

# STATUS ASSESSMENT OF WILDLIFE TOURISM IN AUSTRALIA: AN OVERVIEW

## PART II: STATUS ASSESSMENT



*By Karen Higginbottom, Kelley Rann, Gianna Moscardo,  
Derrin Davis and Sue Muloin*

**WILDLIFE TOURISM RESEARCH REPORT SERIES: NO. 1**  
**Status Assessment of Wildlife Tourism in Australia Series**

## RESEARCH REPORT SERIES

The primary aim of CRC Tourism's research report series is technology transfer. The reports are targeted toward both industry and government users and tourism researchers. The content of this technical report series primarily focuses on applications, but may also advance research methodology and tourism theory. The report series titles relate to CRC Tourism's research program areas. All research reports are peer reviewed by at least two external reviewers. For further information on the report series, access the CRC website, [[www.crctourism.com.au](http://www.crctourism.com.au)].

### **Wildlife Tourism Report Series, Editor: Dr Karen Higginbottom**

This series presents research findings from projects within the Wildlife Tourism Subprogram of the CRC. The Subprogram aims to provide strategic knowledge to facilitate the sustainable development of wildlife tourism in Australia.

### **Status Assessment of Australian Wildlife Tourism, Editorial Team:**

Dr Karen Higginbottom, Ms Kelley Rann, A/Prof Derrin Davis

This report is one in a series comprising a status assessment of wildlife tourism in Australia. It comprises the initial stages of research undertaken by the Wildlife Tourism Subprogram of the CRC. Reports in this series cover various disciplinary perspectives (visitors, economics, hosts, wildlife management) as well as various subsectors (such as zoos, bird watching and hunting). Together, the reports identify the current status and key issues facing Australian wildlife tourism, and make recommendations to enhance its sustainability.

### **National Library of Australia Cataloguing-in-Publication Data**

Status assessment of wildlife tourism in Australia : an overview.

Bibliography.

ISBN 1 876685 07 7.

1. Ecotourism - Australia. 2. Tourism - Australia. 3. Wildlife watching industry - Australia. 4. Wildlife-related recreation - Australia. I. Higginbottom, Karen. II. Cooperative Research Centre for Sustainable Tourism. (Series : Wildlife tourism research report (Cooperative Research Centre for Sustainable Tourism) ; no.1).

338.479194

© 2001 Copyright CRC for Sustainable Tourism Pty Ltd

*All rights reserved. No parts of this report may be reproduced, stored in a retrieval system or transmitted in any form or by means of electronic, mechanical, photocopying, recording or otherwise without the prior permission of the publisher. Any enquiries should be directed to CRC for Sustainable Tourism [[info@crctourism.com.au](mailto:info@crctourism.com.au)].*

## EXECUTIVE SUMMARY

### Introduction

Wildlife tourism is tourism based on encounters with non-domesticated (non-human) animals in either their natural environment or in captivity. It includes both so-called non-consumptive forms of wildlife tourism, such as viewing, photography and feeding; and consumptive forms, such as hunting and recreational fishing.

This report aims to achieve the following with respect to wildlife tourism in Australia:

- Describe the current status of the industry.
- Identify key issues and obstacles relating to development and sustainability.
- Identify potential unrealised opportunities.
- Identify key gaps in research.
- Create a basis for conceptual and practical links between diverse disciplines and stakeholder groups.

It is the central document for the wildlife tourism status assessment project, which in turn comprises the first stage of a large inter-disciplinary research program of the CRC for Sustainable Tourism on wildlife tourism. Part I of the report provides a descriptive overview of wildlife tourism in Australia, placing it in the context of international tourism and wildlife tourism. Part II synthesises information from a series of individual status assessment reports on different aspects of Australian wildlife tourism and presents findings of stakeholder consultation processes. It then uses this information, combined with the more descriptive information provided in Part I, to draw conclusions and make recommendations for the future directions of Australian wildlife tourism.

## Methods

Several components were combined in compiling this report:

1. Synthesis of information provided by 13 individual status assessment reports. These reports dealt with different disciplinary components of wildlife tourism (visitors, economics, wildlife, and host communities) and with different sub-sectors (such as birdwatching, tourism based on free-ranging marine wildlife, captive wildlife tourism and fishing). The research for these reports in turn was conducted mainly through literature reviews, often supplemented by interviews of key informants and some limited primary research.
2. Compilation of a database of wildlife tourism enterprises and activities in Australia. This was analysed to provide a broad description of the industry.
3. Stakeholder consultations. These comprised a series of regional workshops of wildlife tourism stakeholders, a workshop of the research program steering committee, and interviews with key staff from government tourism and conservation agencies.
4. Literature review and professional judgement. The contextual material provided in this report is based mainly on literature reviews, supplemented in some cases with judgements based on the authors' combined professional knowledge.

## The Current Status of Wildlife Tourism in Australia

Wildlife tourism in Australia consists of a wide range of different types of activities, and involves a very wide range of species. There are at least 1,196 enterprises that include wildlife as a planned component of the experience they offer to tourists. About 65% of wildlife tourism activities include wildlife as only one component of a more generalised tourism experience. The largest group of operators of organised wildlife tourism are those running nature-based tours that include a wildlife component. With eight million visitors per year, zoos and wildlife parks probably attract by far the greatest number of visitors. In addition, an unknown but probably very large number of

visitors experience wildlife as independent travellers, often in protected areas. Kangaroos and their relatives seem to be the wildlife-group that features most often in wildlife tourism activities; kangaroos and koalas are the most popular among international visitors. Principally because of the diversity of sub-sectors involved, there is no overarching organisation or coordination of wildlife tourism in Australia. Instead there are a wide range of stakeholders covering tourism and wildlife-related interests.

Wildlife tourism is economically important globally and in Australia, although there are no reliable estimates of total participation or revenues for Australia. There is some evidence that wildlife tourism has the potential to bring even greater economic and employment benefits to Australia than is currently the case, although this has not been clearly established.

Australia has a number of important competitive advantages in relation to wildlife tourism. These relate principally to features of the wildlife such as high biodiversity and unusual species, a natural environment which is in some ways unusually conducive to wildlife viewing, and perhaps a high level of demand from tourists.

The most critical obstacles that the Australian wildlife tourism industry needs to overcome to ensure its sustainability are probably:

- Limited capacity within the industry to deliver high quality wildlife tourism experiences and financially sustainable businesses.
- The risk of negative effects of wildlife tourism on wildlife and habitats, if the current regimes of monitoring and management are not improved.
- Low levels of communication, coordination, strategic direction and government support for wildlife tourism.
- Lack of research in a range of critical areas.

Judging by international trends, there may be opportunities in Australia for:

- Increasing the level of specialisation in wildlife tourism products.
- Including new species and environments.
- Increasing and improving the use of interpretation.
- Increasing the use of technology to facilitate wildlife viewing.
- Creating more experiences that combine captive and free-ranging wildlife tourism.
- Building further synergies between tourism and conservation within wildlife tourism experiences.

However, given the lack of good information at this stage on current and potential demand for wildlife tourism, it is not possible to make conclusive recommendations about types of new products that should be developed.

### **Key Gaps in Research**

There are huge gaps in our knowledge of many aspects of wildlife tourism, especially in Australia. This is a major impediment to the sustainability and development of this industry.

Probably the most critical research gap is in relation to understanding of demand-side issues. Fundamental to strategic planning of wildlife tourism is a better understanding of the levels and nature of demand (both existing and latent), and how this differs between different market segments. Knowledge of visitor reactions (especially satisfaction) to existing experiences is also critical in improving product quality.

A lack of research on product development opportunities is another impediment to sustainable growth of wildlife tourism. Development of new product ideas and research into their feasibility are critical if the industry is to develop further. However in most cases expending significant resources on product development research would be premature before a better general understanding of the market is achieved.

Although this study found no evidence that Australia is yet experiencing widespread problems in terms of negative effects of wildlife tourism on wildlife, this is difficult to ascertain given the very limited research and monitoring that has occurred. This issue is likely to become more critical if wildlife tourism on free-ranging species expands further.

The lack of good information on the economic value of wildlife tourism and its various sub-sectors is an impediment to arguments for increased government support for wildlife tourism. If it can be demonstrated that a particular sub-sector or site provides significant economic benefits to regions or to Australia as a whole, then this may be an effective political argument for greater government funding and support for the industry and for its sustainable management.

In terms of sustainability of individual businesses, there is a serious lack of research on critical success factors for wildlife tourism enterprises, although some broad principles applying to tourism and nature-based tourism can be applied. According to feedback from the tourism industry, the most critical aspect requiring further research and attention is marketing.

While stakeholders raised a range of criticisms of current government and industry mechanisms for supporting and regulating wildlife tourism, these have not been systematically assessed. Ensuring that the bureaucratic environment supports the industry and yet protects the natural environment is vital to the sustainability of wildlife tourism. In particular, there is a need for a critical analysis of the existing legislative and policy frameworks, along with further consultation with stakeholders.

### **The Need for a Holistic, Coordinated Approach to Wildlife Tourism**

Sustainability of wildlife tourism requires simultaneous attention to visitor satisfaction, visitor education, financial viability of individual businesses, economic benefits to society as a whole, impacts on wildlife and their habitats, and social effects on host communities. Where possible, future research designed to understand factors

contributing to sustainability of wildlife tourism enterprises should adopt this inter-disciplinary approach.

There are serious deficiencies in communication and coordination among wildlife tourism stakeholders. There is support among stakeholders for developing higher levels of communication and cooperation, and for a coordinated and strategic approach to sustainable development of wildlife tourism, particularly with regard to marketing. This status assessment project has begun the process of facilitating communication among wildlife tourism stakeholders, but it is the responsibility of governments and industry to drive any future process of coordinated strategic development of wildlife tourism.

### **Recommended Research Priorities to Support Sustainable Development of Wildlife Tourism**

#### *Understanding Visitors*

- Determine size and nature of demand for various forms of wildlife tourism.
- Determine visitor expectations and reactions in relation to existing wildlife tourism experiences, especially in relation to satisfaction, and factors that influence these.
- Determine variability between market segments in the above.
- Assess visitor responses to different approaches to visitor management designed to minimise negative effects on wildlife.

#### *Effects of Wildlife Tourism on Wildlife and Management of these Effects*

- Determine the magnitude and nature of negative effects (if any) on wildlife for high risk species and situations, and factors that influence these.
- Assess the relative effectiveness of different management approaches in minimising negative effects and maximising positive effects of wildlife tourism on wildlife.

- Develop tools that can be used to more effectively monitor and manage effects of wildlife tourism on wildlife.

#### *Economic Value*

- As far as feasible, determine the total economic value of various forms of wildlife tourism in Australia.

#### *Business Operation*

- Determine critical factors influencing business success in wildlife tourism.
- Identify major areas of deficiencies in wildlife tourism business performance.
- Assess effectiveness of current marketing of wildlife tourism and identify areas for improvement.

#### *Opportunities for New Product Development*

- Develop a framework for investigating potential for, and developing new wildlife tourism products.
- Investigate feasibility of specific product development ideas.

#### *Policy and Legislation*

- Critically assess policy and legislative environment for wildlife tourism in consultation with stakeholders.
- Evaluate the performance of wildlife watching initiatives in North America and derive lessons applicable to Australia.

### **Recommendations for Future Directions of Wildlife Tourism in Australia**

- Encourage innovation and adoption of world's best practice in product development, supported by adequate research.
- Raise standards of product quality.
- Improve effectiveness of marketing.

- Build industry capacity to deliver high quality wildlife tourism experiences and be financially successful.
- Improve and expand application of techniques for minimising negative effects of wildlife tourism on wildlife.
- Improve and expand application of techniques for maximising positive effects of wildlife tourism on wildlife.
- Make regulation more operator-friendly while still achieving goals for high industry and environmental standards.
- Improve effectiveness of accreditation programs.
- Increase levels of government support for sustainable development of wildlife tourism..
- Increase the role of Indigenous people and issues in wildlife tourism.
- Build communication channels between wildlife tourism stakeholders.
- Initiate coordination and strategic development of wildlife tourism.
- Provide and facilitate funding for research to address key priorities.

## TABLE OF CONTENTS

<b>ABSTRACT</b> .....	<b>1</b>
<b>1. INTRODUCTION</b> .....	<b>2</b>
1.1 Background .....	2
1.2 Aims and Approach of the Status Assessment Project ....	2
1.3 The Purpose of this Report .....	3
1.4 Methods.....	3
1.4.1 <i>Preparation of individual status assessment reports</i> .....	3
1.4.2 <i>Stakeholder consultations</i> .....	5
1.5 Outline.....	8
<b>2. DISCIPLINE-BASED STATUS ASSESSMENTS</b> .....	<b>10</b>
2.1 Understanding Visitor Perspectives on Wildlife Tourism .....	10
2.1.1 <i>Key issues raised</i> .....	10
2.1.2 <i>Principal conclusions</i> .....	11
2.1.3 <i>Summary of recommendations</i> .....	12
2.2 The Role of Economics in Managing Wildlife Tourism ...	13
2.2.1 <i>Key issues raised</i> .....	13
2.2.2 <i>Principal conclusions</i> .....	15
2.2.3 <i>Summary of recommendations</i> .....	16
2.3 The Host Community: Social and Cultural Issues Concerning Wildlife Tourism.....	17
2.3.1 <i>Key issues raised</i> .....	17
2.3.2 <i>Principal conclusions</i> .....	17
2.3.3 <i>Summary of recommendations</i> .....	18
2.4 The Negative Effects of Wildlife Tourism on Wildlife ....	19
2.4.1 <i>Key issues raised</i> .....	19
2.4.2 <i>Principal conclusions</i> .....	21
2.4.3 <i>Summary of recommendations</i> .....	22
2.5 Positive Effects of Wildlife Tourism on Wildlife by Higginbottom et al (2001) .....	23
2.5.1 <i>Key issues raised</i> .....	23
2.5.2 <i>Principal conclusions</i> .....	24
2.5.3 <i>Summary of recommendations</i> .....	25
2.6 A Tourism Classification of Australian Wildlife .....	27

2.6.1	Key issues raised.....	27	3.8.2	Principal conclusions.....	53
2.6.2	Principal conclusions.....	28	3.8.3	Summary of recommendations.....	54
2.6.3	Summary of recommendations.....	28			
<b>3.</b>	<b>SUB-SECTOR STATUS ASSESSMENTS.....</b>	<b>30</b>	<b>4.</b>	<b>VIEWS OF STAKEHOLDERS.....</b>	<b>55</b>
3.1	Indigenous Wildlife Tourism in Australia: Wildlife Attractions, Cultural Interpretation and Indigenous Involvement.....	30	4.1	The Regional Workshops.....	55
3.1.1	Key issues raised.....	30	4.1.1	Obstacles and solutions.....	55
3.1.2	Principal conclusions.....	31	4.1.2	Information and research needs.....	62
3.1.3	Summary of recommendations.....	32	4.2	SWOT Analysis of Australian Wildlife Tourism Conducted by Research Program Steering Committee..	64
3.2	Indigenous Interests in Safari Hunting and Fishing Tourism in the Northern Territory: Assessment of Key Issues.....	33	4.3	Interviews with Senior Government Staff.....	67
3.2.1	Key issues raised.....	33			
3.2.2	Principal conclusions.....	34	<b>5.</b>	<b>CONCLUSIONS.....</b>	<b>72</b>
3.2.3	Summary of recommendations.....	35	5.1	Limitations of this Study.....	72
3.3	Viewing of Free-Ranging Land Dwelling Wildlife.....	37	5.2	Cross -Sectoral Issues.....	73
3.3.1	Key issues raised.....	37	5.3	Issues Specific to Certain Types of Wildlife Tourism.....	82
3.3.2	Principal conclusions.....	39	5.4	Strengths of Wildlife Tourism in Australia.....	85
3.3.3	Summary of recommendations.....	40	5.5	Challenges for Wildlife Tourism in Australia.....	86
3.4	Birdwatching.....	41	5.6	Overall Conclusions.....	94
3.4.1	Key issues raised.....	41	5.6.1	The current status of the wildlife tourism in Australia.....	94
3.4.2	Principal conclusions.....	42	5.6.2	Key gaps in research.....	96
3.4.3	Summary of recommendations.....	43	5.6.3	The need for a holistic, coordinated approach...	99
3.5	Tourism Based on Free-Ranging Marine Wildlife.....	44	5.7	Recommendations.....	100
3.5.1	Key issues raised.....	44	5.7.1	Recommended research priorities.....	100
3.5.2	Principal conclusions.....	45	5.7.2	Recommendations for future directions of wildlife tourism in Australia.....	102
3.5.3	Summary of recommendations.....	45	5.8	The Future of the Wildlife Tourism Research Program..	103
3.6	Captive Wildlife Tourism in Australia.....	46			
3.6.1	Key issues raised.....	46	<b>REFERENCES.....</b>		<b>105</b>
3.6.2	Principal conclusions.....	47	<b>APPENDICES</b>		
3.6.3	Summary of recommendations.....	48	A:	Glossary of Terms used in Wildlife Tourism Report Series.....	108
3.7	Fishing Tourism: Charter Boat Fishing.....	49	B:	List of Individual Status Assessment Reports.....	110
3.7.1	Key issues raised.....	49	C:	Senior Government Staff Interviewed.....	112
3.7.2	Principal conclusions.....	49	<b>AUTHORS.....</b>		<b>113</b>
3.7.3	Summary of recommendations.....	51	<b>ACKNOWLEDGEMENTS.....</b>		<b>115</b>
3.8	Recreational Hunting: An International Perspective on Australia.....	52			
3.8.1	Key issues raised.....	52			

## TABLES

1: Attendees of Wildlife Tourism Workshops .....	6
2: Synthesis of obstacles and solutions to sustainability and growth of wildlife tourism in Australia, as proposed by stakeholder workshop participants. ....	56

## BOXES

1: Interview questions for Government staff in relation to general issues pertaining to wildlife tourism .....	8
2: SWOT Analysis of Australian wildlife tourism conducted by steering committee of the wildlife tourism research program. ....	64
3: Obstacles identified by key informants from Government tourism and conservation agencies. ....	68
4: Strengths of wildlife tourism in Australia. ....	86
5: Obstacles, constraints and threats faced by wildlife tourism in Australia .....	88
6: Proposed measures to enhance sustainability and growth of wildlife tourism in Australia .....	91

## ABSTRACT

This report describes the current status of wildlife tourism in Australia, including its scope and scale, key issues and obstacles relating to its development and sustainability, and potential unrealised opportunities. It is based on a literature review, a descriptive database of wildlife tourism operators, a synthesis of 14 related reports on different aspects of wildlife tourism, stakeholder consultations and professional judgement. Part I of the report provides a descriptive overview of wildlife tourism in Australia, and Part II uses information from Part I, the 14 reports and stakeholder consultation processes to draw conclusions and make recommendations for the future directions of Australian wildlife tourism. Wildlife tourism in Australia consists of a wide range of different types of activities, a wide range of species, and involves at least 1,196 tourism enterprises. Wildlife tourism is economically important globally and in Australia, and there is some evidence that these economic benefits could be substantially increased. An analysis of international trends allows us to predict likely opportunities for further development of the sector. Australia has a number of important competitive advantages in relation to wildlife tourism, but also faces some critical obstacles. One of these obstacles is the lack of research on many aspects of wildlife tourism, especially in relation to demand-side issues. Sustainability of wildlife tourism requires simultaneous attention to visitor satisfaction, visitor education, financial viability of individual businesses, economic benefits to society as a whole, impacts on wildlife and their habitats, and social effects on host communities. There is support among stakeholders for a coordinated and strategic approach to sustainable development of wildlife tourism, particularly with regard to marketing. Specific recommendations for the future development of wildlife tourism in Australia are given.

