community.

**Recommendations – Barna Mia and Dryandra Woodland as part of Dryandra Country**

**CALM Recommendations**

- Establish formal communication arrangement with newly formed Dryandra Country Visitor Centre (DCVC) with staff time specifically allocated to this end.
- Improve tour booking system to enable better management and distribution of visitor bookings across tour nights.
- Coordinate Barna Mia promotion through DCVC tourism manager.
- Allocate CALM staff time to liaison with DCVC manager to enhance promotion of Barna Mia and demonstrate commitment to community by ensuring maximisation of public input to operation of facility.
- Install additional signs inside Dryandra Woodland to direct tourists to Barna Mia muster point. This may remain at Old Mill Dam or could be moved to the village.

**Dryandra Country Recommendations**

- Install consistent tourist oriented signs that identify attractions and raise tourist awareness of the area identified as Dryandra Country.
- Encourage upgrades of accommodation in Dryandra Country area.
- Work toward full implementation of the State of the Tourism Industry Report (2003) including centralisation of tourism management with the DCVC and establishment of a WATC network centre.
- Upgrade caravan park facilities in Dryandra Country region to cater to broader range of tourist.
- Take a wider focus on drive trails with Dryandra Country incorporated into popular tourism destinations through cooperation with the WATC and HTA. This concept was part of the original brief for this project but was not pursued. This was partly because the Perup facility was under redevelopment and also it does not cater for drive in visitors. Further, at the time it was our judgment that there was simply not the critical mass of related product available to make this worthwhile. It is also not clear that such a product would be effective without considerable marketing. This is a long-term recommendation.
- WDC in cooperation with local government should investigate the potential for a third motel in Narrogin to cater to demand and encourage tourists to stay.

Barna Mia has been demonstrated to be highly satisfying for visitors. It has all the hallmarks of a potentially popular attraction including rare marsupials, close contact with animals, educational components, natural setting and a conservation oriented agenda. Although these attributes create the potential for a successful attraction, the operation of Barna Mia as an isolated entity within Dryandra Woodland and Dryandra Country and under-pricing the experience appears to be inhibiting its success. The issues that function to downplay Barna Mia are both CALM related and also due to the character of the tourism development process in Dryandra Country as a whole. CALM’s lack of resources dedicated to specific tourism management and promotion is a function of the conservation and education mandate of the agency. The current structure of CALM management does not seem to accommodate integration of its areas of responsibility with a wider tourism agenda. It combination with this, the disparate approach of Dryandra Country to tourism development is a result of the diversity within what might be referred to as the community. The multitude of agenda operates to hobble tourism development while also disadvantaging CALM’s limited time and allocation of resources to community liaison and promotion of Barna Mia.
APPENDIX A: DESCRIPTION OF METHOD

Information was gathered using four main methods, accessing past documentation, interviews and discussions, phone and/or email correspondence and a community discussion forum. There were two main avenues of investigation, one to assess Barna Mia as a tourism attraction and the other to examine the relationship between the Dryandra Country community and tourism development, including Barna Mia. Methods of data collection will each be described in turn. Details of information sources are listed in alphabetical order in the reference list.

Past Documentation

Previous work had been carried out in relation to tourism development in the Dryandra Country area. Three main avenues were used to access the relevant documentation specific to tourism development in Dryandra Country. Firstly, contact was made with the ex-tourism development officer who had worked for the shires and the Wheatbelt Development Commission until the end of 2002. The development officer was able to provide some work she had written as well as references to work by other parties. The student originally working on part of the project was able to provide marketing and planning documents she had gathered in relation to tourism development. The Department of Conservation and Land Management (CALM) was approached and was able to supply tourism related planning documentation in relation to Barna Mia and other tourism related initiatives in Dryandra Woodland. These documents were used to access the history of tourism development in the region, placing the current project in context, as well as provide an idea of how stakeholders perceived the future direction of tourism in Dryandra Country. This existing tourism development documentation also facilitated access to literature and provided additional contacts for people involved in tourism development in the region.

Interviews / Discussion

Key contacts provided by the previous tourism development officer were used as a guide for arranging interviews and discussions with stakeholders. As the time frame for the project had considerably shortened in relation to the original proposal, the most significant representatives were interviewed. Interviews were preferably face to face although some were conducted by phone or email owing to distance barriers or time constraints. Representatives residing within the Dryandra Country area were met in person for casual interviews or discussions. These included the Chief Executive Officers of each local government area, CALM management staff, Dryandra Lions Village caretakers and managers, Chamber of Commerce and Business Enterprise Centre representative, and the Wheatbelt Development Commission manager for the Central Southern region and the Narrogin Tourist Bureau president. Meetings with these key stakeholders precipitated further contacts that were considered important and useful to the project though time constraints often only meant contact by email or phone was possible.

