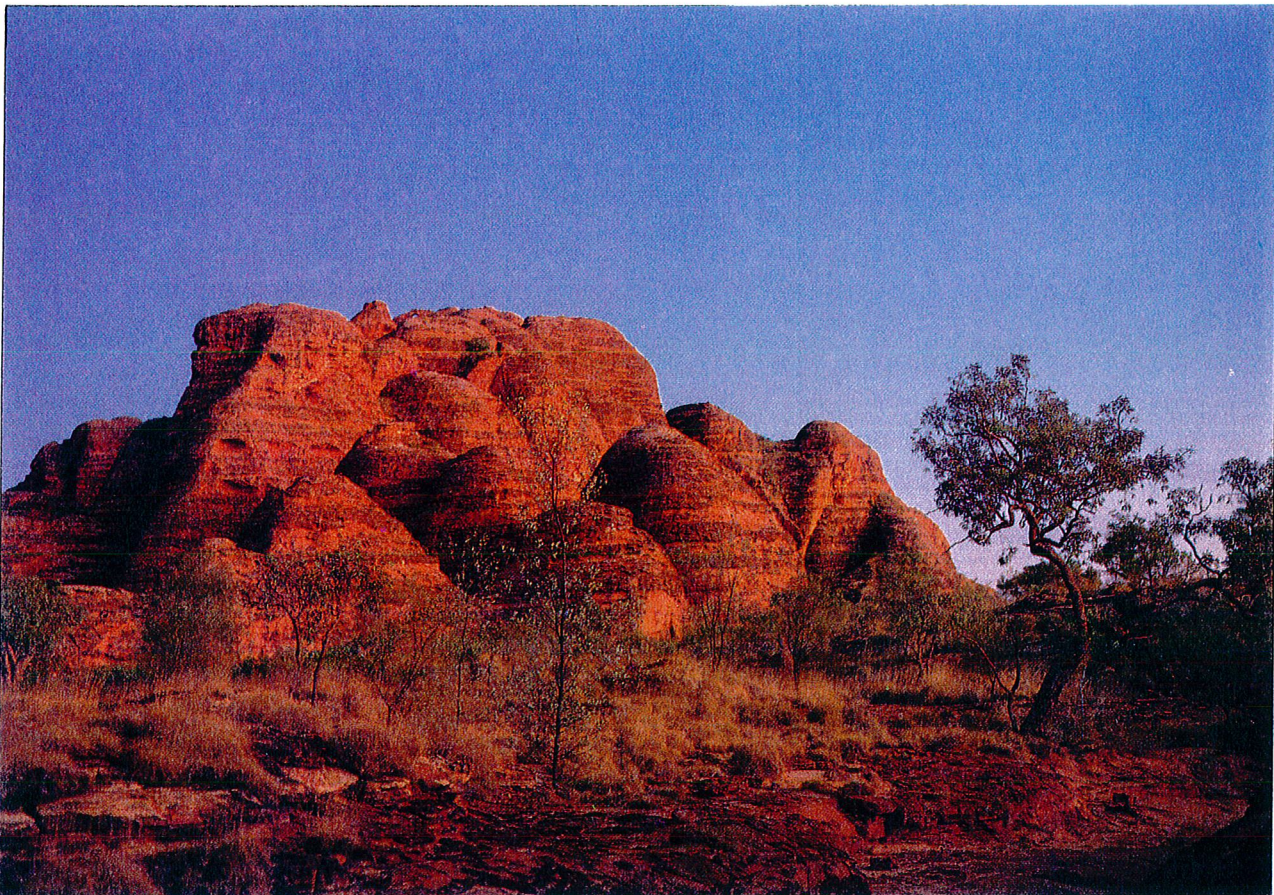

Emerging Tourism Opportunities - Western Australia's "Natural Advantage"

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A Paper to the
Into Asia Conference
Perth Western Australia
November 1992

ABSTRACT

Tourism is the world's fastest growing industry. According to some estimates it is increasing at a rate of 8 per cent per annum. Nature-based tourism is growing at an even faster rate of 25 per cent per annum. Western Australia, a vast state covering one-third of the continent is endowed with great diversity, in plants, animals, landscapes and climate. This diversity combined with the openness, large areas of relatively undeveloped naturalness and the unique Aboriginal culture give Western Australia a distinct advantage as a destination competing for tourists.

CALM manages over 19.8 million hectares of land which contain many of the features attractive to nature-based tourism or ecotourism and is also responsible for the care and management of the State's native plants and animals.

CALM is working in partnership with the private sector and can assist in the development of this exciting sector in the tourism industry. Provided that there are appropriate resources for management, the development of nature-based tourism will not conflict with the primary charter of the Department - the conservation of the unique plants, animals and places of this State. There are already a number of exciting partnerships in operation and the opportunity exists for many more.

Throughout the history of this State we have been bedevilled by our isolation and the harshness of the environment in which we live. It is ironic that it is these very factors which have provided us with the opportunity to capitalise on the high demand for nature-based tourism and use it to create the wealth we need to maintain our living standards and protect what nature has given us.

1. INTRODUCTION

CALM does not have the responsibility for tourist promotion in this State, nor is it in competition with the tourist industry. But it is responsible for management, on behalf of the community, of a vast area of Western Australia, which includes many of the natural attractions which form the basis for the tourism industry.

Western Australia already has a significant tourism industry which is a major contributor to the State's economy. It has excellent infrastructure for the continuing development of tourism, including airports, transport systems, range of accommodation, as well as skilled, friendly people to service the needs of visitors.

But there are many tourist destinations throughout the world which provide this. What differentiates Western Australia as a destination is the uniqueness of its natural attractions, its unusual plants and animals, its culture and its vastness. There are great opportunities to capitalise on this uniqueness.

Much of Western Australia's unique areas are reserved in protected reserves managed by the Department. CALM also has the responsibility for caring for Western Australia's native plant and animals. By providing access and adding the opportunity to learn about and understand this uniqueness to the thrill of observing it, CALM can assist in the development of a tourism product second to none in the world.

More importantly, the Department can ensure that not only will tourism not threaten our environment, but that the industry can contribute to protecting these special areas and conserving our unique plants and animals.

2. THE SIGNIFICANCE OF TOURISM

Australia has seen dramatic growth in tourism in the last decade. The number of overseas visitors grew from 904,600 in 1980 to 2,370,000 in 1991; an increase of 160 per cent. The Bureau of Tourism Research (1992) projects that overseas arrivals will increase to 4,800,000 by the year 2000.

Tourism is Australia's largest single export earner (Fig 1).

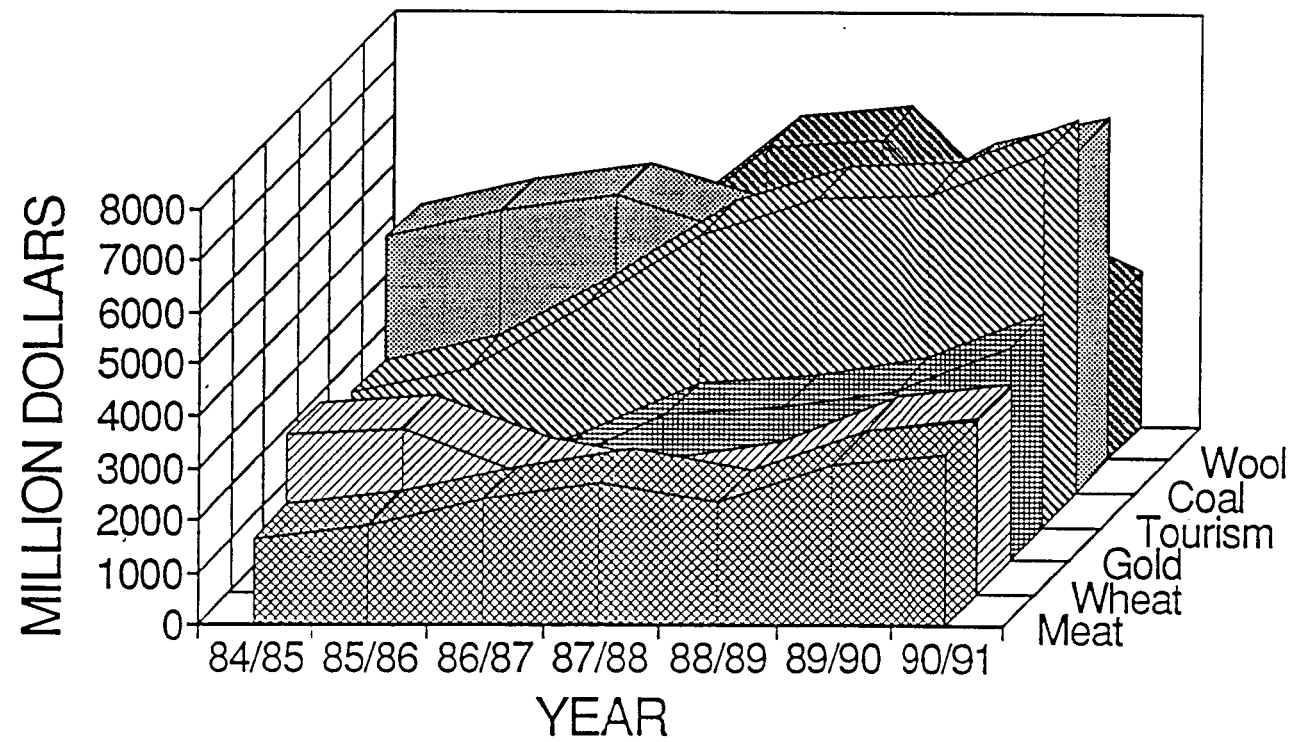
Australians themselves are travelling more within the country. The total trips within Australia rose from 45,000,000 in 1984/85 to nearly 50,000,000 in 1990/91.