## 1. INTRODUCTION

### 1.1 Background

This document is the second part of an overview report that aims to conduct a status assessment of wildlife tourism in Australia. For the purpose of this report, wildlife tourism is defined as **tourism based on encounters with non-domesticated (non-human) animals** in either their natural environment or in captivity. It includes both so-called non-consumptive forms of wildlife tourism, such as viewing, photography and feeding; and consumptive forms, such as hunting and recreational fishing. Other contextual and descriptive information on wildlife tourism is presented in Part I of this report, and a glossary is presented in Appendix A.

### 1.2 Aims and Approach of the Status Assessment Project

The status assessment project as a whole (as presented in Parts I and II of this report) aims to achieve the following with respect to wildlife tourism in Australia:

- Describe the current status of the industry
- Identify key issues and obstacles relating to development and sustainability
- Identify potential unrealised opportunities<sup>1</sup>
- Identify key gaps in research, policy and training
- Create a basis for conceptual and practical links between diverse disciplines and stakeholder groups, and between industry and academics
- Disseminate this information to stakeholders<sup>2</sup>

<sup>1</sup> This aim will be addressed in more detail in a future CRC report by C. Fausnaugh, K. Higginbottom and S. Noakes.

<sup>2</sup> The building of links between industry and academics and the dissemination component is being addressed through publication and distribution of the CRC reports (and academic papers) and fact sheets, a series of wildlife tourism workshops in different parts of Australia (see section 4.1), spoken presentations at various conferences, written contributions to industry newsletters, and use of the CRC's website.

### 1.3 The Purpose of this Report

This report as a whole provides background contextual information, presents a synthesis of the findings of individual status assessment reports on particular aspects of wildlife tourism (listed in Appendix B) and presents input from workshops and key informants. This information is then used to draw general conclusions about the current status of the Australian wildlife tourism industry and the key opportunities and obstacles it is facing, and to offer recommendations regarding future needs in terms of research, policy, and training. Overall, this report provides directions for Australian wildlife tourism that will support its sustainable development and management.

In particular, Part II of this report synthesises information from the individual status assessment reports and presents findings of stakeholder consultation processes. It then uses this information, combined with the more descriptive information provided in Part I, to draw conclusions and make recommendations for the future directions of Australian wildlife tourism.

This report may be read alone or in conjunction with more detailed reports on aspects of particular interest to the reader. Readers of these individual status assessment reports will gain a better appreciation of the context of those reports by reading them in conjunction with the present document. Readers who simply wish to read about the implications of the research for Australian wildlife tourism need read only Part II of this report; those who also wish to obtain a descriptive overview and the full justification for the conclusions reached will need to read both parts.

### 1.4 Methods

#### 1.4.1 Preparation of individual status assessment reports

Authors of the various status assessment reports used some common methods, and some that were particular to their report. Most relied mainly on secondary data, and some also conducted limited primary data collection.

Secondary data were collected primarily through reviews of existing published and unpublished literature and documentation. Both international and Australian literature was reviewed, but the latter in more detail. In addition, a database of Australian wildlife tourism operators was compiled and analysed for the purpose of several of the reports. These secondary data were important in identifying potential issues, determining gaps in knowledge and to support recommendations.

Primary data collection was carried out mainly through personal conversations, interviews, and telephone and e-mail communications with key informants. These key informants included members of government tourism agencies, tourism marketing organisations, tourism operator associations, tour operators, government natural resource management agencies and, in some cases, tourists. In addition, Burns and Sofield (2001), in their status assessment of the social and cultural issues affecting host communities, undertook a survey of all Local Government Councils in Australia. Some limited field studies involving participant observation and pilot research on specific wildlife tourism activities were conducted to identify relevant issues which deserve further research.

The aims of primary data collection were generally to identify current issues in wildlife tourism, to identify the scope of existing information and to seek opinions on priority research needs. Telephone interviews often provided access to unpublished information and valuable opinions of people with considerable experience in wildlife tourism.

Some of the researchers also examined promotional materials produced by wildlife tourism operators to determine the scope of activities and whether wildlife was a major part of their business or a secondary element. Additionally, many of the status assessments involved a review of existing policies and legislation that affect various aspects of the wildlife tourism industry.

## **1.4.2 Stakeholder consultations**

### *Regional Workshops* (section 4.1)

Workshops in four regions of Australia were used to:

- Obtain stakeholder input regarding key obstacles facing wildlife tourism and what is required to address these obstacles.
- Obtain ideas for the development of new products<sup>3</sup>
- Inform stakeholders about the CRC's wildlife tourism research program and its preliminary findings, and obtain feedback on those findings.
- Build networks and strengthen links between all stakeholders in the wildlife tourism industry.

These workshops were held in Brisbane, Cairns, Perth and Hobart. Invitees comprised all wildlife tourism operators recorded on our database (see section 1.4.2), representatives of government natural resource management and tourism agencies, major community conservation groups, and other individuals recommended by State tourism and conservation agency contacts as having a significant interest in wildlife tourism. The number and location of these workshops were determined by available funding and support.

Attendance at these workshops is summarised in Table 1. A total of 70 operators attended. The majority of these (67%) dealt with free-ranging terrestrial wildlife, occasionally as part of a specialised wildlife tour, but more often as a component of a more general nature-based experience. These businesses included host farms, tours and accommodation providers. The second largest category of operators were those involved in captive wildlife tourism, mainly zoos and wildlife parks, but also several wildlife farms. Only nine operators dealing with free-ranging marine wildlife attended, one operator involved in fishing, and no hunting organisations<sup>4</sup>. The next largest group of attendees was government agency staff, mainly those

<sup>3</sup> These results will be presented in a future CRC report by C. Fausnaugh, K. Higginbottom and S. Noakes

<sup>4</sup> This partly reflects incompleteness of our database in these sub-sectors, but also seems to reflect a perception of operators in these sub-sectors that their interests would not be further served by combining with other sub-sectors of wildlife tourism. Written and telephone feedback from two fishing operators in response to invitations to workshops indicated this to be the reason for their lack of desire to participate.

working for State conservation or tourism agencies. Other attendees comprised mainly university staff/students and members of community conservation groups.

**Table 1: Attendees of wildlife tourism workshops**

LOCATION	DATE	WILDLIFE TOURISM OPERATORS	GOVERNMENT	OTHER	TOTAL
Hobart	October 1999	23	18	9	50
Brisbane	May 2000	9	5	8	22
Perth	June 2000	16	19	19	54
Cairns	June 2000	22	5	9	36
<b>TOTAL</b>		<b>70</b>	<b>47</b>	<b>45</b>	<b>162</b>

A major component of the workshop in all cases was small group sessions (8-13 people) to address the following two questions:

1. What are the key obstacles faced by wildlife tourism?
2. What needs to be done to overcome these obstacles and promote sustainability and growth of wildlife tourism?

Attendees were instructed to address this from their own perspective, whether at the level of the individual business or more generically, and whether relating to business, conservation or other issues. Groups were given about an hour to discuss these issues and report back to the plenary. Issues were then arranged in logical groupings and the group was asked to confirm whether this report was an accurate representation of their inputs and adjustments were made where necessary. The outcome was a list of agreed points, with several of these noted as being subject to different views by different participants.

*Steering Community Workshop (section 4.2)*

A workshop of the research program's steering committee was used to conduct a SWOT<sup>5</sup> analysis of Australian wildlife tourism. The steering committee consisted of people chosen for their high level of

knowledge or experience with wildlife tourism. Those attending this workshop consisted of three wildlife tourism operators; senior representatives from: a government tourism agency, two government conservation agencies, two national level tourism operator associations, and one non-government conservation agency; and several academics.

*Interviews*

Attempts were made to interview one or more key staff members in the government tourism agency and conservation agency in each major State and Territory (i.e. excludes ACT). Through consultation with senior staff of these agencies, the people thought to be most knowledgeable in relation to wildlife tourism were identified. In some cases different people were put forward to answer different questions. Due to either difficulty in finding someone with appropriate knowledge, or the lack of availability of the relevant people within the required time, there were some gaps in coverage. A total of 16 senior staff members were interviewed (Appendix C).

Interviewees were informed of the definition of wildlife tourism being applied (as in section 1.1). The semi-structured interview questions listed in Box 1 were used, with additional prompting where necessary. Answers to questions 1, 2 and 3 are covered in Part I and answers to questions 4, 5, and 6 are explicitly covered in section 4.3 of Part II.

<sup>5</sup> strengths, weaknesses, opportunities, threats

## Box 1: Interview questions for Government staff in relation to general issues pertaining to wildlife tourism

Conservation agency informants were explicitly asked not to comment in detail on issues relating to impacts of wildlife tourism on wildlife and habitats as this was being addressed in another report (Green and Higginbottom 2001).

1. Is your organisation doing anything to actively support sustainable development of ecotourism/wildlife tourism? If so, explain including documentation e.g. strategies, policies, plans, research; staff allocated
2. What is the relationship between conservation and tourism interests in your organisation? (Include: staff attitudes, role of tourism/conservation in policies and legislation, cooperation between tourism bodies and conservation agencies)
3. What does your department see as the role of the public and private sector in wildlife tourism? What implications, if any, does the competitive neutrality principle have for your State?
4. What in your opinion are the major obstacles facing wildlife tourism currently? (from the point of view of operators and sustainable development of the industry as a whole)
5. Are there opportunities for more wildlife tourism activities in your State? If so what? (including locations, species, types)
6. Are there any major gaps in information or training or documentation that would assist in overcoming obstacles or meeting opportunities more effectively?

### 1.5 Outline

The next two sections of Part II of this report provide a summary of the key issues raised, principal conclusions and recommendations identified in each of a series of status assessment reports dealing with diverse components of wildlife tourism in Australia. The first group of reports each involve a different disciplinary focus (section 2). These include an assessment of issues relating to visitors, the role of economics in managing wildlife tourism, the social and cultural impacts on the host community, and both the positive and negative

effects of wildlife tourism on wildlife and habitats. The final disciplinary based assessment provides a classification for Australian wildlife with reference to tourism issues.

The second group of status assessment reports that are summarised deal with different sub-sectors of the wildlife tourism industry in Australia (section 3). The sub-sectors included are: Indigenous wildlife tourism, wildlife tourism based on free-ranging, land-dwelling wildlife; wildlife tourism based on free-ranging marine wildlife, birdwatching tourism and captive wildlife tourism. Other reports examine hunting and fishing, including safari hunting and fishing tourism in the Top End of the Northern Territory, with an emphasis on involvement of Indigenous people.

The report then presents the principal outcomes from several stakeholder consultation processes. The principal approach was a series of workshops designed to obtain stakeholder input into identification of key obstacles and opportunities for wildlife tourism in Australia, as well as information and research needs (section 4.1-4.2). This is followed by the key outcomes of interviews with informants from government tourism and conservation organisations (section 4.3).

The concluding sections of this document point out that there were some significant limitations on the scope and depth of the report (section 5.1), then synthesise and discuss key issues arising from the status assessment reports (section 5.2-5.3). The key strengths of wildlife tourism in Australia are summarised in section 5.4, followed by a synthesis of obstacles and constraints (section 5.5). General conclusions are then drawn about the current status of wildlife tourism in this country and key gaps in research, and a framework is proposed for future work in this area (section 5.6). The report finishes with a series of practical recommendations for steps that should be undertaken if Australia is to strive for a truly sustainable and thriving wildlife tourism industry (section 5.7), and for the future of this wildlife tourism research program (section 5.8).

## 2. DISCIPLINE-BASED STATUS ASSESSMENTS

### 2.1 Understanding Visitor Perspectives on Wildlife Tourism (Moscardo, Woods & Greenwood 2001)

#### 2.1.1 Key issues raised

Two elements are central to any wildlife tourism situation: the wildlife and the tourists. This report assessed the current level of research information available on the visitors who participate in wildlife based tourism opportunities. Understanding the expectations, behaviours and responses of visitors to wildlife tourism experiences is important in the development of appropriate management regimes for wildlife tourism activities. It is also important in ensuring the provision of quality experiences for visitors and in supporting the viability of tour operations which rely upon wildlife. The key issues raised by Moscardo *et al.* 2001 are summarised in this section.

Tourism operators raised uncertainty about the true level of demand for wildlife tourism experiences as a significant issue. While there are reports of high and growing demand for such experiences, there is little evidence of this, with many operators reporting stable or declining visitor numbers. This raised the related issues of what kinds of experiences are sought by visitors and what activities and features should tourism operators include in existing or new ventures.

Tensions between tourism operators and managers of protected areas seem to be common. In particular, operators seek more regular and closer access to wildlife, while managers endeavour to restrict access and to keep visitors further away from wildlife. The issue that arises is the need for reliable, independent evidence on the impacts of visitors on wildlife, as well as about the experiences that visitors seek and expect. Generally, this evidence is lacking or non-existent.

Tension between commercial tourism activities and the managers of protected areas is highest in relation to handling and feeding wildlife. Views amongst visitors about wildlife tourism attractions range from a view that there should be no handling, to providing some opportunities for contact when such contact was not harmful to

either visitors or wildlife. The generally poor level of understanding of why visitors seek to feed and handle animals, and what visitors obtain from such experiences in terms of support for wildlife conservation are important issues requiring more research. Additionally, information is needed on the kinds of interpretation and information that could be developed to discourage inappropriate handling and feeding of animals.

#### 2.1.2 Principal conclusions

In relation to demand, Moscardo *et al.* (2001) arrived at five principal conclusions, each of which reflect that information on the level and nature of demand for wildlife-based tourism is generally lacking. These are (emphases added):

1. There is *some* evidence that opportunities to see wildlife are very important to a majority of international and domestic tourists.
2. There is *some* evidence that interest in wildlife viewing opportunities is increasing for *some* international groups.
3. There is evidence that attendance at captive attractions is *steady or in decline*.
4. There is *virtually no information* available on the *number* of visitors going to sites specifically to see wildlife, or numbers of visitors taking tours with the specific aim of seeing wildlife.
5. There is *very little information* on the *types* of wildlife-based experiences sought by visitors or the species they are most interested in.

The nature of the market for wildlife tourism is also poorly understood, with very little research into the characteristics of visitors to specific wildlife activities or attractions. In the case of Australian wildlife tourism activities, very little is known about the characteristics of either domestic or international tourists seeking wildlife tourism experiences, although there is some evidence that wildlife visitors differ in terms of the motivations or benefits sought and the types of activities desired. Participants in very specialised wildlife activities are

a minority group, with most visitors interested in a range of wildlife. Conversely, specialisation, where it occurs, is an important dimension along which visitors vary.

The satisfaction of visitors with wildlife tourism activities in Australia is little understood, with the studies that do exist being site and/or species specific. From these studies it is concluded that key factors influencing visitor satisfaction include: (1) features of the species such as size, rarity and endangered status; (2) variety of species encountered; and (3) features of the setting such as beauty, scenery, and ability to get close to and ease of viewing species.

Finally, it was concluded that there is some evidence that visitors support restrictions on their activities and access to wildlife, particularly if supported by effective interpretation. Conversely, there is a major gap in understanding about visitor perceptions of wildlife feeding.

### **2.1.3 Summary of recommendations**

Moscardo *et al.* (2001) propose the following five recommendations:

1. A standard set of questions to measure interest in wildlife and specific types of wildlife-based opportunities be included in State and national visitor surveys.
2. Attention be paid to promotional images of wildlife tourism experiences to ensure accuracy in terms of numbers of wildlife likely to be seen and types of activities that will be offered.
3. Visitors be adequately prepared for wildlife tourism experiences in terms of having realistic expectations and an understanding of appropriate behaviours.
4. Interpretation programs be developed and upgraded to meet international best practice standards.
5. Managers in both the private and public sectors work to develop alternative ways to view and interact with wildlife.

## **2.2 The Role of Economics in Managing Wildlife Tourism (Davis, Tisdell & Hardy 2001)**

### **2.2.1 Key issues raised**

Economic principles are becoming more widely employed in support of the sustainable management and development of industries such as wildlife tourism. Given doubt about the ability of regulation by itself - even when supported by education - to achieve sustainable use of wildlife resources, however, the potential role of economic approaches needs to be considered even more seriously.

The value of wildlife tourism resources is an important matter to be considered, as this allows policy makers to determine if one use of a resource, such as for tourism, is of greater economic value than is another use, such as consumptive harvesting. This relates also to the issue of government budgetary support for national parks' services, infrastructure development in protected areas, and management of natural resources, with concern that such support is generally declining. Consequently, management agencies are seeking ways to increase revenue, with approaches such as user-pays receiving greater scrutiny. The likely impacts of such policies on wildlife tourism is an issue of relevance to the development of the industry.

Davis *et al.* (2001) describe a number of important economic concepts of relevance to wildlife tourism and its sustainable management. The description of these concepts serves to highlight important issues related to such management. The issue of external impacts and animal welfare is one issue raised, with the point made that the welfare of animals is seen as relevant in so far as changes to their welfare affects humans. The ethical basis of economic analyses must be recognised when economic approaches to management are being considered. Nonetheless, evidence is presented that management policies for some wildlife tourism activities do not take sufficient account of animal welfare, while there are many inconsistencies between policies for different species (e.g. separation distances for whales versus dolphins).

Opportunity costs and the maintenance of habitat are interrelated and important economic issues in wildlife tourism. The opportunity costs associated with removal of habitat reduces the area and integrity of ecosystems and, consequently, the availability of wildlife tourism opportunities. So the economic costs of habitat removal include the loss in tourism dollars, the loss in biological diversity, and the current and future diminution of wildlife populations.

The manner in which environmental resources are used depends on the property rights governing those resources. The issue of property rights is a critical one for the management of wildlife tourism and other resources, with unrestricted or open access usually resulting in overexploitation and degradation of those resources. Well-specified property rights have significant potential to assist the sustainable management of wildlife tourism resources, a fact that is increasingly recognised in natural resource management.

The issue of property rights relates closely to that of the appropriation of the economic rent arising from the exploitation of wildlife tourism resources. The opportunity to appropriate economic rent is a significant factor in attracting tourism operators and other users of natural resources into various industries. The allocation of rent is, however, important. The actual resource owners - often the community - are entitled to at least some proportion of the rent. Furthermore, when there is no control on access, rent is likely to be competed away as too many operators enter the industry.