The key representatives were first contacted by email to introduce the researcher and the purpose of the project. If the contact expressed a willingness to be involved, telephone contact was made to arrange a meeting where possible to establish personal contact with the individual. If this was not possible, meetings were arranged by email. Interviews were arranged in clusters allowing the researcher to travel to the region and meet a series of representatives within the course of several days. This meant that all of the key representatives were interviewed in four trips to the region of two to four days.

Interviews with community representatives were semi structured and based on a list of key points relating to the project objectives. Focus was provided by use of the Prosper Template to identify key issues directly associated with the respective organisation or interest group being represented. The interviewee was given some freedom to direct the conversation according to topics they considered important. This occasionally provided additional information, or alternate points of view, about the region that otherwise would not be covered by the main area of responsibility of the represented organisation. Because of this flexibility, interviews ranged in length from less than 45 minutes, during which no additional information was volunteered, up to 2 hours.

Where permission was granted by the interviewee, the conversation was recorded using a micro cassette recorder. The recording was later transcribed into a word document for analysis. If the interviewee expressed concern about being recorded, notes were taken by the researcher during the interview. The requirement to take notes tended to force a balance between the quantity of detail recorded by the researcher in-situ and maintenance of the flow of conversation. Writing detailed notes tended to stifle the flow of conversation as frequent pauses were necessary to record relevant information. This meant that the researcher relied more heavily on the list of main points to drive the conversation, which in turn tended to be more stilted. The alternative was to write down primary information during the interview and then fill in secondary details from memory immediately after the
interview. While this presented the danger of misrepresentation on the part of the researcher, details could be checked at a later date through email contact with the relevant interviewee to ensure accuracy.

During field trips to the area, many opportunistic discussions were held with individuals able to contribute useful information. For example, casual discussions were held with managers of the various accommodation establishments the researcher stayed in such as the Narrogin Guest House, Hordern Hotel and Albert Facey Motel. These encounters provided information that occasionally filled in gaps left by official contacts and documents or offered alternate points of view on given topics that reflected general community attitudes. Information obtained from incidental conversations was written down as soon as possible after the encounter. Details were cross examined by introducing the ideas to subsequent pre-arranged interviews to record the reaction by the interviewee. Information from informal conversations was also double checked by email contact with the previous tourism development officer. The most useful knowledge obtained from casual conversations was a feel for the political machinations of the area in relation to tourism.

**Barna Mia Visitor Survey**

**Survey Design**

A survey was designed to address the research objective relating to visitor satisfaction with the Barna Mia experience. DCLM suggested using their general satisfaction survey, designed to be distributed across all natural areas state wide. The generally poor design and extremely generalised nature of the DCLM survey was considered inadequate to address the objectives of the research project. It was determined by the researcher that a custom survey dealing with the specific experience of Barna Mia was required.

The Barna Mia survey was comprised of a series of questions with satisfaction ranking scales from 1 (very low satisfaction) to 4 (very high satisfaction). Each scale was accompanied by an open ended question requesting the respondent to write details indicating the reason for the rank given. The survey also included some basic socio-demographic and tourism related questions. The overall design was intended to avoid leading the responses relating to satisfaction with the experience through the use of open ended questions. A four point satisfaction scale prevented the ambiguous neutral response. The demographic and tourism and travel behaviour questions offered multiple choice options to guide the respondent as to the manner of information sought. Each of the multiple choice questions also had an ‘other’ option to allow for responses not included in the multiple choice list.

The survey presented an overall satisfaction scale with space for associated reasons for the experience as a whole. A series of subsequent satisfaction scales addressed each stage of the evening’s experience. The stages were determined according to the distinct activity being undertaken. For example, the experience begins with visitors meeting the guide at the muster point of Old Mill Dam (Stage 1) after which visitors drive in convoy to Barna Mia (Stage 2). Arrival at Barna Mia is a third distinct stage followed by the presentation before the walk and so on through to the hot drink after the walk through the enclosure. Respondents were requested to rank their satisfaction with each of these stages and write down what they most remembered about the stage. This was designed to provide a detailed breakdown of the experience from the visitor’s perspective, affording an insight into the weaknesses and strengths of the experience not indicated by an overall satisfaction ranking.

The survey was distributed by the guide after each evening’s tour. The anonymous nature of the survey and associated confidentiality were explained along with the general purpose of the survey. Visitors then were left to decide whether they would complete the form. On completion of the form, participants returned it to the guide who then returned the surveys to the district DCLM office in Narrogin. Once more than twenty forms had been collected, they were mailed to the researcher at Murdoch University in Perth.

A sample of the survey follows:
Tell Us About Your Barna Mia Experience!
Your feedback is important to us.

Hello
You are visiting a facility managed by the Department of Conservation and Land Management. We would like to know how you enjoyed your visit.

We hope you can spare a few minutes to fill out this feedback form as you will be assisting us to manage the facility more effectively. There are 3 pages for you to complete. Please give it to a staff officer when you have finished.