In Western Australia, there has also been growth in tourism. The growth rates indicate that between 1985/86 and 1989/90 intrastate travel in WA grew by 5 per cent, interstate 2 per cent and overseas by 18 per cent (WATC 1991).

The majority of visits within Western Australia are intrastate travel accounting for 87 per cent of all trips. Interstate and overseas travel accounted for 7 per cent and 6 per cent respectively of total visits in 1990/91. (Fig 2). This means that there is a level of local

FIGURE 1

COMPARATIVE EXPORT EARNINGS AUSTRALIA

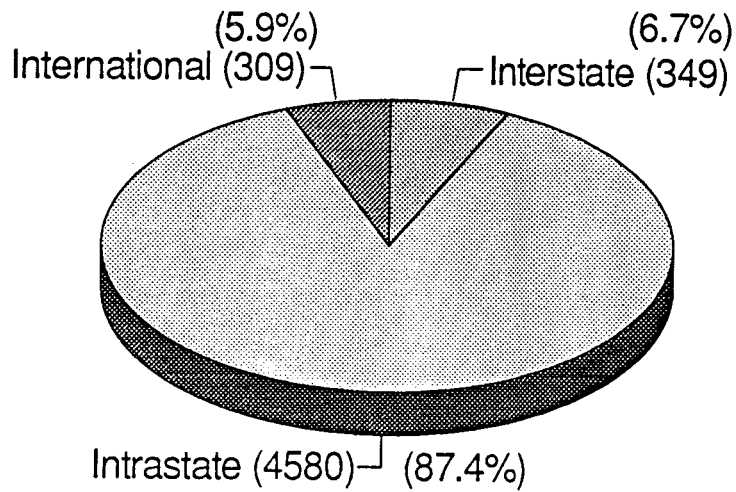


Source: ABS and BTR

FIGURE 2

VISITOR TRIPS TO W.A.

Visitors by Origin (thousands) - 1990/91



Total visitor trips - 5,238,000

tourism sufficient to service the existing infrastructure investments. However, an analysis of visitor spending patterns indicates that the overseas and interstate markets are more significant than visitor numbers indicate when it comes to economic impact. (Fig 3). There is clearly the potential to significantly increase "outside" (including interstate) visits to Western Australia and disproportionately increase the economic contribution per visit by capitalising on what is unique for the visitor to Western Australia.

3. THE CHARACTERISTICS AND POTENTIAL FOR NATURE-BASED TOURISM

There has been much discussion about ecotourism or nature-based tourism in recent times. It is a worldwide phenomenon which is being capitalised on by many countries. Valentine (1991) suggests that "ecotourism" can be defined as that kind of tourism which is based on undisturbed natural areas, is non-damaging or degrading, contributes to protecting and managing areas used and is subject to an adequate and appropriate management regime.

In this paper, we have called the type of tourism that features nature, nature-based tourism, and refer to it as such throughout the paper. Ecotourism is part of nature-based tourism, and in our view is just one of the colours in the nature-based tourism rainbow.

Whatever term is used, it is clear that the number of people wanting to experience and understand natural areas is rapidly increasing. The natural phenomena may be essential to the tourists' experience or may be what enhances their experience. In some instances natural features may be incidental to the visitors' experience but critical to the decision to visit.

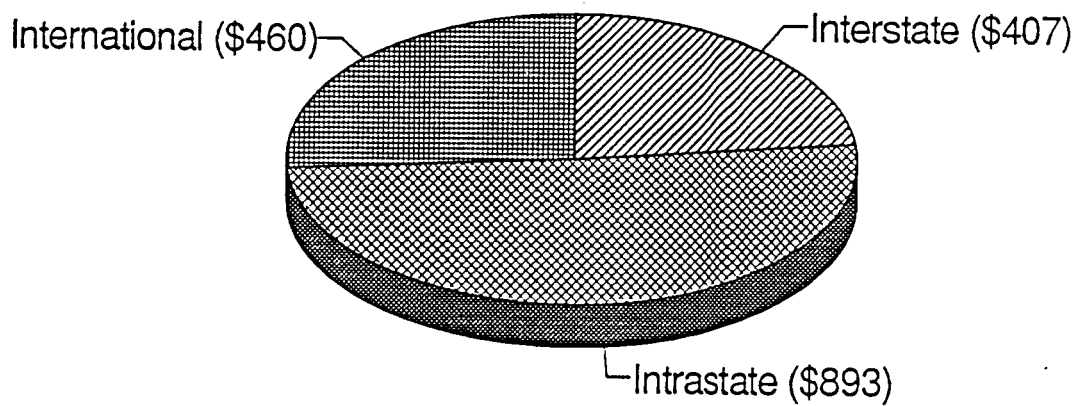
Nature-based tourism can be as inexpensive as the cost of a "billy" of tea and the petrol for a half day trip to the forest. But nature-based tourism also lends itself to high value low volume tourism. There are examples worldwide where nature-based tourism commands premium prices from participants. Much of this willingness of tourists to pay is based on the "exclusive" nature of the activity involved. There are specific segments of the natural tourism product which can be designed for relatively small numbers of people having a high quality experience.

The quality of the experience is, to a large degree, dependent upon the information and understanding given to the tourist. Interpretation of the natural phenomena adds great value to the experience. Significant numbers of tourists are very willing to pay for such value adding, particularly if they have made large expenditures to reach their destination. The provision of information about the science of what a tourist is seeing can increase the value of the product by ten-fold without any additional cost to the environment.

FIGURE 3

VISITOR TRIPS TO W.A.

Visitor Spending (\$ millions) - 1990/91



Total expenditure - \$1,760million

Source: WA Tourism Commission

Nature-based tourism often has an inbuilt repeat visit button because it involves an activity as part of the product. There are undoubtedly many tourists who will repeatedly revisit a famous monument. But there are a significant number of tourists who want each of their dollars to create a new experience the next time they are on holidays. A nature-based tourist experience, whether it includes watching dolphins visit the shore at Monkey Mia, or participating in a night-time possum spotting exercise, is an experience which will also be "new" no matter how many times it is repeated.

The World Tourism Organisation has predicted that the 1991's 450 million tourists will have increased by 50 per cent by the end of the decade and double by 2010. This represents an average of 3.7 per cent annual growth in tourism in the 1990s. (The West Australian 1992).

But even more significant for Western Australia is the prediction by a Stanford Research Institute study which indicates far greater increases in nature-based tourism. It predicts a 10 to 15 per cent increase per annum in adventure or cultural tourism or twice the estimated 8 per cent that this study predicts for general tourism worldwide. The study makes the dramatic prediction of a growth rate of 25 to 30 per cent per annum for nature tourism (A Sense of Place 1992).

The significance of the natural environment to the existing tourist industry in Australia should not be underestimated. The Australian Tourism Commission found that 71 per cent of all American visitors put as their number one first choice for visiting Australia as "unusual birds, animals and flora". Similarly 71 per cent of UK visitors and 77 per cent of European visitors stated the same reason.

The second choice by 63 per cent of European visitors was that they were seeking some form of "unique style holiday", 63 per cent of American visitors and 54 per cent of UK visitors were seeking the same type of holiday.

The third choice of "interesting landscapes" was made by 75 per cent of American visitors, 63 per cent of UK visitors and 81 per cent of European visitors.