Market failure is also an important economic concept relating to wildlife tourism management. Market failure relates closely to the question of property rights, and where access is uncontrolled and resources have no market price attached to them, then inefficient use is likely to result. When resources are unpriced, the market fails to correctly guide firms towards the efficient use of those resources. This is so-called market failure.

The final key issue raised by Davis *et al.* (2001) is that of employing economic instruments such as user -pays, auctioning user-rights, and so on, instead of or in conjunction with regulation. It is argued that regulation by itself has many disadvantages and that it has often failed to protect resources. It is concluded that a judicious blend of

economic instruments and regulation is required to support sustainable management of wildlife tourism resources.

Valuation techniques and the importance of economic valuation is also discussed in the report. It is concluded that economic valuation has an important role to play in resource use decisions and in ensuring that the correct value is ascribed to scarce wildlife tourism and other resources.

### **2.2.2 Principal conclusions**

The potential role of economic instruments in wildlife tourism, while growing in importance, is generally poorly understood by management agencies and their employees. Nonetheless, it is clear that the application of economic instruments in natural resource management, including wildlife tourism, is becoming more prevalent and will become even more important in the future.

It is also concluded that it is important to link economic instruments of any kind to the benefits that commercial operators will derive from the imposition of those instruments. Improved property rights and transferability of user rights are significant positive benefits that will be realised by operators when economic instruments are applied in an appropriate fashion.

The role of property rights in management will and should be more closely scrutinised. The associated matter of who appropriates economic rents should also be carefully evaluated. Presently, in many wildlife tourism operations any economic rent is mostly appropriated by commercial operators, yet the true owners of those resources - the community - should realise a return from their use. Greater transparency in the allocation of user-rights, through means such as auctioning those rights, will contribute to improved efficiency in use, as well as a more equitable distribution of the associated economic rent.

### 2.2.3 Summary of recommendations

Davis *et al.* (2001) recommend:

- increased reliance on the use of economic instruments, in conjunction with regulation, for the management of wildlife tourism;
- commercial access to wildlife tourism resources in public ownership should be provided under a transparent, competitive system that provides for the return of economic rent to the community as owners of those resources;
- access rights should be accompanied by improved property rights, giving greater certainty to commercial operators in terms of their rights and responsibilities;
- such rights should, in most cases, be fully transferable by sale between rights holders and others;
- there may, however, be cases where the asset or habitat in question is poorly understood or particularly vulnerable - in such cases strict protective regulations may be appropriate;
- granting of access rights should take into account the potential for external impacts that might arise from wildlife tourism activities;
- the overall economic value of wildlife tourism in Australia be estimated; and
- economic valuation should be used carefully, but has a role in wildlife tourism through providing information on the relative value of different potential uses of important natural resources.

## 2.3 The Host Community: Social and Cultural Issues Concerning Wildlife Tourism (Burns and Sofield 2001)

### 2.3.1 Key issues raised

The host community is a fundamental component of any tourism system. Wildlife tourism activities have many actual and perceived impacts on a host community. Therefore, any increase in wildlife tourism as a recreational pursuit will inevitably be accompanied by a growth in numbers of local people affected by tourism. In their report, Burns and Sofield (2001) describe hosts as those who live in the vicinity of the tourist attraction and are either directly or indirectly involved with and/or affected by the wildlife tourism activities.

The key issues raised by Burns and Sofield (2001) relate to the involvement of local community members in wildlife tourism activities, and the actual and perceived benefits and disadvantages of wildlife tourism to host communities. They focus on social impacts when identifying the key issues. Burns and Sofield (2001) highlight the importance of host acceptance of such tourism activity to the overall sustainability of a wildlife tourism venture and assess the role of community participation in that sustainability.

### 2.3.2 Principal conclusions

Burns and Sofield (2001) conclude that the actual and perceived impacts of wildlife tourism will influence the attitudes of the host community and, ultimately, have an effect on sustainability. It is postulated that wildlife tourism will only be sustainable where there are perceived benefits for the host community (these may be social and/or cultural, and environmental and will not necessarily be confined to economic benefits).

The actual and perceived social impacts of wildlife tourism are numerous. Impacts on the social environment are likely to affect the behaviour of individuals, community groups, lifestyles, value systems and religious or traditional ceremonies. Members of the host community may be introduced to changes and new behaviours or

ideas that have the potential to affect their attitudes, values, norms and motivations.

The host population's acceptance of wildlife tourism is likely to vary depending on the way in which the host community interacts with the tourist and wildlife. A rural community, whose lifestyle has incorporated consumptive/destructive activities, for example, shooting for food, or sport and trophy hunting, may be introduced to a new understanding of wildlife. The establishment of an ecotourism venture based on wildlife or an enclosure venture (e.g. Dubbo Western Plains Zoo) may broaden world views of local residents. The magnitude of the impacts is likely to vary with the number of tourists, the length of stay, the importance of the wildlife to community life before tourism, and its place in cultural history.

Burns and Sofield (2001) conducted a study of local government councils around Australia, which revealed that community involvement in wildlife tourism attractions varies widely from region to region and from one attraction to another within a region. Moreover, the attitudes of host community members will also vary from region to region and from one individual to another within a region. For example, attitudes towards activities such as hunting and fishing will vary from one host community to another and also between members of a host community.

### **2.3.3 Summary of recommendations**

Burns and Sofield (2001) suggest that further research is required to understand host community perceptions of wildlife tourism. An assessment is needed to identify the elements that affect host attitudes and levels of involvement, as well as factors, which affect impacts on the community. While some of the issues have been studied in relation to tourism systems in general, to date there have been very few studies specifically related to wildlife tourism.

It would be appropriate to commence this type of research by conducting a range of case studies. The case studies could be conducted in numerous areas where the level of community involvement in wildlife tourism activities is minimal, ranging to areas where community involvement is high. The range of communities

selected should cover areas where wildlife tourism is currently encouraged and successful, to areas where wildlife tourism is, or has been less successful. A comparison could then be undertaken to identify the elements that affect host involvement and attitudes and also the factors which affect the magnitude of impacts on host communities.

If the research identified a correlation between hosts' attitudes and their degree of involvement in wildlife tourism activities, it would be possible to develop a model to help predict the magnitude of impacts on community attitudes. Such a model would improve the sustainability of wildlife tourism by identifying management approaches that would minimise the negative impacts on hosts and by providing an environment in which communities' social values and norms can co-exist with wildlife tourism operations.

Finally, when the factors that influence host community perceptions have been identified and a model developed, it may then be appropriate to develop guidelines and recommendations for host community involvement in wildlife tourism. Local governments could play an important role in implementing and promoting these guidelines and, subsequently the sustainable role of wildlife tourism in host communities.

## **2.4 The Negative Effects of Wildlife Tourism on Wildlife (Green and Higginbottom 2001)**

### **2.4.1 Key issues raised**

Wildlife tourism is often considered environmentally friendly because it is expected that those who want to see wildlife will also be concerned with conservation and animal welfare. However, there are numerous potential negative impacts on wildlife that relate to ecology, animal behaviour or animal welfare.

The negative effects of wildlife tourism and related human activities on wildlife can be grouped into three main categories: disruption of activity, direct injury or death, and habitat alteration. The extent of these negative impacts on wildlife can vary enormously depending on species, life-cycle stages, habitats and other variables.

Examples of disruption of activity include the effects of human induced light and sound, disruption of foraging and parental behaviour, and changes in nocturnal and arboreal patterns. When a human disrupts the activities of wildlife, the response will be either avoidance behaviour (where the wildlife will flee or hide), habituation (where there is a learned lack of response to humans to the point of seeming to ignore their presence), or attraction - usually in response to food (Green and Higginbottom 2001).

Death or injury can occur as the result of unintentional events such as road accidents to intentional acts resulting from hunting, fishing and collecting. The trampling of wildlife, killing of wildlife for safety reasons and the use of insecticides for tourist comfort can also be seen as direct causes of wildlife mortality.

The most obvious occurrence of habitat alteration happens when land is cleared or modified to make room for the infrastructure needed for tourism activities. However, changes to habitat also occur from off-road vehicle damage and humans trampling on vegetation. Green and Higginbottom also discuss the intentional and accidental provision of food as resulting in habitat alteration because 'an augmentation of an animal's resources is essentially an alteration to its habitat'. Altering the habitat can result in significant increases or decreases in population numbers, reduction of protection from predators and reduction of prey. In the case of hand-feeding, animals may become aggressive and a danger to tourists.

Determining the magnitude of impacts and deciding whether they are positive, negative or neutral can be a difficult task. For example, what is positive for one species may be negative or neutral for another or the ecosystem in general. What is positive in an ecological sense may be negative in terms of effects on species' behaviour. The magnitude of impacts will also vary according to the goals of the human activity (for example, whether close approach or natural behaviour is deemed more important), the means of approach and the other activities carried out at the site. Human activity may also induce changes on other species that are not directly involved in the wildlife tourism experience.

Management actions designed to mitigate any negative effects of wildlife tourism on wildlife can focus on either wildlife or visitors, and

can use a variety of different methods. In most cases, it will be appropriate to focus on management of visitors or operators, in terms of their numbers, spatial or temporal distribution, behaviour, expectations and attitudes. Methods that can be used include use of physical structures to 'harden' the environment, regulation (by governments or industry), use of economic instruments, education and more rarely, active management of wildlife. All these methods are used around the world and in Australia in relation to wildlife tourism, but available research does not allow clear conclusions to be drawn about their relative merits.

Management is not however confined to the management actions themselves, but also includes monitoring and evaluation. Well-established principles of environmental monitoring combined with known techniques for studying different animal groups are reviewed.

#### **2.4.2 Principal conclusions**

There is a considerable body of information that needs to be disseminated to the tourism industry and to conservation managers, either directly relating to the Australian situation or with potential for adapting to conditions here. There are also gaps in our knowledge which appear to be urgent research priorities. These especially include the effects of hand-feeding on both target and non-target wildlife, effects of spotlighting, and effects of human presence on small cryptic animals that are generally unnoticed by tour operators or tourists.

Little is known specifically about the negative effects of wildlife tourism on Australian animals, although there is some concern from conservation staff about a limited number of species and situations. These situations include artificial feeding of wildlife, and cases where very large numbers of people are concentrated in wildlife habitats. Green and Higginbottom (2001) identify a range of factors that will influence the extent to which an animal is likely to be affected by human activities. These include the amount and type of previous contact with humans, the means of transport used by visitors, the predictability of the human activity, the openness of habitat, and the nature of the animal's activity. Knowledge of these factors will enable the operator or manager to assess the probable nature and severity of any negative effects, and prioritization consequent management efforts.

Management processes that identify potential and actual negative effects and implement actions to correct them are critical to sustainable wildlife tourism, particularly if there is further growth of this sector. However Green and Higginbottom (2001) recognise that if the use of monitoring is to be more widespread, simple user-friendly monitoring techniques must be used. In some cases, negative effects that are difficult to reverse might occur before monitoring can detect them, and so a precautionary approach should be taken where there is cause for concern. There are no 'prescriptions' about what form of management works best, and each probably have merit in some situations.

### **2.4.3 Summary of recommendations**

Green and Higginbottom (2001) recommend that management should occur within a comprehensive planning and evaluative framework. Several existing models are reviewed which can be adapted for this purpose. Management should include monitoring which begins before new wildlife tourism activities are set up and occurs in an ongoing manner. Management should occur as a partnership between operators and management authorities, and even tourists where possible. There is a need to further develop monitoring techniques that are effective yet can be used with limited resources and skills.

In practice, resource constraints will mean that prioritising of management efforts must occur. Knowledge extrapolated from research and from wildlife and local expertise should be used to determine these priorities. In the meantime, research to help us to understand and predict likely impacts and to assess the likely effectiveness of different management approaches should be conducted. Some species and situations from which wildlife tourism may need to be precluded from wildlife tourism because of the difficulty of managing impacts and the conservation value of the animals concerned.

## **2.5 Positive Effects of Wildlife Tourism on Wildlife (Higginbottom, Northrope & Green 2001)**

### **2.5.1 Key issues raised**

In principle, wildlife tourism can have positive effects on wildlife species and their habitats. However, to date very little has been written about how this can best be achieved. Higginbottom *et al.* (2001) provides a review of the ways in which wildlife tourism can have positive effects on wildlife and their habitats, and discusses the limited evidence regarding the extent to which these are currently being realised in Australia.

The positive effects of wildlife tourism on wildlife and habitats work through four main mechanisms: 1) financial contributions to conservation, 2) non-financial contributions, 3) socio-economic incentives for conservation, and 4) education. The contribution may be to animal conservation or animal welfare or both, and in some cases there may be a conflict between the conservation of animal populations and species and what may be best for the welfare of individual animals.

The first mechanism Higginbottom *et al.* (2001) identify as providing positive effects on wildlife is financial contributions. The financial contributions generally come through government-administered user fees such as entrance fees, visitor levies, commercial operator licensing fees and hunting licence fees. However, this income usually only goes a small way to covering the costs of sustainable resource management. For this reason, it is generally viewed as a means of partially contributing to the costs of managing the negative impacts that such wildlife tourism activities would otherwise incur on wildlife and their habitats, rather than as contributing to conservation.

Wildlife tourism can also have a positive effect on wildlife species and their habitats through non-financial contributions. Operators and tourists can contribute positively to conservation of wildlife and their habitats by participating in management activities, monitoring or research. For example, organisations such as Earthwatch and Landscape make non-financial contributions by involving tourists in

conservation-related research projects. A number of zoos are involved in breeding and reintroduction programs for threatened species, while numerous operators participate in research and monitoring.

Potentially one of the most important positive effects of wildlife tourism on wildlife is through the economic incentive that tourism based on free-ranging animals provides for preservation or restoration of wildlife habitat. 'Socio-economic incentives for conservation arising from wildlife tourism can work through their effects on the private or public sector organisations that operate wildlife tourism, or through their effects on the wider host community' (Higginbottom *et al.* 2001, p. 10). Public and private sector operators often have an incentive to adhere to conservation management regulations or practices because the wildlife on which they are depending is more likely to decline if habitats are not conserved. Operators also have an economic incentive to contribute to conservation if they perceive that it will assist with marketing. From the perspective of the wider host community, incentives can come from the economic benefits that generally flow into a host community from increased tourism activities.

In principle, education about conservation and animal welfare issues provided by operators as part of wildlife tourism experiences can have a profound effect on tourists' subsequent knowledge levels, attitudes and even behaviour relating to wildlife conservation. Educating visitors has the potential to promote more responsible behaviour towards wildlife and wildlife habitats and encourage subsequent involvement of visitors in wildlife conservation or research activities. It may also lead to increased pressure on governments to set and meet conservation objectives.

### **2.5.2 Principal conclusions**

Higginbottom *et al.* (2001) draw the following conclusions for wildlife tourism in Australia:

1. Nature-based (including wildlife) tourism in protected areas probably imposes net costs in terms of its direct impacts on the natural environment at the tourism sites involved.

2. The costs identified in 1 are at least partially offset, or perhaps even outweighed, by the incentive that nature-based tourism creates for retention and acquisition of such areas.
3. Government-owned wildlife tourism attractions and activities currently provide significant financial input into conservation in a few instances.
4. Wildlife tourism appears to have led to some small-scale shifts towards more conservation-oriented land-use and wildlife management practices outside of protected areas. Public support for conservation is probably enhanced by participation in wildlife tourism, but it is not possible to determine the magnitude of this effect.
5. Wildlife tourism is associated with significant practical contributions to conservation.
6. The magnitude of benefits to wildlife associated with education provided as part of wildlife tourism are unknown. However it is widely thought that such benefits are large.
7. The nature and magnitude of costs and benefits of wildlife tourism to wildlife will vary according to many factors such as type of tourism activity, vulnerability of the wildlife population, effectiveness of interpretation, and conservation ethic of the operator.
8. Overall, it seems likely that wildlife tourism in Australia probably has a small net positive effect on conservation at present, but this cannot be concluded with any certainty.
9. There seem to be significant opportunities for enhancing these positive effects.

### **2.5.3 Summary of recommendations**

There has been insufficient systematic research into the positive effects of wildlife tourism on wildlife and wildlife habitats. Research is needed to:

- quantify the current and potential value of financial contributions made by wildlife tourism;
- assess the significance of practical contributions (non-financial) of wildlife tourism to conservation and identify factors that are currently restraining the extent of these contributions;
- identify potential economic incentives that will promote and encourage conservation; and
- determine the best approach to educating tourists and operators in regard to wildlife conservation issues.

The following are seen as priorities for steps that can at this stage be taken by governments to enhance the positive effects of wildlife tourism on wildlife:

- greater use of economic instruments investigate opportunities for obtaining greater revenue from protected areas and government-run wildlife tourism attractions; however this needs to be balanced against the requirements of National Competition Policy;
- encourage operators by suitable incentives to donate funds for conservation purposes by suitable incentives, and to use this in their marketing;
- encourage and support organisations that use tourists as volunteers in conservation programs;
- encourage and support wildlife tourism attractions becoming actively involved in research on their target species; and
- encourage shifts from traditional agriculture to wildlife or nature based tourism on private land in cases where this is economically viable.

## 2.6 A Tourism Classification of Australian Wildlife (Green, Higginbottom & Northrope 2001)

### 2.6.1 Key issues raised

There are many animal species in Australia that could be suitable for wildlife tourism. However, much relevant information is not available in a form that is readily accessible to tourism personnel. The potential of many lesser-known wildlife sites and species is being ignored, while a few are probably being used excessively. There also seems to be much scope for enhancing the quality of tourism experiences based on well-known species, especially in terms of providing improved interpretation. In an attempt to address this information shortage, Green *et al.* (2001) present information on Australian wildlife that is useful to inform sustainable tourism development based on these species.

Firstly, relevant information on major categories of Australian wildlife (terrestrial mammals, birds, reptiles, amphibians, terrestrial invertebrates, freshwater fauna and marine fauna) is presented, highlighting the kinds of opportunities and constraints on wildlife tourism development within each category.

The core of the report is a spreadsheet (available on floppy disk or CD) containing an extensive classification of Australian wildlife in relation to tourism. Information is presented on 190 categories of wildlife, including: individual species (e.g. emu, bilby); taxonomic groups (e.g. kangaroos, tree frogs); categories based on features of interest or concern to tourists (e.g. edible fish, dangerous snakes); or remaining elements of a subdivided group (e.g. 'other insects'). The spreadsheet provides information on which species might be of particular interest to tourists, where and how they might be found, as well as possible constraints on their involvement in tourism, such as difficulty of access and shyness of animals. In addition, the spreadsheet addresses conservation management issues by providing information on the vulnerability of wildlife and their habitats, and how this varies between seasons.