Thank you.

1. Please rank your overall satisfaction with the Barna Mia experience by circling one of the numbers on the scale below.

<table>
<thead>
<tr>
<th>Very low</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Very high</th>
</tr>
</thead>
</table>

2. What is the main reason for the overall satisfaction ranking you gave the Barna Mia experience?

This is a double sided page, Please Turn Over
3. Please your satisfaction for each stage of your experience this evening.

<table>
<thead>
<tr>
<th>Stage of Experience</th>
<th>Satisfaction</th>
<th>The thing I remember most</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1: meeting the guide at Old Mill Dam</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>Stage 2: travelling from Old Mill Dam to Barna Mia</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>Stage 3: your surroundings when you first got out of the vehicle this evening</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>Stage 4: the presentation given before the guided walk</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>the information displayed inside the building</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>Stage 5: the guided walk around the enclosure</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>stopping at the feeding stations during the walk</td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>Stage 7: refreshments and browsing on return to the building after the walk.</td>
<td>1 2 3 4</td>
<td></td>
</tr>
</tbody>
</table>

4. Do you have any questions that have not been answered during your experience tonight?
5. How could we most improve the Barna Mia experience?

Telling us a few things about yourself helps us better understand our visitors. Please circle the most appropriate response for yourself only.

<table>
<thead>
<tr>
<th>6. To which age group do you belong?</th>
</tr>
</thead>
<tbody>
<tr>
<td>under 15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. How did you first find out about Barna Mia?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word of mouth</td>
</tr>
<tr>
<td>Tourist Bureau</td>
</tr>
<tr>
<td>Tourist Magazine/map</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8. When travelling from Old Mill Dam to Barna Mia you were a:</th>
</tr>
</thead>
<tbody>
<tr>
<td>driver</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>9. You are visiting:</th>
</tr>
</thead>
<tbody>
<tr>
<td>By yourself</td>
</tr>
<tr>
<td>With a school group</td>
</tr>
<tr>
<td>With a club or organisation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10. You are:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>11. What is your postcode or country of residence?</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>12. Have you been to Barna Mia before?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
</tbody>
</table>

If ‘Yes’ when was your last visit?

<table>
<thead>
<tr>
<th>13. What other activities have you done within Dryandra Woodland on this trip?</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>14. Where will you be staying tonight?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dryandra Woodland</td>
</tr>
<tr>
<td>In a nearby town</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>
Observation
Information was also collected through observations made through personal experiences of Dryandra Country and Barna Mia. Field trips to the region were scheduled such that the research was able to visit each shire and explore the various tourism assets identified in previous reports. Photographic records were taken along with notes regarding the quality and status of attractions. Similar observations were made regarding the towns in each shire as well as Narrogin Town. Observations and notes were based on the Prosper Template.

The researcher attended three tours at Barna Mia in order to gain a better understanding of how tours are conducted and the visitor group dynamics. Notes were made regarding visitor reaction to the experience as well as the quality of experience [resented by the guide.

Community Forum
Toward the end of the research project, a community based forum was organised. This was used to present general findings and impressions of the status of Barna Mia as a tourist attraction and its relationship with tourism development in Dryandra Country. The objective was to gather information about the community perceptions of Barna Mia in a group workshop context. This afforded the opportunity for community members who had not been interviewed previously to provide input. The forum also enabled previously gathered data from individual interviews to be compared with the group responses to tourism development in Dryandra Country.

A 45 minute summary of research outcomes (based on information presented in the body of this report) was followed by a 90 minute group discussion focussing on three questions relating to tourism development and Barna Mia. The questions were as follows:

1. What do you consider to be the best thing Barna Mia brings to tourism in [Dryandra Country]?
2. What do you think the main limitation is in terms of the Barna Mia / [Dryandra Country] tourism relationship?
3. Do you think any change is required to improve the Barna Mia / [Dryandra Country] tourism relationship? If so, what change?

The audience was presented with the questions at the start of the presentation as a means of personal reflection on the issues. After the presentation, group discussion addressed each question in turn. Main points were typed onto a power point overhead and the discussion was recorded using a micro cassette recorded for later transcription and analysis.

Data Analysis

Interview and Text Data Analysis
Notes from all correspondence, discussions and interviews including transcripts were imported directly into a NUD*ist database for analysis. Text searches using NUD*ist facilitated coding of transcripts and notes to establish themes and cross referring with varying sources.