The fourth choice by 73 per cent of UK visitors, 69 per cent of European visitors and 62 per cent of American visitors was that Australia was "not overcrowded, fairly unknown and not overdeveloped" (ATC 1984).

The Industrial Assistance Commission in its draft report on travel and tourism (IAC 1989) quotes the Australian Tourism Industry Association (ATIA) and the Australian Tourism Commission (ATC), who along with Qantas argue that "*an attractive combination of unique natural phenomena is the core of Australia's tourism product.*" They went on to argue that,

given the distance from world markets the tourism industry should be built around attractions which can not be duplicated in destinations which are more accessible.

A recent study of Japanese tourism focusing on the role of the natural environment in Japanese holiday experiences in Australia (Bureau of Tourism Research 1992) indicated that Japanese visitors are attracted by the opportunity to experience what they see as a natural and unexploited environment particularly open space and marine areas. The same study concluded, however, that while the natural environment dominates the Japanese perception of Australia, often this is not the experience of the visitor because tours concentrate on urban areas.

4. WESTERN AUSTRALIA'S COMPARATIVE NATURAL ADVANTAGE

The Centre for International Economics in its report on the Economic Effects of International Tourism (CIE 1988) stated - "We see Australia as a niche market, offering a particular and 'special' product. While the reasons for a foreign tourist visiting Australia may be many and varied, the principal ones appear to be:

- unique landscapes and wildlife (there is only one Great Barrier Reef, one country with kangaroos);
- safe, secure places (in particular, compared with other destinations where terrorism and tensions exist);
- sunny, favourable climate (with seasons opposite to the Northern Hemisphere);
- open spaces and beaches (in particular, compared with other destinations which are becoming overcrowded); and
- relatively unspoilt and 'new' destination."

The mixture of attractions which, include the natural features of climate, scenery, openness and unspoilt landscapes are found in a higher degree in Western Australia than elsewhere in Australia and we would argue most other places in the world.

Western Australia covers more than 2.5 million square kilometres, a third of the continent's land area and coastline, an area characterised by great diversity in landform, climate and biota.

Of the 25,000 species of vascular plants found in Australia, 12,000 are found in Western Australia with over two-thirds being endemic to the State, including 70 per cent of the floral species found in the South West. (In the United Kingdom there are 1400 plant species, about the same number that occurs in one of the State's national parks). This is one of the places on earth (like tropical rainforests) which exhibits mega diversity.

The State has 179 species of indigenous mammals (including 37 marine), 480 species of birds, 387 species of reptiles, 68 species of amphibians and 1,600 species of fish (CALM 1992).

Many of these plants and animals are also rare. The biodiversity, high degree of endemism and unusual landscapes create a comparative advantage for Western Australia in nature-based tourism. It has a range of habitats, remnant rainforests, karri and jarrah forests, mangroves, heathlands, coral reefs and deserts. These are combined with bizarre landscapes, beaches and gorges, masses of wildflowers and features such as, the Pinnacles, striped beehive domes of the Bungle Bungle massif and meteor crater at Wolf Creek. In addition, there is relatively easy access to rare wild animals.

The maintenance of naturalness is a major responsibility of CALM, but this does not mean that areas that have been used or disturbed can't be an attraction to nature seeking tourists. The forest at Boranup is an example of this. This karri regrowth forest site attracts at least 30,000 visits per year or 4 per cent of the total visits to the Leeuwin-Naturaliste National Park. A visitor survey (de Braganca, 1987) indicated that 99 per cent of visitors appreciated the scenery, peace and quietness, the naturalness of the area. Interestingly, 74 per cent of visitors had no knowledge of the area having ever been cut.

Western Australia also has the space to create the atmosphere which many tourists, who want to experience nature, seek.

5. PROTECTING OUR HERITAGE

The opportunities to capitalise on our natural advantage would disappear if the natural assets we have were lost. CALM is responsible for protecting wildlife throughout the State as well as managing 195,800 square kilometres of State lands and waters. The managed land area represents 7.4 per cent of the State (equivalent to 70 per cent of the land area of New Zealand - Fig 4 - 51 per cent of the land area of Japan or 2.7 times the area of Tasmania - Fig 5). The main categories of reserve are national park (about 48,900 sq km), nature reserve (about 107,500 sq km) marine parks (about 11,300 sq km) and State forest (about 17,500 sq km). (Fig 6).