The spreadsheet where possible makes use of published information, however given the lack of such information on some of the relevant

variables, Green *et al.* (2001) have used their own judgement and experience in such cases. The spreadsheet is not intended to be a final product, but is a starting point to stimulate feedback. There is much yet to be learned about the habits and vulnerability of Australian animals and it is hoped that future inputs will be used to modify and expand the spreadsheet to make it increasingly useful.

There is a danger that providing information on attractions without first setting guidelines for their protection will contribute to their destruction rather than sustainable development and management. As competition between operators increases over the coming decades, an increase in areas and species utilised appears inevitable in any case, and it is better for such increase to occur in an informed way, utilising the kind of information presented in the spreadsheet. A lack of realisation of tourism potential will not necessarily save a natural area, and may even lead to its clearance for agriculture or other usage. Further, the spreadsheet does not include (and nor will future versions include) instructions for finding vulnerable wildlife or localities.

### **2.6.2 Principal conclusions**

Informed decisions are necessary for the sustainable development and management of a sustainable wildlife tourism industry. The current spreadsheet, and its future versions as the results of further research are added, will provide valuable information on which to base such decisions.

### **2.6.3 Summary of recommendations**

The recommendations made by Green *et al.* relate to the development and intended usage of their database. It is intended that the database will provide information to tourism operators and conservation managers, in a first-of-its kind compilation for such purpose. It is not designed to assist either tourists or operators to go directly to particular animals or places, and operators will need to do much further reading and fieldwork to develop plans for quality tours. Operators will however find a wealth of basic information and an enhanced view of possibilities for wildlife tours. Green *et al.* recommend that the spreadsheet is utilised either when planning a

new tour or expanding an existing one, and when attempting to make their tours 'greener'. They also recommend that conservation managers use the spreadsheet both when planning interpretation programs and when compiling environmental advice for operators.

### 3. SUB-SECTOR STATUS ASSESSMENTS

#### 3.1 Indigenous Wildlife Tourism in Australia: Wildlife Attractions, Cultural Interpretation and Indigenous Involvement (Muloin, Zeppel & Higginbottom 2001)

##### 3.1.1 Key issues raised

Muloin *et al.* (2001) present an overview of the involvement of Indigenous people and Indigenous knowledge in wildlife tourism operations in Australia. Through a study of various wildlife tourism attractions, they provide an assessment of the nature and extent of Indigenous involvement in wildlife tourism, and make recommendations of how to build on opportunities and to overcome obstacles to such involvement. Advice is provided on how such involvement can be enhanced to the benefit of visitors, wildlife tourism operators, and Indigenous people. For the purpose of their study, Indigenous wildlife tourism is defined as wildlife attractions or tours involving Indigenous people and/or Indigenous knowledge (i.e. interpretation) of living wildlife.

Currently, the extent and nature of involvement of Indigenous people in wildlife tourism in Australia is limited. However, there is evidence of Aboriginal groups providing nature-based tours on Aboriginal lands, and wildlife attractions include tours of Indigenous-owned emu and crocodile farms. Some Aboriginal groups generate significant tourism income from safari hunting on Aboriginal lands and from selling Indigenous artefacts and souvenirs made from wildlife fur, feathers, sinew or teeth.

However, such involvement can have negative consequences for Indigenous people (such as the commercialisation of culture, loss of culture and traditions). Several obstacles, including economic disadvantage, prevailing cultural stereotypes, lack of funding, limited opportunities for education and training, and low self esteem, hamper Indigenous participation in wildlife tourism. However, maximising the opportunities for educational benefits and for economic and social benefits to Indigenous people, while minimising

any adverse consequence on Indigenous communities, presents a major challenge for Indigenous involvement.

The extent of Indigenous interpretation of Australian wildlife incorporated in wildlife displays varies between attractions. For the sites participating in this study, guided tours or talks represent the most common form of interpretation, followed by a general brochure advertising the wildlife attraction. Formal presentations and also discussion with the tourists by the guides themselves, are the main ways in which Indigenous knowledge and use of Australian wildlife is incorporated in the wildlife interpretation provided at the various attractions. The extent of Indigenous interpretation varies with some presentations designed specifically to include an Indigenous cultural element, while with others, it is an incidental part.

As part of their study, Muloin *et al.* (2001) collected information on the opinions of Indigenous staff and managers (both Indigenous and non-Indigenous) about involvement of Indigenous people and knowledge in wildlife tourism. Just under 85% of managers interviewed during the study felt that Indigenous interpretation of wildlife could be used to help tourists to understand or appreciate Indigenous cultures. Most commonly, these managers felt that offering a different cultural perspective about wildlife and discussing the relationship between Indigenous people and wildlife contributed to this increased understanding and appreciation. Eighty per cent of Indigenous staff interviewed felt that wildlife helped tourists to understand Indigenous cultures. Similarly, they most commonly identified the cultural relationship between Indigenous people and wildlife as being the contributing factor.

##### 3.1.2 Principal conclusions

There is currently very limited employment of Indigenous staff in wildlife tourism attractions, particularly in nature-based tours featuring wildlife. Most Indigenous wildlife tourism attractions do not have a policy on Indigenous employment and training or cultural guidelines for Indigenous interpretation of Australian wildlife. However, the employment of more Indigenous staff would enhance the presentation of Indigenous cultural knowledge and provide a unique Indigenous perspective for tourists to experience.

Making operators aware of the range of ways in which they can integrate Indigenous content into their activities, how this can be achieved and the benefits of doing so, could help facilitate greater Indigenous involvement in wildlife tourism. Greater support from government agencies responsible for employing and training Indigenous staff and from local Indigenous communities for the employment of Indigenous staff at wildlife attractions, could also help facilitate greater Indigenous involvement.

Currently, interpretation at wildlife attractions relates mainly to traditional Indigenous uses of wildlife rather than contemporary Indigenous perspectives on wildlife, such as the continuation of hunting and Indigenous involvement in conservation initiatives or wildlife management. Much of the information included in guided talks currently comes from the managers' or employees' personal experiences or communication with local Aboriginal groups. However, as this study shows, there are significant opportunities to increase and improve Indigenous content in Australian wildlife attractions and nature-based tours.

Based on the findings in their study, Muloin *et al.* (2001) make two interesting conclusions. Firstly, they conclude that Indigenous involvement in wildlife attractions or tours can help empower Indigenous staff and communities, promote reconciliation and increase general understanding and awareness of Indigenous cultures in Australia. Secondly, they conclude that Indigenous cultural knowledge and understanding of Australian wildlife can add a unique and authentic element to the wildlife tourism experience, thereby offering a different dimension to understanding and appreciation of wildlife.

### **3.1.3 Summary of recommendations**

Additional research is needed before specific recommendations can be made about the optimal ways of promoting Indigenous involvement in wildlife tourism. Research is required to reveal more industry knowledge and to improve the understanding of Indigenous involvement in wildlife tourism, in particular to identify:

- what approaches to Indigenous involvement will lead to the best outcomes for business success, visitor satisfaction and educational outcomes;
- the training and support mechanisms that would be most effective for overcoming obstacles to Indigenous employment in wildlife tourism;
- opportunities that exist for developing new wildlife tourism ventures on Aboriginal lands; and
- how the quality of existing Indigenous wildlife interpretation can be improved, particularly in zoos and wildlife parks.

## **3.2 Indigenous Interests in Safari Hunting and Fishing Tourism in the Northern Territory: Assessment of Key Issues (Palmer 2001)**

### **3.2.1 Key issues raised**

Palmer (2001) conducted a study which provides a detailed review of tourism management issues in regard to guided sport fishing and commercial safari hunting ventures conducted on Aboriginal lands in the 'Top End' of the Northern Territory. The report addresses the perspectives of Aboriginal land owners and Aboriginal organisations, along with Government organisations, and fishing and hunting tourism operators, in relation to the conflicts, environmental impacts and potential economic benefits of safari hunting, recreational fishing and sport fishing. Case studies are provided about the operation of safari hunting and fishing activities on Aboriginal lands.

Palmer (2001) describes how Northern Territory legislation controlling fishing and hunting on Aboriginal lands is implemented, identifies the gaps in the relevant legislation and examines business and licensing agreements between hunting and fishing operators and Aboriginal land owners and Land Councils. The opportunities and constraints for the development of these niche industries and increasing Aboriginal involvement and employment are outlined. Palmer conducted

research into some of the key issues to be addressed by those involved in the development and management of fishing and hunting tourism.

There is significant Indigenous interest in fishing and hunting tourism in the Northern Territory. While some Aboriginal groups are now increasing their stake and participation in these industries, these niche tourism industries are not a panacea for economic growth and large-scale employment in Aboriginal communities. They may be better incorporated into a 'mixed use rural enterprise' approach<sup>6</sup> if they are to play a role in economic development and meeting community needs.

### 3.2.2 *Principal conclusions*

Based on the study's findings, Palmer (2001) made the following principal conclusions:

- Aboriginal Traditional Owners and their representative local community organisations should be encouraged to take a more pro-active role in facilitating the development of their own tourism enterprises, while at the same time recognising the commercial advantages that can be obtained from agreements secured under the *Aboriginal Land Rights (Northern Territory) Act 1976* (ALRA).
- Co-operation between stakeholders should be promoted and encouraged. Forums for negotiation and information exchange should be organised and not be hampered by jurisdictional misunderstandings.
- Training modules promoting Indigenous employment should be developed on a case by case basis and administered through institutions delivering accredited courses.
- Greater policing of commercial fishing practices along the coast of the Northern Territory is needed to ensure illegal netting does not occur within the boundaries of excluded zones under the *Fisheries Act*.
- Fishing charter ventures operating along the coastal areas of Aboriginal land should be encouraged to recognise the marine

<sup>6</sup> As recommended by the Aboriginal and Torres Strait Islander Rural Industry Strategy (ATSIC and The Department of Primary Industries and Energy 1997)

interests of Aboriginal owners and negotiate license agreements with Traditional Owners.

- Research should be commissioned into strategies for management aimed at the economic and environmental sustainability of the buffalo herds in Arnhem Land, and banteng herds in Gurig National Park.
- Given the general acceptance amongst many stakeholders in the safari hunting industry that the industry needs to be regulated, regulation could take the form of pro-active self-regulation amongst operators, or government legislation to achieve international best practice standards, professionalism and appropriate accreditation across the industry.
- An explicit code of practice for the safari hunting industry is needed to deal with the shooting of feral animals and that complies with animal welfare standards.

### 3.2.3 *Summary of recommendations*

Indigenous interests in fishing and hunting tourism in the Top End of the Northern Territory are locally significant and, in some communities, have the potential to translate into more active involvement as part of a 'mixed use rural enterprise' approach.

There are a number of obstacles and opportunities involved in the development of these niche industries that need to be addressed. Greater policing of commercial fishing practices along the coast of the Northern Territory is needed to ensure illegal netting does not occur within the boundaries of excluded zones under the *Fisheries Act*. Resources could be made available to train and authorise Aboriginal owners and their organisations to carry out a monitoring role and to ensure commercial and recreational fishers compliance with fisheries law in remote areas.

In the safari hunting industry, the ability of the Aboriginal Land Councils to fulfil their statutory obligations under the *Aboriginal Land Rights (Northern Territory) Act 1976* (ALRA), is challenged by an unregulated safari hunting industry. Palmer suggests that the

development of an industry to include the safari hunting of native wildlife, such as crocodiles, needs to be approached with caution by Aboriginal communities. Aboriginal landowners and their representatives need to ensure that there is a legislative basis to protect their interests in the development of any commercial hunting activity.

The environmental impacts of feral animals are a significant issue and need to be considered and addressed on a regional basis. Strategies for incorporating feral animal control and other areas of land management into safari hunting operations should be investigated. This could include strategies to provide specific training modules in activities directly related to the needs of the industry and thereby increase the active involvement of local Aboriginal people in the hunting operations.

Public approval of safari hunting and public concerns about animal welfare will be a significant factor in the continued development of the industry. An explicit code of practice for the safari hunting industry is needed that deals with the shooting of feral animals and that complies with animal welfare standards.

Currently, adverse interactions between government and Indigenous agencies are placing constraints on the constructive development of both the safari hunting and fishing tourism industries. Co-operation between stakeholders should be promoted and encouraged with organised forums for negotiation and information exchange.

Palmer (2001) suggests that, if Aboriginal communities and landowners wish to increase their direct involvement in the safari hunting and sports fishing industries, the initial years of a business operation should be undertaken through a cooperative arrangement with an existing operator. In most instances, a joint venture approach, with operators who have pre-existing market experience is likely to be more commercially viable than if Aboriginal traditional owners are directly running operations themselves. Whilst ensuring that final agreements are negotiated under terms of the ALRA, to increase the active involvement of Aboriginal people in these industries, local Aboriginal organisations should be encouraged to take a more proactive role in facilitating the development of their own tourism enterprises. This pro-active approach would assist Land Councils in

facilitating the proposal to the agreement stage within a time frame conducive to the needs of Aboriginal traditional owners and potential operators. This approach would require the community group to include negotiating with potential operators for employment and training packages that are tailored to each community's needs and identifying individuals who are interested in exploring these opportunities.

To achieve an overall strategy for the development of fishing and hunting tourism in the Northern Territory, further research is needed to investigate:

- the potential of commercial harvesting of buffaloes and pigs,
- maximising economic and environmental sustainability of feral animal resource use on Aboriginal land;
- the economic value and potential of the safari hunting industry as a whole in the Northern Territory;
- the potential of Indigenous interests in wildlife tourism generally and specifically in the Northern Territory; and
- the fish carrying capacity and environmental resource impacts of sport fishing on Aboriginal land.

### **3.3 Viewing of Free-Ranging Land Dwelling Wildlife (Higginbottom and Buckley 2001)**

#### **3.3.1 Key issues raised**

Australia has a wide range of endemic land-dwelling wildlife, with the highest diversity of any major tourist destination. Higginbottom and Buckley's (2001) report focuses on managed encounters between tourists and these terrestrial species occurring in free-ranging situations<sup>7</sup>.

<sup>7</sup> This excludes a detailed discussion of issues relating to birdwatching tourism, which are covered in Jones and Buckley (2001)

Viewing of free-ranging land dwelling wildlife does not comprise a uniform sub-sector, but involves a number of different types of attractions and activities. These can be classified as follows:

- Unguided encounters with wildlife in natural areas.
- Nature-based tours, 'ecotours' or 'safaris' with a wildlife component.
- Farm-based holidays with a wildlife component.
- Nature-based accommodation with a wildlife component.
- River or lake cruises with a wildlife component.
- Managed attractions based on large aggregations of wildlife.
- Specialised commercial wildlife tours.
- Guided wildlife activities provided by organisations whose main activity is not tourism (e.g. Universities, conservation groups, local government).
- General sightseeing tours that include a stop at a wildlife attraction.

There are at least 605 Australian businesses or organisations that provide tourism experiences which include viewing of free-ranging terrestrial wildlife other than birds (Higginbottom and Buckley 2001). Of these businesses, only 6.9% (42) specialise in terrestrial wildlife viewing. The most popular animals used in promotional materials by these tourism businesses are Australia's icon animals, namely kangaroos, koalas and crocodiles. Many characteristics of enterprises that offer terrestrial wildlife viewing are identified in this study.

The economic value of this sub-sector would appear to be high. However, little research has been conducted to quantify its value. Additionally, little research has been conducted to identify the financial success of existing businesses or to identify what factors are limiting such success. It appears that many businesses in this sector are relatively

small lifestyle businesses whose financial viability is limited by ineffective marketing and limited business knowledge and skills.

### **3.3.2 Principal conclusions**

If the viewing of free-ranging land-dwelling wildlife is to be further developed as a sustainable sub-sector of wildlife tourism, there is a need to collect information on what type of wildlife interactions tourists want, which species they want to see, and what obstacles are preventing them from participating in existing activities. There is very little information of this sort currently available. The pilot study conducted by Higginbottom and Buckley indicated that tourist satisfaction levels with this form of wildlife tourism are often high. However, there does appear to be a level of dissatisfaction associated with the difficulty of encountering animals in the wild where the experience does not specialise in wildlife viewing. There may well be a substantial unmet demand for wildlife viewing activities, although research to establish whether this is the case is required.

Higginbottom and Buckley (2001) suggest that the growth of this sub-sector requires four components:

1. More effective linking of tourists to products.
2. Enhancement of product quality.
3. Development of more sophisticated products on a regional or State basis that focus on species of particular local interest.
4. Use of a promotional campaign to increase the level of demand by both domestic and international tourists to view a wide range of Australian wildlife in their natural habitats.

Any increase in visitor numbers in natural areas however needs to be met with an increase in appropriate measures to manage and monitor the impacts of these activities. In public protected areas, this will require an increase in central funding or user fees to cover the increased costs. As the number of visitors to these areas continues to increase, and as tour operators search for new, more exclusive or less crowded opportunities, research that will assist in the sustainable

development and management of this sub-sector of the wildlife tourism industry will become a priority.

### **3.3.3 Summary of recommendations**

Higginbottom and Buckley (2001) suggest that the research priorities for this sub-sector are the:

- identification of species and situations suitable for wildlife tourism development, including development on private land;
- investigation of demand and relevant market characteristics, including factors affecting visitor satisfaction;
- assessment of channels for, and effectiveness of, current advertising strategies;
- assessment of the impact of these types of activities on wildlife;
- development of practical monitoring and management tools;
- research and development to facilitate further production of interpretive materials to assist tourists and travel agents, raise the satisfaction levels of tourists experiencing wildlife encounters, and enhance education in relation to conservation; and
- conduct of research to aid in the development of management-related materials that will assist in the sustainable management and development of the industry.

Several new styles of wildlife tourism or facilities to support wildlife tourism also deserve investigation. Higginbottom and Buckley suggest that these should include: a modified form of African-style safari tourism, greater integration of captive and free-ranging tourism experiences, more specialist tours, more development of wildlife tourism activities on private land, more integration of tourism with existing government or university research and conservation programs and development of new facilities in natural areas to aid in wildlife viewing.

## **3.4 Birdwatching Tourism in Australia (Jones and Buckley 2001)**

### **3.4.1 Key issues raised**

Even though birdwatching is a major component of wildlife tourism, virtually nothing is known about this form of recreation or its importance to tourism in Australia. Jones and Buckley (2001) provide an initial description of the characteristics of birdwatching tourism in Australia and discern its main constraints and challenges. In doing so, the following key issues were raised in their report.

There is evidence of considerable growth in birdwatching throughout the 1990s. However, reliable estimations of the economic significance of the industry in Australia do not yet exist. This lack of reliable and applicable information is currently impeding the planning for future development and marketing of the birdwatching sector of wildlife tourism.

This lack of information and the difficulty in obtaining it can be contributed in part to the competitiveness among operators. They are reluctant to divulge information which they regard as sensitive and are extremely territorial. Conversely, Jones and Buckley (2001) also identified a general appreciation amongst operators that there has been a lack of industry-wide planning and marketing. This battle between competition and synergism has constrained growth in this sector and is obviously an obstacle that needs to be overcome for its future to be secure.