Survey Data Analysis
The survey responses were entered verbatim into an excel spread sheet with each column representing a question and each row representing a respondent. This created an electronic version of the completed surveys for direct analysis or transferral into other data analysis programs. Open ended questions were categorised by common themes and multiple choice responses were coded accordingly. All data, including satisfaction rankings were transferred to SPSS v10 for statistical analysis. This primarily involved Chi-square analysis of categorical data using Cramer’s V test of strength of relationship and nonparametric testing of the ordinal ranking data. All statistical analysis was conducted at the $= 0.05$ significance level.
APPENDIX B: DETAILED BARNA MIA SURVEY RESULTS

Response Rate

Eighty-five responses to the visitor satisfaction survey were returned to the researcher during the survey collection period between March and September. During this period there was approximately 1,000 visitors providing a sample of about 8.5% of the total visitor population. The number of completed surveys may have been restricted owing to the limited number of visitors per tour in combination with group dynamics. That is, tours at Barna Mia were ideally limited to 15 individuals though numbers occasionally included up to 30 individuals. Each tour group was comprised of several sub groups, either families or club type organisations. Casual observation suggested that these sub groups tended to allocate one or two ‘representatives’ to complete the survey form. This hypothesis was supported by notes on several forms indicating the respondent was representing a group or had been nominated as the ‘official’ survey participant by the subgroup they were visiting with. This meant that when a tour comprised 15 to 20 people in two or three club or family groups, it was likely that only two or three surveys were completed on the given night. Thus the proportion of survey responses on a given night appeared to depend on the number of sub groups rather than the number of individuals.

Responses to the survey were likely to be a combination of individual impressions and results of group discussion during the experience. As the tour had a significant socialisation aspect with ample opportunity for discussion in relation to the experience, and given that groups tended to nominate a representative to complete a survey form, the relationship between the satisfaction data and the demographic data may be tenuous. Thus care must be taken when drawing information in regard to the demographic profile of the sample group and the statistical relationships between particular demographic data and mean responses.

Survey Respondent Characteristics

The data (see Table 5) indicate most survey participants were visiting Barna Mia for the first time (94%) and were mostly there with friends and/or family (67%). Of the 5 repeat visitors, 3 were visiting with family and the remaining two visited as part of a high school excursion. Respondents were most commonly visiting from the Perth metropolitan area (35%), interstate (26%) or resided in the Central Southern Wheatbelt region (14%). They more often found out about the Barna Mia tour by word of mouth (54%) and mostly stayed overnight at the Dryandra Woodland Village (48%) or in the Town of Narrogin (32%).

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>NO.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>female</td>
<td>48</td>
<td>56.5%</td>
</tr>
<tr>
<td>male</td>
<td>33</td>
<td>38.8%</td>
</tr>
<tr>
<td>Not stated</td>
<td>4</td>
<td>4.7%</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>NO.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repeat or first time visit?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First time visit</td>
<td>80</td>
<td>94.1%</td>
</tr>
<tr>
<td>Repeat visit</td>
<td>5</td>
<td>5.9%</td>
</tr>
<tr>
<td>Not stated</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age group (yrs)</th>
<th>NO.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;15</td>
<td>4</td>
<td>4.7%</td>
</tr>
<tr>
<td>15-24</td>
<td>15</td>
<td>17.6%</td>
</tr>
<tr>
<td>25-39</td>
<td>14</td>
<td>16.5%</td>
</tr>
<tr>
<td>40-59</td>
<td>31</td>
<td>36.5%</td>
</tr>
<tr>
<td>60+</td>
<td>15</td>
<td>17.6%</td>
</tr>
<tr>
<td>Not stated</td>
<td>6</td>
<td>7.1%</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Who are you visiting with?</th>
<th>NO.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>friends/family</td>
<td>57</td>
<td>67.1%</td>
</tr>
<tr>
<td>club/organisation</td>
<td>11</td>
<td>12.9%</td>
</tr>
<tr>
<td>school group</td>
<td>8</td>
<td>9.4%</td>
</tr>
<tr>
<td>alone</td>
<td>1</td>
<td>1.2%</td>
</tr>
<tr>
<td>Not stated</td>
<td>8</td>
<td>9.4%</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Place of residence?</th>
<th>NO.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perth metro area, WA</td>
<td>30</td>
<td>35.3%</td>
</tr>
<tr>
<td>Interstate</td>
<td>26</td>
<td>30.6%</td>
</tr>
<tr>
<td>local Wheatbelt</td>
<td>12</td>
<td>14.1%</td>
</tr>
<tr>
<td>international</td>
<td>5</td>
<td>5.9%</td>
</tr>
<tr>
<td>total</td>
<td>85</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How did you find out about Barna Mia?</th>
<th>NO.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word of mouth</td>
<td>46</td>
<td>54.1%</td>
</tr>
<tr>
<td>local knowledge</td>
<td>8</td>
<td>9.4%</td>
</tr>
<tr>
<td>CALM</td>
<td>5</td>
<td>5.9%</td>
</tr>
<tr>
<td>tourist publication</td>
<td>3</td>
<td>3.5%</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
The Dryandra Village appears to be a significant part of the Barna Mia experience owing to the number of survey respondents indicating use of the facility for overnight accommodation. The most frequent visitor group defined by place of residence, Perth Metropolitan residents, tended to stay at the village more than anywhere else. Of those respondents who indicated that they usually lived in the Perth metropolitan area, 67% indicated that they were staying overnight at the Dryandra Woodland village with the remainder either staying in the Town of Narrogin, camping or staying in a nearby town. Approximately half of the second most frequent group by place of residence, interstate visitors, were staying at the village while the rest stayed overnight in the Town of Narrogin. The importance of the Dryandra Village as a base from which to experience Barna Mia is most certainly a product of its proximity to the facility and its location within a natural area known for its unique flora and fauna and family friendly environment. Unfortunately, the village is presently under serviced and poorly integrated with the operation of Barna Mia as discussed in Chapter 8. This is a major concern given the status of Dryandra Village as a major base for Barna Mia visitors.