FIGURE 4

CALM manages a land area 70% the size of New Zealand

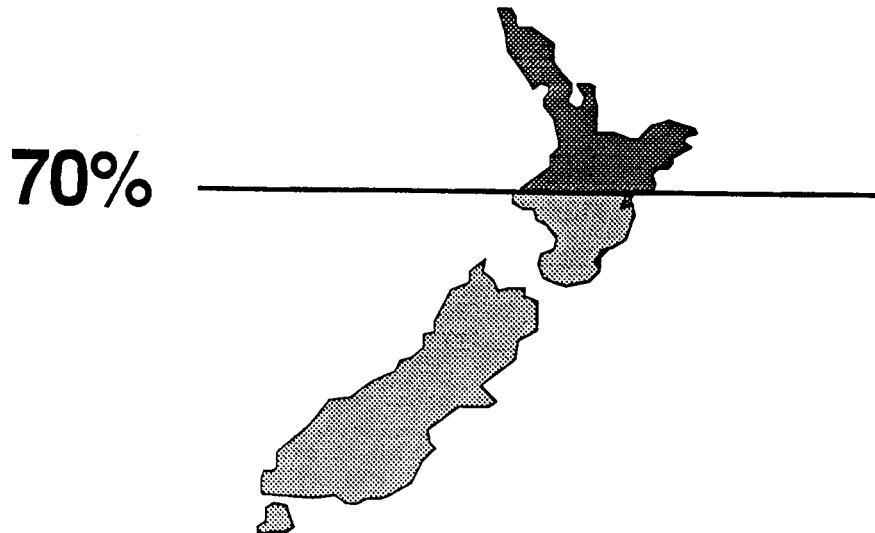


FIGURE 5

**CALM manages a land area
51% the size of Japan**

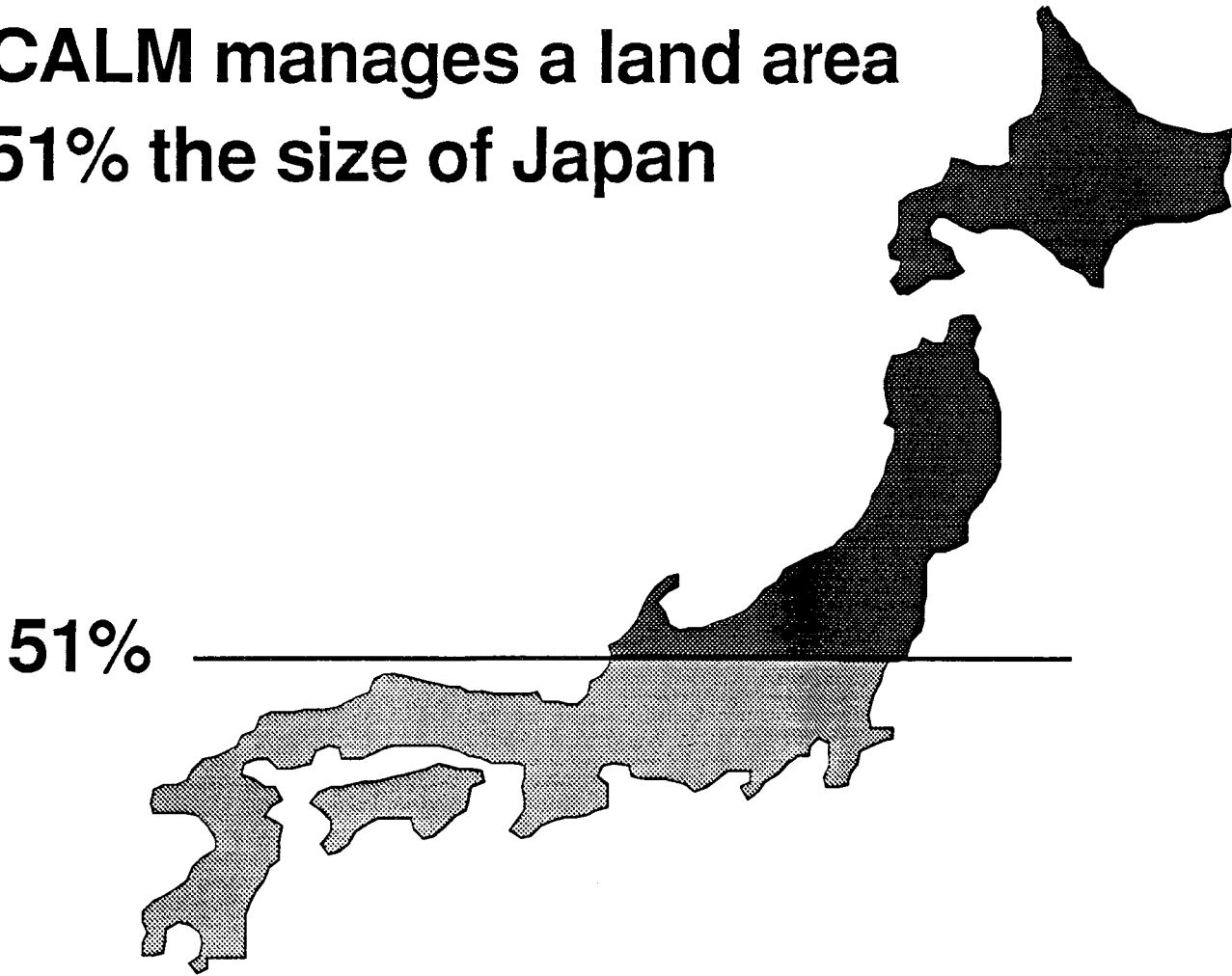








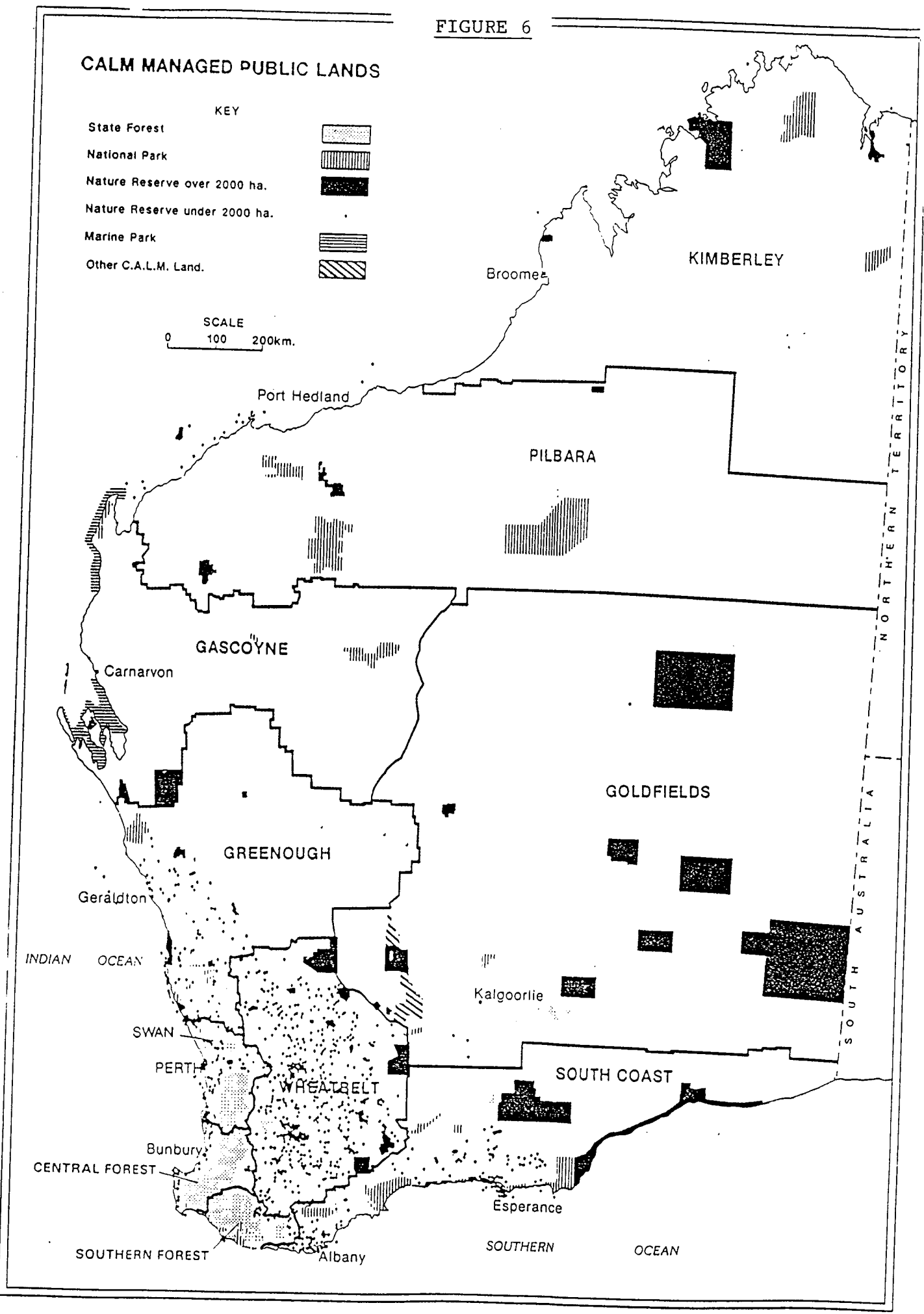
FIGURE 6

CALM MANAGED PUBLIC LANDS

KEY

- State Forest 
- National Park 
- Nature Reserve over 2000 ha. 
- Nature Reserve under 2000 ha. 
- Marine Park 
- Other C.A.L.M. Land. 

SCALE
0 100 200km.



The conservation estate is rapidly expanding. In the last six years the area of terrestrial conservation reserve managed by CALM has increased from 164,240 sq km to 187,570 sq kms, an increase of 23,150 sq kms. An average of 3,850 sq km each year.

Rather than seeing nature-based tourism as a threat to its mission, which is *"to conserve Western Australia's wildlife and manage lands and waters entrusted to the Department for the benefit of present and future generations"*, it sees it as an essential partner in achieving that end.

Western Australia does have significant environmental problems and there is no question that the arrival of European man resulted in a massive disruption to many of the State's ecosystems and wildlife. But the problems that we confront, although serious and are compounded by the bizarre nature of our ecosystems, are not unmanageable and are not necessarily a function of the numbers of people who live in or visit this State.

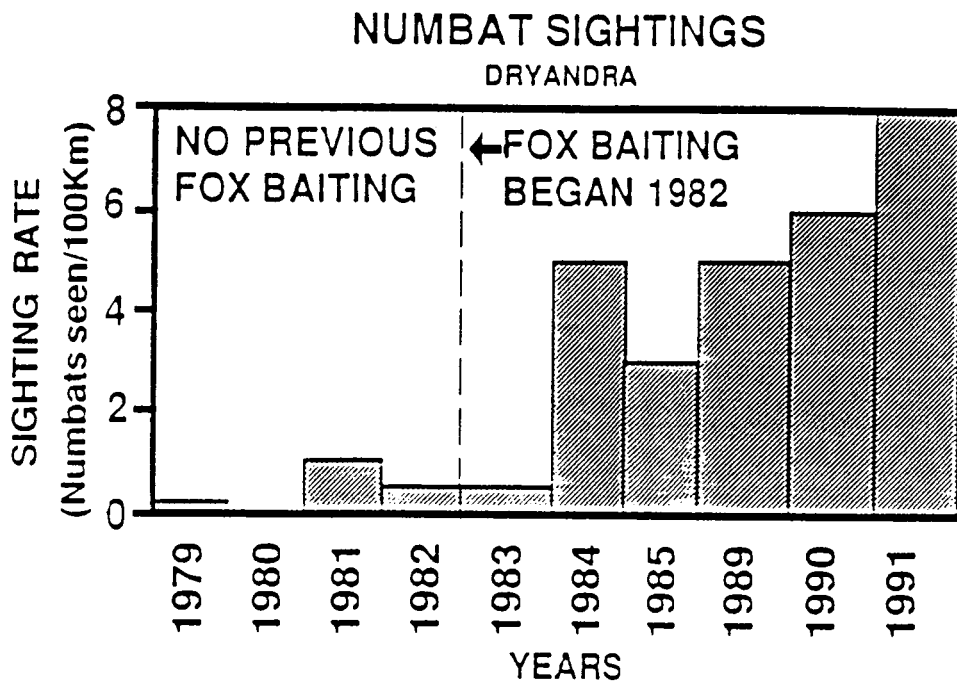
If a neutron bomb was set off in Western Australia tomorrow and resulted in the selective instant extinction of every human in the State, most, if not all, of our significant environmental problems would remain and some would be magnified.