The characteristics of birdwatching tourism can relate to the activity or the individuals undertaking the activity. Jones and Buckley (2001) identify that the activities associated with birdwatching tourism will, at a basic level, consist of the travel to a birdwatching destination, the detection of species living wild in their natural environment, identification of species and observation of the birds. Alternatively, the characteristics of birdwatching tourism can relate to the individual tourist. While the characteristics of a birdwatcher have typically been stereotyped, recent studies have indicated a much more complex picture. Birdwatching tourists may be grouped based on their level of

specialisation, ranging from generalists who are interested in birds as one part of the natural environment, to specialists who search for particular species in specific locations.

### **3.4.2 Principal conclusions**

The three main conclusions drawn by Jones and Buckley (2001) relate to the characteristics of birdwatching tourism, the obstacles to its development and sustainability, and the opportunities that the future may hold for this sub-sector of the industry. Firstly, birdwatching tourists in Australia tend to be either independent travellers seeking unguided encounters, or birdwatching tourists requiring some assistance. The independent travellers, while numerically the largest category of birdwatchers, typically use their own transport or existing travel infrastructure. Alternatively, the birdwatching tourists are generally reliant on operators to provide transport and accommodation in the places they wish to visit.

The main obstacle to development and sustainability for the birdwatching industry is understanding what tourists want. In order to develop and be sustainable, it is crucial that the birdwatching industry understands the motivations, needs and expectations of the various tourist groups based on their level of specialisation. Decker *et al.* (1987) proposed that people involved in wildlife-related recreation were motivated by a combination of three main factors: (1) affiliation, where participation was based on the enjoyment of being with like-minded companions; (2) achievement, where competition or performance were key motivations; and (3) appreciation where participants sought a sense of peace, belonging and familiarity. Jones and Buckley concluded that affiliation, achievement and appreciation are clear goals among all birdwatchers, however, their importance varies with the different levels of specialisation. They also discuss conservation as a motivating factor, but identify that it is more important to advanced birdwatchers than it is among the less specialised.

Jones and Buckley (2001) identify several general areas of opportunity for the development and expansion of the birdwatching industry in Australia. The opportunities that currently exist, include:

- more effective promotion by operators through useful websites which are updated regularly;
- the organisation of events such as meetings, camp-outs, conferences and conventions, where birdwatchers can meet, exchange ideas and news and participate in birdwatching experiences;
- the formation of local alliances and cooperative ventures;
- identification and promotion of new locations allowing for expansion; and
- the introduction of conservation initiatives that will enable tourists to become involved in meaningful scientific and conservation projects.

### **3.4.3 Summary of recommendations**

Recommendations for action and research include the following:

- Develop a code of conduct in relation to 'eco-friendliness', sustainable practices and ethical procedures
- Establish links for the exchange of information and views among birdwatching operators and guides
- Discuss bureaucratic constraints with relevant Governments
- Conduct research into the dimensions of the economic impacts of birdwatching
- Assess the positive and negative effects of birdwatching
- Conduct an appraisal of the constraints to development of birdwatching in remote areas of Australia (Jones and Buckley 2001).

### 3.5 Tourism Based on Free-Ranging Marine Wildlife (Birtles, Valentine & Curnock 2001)

#### 3.5.1 Key issues raised

Tourism based on free-ranging marine wildlife<sup>8</sup> is one of the fastest growing sub-sectors of wildlife tourism. However, the ecology and behaviour patterns of some species are not documented and, therefore, the sustainability of some aspects of this sub-sector are not known. Birtles *et al.* (2001) note that there has been little attempt to bring together the existing data on free-ranging marine wildlife that could provide a coherent framework to guide sustainable development and management of this wildlife tourism sub-sector. During their discussion, Birtles *et al.* (2001) raise the following key issues.

This sub-sector of the industry is modifying its activities to those that are more likely to be sustainable. In some places, the former practices of consumptive exploitation have been replaced with non-consumptive tourism. For example, whale hunting has been replaced with tourism based on whale-watching. Additionally, the development and implementation of guidelines for specific species affected by wildlife tourism is now occurring. In Australia, the Great Barrier Reef Marine Park Authority is currently developing a whale and dolphin conservation policy. While these practices are starting to change, much more work is needed to develop a sustainable industry.

Government and industry need to work together to develop and implement appropriate management strategies that focus on conservation of free-ranging marine wildlife. From an industry point-of-view, operators and tourists can both contribute to improving the sustainability of this sub-sector. Birtles *et al.* provide some interesting examples by Australian operators who have contributed to the conservation of marine wildlife. Additionally, tourists are recognised as being able to provide valuable input. For example, in the Great Barrier Reef visitors have been engaged in data collection, which has contributed to coral reef monitoring. Government, operators and tourists can all make an important contribution to the sustainable

<sup>8</sup> Taken to include snorkelling/diving involving viewing of underwater life, as well as species that move between the sea and shores such as seals and turtles.

development and management of tourism based on free-ranging marine wildlife.

#### 3.5.2 Principal conclusions

While there are changes occurring, the effects of tourism on marine wildlife and the nature of any impacts remain unclear in any long-term sense. There are many gaps in knowledge, mainly because inconsistent approaches to collecting information and developing guidelines have been adopted in the past. In some cases, policies have been developed for a specific site, while in others policies relate to a specific species. Birtles *et al.* conclude that there is an urgent need for information that will promote management, in an ecologically sustainable manner, of interactions with free-ranging marine wildlife.

The information required is complex and varied. It includes knowledge of each targeted species, level of tourism interest, existence of management guidelines and main gaps in research needs. Developing a matrix of this information could assist in the development of longer-term plans for research and, hopefully, attract research funds. However, this approach is limited. Some species are always of interest when they are seen, but they are not necessarily the focus of the tourist experience. In addition, the activities of tourists may impact on other species in which a tourist may not be interested.

#### 3.5.3 Summary of recommendations

Birtles *et al.* (2001) offer the following recommendations for action:

- Development of a database that collates, on a species by species basis, information about the current status and changing circumstances associated with tourism based on free-ranging marine wildlife.
- The preparation of a summary booklet for each species targeted by the wildlife tourism industry. The key experiential, ecological and economic aspects of the tourism activities and guidelines as to how these must be addressed to achieve sustainable outcomes would be described in each booklet.

- A review of guidelines that currently exist and the subsequent development of operational and management guidelines for those species for which they are not currently in place.
- Further studies on specific species to identify the attributes of the visitor experience that affect the wildlife and the attributes of the wildlife encounter which affect the visitor's experience.
- Research leading to development of a model that would assist in the evaluation of the social and economic benefits of wildlife tourism in the marine environment, supported by subsequent evaluation of the benefits associated with each species.
- Development of a program to increase the understanding of the precautionary principle, both in its application to marine-based wildlife tourism and as a central part of ecologically sustainable development.

### 3.6 Captive Wildlife Tourism in Australia (Tribe 2001)

#### 3.6.1 Key issues raised

With more than eight million visits to Australian zoos each year, captive wildlife is an important part of this country's tourism industry. Yet, despite their popularity and place in our recreational history, zoos have recently undergone considerable change in both their structure and function. In this report, Tribe addresses the issues relevant to captive wildlife tourism, and makes a number of recommendations concerning their future sustainability.

Modern zoos have seen their survival as being dependent upon their changing direction and becoming a relevant part of today's society. As such, they have developed three justifications for keeping wild animals in captivity: conservation, education and research. However, zoos (including aquariums, sanctuaries and fauna parks) must also be viable and popular places for public recreation, and this can provide them with a major quandary - how to attract and entertain its visitors without compromising its stated objectives (education, conservation and research)?

This issue is important because visitor numbers to some Australian zoos have gradually declined over the past five years. Reasons given for this decline include economic factors, weather conditions and increased competition from other tourist attractions. However, at zoos that have recently opened major new facilities or enclosures and are displaying new animals, there has been a significant increase in visitor numbers. Additionally, the marketing strategy of the zoo and its proximity to other major tourist attractions influence the ratio of international to domestic tourists, which varies greatly from zoo to zoo.

The sustainability of captive wildlife tourism in Australia is also dependent on the management and welfare of wildlife. Each zoo must make choices as to which species to hold. These choices will be influenced by wildlife laws, the zoo's own stocking policy, the cost of maintenance, conservation status, marketability and availability of a particular species. Zoos must also ensure that they maintain acceptable standards of animal welfare.

#### 3.6.2 Principal conclusions

According to Tribe (2001), 'zoos can be regarded as contributing to society in three main ways: through their economic contribution, their role in conservation and their cultural status' (Tribe 2001, p. 10). The economic benefits generated are employment, foreign exchange credits from attracting international visitors and reinvestment of operating profits. Their contribution to conservation includes captive breeding programmes for endangered species, education programmes with a conservation objective, and research studies with conservation outcomes. On the other hand, contributions to cultural status are not as direct, with zoos generally reflecting a society's cultural traditions in the same way as a museum or art gallery.

However, if zoos are to remain relevant and popular, they need to continue to transform themselves into true conservation centres delivering their message through a combination of both entertainment and education. To do this, Tribe recommends that zoos entertain, interest and educate their visitors through a combination of:

- displays and presentations which promote interaction and interpretation;

- themed displays, promoting a particular aspect of wildlife and conservation;
- integration and development of other zoo facilities that may become destinations in their own right;
- encouragement to view the zoo as an important community resource; and
- greater interaction with *ex situ* conservation activities and eco-tourism.

Finally, Tribe concludes that in order to achieve this change from a traditional zoo to a conservation centre, management will need to develop and implement appropriate policies and procedures and, like any organisation dealing with change, will need to nurture and encourage staff. Additionally, to raise funding and develop new marketing opportunities zoos need to develop more collaborative links and strategic alliances with other components of both business and government.

### **3.6.3 Summary of recommendations**

Tribe identifies the first step in promoting sustainable development and management of captive wildlife tourism in Australia as carrying out an accurate and complete evaluation of the contribution of Australian zoos to conservation. This evaluation should focus on the areas of education and captive breeding. By identifying how zoos efficiently and effectively contribute to conservation it will be possible to guide zoo policy and influence government policy. Additionally, the evaluation would promote the development of zoos as conservation centres and improve public perception and understanding of the value of zoos to wildlife conservation.

## **3.7 Fishing Tourism: Charter Boat Fishing (Gartside 2001)**

### **3.7.1 Key issues raised**

It is only recently that tourism bodies have started to recognise that charter boat fishing involves large numbers of tourists. Additionally, until recently, government fisheries management agencies had not recognised that charter boat fishing could remove large numbers of fish and, therefore, needs to be included in management plans. As part of the status assessment of this industry, Gartside (2001) examined the size and composition of this sector, the developing regulatory environment and the challenges and opportunities faced by fishing tourism.

The size and composition of the industry is very important to planning for sustainable management and development. There are around 965 marine charter fishing boats currently operating in Australia. These operators generally charge for the hire of their boat, equipment and knowledge. The distribution of boat sizes, which varies considerably around the country, is also important because the length of a boat determines the upper limit on the number of passengers or anglers that it can carry. This type of information is obviously relevant to fisheries management agencies and tourism bodies.

The development of a standard regulatory environment is a key issue for the charter boat tourism fishing sector. Gartside (2001, p.5) states that 'the marine charter boat fishing sector sits uncomfortably between the fishing and tourism industries amid a tangled maze of government regulation'. At present, fisheries management laws in each State dominate the regulatory framework. However, these are not consistent between all the States. Some States require operators to submit statistical returns on their fishing; others have separate licences under their fisheries acts; while Queensland has a system of non-renewable permits.

### **3.7.2 Principal conclusions**

Following a brief discussion of the types of charter boat fishing activities currently being conducted in Australia, Gartside states that it

appears that the inshore and coastal reef fishery is an important component throughout most of Australia. There is existing harvesting pressure on these species and the charter boat fishing activities are adding to this pressure. The sustainability of the resource is essential to the management of the regions and also the future of the industry. Therefore, this component of the industry has important implications for fisheries management.

It is important that a regulatory framework is developed for the charter fishing boat sector that will address the needs of both the fishing and tourism industry. Gartside, in his discussion of this framework, refers to a meeting of the Australia and New Zealand Fisheries and Aquaculture Council in 1997 where it was agreed that certain conditions need to be present. These conditions are consistency of laws between jurisdictions, adoption of the principles of ecologically sustainable development, that fishing rights are allocated in a transparent way among users, and that there is compliance with the obligations of international treaties, such as those on conservation and biodiversity (Gartside 2001).

Gartside discusses the main issues for marine tourism operators that were identified by Donnelly (1998) in a survey of operators. One of the main concerns identified related to bureaucratic over-regulation. Other issues identified by the operators included competition from unlicensed operators, larger operators and the commercial fishing industry, costs of operating and training staff, ineffective marketing and unethical behaviour of some operators.

The main issues of concern for the industry may be categorised as either fisheries issues or tourism issues. The fisheries issues discussed by Gartside focus mainly on management of the natural resource and include the risk of increases in recreational exploitation of fish stocks, competition between charter boat operators for access to the most productive or consistent sites, unregulated entry to the sector, who will pay for research and management, and what the licence conditions and limits will be. The current tourism issues that Gartside identifies as being relevant to this sector include the quality of the tourist experience, the quality of the tourism attractions, the need for coherent standards of customer service and industry promotion, the local depletion of catch and the variation of standards between

operators. These issues need to be addressed simultaneously if the industry is to achieve sustainable development and management.

### **3.7.3 Summary of recommendations**

The recommendations made by Gartside relate to the overall context of marine-based tourism and its unavoidable relationship with natural resource management, conservation and sustainability of resource usage. The recommendations made include the following:

- Restriction on entry to the sector to help meet fisheries management requirements for controls on harvest and to ensure that those entering the industry have a commitment to these issues.
- Coordination of the currently fragmented, duplicated and complex government regulations.
- Development of a charter of customer service/client satisfaction, adopting an accreditation and registration system for operators, and developing industry operating standards and procedures.
- Investigations into a coordinated approach to marketing.
- The establishment of a management body to facilitate sustainable development and a review of how this additional management could be funded.
- Government support to enhance the sector as part of regional development plans.
- Recognition by the tourism industry of their commitment to fisheries management issues.

### **3.8 Recreational Hunting: An International Perspective on Australia** *(Bauer and Giles 2001)*

#### **3.8.1 Key issues raised**

Issues surrounding hunting in modern society are complex. Hunting activities include sport hunting, subsistence hunting, traditional hunting, commercial harvesting of wildlife, animal control by shooting, market rearing, trophy hunting or indigenous hunting. The status assessment report by Bauer and Giles (2001) attempts to make the point that a range of modern hunting activities can be viewed as nature-based recreation or ecotourism. The report cites literature documenting the considerable contributions that hunters have made and are making to conserving habitat, rehabilitating species and restoring ecosystems. In arguing that recreational hunting can make significant contributions to conservation and society, Bauer and Giles raise the following key issues.

The philosophy and psychology of hunting is a complex topic. Bauer and Giles reflect on the ideas of Cartmill (1993) who suggests that both hunting and protest against hunting seem to symbolise a conflict between human intellect and instinct, and contemplation and aggression. Hunting is important to the cultural heritage of many indigenous and traditional rural societies around the world.

Recreational hunting can be viewed as a modern global land use. Many developed countries have important and diverse hunting industries. Bauer and Giles conducted a global comparison of hunting practices. They found that hunting plays a major economic role in highly developed and industrialised countries such as the United States, Canada, Germany, France and Russia. In contrast, developing countries such as India, Nepal and Zambia, where game and wildlife resources are more diverse and, at times, more abundant than in developed nations, derive very little from the industry. Currently, Australia lies somewhere in the middle. However, there is potential to increase the economic contribution of hunting as a form of sustainable development and management of natural resources in Australia.

#### **3.8.2 Principal conclusions**

The hunting industry may well be approaching crisis point. In many countries where hunting is important to traditional cultures, resources have been depleted, while in other countries hunting has become socially unacceptable. The stakeholders in the industry need to work hard to promote hunting as a conservation tool.

Bauer and Giles identify the current global challenges for hunting as being the following:

- More regulation of international hunting tourism.
- More involvement of hunting organisations with international conservation projects involving Indigenous communities.
- Greater and more articulate involvement of hunters in ideological disputes.
- Better international liaison and cooperation.
- Development of acceptable hunting models for protected areas that can help control population numbers.
- Development of efficient self-regulation in international trophy hunting, including regulations requiring economic contributions to conservation.
- Developing projects to establish and implement national hunting policies in developing countries.
- Involvement of Indigenous people in the development of national conservation and hunting legislation.
- Development of environmental auditing and accreditation systems relevant to recreational hunting.

In conclusion, the present and future key issues of hunting in Australia include identifying the kinds of hunting that are sustainable and promotes conservation, the opportunity for development by focusing

on game animals which require control, constraints on the development of hunting and the negative image of hunters in the public. These are all long-term issues that need to be addressed in order to promote sustainable development and management of the industry.

### **3.8.3 Summary of recommendations**

Bauer and Giles make the following recommendations for the recreational hunting industry:

- Establish a research centre and development of training programs to promote research, training and public relations.
- Improve self-regulation and self-control.
- Address current firearm issues relating to hunter versus shooter and restrictions on possessing firearms.
- Address the issue of gaining permission to hunt in different land tenure areas.
- Trial some innovative new hunting systems (e.g. licence or lease).
- Finalise the development of a National Hunting Strategy.
- Address difficult current population control issues with native species.
- Develop sustainable use patterns in accordance with existing International Treaties and Australian legislation.

## **4. VIEWS OF STAKEHOLDERS**

### **4.1 The Regional Workshops**

#### **4.1.1 Obstacles and solutions**

The principal outcome of the regional workshops was the identification of elements of wildlife tourism that participants currently view as obstacles to growth and sustainability of wildlife tourism in Australia, and of potential solutions for overcoming these problems. Table 2 presents a summary of these issues.