The dominance of the 'word of mouth' method of finding out about Barna Mia is probably a product of the lack of promotion and marketing. This is reflected in the low percentage of respondents who indicated that they found out about Barna Mia through publications containing tourism related information. The low status of published material as a means of discovering Barna Mia appears to be a function of both the lack of time the relevant CALM staff have for organising such material and the diversity of tourism publications produced locally and state-wide by various organisations. Discussion with Narrogin CALM representatives and assessment of Barna Mia as a tourism operation highlighted that CALM functions as a conservation and education agency first and foremost with tourism promotion related activities a secondary priority. A combination of a lack of CALM staff time and skills, a limited tourism promotion budget and the number of possible publications in which Barna Mia could be advertised has resulted in poor promotion. Poor promotion may also contribute significantly to the loss making performance of the facility during its first year of operation. This is discussed further in Chapter 8.

Mean Satisfaction Rankings

Table 6 details the mean satisfaction rankings and associated data from the Barna Mia Survey. Overall satisfaction refers to the first question in the survey requesting a satisfaction rank for the experience as a whole. The stages that make up the total experience were then individually ranked. N is the number of respondents assigning a rank to the stage out of the 85 in total who completed the survey. The Min and Max columns indicate the lowest and highest ranking given to the stage. The mode represents the most frequent rank.

<table>
<thead>
<tr>
<th>STAGE OF EXPERIENCE</th>
<th>N</th>
<th>SATISFACTION RANK (1 = VERY LOW, 5 = VERY HIGH)</th>
<th>MIN</th>
<th>MAX</th>
<th>MEAN</th>
<th>STD. DEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Satisfaction</td>
<td>85</td>
<td></td>
<td>3</td>
<td>4</td>
<td>3.75</td>
<td>0.47</td>
</tr>
<tr>
<td>Meeting the guide at Old Mill Dam</td>
<td>82</td>
<td></td>
<td>2</td>
<td>4</td>
<td>3.54</td>
<td>0.76</td>
</tr>
<tr>
<td>Driving to Barna Mia</td>
<td>81</td>
<td></td>
<td>2</td>
<td>4</td>
<td>3.44</td>
<td>0.72</td>
</tr>
<tr>
<td>Arrival at Barna Mia car park</td>
<td>82</td>
<td></td>
<td>1</td>
<td>4</td>
<td>3.57</td>
<td>0.73</td>
</tr>
<tr>
<td>Pre-walk presentation</td>
<td>83</td>
<td></td>
<td>2</td>
<td>4</td>
<td>3.70</td>
<td>0.58</td>
</tr>
</tbody>
</table>
The overall satisfaction of visitors was very high with no ranks below 3 on the four point scale. The overall satisfaction ranking was equivalent to the guided walk and feeding station stages of the experience. The lowest ranked stages were the drive to Barna Mia from Old Mill Dam and the post walk refreshments. Statistical analysis using the Friedman test for related samples ($\alpha = 0.05$) indicated there was a significant difference present in the ranking of the stages ($\chi^2 = 39.7$, df = 7, $p = 0.000$). The comments for each stage of the experience detailed in Table 2 to Table 10 provide some explanation for the variation in the ranks given.

**Reasons for Satisfaction Rank**

Respondents were requested to write comments in relation to their satisfaction ranking overall and for each stage of the tour (Table 7 to 15). This provided some insight into the survey participants’ perception of the experience and why they assigned particular ranks without being prompted by multiple choice options. Some respondents provided more than one type of comment such that their response fell into two or more categories. This means that the total number of categorised comments made is greater than the number of surveys collected. It is important to note that respondents may have provided a satisfaction rank but did not write comments for each stage as indicated by the 'Rank but no comment' category. Some respondents did not rank particular aspects of the experience. A footnote beneath each table indicates the number of respondents out of the total of 85 who provided a rank. Thus some caution should be exercised when interpreting these results as they may not be representative of the total visitor population.