For example, probably the most significant threat to our native fauna is not bulldozers, chainsaws or tourists in Western Australia - it is the European fox. CALM research has shown that when this introduced predator is controlled, native animals return in abundance to areas where they previously were extinct (Fig 7). What is required to ensure this major conservation initiative is sustained is more human intervention in the form of finance.

There is no doubt, evidenced by what has happened in many unique areas throughout the world, that if people pressure because it has not been managed will cause severe environmental degradation. It is also obvious that too many people, too often in the one place, can destroy the very essence of the nature-based experience. But Western Australia is a vast land and it would be possible, with appropriate management, to quadruple current visitor levels without causing damage to the environment or lessening the nature-based tourist experiences.

In addition to the specific measures that are needed to protect the nature-based tourism experience, CALM has a number of management procedures in operation which are there to fulfil the Department's principal obligation - the maintenance of the natural environment for the use of future generations.

FIGURE 7



Statutory controls on CALM managed lands

CALM operates under two primary Acts, the Wildlife Conservation Act 1950 and the Conservation and Land Management Act 1984. The Wildlife Conservation Act protects all wildlife regardless of land tenure. Its regulations provide powers to conserve and protect flora and fauna.

The CALM Act directs management activities to given tenures and purpose of reservation. Most protected areas are vested in the National Parks and Nature Conservation Authority (NPNCA), which prepares management plans and policies applying to protected areas. The NPNCA represents the wider community interest, including the voluntary conservation movement, academic institutions, local government, Aboriginal interests and recreational groups. Management plans are the mechanisms by which protected areas are managed and tourism development and activity is controlled.

Management Plans

Before any tourist development can take place, the CALM Act requires that a management plan for the national park or protected area must be in place and that the activity is approved. The only alternative is if the activity is deemed to be a "compatible operation". Such a determination can only be made by the Minister for the Environment after seeking public comment and allowing a two-month period for public submission.

Management plans are produced at several levels. Regional plans cover CALM's nine management regions throughout the State. These plans examine broadscale planning of reserves in all categories and recommend additions to the conservation estate. Such broadscale planning helps address the common criticism that tourism planning is on a project basis rather than looking at the accrued impacts of several projects or activities over a wider area. This allows parks and reserves with varying opportunities and settings to be developed and managed for visitors in such a way as to complement each other.

Management plans are also prepared at area specific levels for one or several national parks, nature reserves or marine parks in close proximity. These plans prescribe management actions for up to 10 years. They also indicate the level and type of tourist activity that is appropriate to maintain conservation values. The CALM Act states that as far as national parks and conservation parks are concerned management plans should be designed "to fulfil so much of the demand for recreation by members of the public as is consistent with the proper maintenance and restoration of the natural environment, the protection of indigenous flora and fauna and the preservation of any feature of archaeological, historic or scientific interest."

Management plans are required by Statute to be made available as a draft for public comment for at least two months. In fact, much wider public involvement occurs than is required under Statute and this ensures that all aspects of community interest and concern are expressed before the NPNCA forwards the final plan to the Minister for the Environment for approval.

Site Development Plans

Where tourism and recreation facilities are permitted by way of management plans, specific site plans are developed. These plans ensure that visitor facilities and services are located in zones where the impact on the environment is minimised and the benefit for the visitor maximised.

These site plans are developed where degradation occurs or the potential for degradation exists or it is perceived that management intervention is necessary to prevent environmental impact from increased numbers of visitors.

These plans take into account visitor needs, scenic values, management capability as well as environmental concerns using concepts such as the "recreation opportunity spectrum" and the "limits of acceptable change". Important components in these site plans are signs, as well as interpretation and education plans and programs. Site plans are developed in close association with local communities and interest groups and are of particular interest to tour operators.

Over 300 CALM field staff have had intensive training in recreation site planning by specialist landscape and community education and interpretation officers.

Policies

CALM has published policies endorsed by the NPNCA and the Minister for the Environment for recreation, tourism and visitor services. These comprehensive policies are predicated on four major principles:

- the need to preserve values of land and water;
 - consistency of any activity with the purpose for which that land or water is vested, that is nature reserve, national park, marine park or conservation park etc;
 - equity of use; and
 - CALM's ability to manage the impacts of any proposed activity or development.
- Flowing from these principles are numerous statements that deal with issues such as

public safety, fees, leases and concessions, as well as those that deal with specific activities such as four wheel driving, horse riding or shell collecting. These policies, combined with intensive training have enabled a culture in management which understands the balance between use and appreciation and protection.

Tour Operators' Permit System

Tour operators require approval to operate on CALM managed land and are required to apply for a permit to operate. Approval is given subject to conditions designed to protect conservation values. It allows managers to be aware of the numbers and types of tour operations taking place. A database has been developed that provides a means of keeping tour operators informed of current conditions and relevant information about tenures. Licences and leases are issued where exclusive use or limited access is given to lands and waters.

It has become clear to CALM and the wider community that natural areas can be managed to provide for nature-based tourism and recreation without compromising conservation values. This does require effective planning and management intervention. It has become equally apparent that tourism has the potential to provide resources to sustain management.

Given the vast and growing conservation estate, the limited financial resources, and the prospect of declining funding in real terms, CALM has vigorously sought external sources of support, including sponsorship, philanthropy and off-set funding from the corporate community. It has also sought donations and bequests, support from trusts and foundations, and to develop partnerships and cost sharing schemes to improve its level of resourcing. An active volunteer scheme has resulted in over 1000 enthusiastic and motivated people delivering a wide range of services that meet both personal goals and CALM's objectives.

However, the potential revenue from nature-based tourism, through fees and charges, has an immense role to play in future resourcing as well as a means of controlling the level of activity. (Fig 8).

Probably more important is the community support and understanding of the need to protect the environment that results from an involved and understanding visiting public who have had meaningful nature-based experiences.

6. CALM'S NATURE TOURISM INITIATIVES

In 1991/92, over 4.3 million visits were made to CALM-managed areas (Fig 9) While most of the visits were to sites near major urban areas there has been rapid growth in visitation to

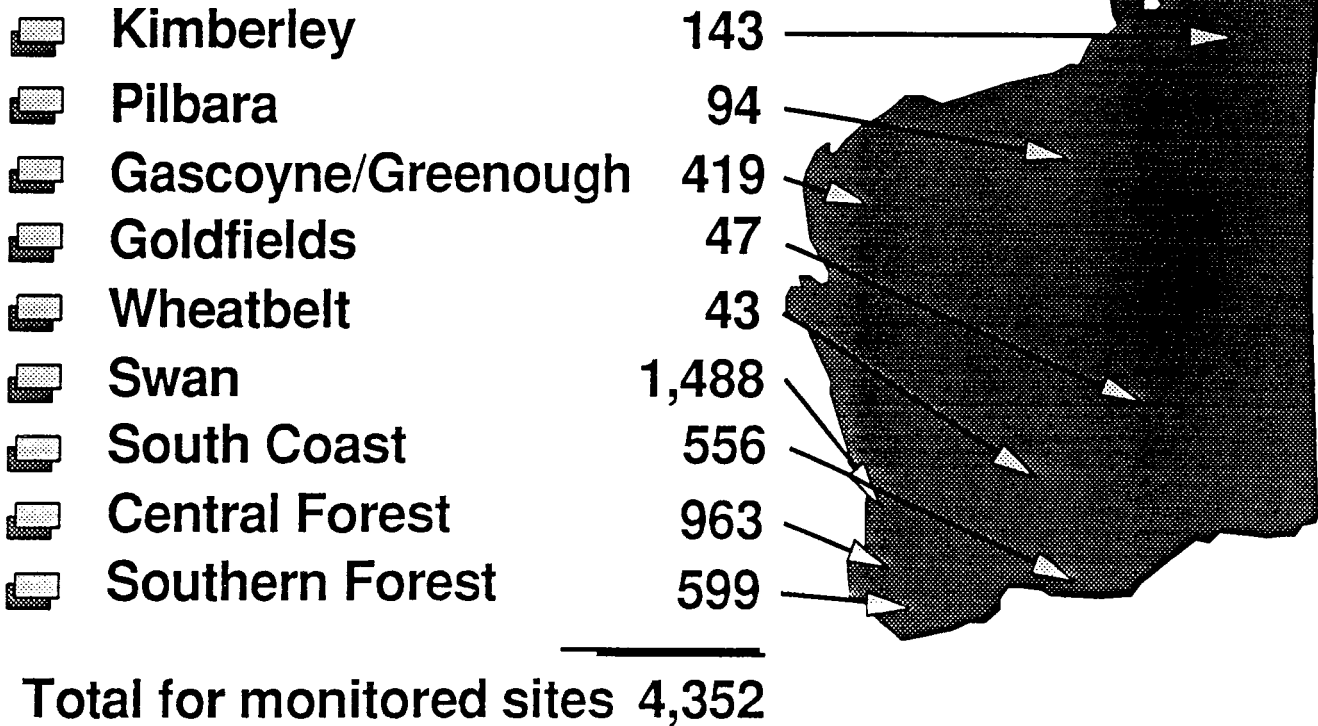
FIGURE 8



FIGURE 9

VISITATION TO CALM ESTATE

Monitored Sites ('000's of visits - 1991/92)



areas such as the Pinnacles in Nambung National Park (Fig 10) which has increased by 43 per cent between 1988 and 1992 and the more remote Purnululu National Park (Fig 11) which has experienced a 100 per cent increase in visitation between 1988 and 1992. There also has been significant growth in visitation at Geikie Gorge National Park (Fig 12). (See Appendix A).