**Table 2: Synthesis of obstacles and solutions to sustainability and growth of wildlife tourism in Australia, as proposed by stakeholder workshop participants**

OBSTACLES	SOLUTIONS
<b>MARKETING</b>	
<ul style="list-style-type: none"> <li>• Insufficient marketing</li> <li>• Lack of coordinated marketing of wildlife tourism</li> <li>• Inappropriate marketing practices</li> <li>• Lack of marketing funds</li> </ul>	<ul style="list-style-type: none"> <li>• More effective targeting of marketing funds, based on knowledge of market</li> <li>• More effective use of world wide web</li> <li>• Develop better linkages of operators to State tourism agencies re marketing</li> <li>• Increase international marketing</li> <li>• Educate Australian public to value their wildlife more highly</li> <li>• Create realistic expectations regarding wildlife in marketing</li> <li>• Promote greater general awareness about Australian wildlife</li> <li>• Use more diverse wildlife icons</li> <li>• Get industry (non-tourism) to utilise and promote Australian animals as icons</li> <li>• Develop a cooperative marketing approach that will aid in educating the public</li> <li>• Promote individual sub-sectors, but still adopting a cooperative approach</li> </ul>
<b>PRODUCT RANGE AND QUALITY</b>	
<ul style="list-style-type: none"> <li>• Current range of wildlife tourism products insufficient</li> <li>• Some wildlife tourism products of poor quality</li> <li>• Some experiences fail to meet expectations</li> <li>• Poor infrastructure and image problems for wildlife parks</li> </ul>	<ul style="list-style-type: none"> <li>• Increase opportunities for interactive wildlife tourism e.g. combine captive and free-range experiences</li> <li>• Educate tourists so that their expectations match the products available</li> <li>• Improve design of settings/ features, especially through use of technology</li> <li>• Develop best practice codes to encourage high quality and authenticity of products</li> <li>• Display local species in wildlife parks - need to overcome bureaucratic constraints</li> </ul>

OBSTACLES	SOLUTIONS
<b>COMMUNICATION AND ORGANISATION</b>	
<ul style="list-style-type: none"> <li>• Fragmented industry</li> <li>• Lack of communication between operators, and between operators and management bodies</li> <li>• Lack of collective lobbying and marketing</li> </ul>	<ul style="list-style-type: none"> <li>• Establish a national body to provide leadership on marketing and lobbying, and facilitate greater communication - or organise more effectively within existing organisations</li> <li>• Develop stronger links and communication channels between wildlife tourism operators, and between operators and management organisations by promoting a common ground</li> </ul>
<b>INEQUALITIES IN THE INDUSTRY</b>	
<ul style="list-style-type: none"> <li>• Greater opportunities available for large than for small operators</li> <li>• Excessive restrictions for tour operators accessing protected areas</li> <li>• Private operators have to compete with government subsidised attractions</li> </ul>	<ul style="list-style-type: none"> <li>• Increased government support (e.g. through training, tax concessions) for private wildlife parks</li> <li>• Small operators use industry associations to lobby for equal opportunities</li> <li>• Increase entry fees at government subsidised venues</li> <li>• Educate the public about the high costs of running a private wildlife tourism venture</li> </ul>
<b>LACK OF OPERATOR SKILL AND KNOWLEDGE</b>	
<ul style="list-style-type: none"> <li>• Operators getting into wildlife tourism for purely commercial reasons</li> <li>• Lack of operator knowledge and imagination</li> <li>• Insufficient operator training, especially in relation to business and wildlife skills</li> </ul>	<ul style="list-style-type: none"> <li>• Develop codes of best practice</li> <li>• Work experience and education from experts</li> </ul>
<b>FINANCIAL CONSTRAINTS</b>	
<ul style="list-style-type: none"> <li>• Insufficient capital for development, marketing, training and staffing</li> <li>• Lack of revenue reinvested in environmental and management issues</li> </ul>	<ul style="list-style-type: none"> <li>• Start up subsidies and traineeships to be provided for small operators</li> <li>• State tourism budgets to provide funds for promoting and sustaining wildlife tourism</li> </ul>

OBSTACLES	SOLUTIONS
<b>ACCREDITATION</b>	
<ul style="list-style-type: none"> <li>• Low standards and credibility of accreditation programs</li> <li>• Lack of consistent codes of best practice</li> <li>• Difficulty in making accreditation programs effective</li> </ul>	<ul style="list-style-type: none"> <li>• Improve accreditation standards</li> <li>• Introduce accreditation for information centres</li> <li>• Improve linkages between different accreditation schemes</li> <li>• Raise consumer awareness of accreditation schemes</li> <li>• Highlight best practice and genuinely accredited businesses in marketing campaigns</li> <li>• Educate travel agents and operators re best practice and accreditation standards</li> </ul>
<b>REGULATION</b>	
<ul style="list-style-type: none"> <li>• Current regulations are overly bureaucratic and restrictive</li> <li>• Complexity of licensing and insurance</li> <li>• Lack of compliance with regulations by some operators</li> <li>• Lack of consistent government policy</li> </ul>	<ul style="list-style-type: none"> <li>• Streamline and integrate current licensing requirements between government departments; more national consistency</li> <li>• Develop suitable policies</li> <li>• Minimise compliance costs and potential for negative reactions by operators</li> <li>• More effective enforcement</li> </ul>
<b>WILDLIFE</b>	
<ul style="list-style-type: none"> <li>• Many species of wildlife tend to be 'uncooperative' in relation to tourism</li> <li>• Lack of tourists' and operators' knowledge of wildlife</li> <li>• Threats to wildlife due to causes unrelated to wildlife tourism</li> <li>• Seasonality of viewing for some species</li> </ul>	<ul style="list-style-type: none"> <li>• Focus on the species that are 'cooperative'</li> <li>• Change timing of tours to facilitate nocturnal viewing</li> <li>• Use creative interpretation</li> <li>• Enhance links between captive and free range animals</li> <li>• Educate visitors and operators to enhance ability to find and interpret wildlife</li> <li>• Educate market to increase length of viewing season</li> <li>• Marketing to develop realistic expectations</li> <li>• Lobby government regarding conservation threats</li> </ul>

OBSTACLES	SOLUTIONS
<b>CONSERVATION AND ENVIRONMENT</b>	
<ul style="list-style-type: none"> <li>• Inadequate protection of natural resources by government</li> <li>• Threat of environmental damage by poorly managed wildlife tourism</li> </ul>	<ul style="list-style-type: none"> <li>• Develop creative approaches to minimise negative impacts of wildlife tourism on wildlife e.g. remote viewing technology for viewing rare and endangered species</li> <li>• Promote the protection and conservation of wildlife in all aspects of wildlife tourism</li> <li>• Provide incentives and rewards for conserving natural environments on private land</li> </ul>
<b>INDIGENOUS ISSUES</b>	
<ul style="list-style-type: none"> <li>• Lack of Aboriginal culture incorporated into wildlife tourism</li> <li>• Lack of input from Indigenous people into wildlife tourism</li> </ul>	<ul style="list-style-type: none"> <li>• Improve and encourage communication between Aboriginal communities and operators</li> <li>• Use cross-cultural workshops to raise operator awareness of Aboriginal issues</li> </ul>

The most commonly and strongly expressed concerns related to marketing of wildlife tourism. Current marketing efforts were deemed insufficient and a lack of coordination and funds were viewed as obstacles to overcoming this problem. Participants felt that the limited funds available need to be used to develop a cooperative approach to marketing that would promote the industry and provide stronger links between operators and State tourism agencies. In addition, they believed that marketing programs should educate the public in relation to wildlife, and shift the focus to a more diverse range of icon animals. They agreed it was essential that any marketing policy follow a cooperative approach that will promote wildlife tourism as a whole<sup>9</sup>, as well as individual sub-sectors<sup>10</sup>.

The participants viewed the range and quality of wildlife tourism products currently available as being an obstacle to sustainable development of wildlife tourism, especially in the face of what they

<sup>9</sup> Note however that no advocates of, or participants in consumptive wildlife tourism operators were present at the workshops, and many of those present did not see fishing and hunting as being part of wildlife tourism with respect to the workshop conclusions.

<sup>10</sup> As a follow up to the workshops, the feasibility of developing a national wildlife tourism website, with its major role being in marketing, is being investigated by the CRC in conjunction with operators.

perceived to be an increasingly sophisticated international market. In particular, problems with wildlife parks in some regions were mentioned. One problem beyond the control of wildlife park operators was that parks are unable to differentiate themselves sufficiently by specialising in species native to their area because of legal prohibitions on acquiring them from the wild. For wildlife viewing in general, it was proposed that improvements were required in setting design, authenticity and use of technology. In response to a perceived desire of tourists to see animals in the wild, and yet be able to have close interactions with them, it was suggested that the number of products that combine captive and free-range experiences should be increased. Best practice codes of conduct were seen as a key means to raise standards. However, if the industry is to be developed and managed in a sustainable manner, the participants felt that it may be appropriate to limit opportunities for interactions with free-ranging wildlife. Therefore, it is also important to educate tourists about the need to protect species and their habitats, so that the existing range of products will better meet their expectations and provide satisfying experiences.

The fragmented nature of the industry and a related lack of communication between stakeholders (between operators, and between operators and management agencies) were viewed as an obstacle, especially with regard to lack of capacity for collective lobbying and marketing. It was proposed that the establishment of a national organisation of wildlife tourism interest groups could help address these problems<sup>11</sup>. Some small operators perceived that there were inequalities in the way the tourism industry is organised, which unfairly prejudiced their businesses, particularly in regions of fierce competition such as around Cairns. Another unfair source of competition perceived by some operators was with subsidised government run ventures, and it was proposed that entry fees of these ventures should be increased to provide fair competition.

The participants identified several operational constraints that need to be overcome before a sustainable approach to the development and management of wildlife tourism can be successfully implemented.

---

<sup>11</sup> As a follow up to the workshops, the feasibility and desirability of setting up a national wildlife tourism association, as opposed to working within existing organisations, is being investigated.

These constraints included a lack of operator skill and knowledge in relation to both wildlife and business issues, financial constraints, and problems with accreditation and regulation. In most of these workshops, problems with the regulatory system were described in terms of over-regulation, with operators feeling that delays, costs, complexities, and a multitude of required permits were inhibitions to their business. However, at the Cairns workshop this problem related to the opinion that regulations were not adequately enforced, allowing irresponsible operators to thrive. Suggested solutions to lack of operator capacity were that new operators should be required to participate in training programs to develop financial management skills and to improve their knowledge of wildlife, and that all operators should comply with a code of best practice. To address financial constraints, it was proposed that start-up subsidies and traineeships should be provided to small operators and that State budgets should provide additional funds to be allocated to promoting sustainable wildlife tourism operations. The need for streamlining of regulatory systems was stressed, and, in the Cairns region, for greater commitment and resources for adequate regulation and enforcement. Improvements in existing accreditation schemes (particularly the Nature and Ecotourism Accreditation Program) as well as development of codes of practice were seen as vehicles for improving standards.

The issues identified above all relate to the wildlife tourism industry and the way it is currently operated and managed. In addition, the workshop attendees identified a series of constraints that relate to the actual wildlife experience or encounter. Constraints associated with the wildlife itself were that many species are 'uncooperative', and some are seasonal in their activity. It was proposed that these constraints could be tackled by appropriate design of wildlife experiences combined with education of visitors and operators to facilitate more realistic expectations. Participants agreed that marketing and operators must promote the conservation of wildlife, which is seen as crucial to the sustainability of the industry. Additionally, it was suggested (particularly in the Perth workshop) that the visitor experience would be enhanced by increasing the level of Aboriginal culture incorporated into wildlife tourism experiences. Mechanisms to promote greater awareness of Aboriginal issues by operators were proposed.

#### 4.1.2 Information and research needs

In addition to the practical solutions proposed in section 4.1.1, the workshop participants identified a number of ways in which research, information provision and training programs could contribute to enhanced growth or sustainability of wildlife tourism.

By far the most commonly expressed research need related to understanding the nature of demand for wildlife tourism. This included the need for information about the market, including visitor numbers, characteristics, expectations, motivations, preferences and satisfaction levels. These were felt to be vital in order to enable operators to design satisfying experiences and to better target their marketing.

Other proposed topics for research were:

- assessment of the economic value and potential of wildlife tourism, in order to argue for increased funding to support;
- inventories of wildlife resources relevant to tourism, to inform strategic development of new wildlife tourism opportunities;
- characteristics of wildlife species relevant to optimum tourism development; and
- technical research and development to investigate new viewing technologies and setting designs, in order to improve visitor satisfaction and/or reduce impacts on wildlife.

Participants identified a number of ways in which operators could be provided with readily useable information and advice to help them improve the quality of their products:

- develop best practice guidelines and/or codes of best practice for wildlife tourism and wildlife interpretation;
- develop demonstration cases of 'realistic best practice';

- develop reference material on wildlife of relevance to tourism that will be available to operators and tourists (possibly as education kits);
- provide information on appropriate tourism distribution channels to operators; and
- operators and indigenous people should communicate more to incorporate indigenous information into wildlife tourism.

Specific issues on which training programs or materials were recommended were:

- the nature and diversity of Australian wildlife (for tourists, the general public, and tourism intermediaries, and at a more detailed level, for operators);
- wildlife-related skills (operators);
- accreditation schemes and associated standards (potential tourists);
- financial and operations management (operators);
- interpretation (operators); and
- Aboriginal issues (operators).

The final group of needs identified by the participants related to the way in which research on wildlife tourism should be conducted. In order to maximise collection of useful data on demand, participants suggested that operators should be trained and involved in administering visitor surveys. Uniform survey guidelines should be used by different operators to maximise the collective usefulness of these data. In relation to conservation objectives, it was proposed operators and tourists could assist in the collection of data and can participate in monitoring programs and administering management plans. Finally, it was proposed that researchers need to frequently update participants on research progress and outcomes.

## 4.2 SWOT Analysis of Australian Wildlife Tourism Conducted by Research Program Steering Committee

The results of a SWOT analysis of Australian wildlife tourism undertaken at a workshop of the wildlife tourism steering committee are presented in Box 2. Only those aspects that relate specifically to the attributes of Australia as a wildlife tourism destination (rather than as a general tourism destination) are included. Features listed during the workshop were subject to consensus unless indicated with an asterisk, in which case some participants expressed an opposing view to that presented here when this point was raised.

### Box 2: SWOT Analysis of Australian wildlife tourism conducted by steering committee of the wildlife tourism research program

#### STRENGTHS

##### *The Wildlife*

- High levels of endemism
- High abundance of some species
- Unusual
- Wildlife that are 'truly wild' in contrast to many overseas destinations
- Australia internationally recognised for its wildlife

##### *Other*

- Some wildlife tourism provides educational benefits
- Some operators contribute to research and conservation

#### WEAKNESSES

##### *The Wildlife*

- Most Australian terrestrial mammals are difficult to view because they are often small, cryptic and nocturnal
- There are few native species likely to be seen as 'exciting' because they are very large or dangerous

##### *Other*

- Available opportunities for wildlife tourism have not been systematically explored, either in terms of a wildlife inventory or product development opportunities
- Many of our wildlife tourism products are not internationally competitive and are not adequately sophisticated given expectations of many modern tourists
- Australia provides insufficient funding to manage its natural resources to ensure sustainability
- There is a lack of wildlife expertise in the tourism industry
- Many government wildlife tourism managers have no tourism expertise

- There is insufficient cooperation between governments and the tourism industry
- Land-use planners are not sufficiently involved in wildlife tourism
- There is insufficient involvement of private landholders in wildlife tourism, but it is on private land where wildlife tourism can have greatest conservation benefits
- The tourism industry is not aware of the high diversity of Australian animals
- Facilities for wildlife tourism are insufficient\*
- Much wildlife occurs in remote areas lacking in other tourism infrastructure, including difficult access
- Australia is not meeting expectations of inbound tourists for close interactions with wildlife (especially handling and feeding)\*
- There is insufficient government funding to assist private operators

#### OPPORTUNITIES

- Improvement of marketing, especially via the Internet
- Development of more specialised and sophisticated wildlife tourism products
- Development of an industry training program in relation to wildlife tourism, especially in relation to overseas visitors
- Use of wildlife tourism as a strategy for conservation, especially on private land, and exploration of ways to do this most effectively
- Improvement of educational quality to raise conservation awareness
- Implementation of limits of acceptable change in monitoring and management
- Recognition that hunting can be one of the most sustainable of land uses\*

#### THREATS

- Wildlife species and their habitats can be threatened by poorly managed wildlife tourism
- There are some unscrupulous operators who cause environmental damage and offer poor quality experiences
- Some responsible private operators have their access to good areas for wildlife tourism in protected areas unduly restricted, threatening the viability of their businesses
- Allowing any commercial wildlife tourism in protected areas and for certain sensitive species and ecosystems is a conservation threat, especially where tourist numbers are high or there is active interaction with wildlife (e.g. feeding)\*
- Community conservation groups sometimes go too far in restricting wildlife tourism or other tourism in natural areas\*
- Wildlife tourism experiences should be, first and foremost, for the benefit of wildlife, not purely for human gratification; they should not distort nature or natural processes and should not involve infrastructure (e.g. viewing platforms) or activities (e.g. four wheel driving) that may impact detrimentally on the environment\*

If there is to be sustainable development of wildlife tourism in Australia, then there needs to be a concerted effort to build on the identified strengths, particularly in terms of marketing, and pursue some of the identified opportunities. Most of the weaknesses can be addressed with sufficient commitment and funding, although the inherent weaknesses relating to the wildlife must be recognised as constraints, and creative ways for overcoming these explored. For example, the nocturnal nature of much Australian terrestrial wildlife requires education of tourists and the larger tour operators to adjust expectations and planning with regard to daily timetables.

Although there was consensus on most points, several key controversial questions that could cause conflict between different stakeholders emerged from this analysis and the subsequent workshop discussion:

1. Should wildlife tourism seek to cater for expressed demand by tourists for close encounters with wildlife (e.g. feeding, handling), or should it seek to modify that demand through education?
2. Should commercial wildlife tourism in protected areas be promoted?
3. Should infrastructure to facilitate wildlife viewing in protected areas be developed?
4. To what extent should wildlife versus tourism specialists be involved in running wildlife tourism enterprises?
5. Should enterprises involving sustainable hunting of native wildlife be promoted?
6. Should feeding and other forms of artificial provisioning of wildlife for tourism purposes be allowed, and if so under what circumstances?
7. Should numbers of people viewing free-ranging wildlife always be kept small?

A stakeholder's position on these points probably depends largely on the extent to which they take a 'tourism-centred' or 'wildlife-centred' perspective. In the extreme tourism-centred view, the path that will lead to greatest short-term benefits for the tourism industry and visitor satisfaction will be taken. In the extreme wildlife-centred view, any activities that cannot unequivocally be demonstrated to be non-harmful to the wildlife or natural environment will be prohibited, irrespective of their desirability from a tourism or visitor point of view. However inability to reach consensus on some of these issues, and difficulties for governments in producing defensible policies, also relate to a lack of knowledge about the effects of alternative approaches on wildlife and habitats, and/or on visitors. Research and wide dissemination of its findings can therefore play an important role in helping to resolve these issues.

### 4.3 Interviews with Senior Government Staff

When asked to identify the major obstacles facing wildlife tourism, key informants from government tourism and conservation agencies identified a range of factors (Box 3) which generally fitted into the same categories as those emerging from the stakeholder workshops. Issues that were identified by at least three informants related to: deficiencies in marketing, communication and organisation, and operator capacity; financial constraints; problems with regulation, and constraints relating to the nature of Australian wildlife. Since informants were told that conservation issues would be focused on elsewhere<sup>12</sup>, the lack of depth on issues relating to managing negative effects of wildlife tourism on the wildlife and environment should not be taken as indicative of any relative lack of concern.

<sup>12</sup> as part of interviews conducted for Green and Higginbottom (2001)

### Box 3: Obstacles identified by key informants from government tourism and conservation agencies.

All issues identified by at least one informant are presented.