<table>
<thead>
<tr>
<th>COMMENT</th>
<th>NO.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enjoyed educational/informative aspect of tour</td>
<td>33</td>
<td>40.2%</td>
</tr>
<tr>
<td>General positive comments about wildlife (fascinating/exciting/wonderful…)</td>
<td>30</td>
<td>36.6%</td>
</tr>
<tr>
<td>Specifically enjoyed seeing rare animals not seen live before</td>
<td>27</td>
<td>32.9%</td>
</tr>
<tr>
<td>Appreciated the friendly guide/ guide fun</td>
<td>23</td>
<td>28.0%</td>
</tr>
<tr>
<td>Enjoyed viewing animals in natural habitat/ displaying natural behaviour</td>
<td>19</td>
<td>23.2%</td>
</tr>
<tr>
<td>Enjoyed being close to animals</td>
<td>14</td>
<td>17.1%</td>
</tr>
<tr>
<td>Appreciated the obvious conservation effort</td>
<td>12</td>
<td>14.6%</td>
</tr>
<tr>
<td>Liked the building structure/facility design</td>
<td>9</td>
<td>11.0%</td>
</tr>
<tr>
<td>Enjoyed experience - unusual/new/different</td>
<td>9</td>
<td>11.0%</td>
</tr>
<tr>
<td>Good because it was not like a zoo/not touristy</td>
<td>4</td>
<td>4.9%</td>
</tr>
<tr>
<td>Good weather/enjoyed seeing night sky</td>
<td>4</td>
<td>4.9%</td>
</tr>
<tr>
<td>Other comments (negative)</td>
<td>4</td>
<td>4.9%</td>
</tr>
<tr>
<td>Liked animals, cute/entertaining</td>
<td>3</td>
<td>3.7%</td>
</tr>
<tr>
<td>Tour too crowded</td>
<td>2</td>
<td>3.7%</td>
</tr>
<tr>
<td>Rank but no comment</td>
<td>3</td>
<td>2.4%</td>
</tr>
</tbody>
</table>

Number of respondents who provided a satisfaction ranking: 85

<table>
<thead>
<tr>
<th>COMMENT</th>
<th>NO.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guide welcoming/friendly</td>
<td>19</td>
<td>46.3%</td>
</tr>
<tr>
<td>Guide punctual</td>
<td>8</td>
<td>19.5%</td>
</tr>
<tr>
<td>Surroundings too dark/ weather cold</td>
<td>4</td>
<td>9.8%</td>
</tr>
<tr>
<td>Enjoyed hearing night sounds</td>
<td>3</td>
<td>7.3%</td>
</tr>
<tr>
<td>Positive anticipation of experience</td>
<td>2</td>
<td>4.9%</td>
</tr>
<tr>
<td>Guide late to meeting point</td>
<td>1</td>
<td>2.4%</td>
</tr>
<tr>
<td>Unsure if in correct location</td>
<td>1</td>
<td>2.4%</td>
</tr>
<tr>
<td>Woodland was peaceful/quiet</td>
<td>1</td>
<td>2.4%</td>
</tr>
<tr>
<td>Rank but no comment</td>
<td>41</td>
<td></td>
</tr>
</tbody>
</table>
Table 9: Categorised comment frequencies for satisfaction with driving from Old Mill Dam to Barna Mia

<table>
<thead>
<tr>
<th>Comment</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy to follow guide</td>
<td>8</td>
<td>24.2%</td>
</tr>
<tr>
<td>Road was dusty, hard to see when driving</td>
<td>6</td>
<td>18.2%</td>
</tr>
<tr>
<td>Enjoyed seeing trees/beautiful woodland at night</td>
<td>5</td>
<td>15.2%</td>
</tr>
<tr>
<td>Feeling nervous/disoriented during drive</td>
<td>4</td>
<td>12.1%</td>
</tr>
<tr>
<td>Pleasantly spooky feeling about woodland at night</td>
<td>3</td>
<td>9.1%</td>
</tr>
<tr>
<td>Drive was cold/dark – negative feeling</td>
<td>2</td>
<td>6.1%</td>
</tr>
<tr>
<td>Enjoyed seeing some wildlife during drive</td>
<td>2</td>
<td>6.1%</td>
</tr>
<tr>
<td>Appreciated patience of other drivers</td>
<td>1</td>
<td>3.0%</td>
</tr>
<tr>
<td>Disappointed because didn't see any animals</td>
<td>1</td>
<td>3.0%</td>
</tr>
<tr>
<td>Didn’t enjoy seeing dead animal on road</td>
<td>1</td>
<td>3.0%</td>
</tr>
<tr>
<td>Rank but no comment</td>
<td>43</td>
<td></td>
</tr>
</tbody>
</table>

Table 10: Categorised comment frequencies for satisfaction with arrival at Barna Mia