It is projected that the Department will spend 21.1 million Australian dollars on nature conservation and wildlife management and 17.8 million Australian dollars on tourism and recreation management in the 1992/93 financial year, these amounts are considered minimal when compared with the growth in demand for visitor facilities and services, and the threats to nature conservation values given the vast size, remoteness and ruggedness of the national parks, nature reserves, marine parks and other reserves in the conservation estate. Regardless of the demand the expenditure does recognise the importance of both protecting these areas and ensuring that visitors have the opportunity to observe and appreciate those places.

In addition to the allocation of resources to the management of the State's wildlife and land areas to provide for recreation and tourism, the Department has undertaken a specific initiatives aimed at meeting the demand for and providing the opportunities for nature-based tourism.

Perth Outdoors

Perth Outdoors is a CALM strategy to help the people who live in or visit Perth to enjoy its natural environment, while at the same time ensuring that it is protected. It involves CALM working in partnership with other public authorities and private organisations, in a campaign to upgrade recreation facilities, improve management of natural areas and increase the opportunity for outdoor activities throughout the Perth region.

Part of the strategy is about providing information about the opportunities for nature-based outdoor experiences. Consequently a book has been produced. The book is not just about places to visit and things to do, it also describes what underlies Perth - its soils and geology, how the ecosystems work in the region, why our plants and animals are where they are and how they cope with our environment. The book documents a vast number of permutations of places and outdoor experiences within one hour's drive of Perth. The Perth region, with its unique natural attractions, can be the window through which a visitor can see the natural attractions of the rest of the State.

Interpretation

Much of the value of the nature-based tourism comes from the visitor being provided with the information about the place, the animal or plant. CALM does this by signs, brochures and a large number of quality publications, as well as trails and innovative programs for the public.