#### Marketing

- Inadequate marketing
- Poor marketing
- Lack of cooperative marketing - operators tend to adopt a competitive approach

#### Product range and quality

- Poor quality of interpretation
- Shortage of interpretation in foreign languages
- Wildlife tourism products in remote areas must be of higher quality than they often are to overcome the obstacle provided by this remoteness
- Operators lack imagination or are unwilling to risk taking opportunities to develop new types of products
- Quality of wildlife parks is often poor

#### Communication and organisation

- 'Keep out' mentality by some rangers
- Bad relationship between parks staff and operators in some areas
- Lack of suitable bodies to represent the tourism operators in some areas; difficult for government agencies to communicate with them
- Lack of coordination within some State conservation agencies
- Lack of sufficient support from State tourism agency in some States (according to conservation agency staff)

#### Operator viability

- Many operators financially marginal
- Lack of sufficient visitors is major reason for financial problems

#### Lack of operator skill and knowledge

- Typical problems of small business in Australia: lack of business skills
- Insufficient wildlife skills
- Insufficient people skills
- Inexperience of operators in wildlife tourism
- Being a wildlife tourism operator is not seen as a 'real job' in some areas

#### Financial constraints

- Insufficient funds for development in remote areas
- Insufficient government funding
- Insufficient funds for visitor infrastructure
- Many enterprises are undercapitalised (private and public sector)

#### Regulation

- Many operators perceive themselves to be 'over-regulated'
- Permit system is too inflexible
- In areas where quotas exist on commercial operators permits, there is sometimes a backlash to conservation agencies from those who are excluded, which is difficult to defend given lack of good research
- Insufficient security for operators in current permit systems

#### Policy

- Lack of consistent, clear policies on management of wildlife tourism by conservation agencies

#### Wildlife and environment

- Wildlife species often unpredictable to find, nocturnal, small, cryptic
- Remoteness and access problems to where the wildlife are
- Uncomfortable weather conditions in some areas at some times of year

#### Conservation

- Potential for overcrowding at some wildlife sites
- Too much focus on tourism volume rather than yield
- Difficulty managing the visitor: conservation balance
- Insufficient funding of conservation agencies to ensure sustainable management of wildlife tourism in protected areas

When asked whether they perceived any major gaps in research, provision of information or training programs that would assist in overcoming obstacles or meeting opportunities more effectively, a range of suggestions in each of these categories were suggested.

With regard to research, the two most frequently mentioned areas of need related to understanding the market, and investigating product development opportunities. Suggested areas of research on the market were: identifying characteristics of the market for wildlife tourism, investigating the nature of demand, and determining how important wildlife is to visitors in relation to other aspects of the tourism experience. With regard to product development, it was proposed that opportunities for new locations, species and forms of wildlife tourism should all be investigated, and that an inventory of opportunities and constraints relating to particular sites should be undertaken. As one way to investigate potential new forms or design

features for wildlife tourism, it was suggested that there should be an investigation best practice international cases of wildlife tourism and opportunities for their application in Australia.

Other proposed topics for research were:

- determine the relationship between use of accreditation and actual standards
- determine visitor impacts on sensitive species/ situations to inform re imposition of quotas
- determine factors restricting access of visitors to sites and how to overcome
- determine financial value and potential of wildlife tourism in order to argue for increased funding for its development and management
- determine critical success factors for wildlife tourism operators

Informants identified several ways in which operators could be provided with information and advice that would result in improved product quality or reduction of the potential for negative impacts on wildlife:

- interpretive kits on natural history (including wildlife) for individual bioregions
- written and electronic materials providing information and advice relating to Australian wildlife
- codes of conduct or guidelines for wildlife tourism based on species involved in wildlife tourism not covered at this stage (i.e. particularly terrestrial species)

Two informants suggested that training programs would be helpful in raising standards among operators. One suggested that selected operators should be sent on a study tour to see cases of best practice wildlife tourism overseas, in order to stimulate innovation and raising

of standards. The other suggested that a training course be developed targeted at wildlife tourism operators: this should combine local (including on site) modules and national modules.

When asked what opportunities they saw for expansion of wildlife tourism, the informants mostly identified new types of wildlife tourism experiences that could be developed, or ways of raising standards of existing products. Some informants proposed that there were opportunities for development of new wildlife tourism experiences based on certain species and areas not previously exploited for this purpose (the details of this were State-specific). In particular it was suggested that this could be linked to creation of new protected areas that were in progress (marine reserves in NT and WA) or wildlife reintroduction programs (WA: Western Shield, and SA: Operation Bounceback). On the other hand, some informants did not believe that there were significant opportunities for development of wildlife tourism on new species and areas in their State. Certain sub-sectors were also seen by some informants as providing particular opportunities in their State. These were bird-watching, boat-based whale-watching and fishing. One informant also suggested that there were opportunities to develop more 'soft ecotourism' experiences based on free-ranging wildlife, especially for the Asian market.

Most informants felt that improving the quality of existing products was important, and some suggested that accreditation systems were a good way to do this. Some proposed that raising of standards among existing operators, rather than establishment of new operators, was desirable. Opportunity to increase yield by raising prices, subject to provision of high quality products. Raise standards through improvement and increased use of accreditation programs.

Other identified opportunities were:

- increased development of wildlife tourism on private land.
- construction of facilities to assist wildlife viewing e.g. hides, viewing platforms
- increased role of operators and public in conservation.

## 5. CONCLUSIONS

### 5.1 Limitations of this Study

There are several topics that are important to Australian wildlife tourism but were not reviewed within the individual status assessment reports because of limitations on funding and available expertise. Some of these topics did, however, emerge within the stakeholder consultation processes (section 4). The most fundamental topic was business issues, including marketing and product development. Some other topics that deserve future attention are:

- public and tourist values, perceptions and ethical positions relating to wildlife tourism
- a detailed analysis of the policy and legislative environment of wildlife tourism
- the relationship between wildlife tourism and other uses of wildlife and land
- aspects of tourist fishing other than the charter boat sector<sup>13</sup>

Other limitations of this report relate to the methods that were employed. The status assessment reports were based principally on literature reviews and interviews of key informants, rather than conduct of primary research. Given the major gaps in research on most aspects of wildlife tourism, particularly in Australia, and the complexity of the issues, it is not possible to draw definitive conclusions on some issues.

The stakeholder consultation processes, while quite extensive, were necessarily limited by the range of people involved, and there are probably some biases. In particular there was an over-representation of the terrestrial non-consumptive sub-sector compared with others, and very little input from the hunting or fishing sub-sectors. Also there was no input from operators from NT, Victoria, NSW or South Australia.

However there was a high level of consistency of findings, both between different stakeholder consultation processes, and between

<sup>13</sup> another study being conducted by A. Franklin within this wildlife tourism research program is addressing potential for further development of trout fishing in Tasmania.

the status assessment reports and consultations. Thus the conclusions of this report can be seen as a sufficient basis to guide broad directions for the industry and for research.

### 5.2 Cross-Sectoral Issues

Many of the key issues raised in the individual status assessment reports and stakeholder consultation processes are relevant to all sectors of wildlife tourism. Most of these issues can be seen as relating to an aspect of the broad question of how to develop and manage wildlife tourism in a sustainable manner that brings lasting benefits to tourists, operators, wildlife and habitats, and host communities.

#### *Visitor demand and satisfaction issues*

A recurring theme across all the sectoral reports and in consultations with stakeholders was the need to better understand the nature of demand for wildlife tourism experiences. This was the issue that was most frequently stressed by tourism stakeholders as being critical for research. The development of new products or facilities requires some understanding of the potential size of the markets or audiences as well as an understanding of visitor expectations with regard to the activities and types of experiences that will be provided. Many commercial operators and protected area managers make decisions about products and facilities based on anecdotal evidence at best. In addition several of the sectoral reports noted the need to investigate the factors that influence visitor satisfaction. Reliable information on visitor expectations and satisfaction can help not only in the design and adaptation of products and facilities, but also can inform management decisions. Arguments over wildlife feeding, for example, are often based upon the assumption that such feeding is desired by a majority of visitors or that it is critical to the ongoing success of a tour operation. Yet such assumptions have rarely been examined in a systematic, objective way.

#### *Interpretation*

A related concern is that of the importance and effectiveness of interpretation programs within wildlife tourism. There has been very little research to assess the quality and effectiveness of wildlife interpretation in Australia. However all stakeholder consultation

processes conducted for this report elicited the view that the quality of interpretation offered by Australian wildlife tourism businesses and in protected areas is inconsistent and could be improved. Given that there is evidence that interpretation is an important component of visitor satisfaction and that effective interpretation can contribute to conservation awareness and support, it is important to further investigate the nature and extent of any deficiencies and address these.

#### *Tourism business issues*

The stakeholder consultation processes raised a range of concerns relating to running the business-side of wildlife tourism operations. Some of these were further supported by preliminary research conducted as part of the individual status assessment reports. However it must be stressed that there has been no substantial research to properly assess these issues.

The primary concern of operators related to marketing and, indeed, there currently seem to be deficiencies. To overcome this obstacle requires a concerted effort by both governments and operators, supported where possible by training programs, as well as taking full advantage of the Internet and cooperative marketing opportunities.

In the opinion of many stakeholders, a key obstacle to the sustainability of wildlife tourism businesses is lack of capacity or performance by operators in some aspects of delivering high quality wildlife tourism experiences and sustaining their own businesses. A wide range of issues is involved - some common to small business and tourism in general, and some specific to wildlife tourism. Research is needed to more clearly pinpoint the areas of most critical concern. Possible methods for addressing such problems are: better dissemination of information and advice to operators, appropriate training programs, more effective accreditation schemes and more effective enforcement of agreed regulatory systems. Lack of information and understanding of Australian wildlife by tourism intermediaries is probably also an obstacle to successful marketing, and needs to be addressed through education. Most of these measures would need substantial support from government.

Some stakeholders and authors argued that there seems to be an inadequate range, low level of sophistication, and low quality of

products and facilities, especially given expectations of many international tourists. Australia in some ways appears to lag behind best practice international trends in wildlife tourism products. Expansion and enhancement of wildlife tourism products and facilities requires a cooperative effort by operators, researchers and governments. However it also needs to be informed by a better understanding of visitor demand and satisfaction factors, and especially ascertaining whether there is indeed sufficient demand to justify development of new products.

Other business issues relate to the structure and function of the industry itself. Most of the concerns expressed by operators are issues common to tourism in general, and are beyond the scope of this report. For example, some small operators find it difficult to compete against larger ones. The distribution channels are complex and difficult for the small operator to master. The industry is often highly competitive. One issue that is, however, particularly significant to wildlife tourism is the role of the public and private sector in running wildlife tourism operations. Arguments in favour of the private sector running wildlife tourism ventures include perceived greater efficiencies and perhaps higher service standards by the private sector, and are driven by the current political climate and dominant economic ideology in Australia. The key arguments favouring a role for the public sector are that it is more likely to pursue conservation and educational objectives, and to make financially risky investments. The relative merits of these arguments need to be determined based on learning from experience (in Australia and overseas) and informed debate.

#### *Effects of wildlife tourism on wildlife and their management*

Wildlife tourism can have negative effects on wildlife at the sites where the tourism occurs. However it can also have positive effects at the site or on a broader scale. It is important to understand the factors influencing the direction and magnitude of such effects so that the negative effects can be minimised and the positive effects maximised, such that the net balance is at worst neutral and preferably positive.

One of the main problems relevant to all sub-sectors of the wildlife tourism industry relates to potential negative effects on wildlife and/or habitats. Critical to all planning with regard to tourism based on free-ranging wildlife must be the recognition that wildlife tourism has the

potential to destroy the resource on which it is based, therefore not only leading to conservation concerns, but also undermining the industry itself. Nearly all wildlife tourism activities have some effect on wildlife or habitats, though these effects are not necessarily negative and in some cases could be positive. Negative effects can relate to the status of populations, the welfare of individual animals, and/or to ethical issues.

In free-ranging non-consumptive situations the major ultimate concern is normally whether the population is likely to decline over time, but this can be mediated through a wide range of proximate effects. The type and magnitude of these effects vary greatly, and depend on a variety of factors in ways that research is only just beginning to understand. Thus prediction of these effects for any particular wildlife tourism site is often difficult. These complexities are particularly pronounced with regard to the issue of wildlife feeding, the effects of which are often controversial. Although there was little evidence that this form of wildlife tourism is leading to significant problems for wildlife at this stage, it is important to expand the use of, and improve the effectiveness of management so that effects are minimised, especially if this sub-sector of wildlife tourism is to grow. This should be done in a proactive, rather than reactive manner if Australia is to build its image as an environmentally sound destination for wildlife tourism.

In consumptive wildlife tourism situations, there is potential for population declines as a direct result of the tourism activities. However in Australia such concerns are limited mainly to waterfowl and fish, since most other species involved are introduced species considered to be pests. Avoiding overharvesting usually requires careful monitoring and management built on sufficient political commitment and resources. Even with sustainable management regimes, there are potential animal welfare concerns relating to suffering experienced by animals. In captive situations, any detrimental effects on wild populations are generally avoided (since collection of live specimens from the wild is rare in Australia), but again animal welfare can be of concern, especially if husbandry standards are poor.

Given difficulties in determining effects of wildlife tourism on free-ranging animals, stakeholders with a conservation-oriented perspective often argue that the precautionary principle should be adopted. This applies especially to species such as whales for which it may be difficult to reverse declines once they are detected. Some stakeholders may even argue that any new tourism development based on free-ranging animals should not proceed unless research (or an environmental impact assessment in the case of 'significant' developments) convincingly demonstrates that such a development will not be harmful. Such views are most justified in cases where there are already conservation concerns about the species, where the species is expected to be particularly vulnerable to disturbance, or where the scale and type of tourism development is likely to be associated with high levels of disturbance. Such judgements are however often little more than informed guesses, and research to help us better predict high risk situations and species is needed to help resolve such uncertainties.

Sound decision making about whether a certain wildlife tourism venture should proceed requires: (a) recognition that different circumstances may require different solutions; (b) logical dissection of the different types of effects, (c) recognition of conservation, animal welfare and ethical arguments; and, in some cases, (d) research. In circumstances where wildlife tourism does proceed and there is cause for concern about potential negative effects, it is vital that sound monitoring and management practices are in place. This is an area that requires further development, research, and commitment from management authorities. In particular, monitoring techniques that can readily be used by resource managers and operators need to be developed and implemented. However, increases in such activities by resource managers would also require an increase in government and/or industry funding.

The status assessment reports identified several mechanisms for improving environmental sustainability which are relevant to all sectors of the wildlife tourism industry. Those most emphasised were: the education of visitors and operators, greater use of economic instruments, and an improved regulatory environment. Some of the principle tools currently used for environmental management are through policies, legislation, regulation and accreditation, all of which

are areas of concern to many stakeholders across a range of sub-sectors. Currently, there appears to be a complex, poorly understood and sometimes poorly conceived legislative, regulatory and policy environment for wildlife tourism in Australia. This includes a lack of effective policy on environmental monitoring and management techniques. This issue needs to be addressed through commitment by governments coupled with effective strategies for stakeholder input. Accreditation schemes are widely suggested as useful ways of raising standards within the tourism industry (in relation to not only environmental standards, but also business performance), but their effectiveness was often questioned by workshop participants and other interviewed stakeholders. Resources and efforts to overcome obstacles faced by such schemes are needed.

On the other hand it must be strongly stressed that wildlife tourism can lead to a range of positive effects on wildlife, particularly in relation to conservation benefits. In fact, it seems likely that wildlife tourism in Australia probably has a net positive effect on conservation outcomes at present, although this cannot be concluded with any certainty. Probably one of the most important ways in which this can happen is through enhanced public understanding and appreciation of wildlife associated with increased support for conservation. The degree to which this effect is manifested probably depends to a large extent on the availability and quality of interpretation. The second key benefit occurs through creation of economic incentives for conservation on both public and private land. In particular, whereas wildlife tourism in protected areas may in some cases be considered a conservation risk, its development on private land is more likely to be positive for conservation, since it might preclude other more damaging land uses occurring. In addition, wildlife tourism can provide financial and practical contributions to conservation. While it is not currently possible to quantify the above benefits, there is no doubt they can be substantial if wildlife tourism is appropriately designed. However wildlife tourism does not automatically lead to conservation benefits, and there is evidence that the potential is far from being fully realised in Australia at this stage. Although recent government policies support the use of tourism to achieve conservation goals, it seems that much more could be done through further developing cooperative relationships and implementing practical initiatives to enhance these links.

Given the lack of good research data, the complexity of the interacting effects, and the need to consider conservation, animal welfare, and ethical issues, it is currently not possible to reach simple or definite conclusions about the current and potential net effects of wildlife tourism on wildlife. What is clear is that whether wildlife tourism has net positive or negative outcomes for wildlife (overall or with respect to particular developments) depends on the circumstances that apply and the design and management of the experience.

#### *Social impacts*

Any form of wildlife tourism activities can result in a range of social impacts. However, this was not a theme that emerged often in the reports or consultation processes, except indirectly in that economic impacts are likely to also lead to social impacts, and in terms of impacts on Indigenous people. Little is known from research about social impacts on host communities that are specific to wildlife tourism, but most of the same issues presumably apply as for other forms of tourism. For example, in small communities close to major wildlife tourism destinations (such as Bundaberg, near Mon Repos Turtle Rookery; or Kangaroo Island), it can be speculated that some detrimental effects of the presence of tourists on local residents might occur. Further, if residents are already making significant use of wildlife or the areas where they occur (for example in cases where Aboriginal people are involved in subsistence hunting), then wildlife tourism could cause conflicts of interest to occur. While the situation may change if wildlife tourism grows significantly, there seems to be no evidence that such effects are currently of widespread concern in Australia.

#### *The Role of Indigenous People and Culture*

Indigenous cultural knowledge and understanding of Australian wildlife can add a unique and authentic element to the wildlife tourism experience, thereby potentially enhancing visitor understanding and appreciation of both wildlife and Indigenous culture. In some situations it can also provide social and economic benefits to Indigenous people and communities. A particular opportunity for further development appears to be increasing involvement of Indigenous people in fishing and hunting tourism in the Top End of the Northern Territory.

However there is currently very limited involvement of Indigenous staff in wildlife tourism activities, and Indigenous content tends to refer to traditional rather than contemporary Indigenous perspectives on wildlife. Thus there seems to be a need to promote greater involvement of Indigenous people in wildlife tourism.

#### *Differing perspectives of stakeholders*

Several of the status assessment reports and all the stakeholder consultation processes revealed that there are a number of important issues in wildlife tourism that give rise to differing views between different stakeholders. These diverse perspectives present a major challenge for establishing a sustainable and consistent approach to its development and management of wildlife tourism. For example, even among operators there are varying opinions about the appropriate level of regulation over protected areas. Different stakeholders have different opinions about the relative merits of high volume versus high yield activities, and about the appropriate level of public sector involvement in wildlife tourism. On some issues, there are stakeholders with diametrically opposed views, such as whether hunting and feeding of free-ranging animals should be allowed to occur.