<table>
<thead>
<tr>
<th>COMMENT</th>
<th>NO.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interesting building design/presentation</td>
<td>16</td>
<td>43.2%</td>
</tr>
<tr>
<td>Liked access pathway lighting</td>
<td>9</td>
<td>24.3%</td>
</tr>
<tr>
<td>Appreciated natural surroundings</td>
<td>7</td>
<td>18.9%</td>
</tr>
<tr>
<td>It was too dark</td>
<td>6</td>
<td>16.2%</td>
</tr>
<tr>
<td>It was too cold</td>
<td>2</td>
<td>5.4%</td>
</tr>
<tr>
<td>Generator noise was distracting</td>
<td>2</td>
<td>5.4%</td>
</tr>
<tr>
<td>Inadequate parking</td>
<td>1</td>
<td>2.7%</td>
</tr>
<tr>
<td>Rank but no comment</td>
<td>45</td>
<td></td>
</tr>
</tbody>
</table>

Table 11: Categorised comment frequencies for satisfaction with listening to presentation before guided walk

<table>
<thead>
<tr>
<th>COMMENT</th>
<th>NO.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interesting/well presented talk</td>
<td>24</td>
<td>58.5%</td>
</tr>
<tr>
<td>Informative/educational content</td>
<td>15</td>
<td>36.6%</td>
</tr>
<tr>
<td>Liked learning about specific facts and figures</td>
<td>8</td>
<td>19.5%</td>
</tr>
<tr>
<td>Talk was too long</td>
<td>3</td>
<td>7.3%</td>
</tr>
<tr>
<td>Enjoyed interaction with guide</td>
<td>2</td>
<td>4.9%</td>
</tr>
<tr>
<td>Talk was boring</td>
<td>1</td>
<td>2.4%</td>
</tr>
<tr>
<td>Rank but no comment</td>
<td>42</td>
<td></td>
</tr>
</tbody>
</table>

Table 12: Categorised comment frequencies for satisfaction with the interpretation material displayed in building

<table>
<thead>
<tr>
<th>COMMENT</th>
<th>NO.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Didn’t notice/look at it</td>
<td>8</td>
<td>33.3%</td>
</tr>
<tr>
<td>Well presented material</td>
<td>8</td>
<td>33.3%</td>
</tr>
<tr>
<td>More material needed</td>
<td>5</td>
<td>20.8%</td>
</tr>
<tr>
<td>Found content to be sad</td>
<td>1</td>
<td>4.2%</td>
</tr>
<tr>
<td>Liked straw bail display window in wall</td>
<td>1</td>
<td>4.2%</td>
</tr>
<tr>
<td>Rank but no comment</td>
<td>56</td>
<td></td>
</tr>
</tbody>
</table>

Number of respondents who provided a satisfaction ranking: 82

Number of respondents who provided a satisfaction ranking: 81

Number of respondents who provided a satisfaction ranking: 82

Number of respondents who provided a satisfaction ranking: 83

Number of respondents who provided a satisfaction ranking: 83

Number of respondents who provided a satisfaction ranking: 80
### Table 13: Categorised comment frequencies for satisfaction with guided walk through the enclosure

<table>
<thead>
<tr>
<th>COMMENT</th>
<th>NO.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience brilliant/excellent</td>
<td>17</td>
<td>44.7%</td>
</tr>
<tr>
<td>General positive comments about wildlife</td>
<td>13</td>
<td>34.2%</td>
</tr>
<tr>
<td>Enjoyed seeing specific species</td>
<td>5</td>
<td>13.2%</td>
</tr>
<tr>
<td>Enjoyed close proximity of wildlife</td>
<td>4</td>
<td>10.5%</td>
</tr>
<tr>
<td>Liked viewing animals in natural/habitat surroundings</td>
<td>4</td>
<td>10.5%</td>
</tr>
<tr>
<td>Guide was informative/entertaining</td>
<td>4</td>
<td>10.5%</td>
</tr>
<tr>
<td>Enjoyed observing natural behaviour of animals</td>
<td>3</td>
<td>7.9%</td>
</tr>
<tr>
<td>Tour was too crowded</td>
<td>3</td>
<td>7.9%</td>
</tr>
<tr>
<td>Did not see many animals</td>
<td>3</td>
<td>7.9%</td>
</tr>
<tr>
<td>Enjoyed quiet of woodland at night</td>
<td>2</td>
<td>5.3%</td>
</tr>
<tr>
<td>It was too cold</td>
<td>1</td>
<td>2.6%</td>
</tr>
<tr>
<td>Did not enjoy seeing 'performing animals'</td>
<td>1</td>
<td>2.6%</td>
</tr>
<tr>
<td>Rank but no comment</td>
<td>46</td>
<td></td>
</tr>
</tbody>
</table>