FIGURE 10

NAMBUNG NATIONAL PARK

Total Visitor Numbers

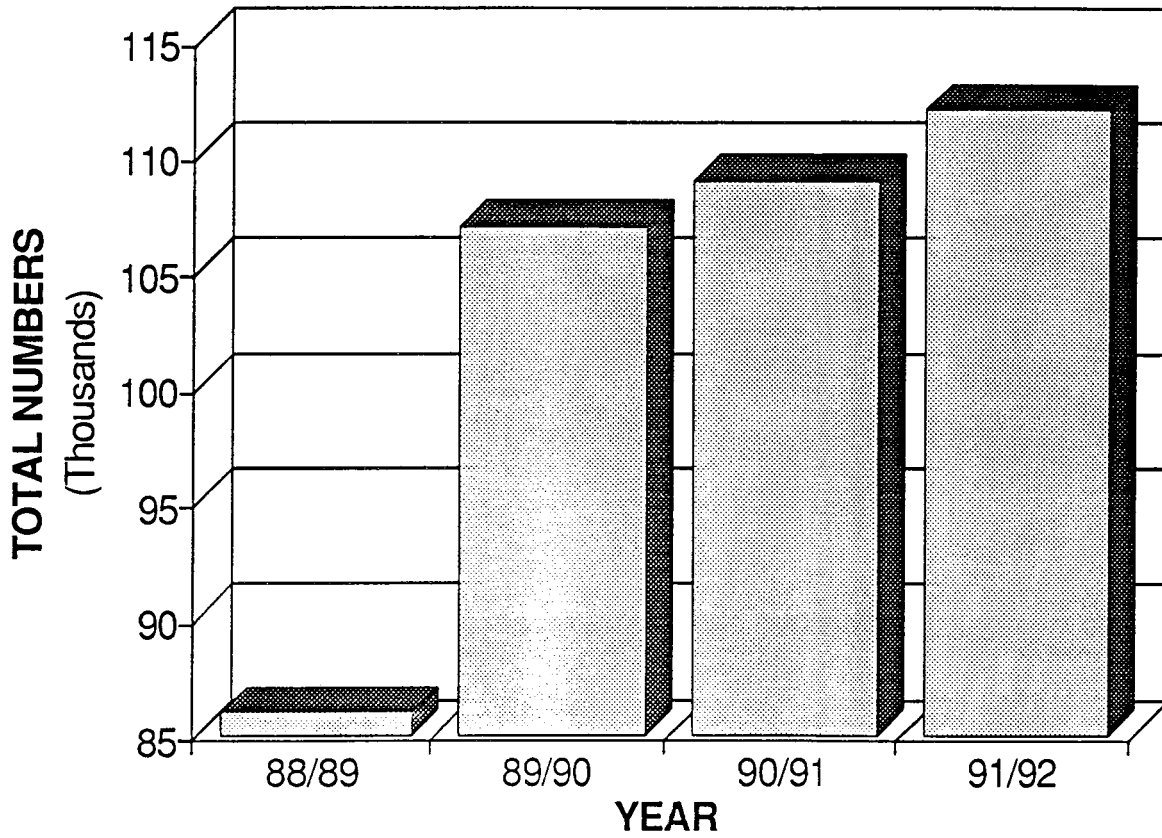


FIGURE 11

PURNULULU NATIONAL PARK

Total Visitor Numbers

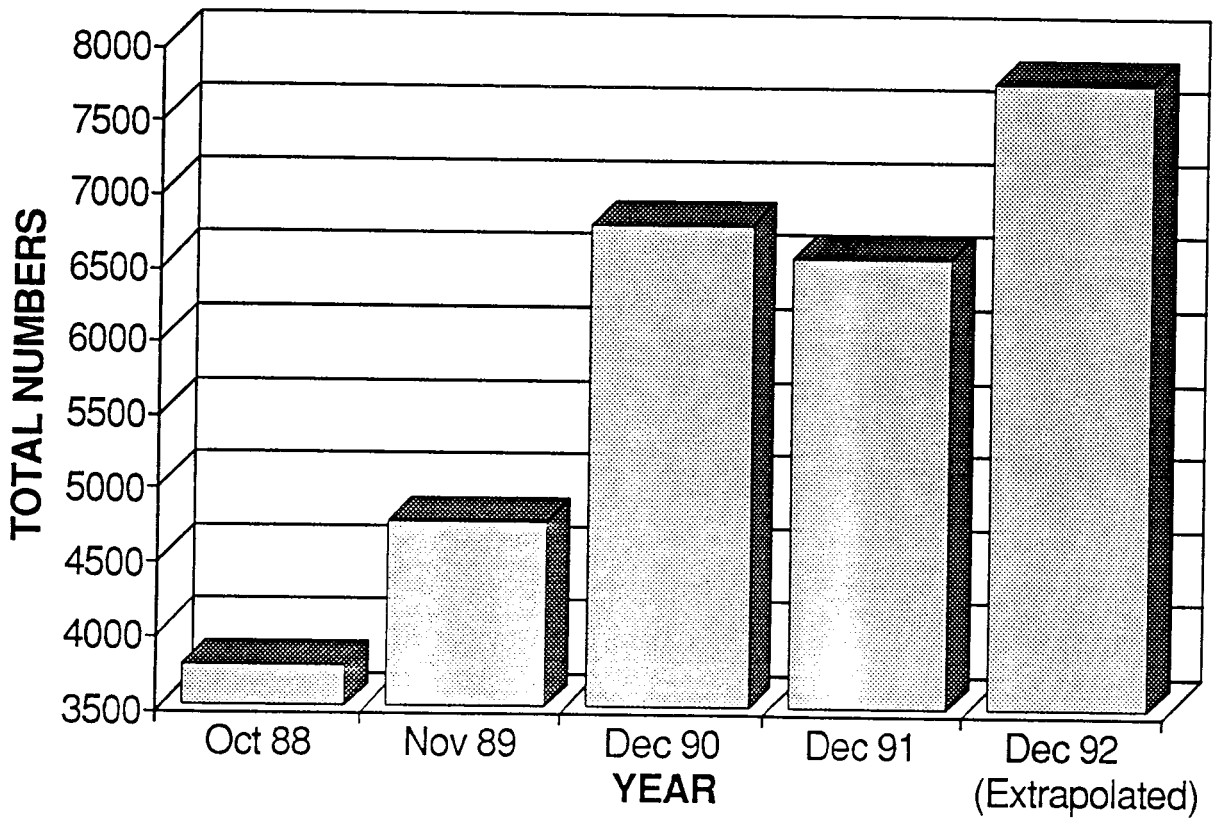
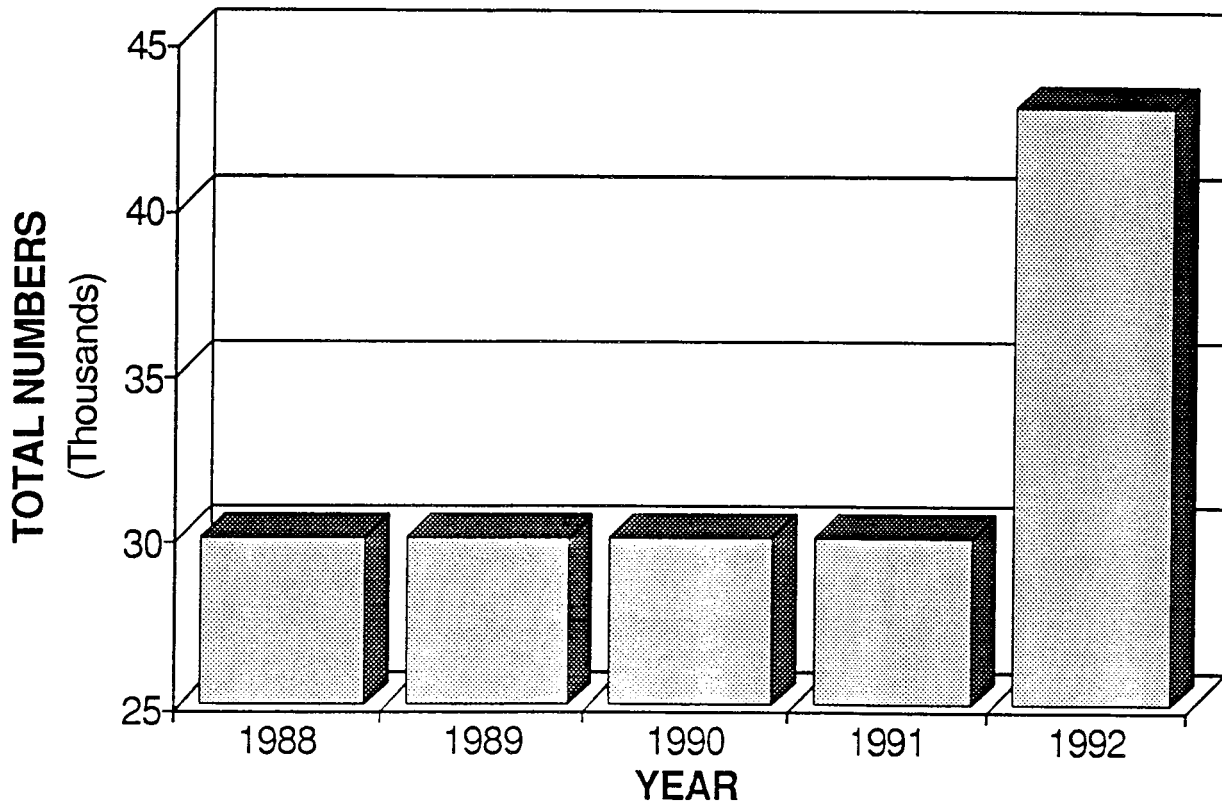


FIGURE 12

GEIKIE GORGE NATIONAL PARK

Total Visitor Numbers



Publications such as Landscape, the Department's quarterly magazine, plays a major role in providing the information required to appreciate and understand Western Australia's unique ecosystems. Its credibility is enhanced by the fact that the majority of the articles are written by the scientists and managers who conduct the research or who are responsible for managing Western Australia's ecosystems.

Training

More recently CALM has involved itself in the training of tour operators so that the quality of the nature-based component of their product can be enhanced. In March 1992 the then Minister for the Environment announced a policy in which CALM staff were to be made available for trials involving interested Aboriginal groups and local naturalists to interact with tour operators to market ecotourism in remote areas. The objective being to overcome the lack of expertise on wildlife and the environment in these areas. The knowledge and experience of staff combined with the opportunity to interact with wildlife is a valuable "product" for tour operators.

For example, Aboriginal Cultural Tours stops in at Yanchep National Park as part of an extensive day trip and clients are given a tour by an Aboriginal Ranger. This trip is conducted within a half hour's drive of Perth.

Specialised Tours

CALM also can contribute by developing and demonstrating the potential for specialised nature-based products. This has been done in many areas, the most notable examples being Landscape Expeditions and the Hills Forest Go-Bush programs. These quality "products" have demonstrated the interest of visitors in unique opportunities to interact with and learn about nature.

Landscape Expeditions recently organised an ecotour through the University of Western Australia's Extension Service. This was developed in conjunction with Landscape, CALM's quarterly science and environment management magazine.

The twenty ecotourists functioned as "paying volunteers" to help trap, identify and monitor animals using radio telemetry. The ecotour took place in the Gibson Desert where two endangered species, the Burrowing Bettong and Golden Bandicoot were reintroduced from Barrow Island.

Dorre Island is about 60 kilometres off the coast in Shark Bay and is the habitat of four rare mammals extinct on the mainland. Protected from introduced predators, these animals -

Rufous Hare-wallaby, Banded Hare-wallaby, Boodie and Western Barred Bandicoot - are the last remnants of what were once thriving mainland populations. CALM scientists have been studying the animals for some years and are poised to reintroduce them to mainland areas from which exotic predators, including foxes and cats, have been removed. Desert Discovery, an ecotour company which had previously undertaken tours with CALM scientists undertook a tour to Dorre Island in August 1992. The funds from Desert Discovery have underwritten the cost of the scientific expedition and have made the project possible.

There are many other examples and opportunities for partnerships between CALM and private sector tourist operators to develop nature-based tourism opportunities. CALM sees that it has a complementary role, in managing and presenting natural assets, providing access, information and interpretation, to private enterprise which has the role of marketing opportunities and catering for the transportation, accommodation and comfort needs of visitors.

Partnerships with Aboriginal Communities

Ecotourism is generally linked with cultural tourism. This is pertinent to Western Australia in that Aboriginal people are returning to and protecting their traditional lands. At the same time they are seeking to develop an economic base to sustain communities. Conservation management is providing some opportunity for this. Nature-based tourism also presents an opportunity to generate income and provide employment. Synergy exists between these aspirations and the desire of visitors to understand Aboriginal culture and its relationship to the natural environment. There are several examples in Western Australia of Aboriginal people meeting the needs of nature tourists who are seeking cultural as well as ecological information and experiences.

Access into the Purnululu National Park is restricted to four-wheel drive vehicles to protect the wilderness experience. Recently operators were given approval to land a limited number of visitors each day. A traditional owner of the Purnululu National Park is one of the three ground tour operators permitted to take fly-in campers. Already the demand for genuine Aboriginal experience is being sought by tourists who wish to understand the natural environment and Aboriginal culture and its relationship to that environment.

CALM is currently working with one of the legends and pioneer of nature-based tourism in the Kimberleys, Mr Sam Lovell, to develop models for nature-based tourism which feature Aboriginal culture.

Leases and Licences

There are several major leases currently being negotiated on CALM lands including a major redevelopment of an inn and motel accommodation at Yanchep National Park and two caravan parks on other national parks. There are leases for three caravan parks being negotiated on State forest. As is the case elsewhere in the world, leases help managers of protected areas to meet the needs and expectations of visitors by enabling the capital and skill of private operators to be used on reserved lands and waters. Leases which are allocated after expressions of interest, must conform to the requirements of management plans developed on scientific basis and after long and intensive involvement of the public.

There are many instances where, for environmental reasons, limits on the number of operators may need to be set which means that approved operators have an "exclusive" product. This exclusiveness is conveyed by way of licence or a lease. The licences or lease obtained by operation of the free market then becomes an asset for the tourist operator, which he can use to justify investment into the tourist product.

CALM has several management plans for reserved areas currently in preparation. These plans include recognition of the importance of the tourism industry and seek to identify opportunities for leases and licences to be allocated.

CALM is examining the airstrips on land that it manages to offer their potential to operators developing packages. Likewise there are many places that can only be accessed by specialised four wheel drive vehicles or by boat that are waiting for packages to be developed.

7. WHAT DO WE NEED TO DO TO CAPITALISE OUR NATURAL ADVANTAGE

With the dramatic growth in interest in ecotourism worldwide, the incredible natural attractions of Western Australia, the commitment of this State to encouraging nature-based tourism combined with Western Australia's position in Australasia, there are immense opportunities to expand the nature-based tourism in this State. We believe that there are some critical areas which need attention.

Resources for Management

Increased use of our natural assets must be accompanied by the provision of matching resources to manage the places, animals, plants and the people.

Developing Infrastructure

There is a need for accommodation and other facilities to service the needs of ecotourists. It is recognised that nature oriented tourists can not be stereotyped into backpackers using low cost accommodation nor should they be viewed only as wanting natural experiences. People visiting other countries invariably want to interact with the culture of cities and obtain an appreciation of history and lifestyles of a cross-section of the host country's people. This means a wide range of accommodation and services are required to meet the needs of tourists. This is particularly true of remote areas but it is also true of regional centres.

If there is anything like the predicted 25 per cent growth in nature-based tourism, there will be many more facilities required adjacent to the reserves containing features which attract people.

Developing and Marketing Tour Programs and Packages

There has already been dramatic growth in the number and variety of nature based tour packages in this State. CALM has 82 registered tour operators on areas it manages. The Western Australian Tourism Commission recently published a guide called *Western Australia Nature Holidays*. It is indicative of the opportunities which have been developed already and the future opportunities which can be developed.

There has been some excellent marketing, but generally, perhaps because of some culture based inhibition, Australians are appalling marketers of the characteristics of our nation which we should be proud about.

Integrated Air Transport System

One of the great attractions of Western Australia is its vastness, sense of naturalness and state of being relatively undeveloped, but one of the consequences of this geographical fact is that the peak attractions are scattered throughout a vast area.

Many tourists who are seeking the nature-based experiences are nonetheless on tight schedules.

Transport by air has the advantage of retaining that part of the experience which comes from Western Australia's size and isolation, while at the same time provides the means for rapid transport. Air transport also has minimal impact on the environment.

There are already a vast number of "airports" throughout the State. Already there are private operators who have invested in the types of planes that can use them. For example, CALM was

surprised at the level of interest by air tour operators when the Purnululu airstrip was opened to operators. Twelve air operators responded with a variety of innovative and exciting tour packages, which involved the use of light aircraft to both give access and the opportunity to observe the uniqueness of the region.

There is a need to integrate this type of transportation with the international airline companies. It is also essential that there is integration and cooperation between the land managers, on-ground tour operators and the companies developing the aerial tourist transport system.

CONCLUSION

Australia is an island and has all the mystique that island nations connote. But Western Australia is an island on an island.

This, together with the fact that we live on the oldest part of earth, is the reason why we have a treasure trove of natural places, plants and animals.

Throughout the history of this State we have been bedevilled by our isolation and the harshness of the environment in which we live. It is ironic that it is these very factors which have provided us with the opportunity to capitalise on the high demand for nature-based tourism and use it to create the wealth we need to maintain our living standards and protect what nature has given us.

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APPENDIX

VISITATION TO CALM-MANAGED

LANDS AND WATERS

- BY REGION

VISITOR LEVELS FOR THE SWAN REGION

(For selected sites only)

NATIONAL PARK/RESERVE	TOTAL VISITS 1991-92 (to the nearest '000)
1. MATILDA BAY	400,000
2. YANCHEP	301,000
3. LANE-POOLE	185,000
4. JOHN FORREST	143,000
5. FRED JACOBY	88,000
6. MARMION	70,000
7. WALYUNGA	69,000
8. SERPENTINE	68,000
9. PENGUIN ISLAND	61,000
10. HERDSMAN LAKE	37,000
11. GOORALONG	27,000
12. AVON VALLEY	13,000
13. GARDEN ISLAND	8,000
14. THOMPSON'S LAKE	6,000
15. LAKE FORRESTDAL	4,000
16. CARNAC ISLAND	4,000
17. SEAL ISLAND	4,000
TOTAL	<u>1,488,000</u>

Based on VISTAT traffic counter records, surveys and observations.

VISITOR LEVELS FOR THE CENTRAL REGION

(For selected sites only)

NATIONAL PARK/RESERVE	TOTAL VISITS
	1991-92 (to the nearest '000)
1. LEEUWIN-NATURALISTE	735,000
2. COLLIE	155,000
3. HARVEY	47,000
4. NANNUP	18,000
5. KIRUP	<u>8,000</u>
TOTAL	<u>963,000</u>

Based on VISTAT traffic counter records, surveys and observations.

VISITOR LEVELS FOR THE SOUTHERN REGION

(For selected sites only)

NATIONAL PARK/RESERVE	TOTAL VISITS 1991-92 (to the nearest '000)
1. WALPOLE-NORNALUP	257,000
2. a) GLOUCESTER TREE	227,000
b) SHANNON (Information and Resource Centre)	21,000
c) BIG BROOK	9,000
3. a) MANJIMUP WALK TRAILS (Selected)	26,000
b) DIAMOND TREE	25,000
c) FOUR ACES	25,000
d) LOOP ACCESS TO KING JARRAH	9,000
TOTAL	<u>599,000</u>

Based on VISTAT traffic counter records, surveys and observations.

VISITOR LEVELS FOR THE SOUTH COAST REGION

(For selected sites only)

NATIONAL PARK/RESERVE	TOTAL VISITS 1991-92 (to the nearest '000)
1. TORNDIRRUP	223,000
2. WILLIAM BAY	93,000
3. STIRLING RANGES	88,000
4. CAPE LEGRAND	59,000
5. PORONGURUP	45,000
6. TWO PEOPLES BAY	34,000
7. CAPE ARID	10,000
8. STOKES	4,000
TOTAL	<u>556,000</u>

Based on VISTAT traffic counter records, surveys and observations.

VISITOR LEVELS FOR THE WHEATBELT REGION

(For selected sites only)

NATIONAL PARK/RESERVE	TOTAL VISITS 1991-92 (to the nearest '000)
1. DRYANDRA	29,000
2. LAKE DUMBLEYUNG	8,000
3. BOYGIN	3,000
4. MERREDIN RESERVES	3,000
TOTAL	<u>43,000</u>

Based on VISTAT traffic counter records, surveys and observations.

VISITOR LEVELS FOR THE GOLDFIELDS REGION

(For selected sites only)

NATIONAL PARK/RESERVE	TOTAL VISITS 1991-92 (to the nearest '000)
1. KALGOORLIE ARBORETUM	30,000
2. BURRA ROCKS	6,000
3. VICTORIA ROCKS	5,000
4. ROWLES LAGOON	3,000
5. CAVE HILL	3,000
TOTAL	<hr/> 47,000

Based on VISTAT traffic counter records, surveys and observations.

VISITOR LEVELS FOR THE GASCOYNE-GREENOUGH REGION

(For selected sites only)

NATIONAL PARK/RESERVE	TOTAL VISITS 1991-92 (to the nearest '000)
1. KALBARRI	120,000
2. NAMBUNG	112,000
3. MONKEY MIA	95,000
4. CAPE RANGE	56,000
5. HAMILIN POOL	27,000
6. FRANÇOIS PERON	9,000
	<hr/> 419,000

Based on VISTAT traffic counter records, surveys and observations.

VISITOR LEVELS FOR THE PILBARA REGION

(For selected sites only)

NATIONAL PARK/RESERVE	TOTAL VISITS 1991-92 (to the nearest '000)
1. MILLSTREAM-CHICHESTER	55,000
2. KARIJINI	<u>39,000</u>
TOTAL	94,000

Based on VISTAT traffic counter records, surveys and observations.

VISITOR LEVELS FOR THE KIMBERLEY REGION

(For selected sites only)

NATIONAL PARK/RESERVE	TOTAL VISITS 1991-92 (to the nearest '000)
1. MIRIMA	50,000
2. GEIKIE GORGE	43,000
3. WINDJANA	18,000
4. TUNNEL CREEK	18,000
5. PURNULULU (BUNGLER BUNLE)	8,000
6. WOLFE CREEK CRATER	6,000
TOTAL	<u>143,000</u>

Based on VISTAT traffic counter records, surveys and observations.