Number of respondents who provided a satisfaction ranking: 84

### Table 14: Categorised comment frequencies for satisfaction with stops at feeding stations during walk

<table>
<thead>
<tr>
<th>COMMENT</th>
<th>NO.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exciting/amazing/brilliant experience</td>
<td>10</td>
<td>29.4%</td>
</tr>
<tr>
<td>Enjoyed close proximity of animals</td>
<td>9</td>
<td>26.5%</td>
</tr>
<tr>
<td>Enjoyed viewing natural feeding behaviour</td>
<td>5</td>
<td>14.7%</td>
</tr>
<tr>
<td>Enjoyed seeing a specific species</td>
<td>4</td>
<td>11.8%</td>
</tr>
<tr>
<td>Thought animals were cute.</td>
<td>3</td>
<td>8.8%</td>
</tr>
<tr>
<td>Stops at feeding stations too long</td>
<td>2</td>
<td>5.9%</td>
</tr>
<tr>
<td>Enjoyed seeing rare wildlife</td>
<td>2</td>
<td>5.9%</td>
</tr>
<tr>
<td>Guide was informative/entertaining</td>
<td>2</td>
<td>5.9%</td>
</tr>
<tr>
<td>Tour was too crowded</td>
<td>2</td>
<td>5.9%</td>
</tr>
<tr>
<td>It was too cold</td>
<td>2</td>
<td>5.9%</td>
</tr>
<tr>
<td>Saw same animals repeatedly/ boring</td>
<td>1</td>
<td>2.9%</td>
</tr>
<tr>
<td>Enjoyed natural surroundings</td>
<td>1</td>
<td>2.9%</td>
</tr>
<tr>
<td>Rank but no comment</td>
<td>50</td>
<td></td>
</tr>
</tbody>
</table>

Number of respondents who provided a satisfaction ranking: 84

### Table 15: Categorised comment frequencies for satisfaction with refreshments and browsing after walk

<table>
<thead>
<tr>
<th>COMMENT</th>
<th>NO.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enjoyed hot drink/snack after walk</td>
<td>14</td>
<td>51.9%</td>
</tr>
<tr>
<td>Liked looking at merchandise</td>
<td>6</td>
<td>17.6%</td>
</tr>
<tr>
<td>Enjoyed informal chat with guide</td>
<td>7</td>
<td>20.6%</td>
</tr>
<tr>
<td>Tour ran too late/felt tired</td>
<td>3</td>
<td>8.8%</td>
</tr>
<tr>
<td>Tour too crowded</td>
<td>2</td>
<td>5.9%</td>
</tr>
<tr>
<td>Rank but no comment</td>
<td>51</td>
<td></td>
</tr>
</tbody>
</table>

Number of respondents who provided a satisfaction ranking: 78
REFERENCES

Anon (1999). 'Living in the regions: The views of Western Australians, the Wheatbelt report', Department of Commerce and Trade, February.


Howell, R. (1987). Small town tourism development, Dept. of Parks, Recreation and Tourism Management, College of Forest and Recreation Resources, Clemson University, SC.


AUTHORS

Dr Michael Hughes
Michael Hughes is a Research Fellow in the tourism program at Curtin University, a position funded by the Sustainable Tourism CRC. He has a background in Biological Science and Environmental Science and moved into the area of tourism when following an interest in exploring human-nature interactions. Michael currently pursues a diverse range of sustainable tourism research interests that revolve around the relationship between tourism development, regional communities and natural areas. Email: Michael.Hughes@cbs.curtin.edu.au

Dr Jim Macbeth
Jim Macbeth is the senior lecturer at School of Social Sciences and Humanities, Murdoch University. He began to work in tourism research when one of his first PhD students undertook a study of western travellers in Asia. However, his personal work began with the regional tourism project in Omeo, eastern Victoria that combined his interest in regional revitalisation with tourism. His current research in tourism ranges from the regional focus, including this project, through to theoretical work on social capital, ethics and sustainable tourism. Jim’s current research continues the regional theme through work with backpackers and local government tourism planning and theoretically in aspects of tourism yield and social impacts. Email: J.Macbeth@murdoch.edu.au
CAIRNS
NQ Coordinator
Prof Bruce Prideaux
Tel: +61 7 4042 1039
bruce.prideaux@jcu.edu.au

BRISBANE
Managing Director - STS
Mr Stewart Moore
Tel: +61 7 3321 4726
stewart@crctourism.com.au

GOLD COAST
National Coordinator
Mr Brad Cox
Tel: +61 7 5552 8116
brad@crctourism.com.au

LISMORE
NSW Coordinator
Regional Tourism Research
Dr Jeremy Buultjens
Tel: +61 2 6620 3382
jbuultje@scu.edu.au

SYDNEY
Sustainable Destinations
Mr Ray Spurr
Tel: +61 2 9385 1600
r.spurr@unsw.edu.au

PERSISTENT
CRC for Sustainable Tourism Pty Ltd
[ABN 53 077 407 286]
PMB 50
GOLD COAST MC QLD 9726
AUSTRALIA

Telephone: +61 7 5552 8172
Facsimile: +61 7 5552 8171

Email: info@crctourism.com.au
http://www.crctourism.com.au