The biggest underlying source of disagreement appears to be the extent to which a stakeholder adopts a tourist-centred or a wildlife-centred perspective. Thus, many of these arguments are between tourism and conservation interests, whether at government or community level. As remarked by Moore and Carter (1993, p123) 'planning for ecotourism in the 21<sup>st</sup> century requires greater coordination between natural resource managers and the service delivery arms of the tourism industry'. Government wildlife managers have generally not been trained to address tourism management issues, while the tourism industry is often perceived by conservation trained staff as lacking a conservation ethic.

The other main division is between interests relating to the public versus the private sector (although this is to some extent related to the previous issue). Current political directions in Australia generally favour increasing private sector involvement in revenue-generating enterprises relating to protected areas and wildlife. However, the extent of this shift differs between States and remains a source of controversy.

Controversial issues need to be resolved through effective communication processes, engaged in with a spirit of cooperation, and supported by adequate provision of information, and independent of political dogma. Where such information is not already available, research should be conducted. For example, which models of ownership are most likely to lead to the best conservation outcomes? Do tourists on commercial tours in protected areas cause more or less environmental damage than equivalent numbers of independent visitors?

#### *Lack of communication, organisation and strategic development*

Although some sub-sectors of wildlife tourism have some level of organisation, planning and coordination, it seems that, in general, the wildlife tourism industry is distinctly lacking in such areas. Thus there is very little strategic direction, cooperative marketing, or sharing of ideas and information relating to wildlife tourism, except within specific sub-sectors. There is also an inability for collective lobbying on broad issues relating to wildlife tourism. Tasmania is unusual in having strategically approached wildlife tourism as a sector worthy of particular attention, and may in future provide a useful model from which other States could potentially learn.

Strategic development of wildlife tourism needs to be built around cooperation between a wide range of stakeholders from wildlife and tourism interests, and from government, industry associations and individual tourism operators<sup>14</sup>. It needs to occur through both informal and formal channels. There are encouraging moves towards such cooperation throughout Australia, but further progress is needed.

Strategic product development and marketing of wildlife tourism also needs to occur with full cognisance of the substantial competitive advantages of Australia as a wildlife tourism destination, as well as the substantial constraints. The focus should be on enhancing the quality of existing experiences, in relation to which a number of problems have been identified. However there is an argument that to compete internationally, risks also need to be taken with development

---

<sup>14</sup> this is not to say that some level of conflict may not be beneficial if it ensures that all valid perspectives are considered.

of new products. Both approaches need to be informed by a better understanding of visitor demand and satisfaction issues.

There is clearly no distinct 'wildlife tourism industry' in Australia, although this term has been used here for convenience. There is also little support from stakeholders for the idea that 'wildlife tourism' is useful as a brand to be used in marketing. However this report has shown that there are a range of major issues relating particularly to demand-side and wildlife management issues that are somewhat specific to wildlife tourism, and yet apply quite broadly across sub-sectors of wildlife tourism. Therefore for the purposes of planning, management, and research there seems to be value in considering wildlife tourism as a discrete sub-sector of tourism, while still recognising overlaps with more clearly defined sub-sectors.

### **5.3 Issues Specific to Certain Types of Wildlife Tourism**

In general, the key issues facing all forms of wildlife tourism based on viewing of free-ranging animals are similar, although the details of the types of tourist-wildlife interactions, impacts on wildlife, management approaches and so on differ<sup>15</sup>. For example, marine and coastal experiences are more likely than land based experiences to be focused on single species. This is probably because several marine species occur in concentrated colonies (e.g. turtles, penguins), and others are of sufficiently high tourist interest to be considered worthy of the time taken to locate them (especially whales and dolphins). This fact has led to the development of management guidelines or approaches focused on these single species, but the underlying principles of such approaches would be equally applicable to any species (e.g. the need to maintain distance between tourists and wildlife). A second example is that different types of tourism experiences will, to some extent, attract different types of visitor and therefore need to be designed accordingly. For example, specialist birdwatching tours need to deliver specialist interpretation, while interpretation can be much more generalised for most nature-based tours with a wildlife element. Thirdly, the types of management approaches vary with the type of species concerned, partly for biological reasons, and partly because of

<sup>15</sup> see Part 1, section 2.7 for comments on how some of these differ between different types of wildlife tourism experiences.

differing levels of public interest. For example, there is apparently less public concern about keeping birds in zoos than keeping mammals, and for dolphins and whales than for any other wild mammals.

However, some issues were raised that apply specifically to certain sub-sectors. In terms of the key factors influencing sustainability, the key distinctions seem to be between: non-consumptive tourism based on free-ranging animals, captive wildlife tourism, and consumptive forms of wildlife tourism (hunting and recreational fishing). The key differences in wildlife management issues involved in each of these sub-sectors have been briefly discussed above.

Non-consumptive wildlife tourism based on free-ranging animals in many ways is still in its infancy in Australia. Sustainability and growth of this sub-sector depends mainly on (a) overcoming practical constraints posed by the nature of Australian wildlife to provide satisfying visitor experiences, and (b) ensuring that such activities do not have significant detrimental effects on wild populations, and where possible actually enhance conservation objectives. The first challenge requires building of capacity among operators, supported by appropriate research on wildlife, product development, and on visitor demand and reactions to existing experiences. The second challenge requires implementation of sound monitoring and management practices, supported by research and adequate funding.

It seems that the future of captive wildlife attractions in Australia depends to a significant extent on their level of public support, including that which is reflected in visitation levels. One of the key factors is whether keeping animals in captivity in such situations is seen by the public to be ethically justifiable. Three important areas of justification presented for keeping animals in captivity relate to their contributions to conservation, education and research. Many zoos contribute to conservation through their captive breeding programs, and through research on captive animals that can be applied to management of wild populations. However, the extent to which these efforts make a significant contribution to conservation is not clear, and is a topic needing further research. Keeping animals in captivity allows tourists to interact with the animals while not disturbing their natural habitats. In principle, with annual visitation of about eight million people, Australian zoos provide opportunities for educating

very large numbers of people about conservation. Once again, the extent to which existing education is effective is not known, and an important topic for research. On the other hand, it can be argued that zoos provide stressful living conditions for wild animals, and some believe it is morally wrong. In particular, some stakeholders believe that standards of presentation and husbandry in many of the smaller wildlife parks are low and lead to image problems for the zoo industry as a whole. It is vital that any conservation and educational benefits of zoos be measured, publicised and if necessary enhanced, and that animal welfare standards are seen to be high if zoos are to maintain or increase levels of public and government support. Many zoos are fully conscious of these issues and are making efforts to address them. However, research, conservation and education all cost money, and zoos also need to remain commercially viable unless they can rely on some government support. Detailed research to determine and understand public attitudes to zoos in Australia would be beneficial in informing zoos about what they need to do to enhance levels of public support.

The key issues relating to sustainability of consumptive wildlife tourism in Australia (although there seems to have been little systematic research on this issue) are probably (a) social acceptability and (b) ecological sustainability. Social acceptability is dependent partly on fundamental ethical positions, and partly on perceptions of ecological sustainability. Killing of animals for pleasure is opposed by some vocal NGOs in Australia, although it is not clear to what extent this reflects broad public opinion. The level of public concern for killing of fish is apparently much lower than that for mammals (at least for native mammals). The most effective way for the hunting industry to raise its level of social acceptability may be to ensure and demonstrate that hunting leads to net conservation benefits. When focused on introduced pest species (as is usually the case for hunting in Australia), it has been argued that hunting can lead to conservation and even rehabilitation of habitats and allow for ecosystems to be restored. On the other hand, the commercial interest in hunting actually creates an economic incentive for not eradicating or reducing pest populations to very low levels (see Bauer and Giles 2001, Choquenot *et al.* 1998). A related challenge for these sub-sectors, if they are to achieve sustainable growth, is to increase levels of integration with the mainstream tourism industry and government

support processes. This is beginning to happen with fishing, but not for hunting due largely to differing levels of perceived social acceptability.

#### **5.4 Strengths of Wildlife Tourism in Australia**

This report has identified a number of features of the Australian situation that may contribute to a competitive advantage for Australia in wildlife tourism (Box 4). These are principally:

- Wildlife with a range of features likely to appeal to tourists
- A natural environment conducive to viewing of animals in natural areas
- Substantial levels of demand for seeing wildlife, at least from international visitors to Australia (although further research is required to adequately quantify the level of this demand)

These features are in addition to those that have been identified in a range of other publications relating more broadly to tourism and nature-based tourism in Australia. As well as the economic benefits provided, this report has shown that wildlife tourism has the potential to (and probably sometimes does) provide conservation and educational benefits.

#### Box 4: Strengths of wildlife tourism in Australia

##### Wildlife with features likely to appeal to tourists

- High levels of endemism
- High abundance of some species
- Unusual
- Wildlife that are 'truly wild' in contrast to many overseas destinations
- Australia internationally recognised for its wildlife
- High biodiversity
- High levels of scientific interest
- High conservation value
- Many species 'cute' or charismatic
- Seasonality of wildlife viewing less of a problem than in North America and Europe
- Several species occur in predictable concentrations

##### Environment conducive to viewing of animals in natural areas

- Australia has a large network of protected areas including a range of habitat types and wildlife species, in which wildlife viewing can occur
- High levels of visitor safety from visiting natural areas: this relates both to the general lack of dangerous predators and also to a stable human society

##### Demand for wildlife tourism from the market

- Wildlife are part of the decision to visit Australia for a substantial number of international visitors
- Some evidence that opportunities to see wildlife are important to many international and domestic tourists
- Some evidence that interest in wildlife viewing opportunities is increasing for some international groups

##### Conservation and educational benefits

- Some operators have strong interest in wildlife and conservation awareness and are highly motivated to communicate these to visitors
- Some wildlife tourism provides educational benefits
- Some operators contribute to conservation and conservation-related research

#### 5.5 Challenges for Wildlife Tourism in Australia

There are however a wide range of obstacles that wildlife tourism stakeholders need to be address and constraints to be borne in mind in achieving sustainable development and management of wildlife tourism in this country (Box 5).

Key constraints that are largely outside the control of the immediate stakeholders are:

- Certain features of wildlife that restrict the nature and extent of opportunities for wildlife tourism, and/or for which creative solutions are required
- Conservation threats to wildlife from causes other than tourism
- Public perceptions regarding the ethical acceptability of hunting and keeping animals in captivity

Key obstacles that can (in theory) be more readily addressed are:

- Lack of capacity within the tourism industry in some areas relevant to wildlife tourism
- Inadequate measures to minimise negative effects and maximise positive effects on wildlife and habitats
- Perceived over-regulation of tourism operators
- Shortcomings in accreditation systems
- Perception of insufficient government support for industry
- Insufficient Indigenous input
- Poor communication and organisation

In addition, many stakeholders believe that there is currently an inadequate range of wildlife tourism products and that the quality of what is available needs to be enhanced. There is also some evidence of falling demand in some areas. These critical issues require careful research on relevant aspects of visitor demand and satisfaction to determine if these are indeed significant problems. There is also a strong perception among stakeholders that there are serious deficiencies in marketing of wildlife tourism. This should be further investigated through a systematic assessment of current marketing and its effectiveness.

### **Box 5: Obstacles, constraints and threats faced by wildlife tourism in Australia.**

Where not indicated otherwise, the identified problem is supported by research and not likely to be controversial. Issues that may deserve further investigation to confirm whether they are indeed significant problems are presented in italics.

#### **Wildlife has features likely to be constraints on tourism development**

- Most Australian terrestrial mammals are difficult to view because they are often small, cryptic and nocturnal.
- There are few native species likely to be seen as 'exciting' because they are very large, or dangerous
- Most species do not occur predictably in the same location unless handfed
- Wildlife tourism often requires patience, perseverance and sometimes hardship by tourists
- Seasonality of viewing of some species
- Much wildlife occurs in remote areas lacking in other tourism infrastructure, including difficult access
- Non-tourism related threats to wildlife might reduce the resource for tourism

#### **Possible lack of sufficient market demand for some forms of wildlife tourism to support the current supply**

- *Possible drop in demand for captive wildlife tourism in some areas*

#### **Poor range and quality of wildlife tourism products**

- Available opportunities for wildlife tourism have not been systematically explored, either in terms of a wildlife inventory or product development opportunities
- *Interpretation quality is often poor, and not available in enough languages*
- *Marginal financial viability of many businesses*
- *Insufficient range of wildlife tourism products*
- *Many wildlife tourism products are not internationally competitive and are not adequately sophisticated given expectations of many modern tourists*
- *Facilities for wildlife tourism are insufficient*
- *Some experiences fail to meet expectations of inbound tourists for close interactions with wildlife (especially handling and feeding)*
- *Poor infrastructure and image problems of wildlife parks*

#### **Inadequate marketing**

- Lack of coordinated marketing and cooperative marketing
- *Insufficient marketing, including lack of information available to tourists on viewing opportunities*
- *Poor quality marketing*

#### **Lack of capacity within the tourism industry**

- Lack of wildlife expertise in the tourism industry
- Many government wildlife tourism managers have no tourism expertise
- Much of the tourism industry and tourists are not aware of the high diversity of Australian animals
- Operators often lack a good knowledge of marketing
- *Lack of sufficient business and hospitality skills by some operators*
- *Many operators lack sufficient capital to establish and sustain high quality enterprises*
- *The tourism system makes it difficult for some small operators to compete*
- *Lack of imagination and willingness to take risks by operators*

#### **Conservation threats**

- Lack of consistent clear policies for management of wildlife tourism
- Potential for overcrowding at some sites
- Lack of understanding of conservation issues by tourism industry
- Insufficient revenue reinvested into protecting the resource
- Wildlife species and their habitats can be threatened by poorly managed wildlife tourism
- There are some unscrupulous operators who cause environmental damage
- Lack of codes of practice/ guidelines for certain types of wildlife tourism or species
- High proportion of threatened species, making tourism relating to those species potentially risky
- *Australia provides insufficient funding to manage its natural resources to ensure sustainability*
- *Lack of sufficient enforcement of environmental regulations in some areas*

#### **Over-regulation**

- *Permit system is overly bureaucratic, complex and restrictive*
- *Insurance issues are overly complex*
- *Too much emphasis on regulation as a means of achieving conservation goals*

#### **Inadequate accreditation systems**

- Lack of consistent codes of practice
- Low market awareness of accreditation schemes
- Low standards and thus credibility of accreditation schemes

**Perception of insufficient government support for industry**

- Lack of consistent government policy to support wildlife tourism industry
- *Lack of sufficient support for operators from state tourism agency in some States*
- *Unfair competition with government wildlife tourism activities*
- *Insufficient government funding to support product development and provide visitor infrastructure*

**Insufficient Indigenous input**

- Limited employment of Indigenous people in wildlife tourism
- *Insufficient input from Indigenous people into planning and interpretation*

**Low levels of public support for some forms of wildlife tourism**

- *Some stakeholders believe zoos and hunting to be ethically unjustifiable*

**Poor communication and organisation**

- Fragmented industry
- Low level of communication, coordination and cooperation between governments and the tourism industry, and between wildlife tourism operators
- Lack of collective lobbying on wildlife tourism
- 'Keep out' mentality by some conservation agency staff
- Poor relationships between parks staff and tourism operators in some areas
- *Insufficient involvement of private landholders in wildlife tourism*
- *Insufficient coordination within some State conservation agencies*

A wide range of measures to address these problems and enhance the sustainability and growth of wildlife tourism in Australia has been proposed by the authors and stakeholders participating in this project (Box 6). While many of these arise logically from identification of the obstacles the industry is facing, it is important to carefully consider the full implications of each of these actions, and conduct necessary research before they are implemented. This list should be interpreted only as an initial checklist of potential measures deserving further investigation.

**Box 6: Proposed measures to enhance sustainability and growth of wildlife tourism in Australia****Increase product range and quality**

- Identify new areas and species suitable for non-consumptive free ranging wildlife tourism
- Develop more specialised and sophisticated wildlife tourism products
- Adapt some overseas models of wildlife tourism to Australian conditions
- Employ more Indigenous staff to enhance the presentation of Indigenous cultural knowledge and provide a unique Indigenous perspective for tourists to experience
- Increase opportunities for interactive wildlife tourism
- Improve design of settings/ features, especially through use of technology
- Develop industry (self-regulated) best practice codes to encourage high quality and authenticity of products
- Overcome bureaucratic constraints to display of local species in wildlife parks
- Focus on the species that are 'cooperative'
- Change timing of tours to facilitate nocturnal viewing
- Enhance links between captive and free range animals
- Interpretation: develop programs that meet international best practice standards; develop interpretation programs that reflect Indigenous culture and interpretation; use creativity
- Educate visitors and operators to enhance ability to find and interpret wildlife
- Educate market to increase length of viewing season
- Use marketing to develop realistic visitor expectations of wildlife experiences
- Lobby government regarding conservation threats

**Improve marketing**

- Improve marketing, especially via the Internet
- Improve linkages of operators to State tourism agencies in marketing
- Increase international marketing
- Promote conservation benefits conferred by certain operators/ sub-sectors
- Educate Australian public to value their wildlife more highly
- Create realistic expectations regarding wildlife in marketing
- Promote greater general awareness about Australian wildlife
- Use more diverse wildlife icons
- Get industry (non-tourism) to utilise and promote Australian animals as icons
- Develop a cooperative marketing approach
- Promote individual sub-sectors, but still adopting a cooperative approach

**Build capacity within the tourism industry**

- Provide training/ education to operators in wildlife and tourism skills
- Provide ready access to relevant information for operators
- Promote use of accreditation systems (subject to their improvement)

**Enhance measures to minimise negative impacts on wildlife and habitats**

- Educate visitors about potential impacts of their activities on wildlife and habitats
- Develop operational and management guidelines for particular species and habitats
- Improve industry self-regulation regarding environmental standards
- Develop integrated marketing programs that educate visitors in appropriate behaviour and influence their expectations to minimise negative effects on wildlife and habitats
- Increase funding to management authorities
- Develop and encourage use of guidelines and codes of practice
- Implement limits of acceptable change in monitoring and management
- Increase operator involvement in monitoring and evaluation
- Develop and implement user-friendly methods for monitoring and evaluation
- Use creative approaches and technology to minimise negative impacts on wildlife
- Implement more effective enforcement in problem areas
- Increase use of economic instruments in management
- Promote use of accreditation systems (subject to their improvement)

**Enhance conservation benefits**

- Investigate opportunities for obtaining greater revenue for conservation from protected areas and government-run wildlife tourism attractions; however this needs to be balanced against the requirements of National Competition Policy
- Encourage operators by suitable incentives to donate funds for conservation purposes by suitable incentives, and to use this in their marketing
- Encourage and support organisations that use tourists as volunteers in conservation programs
- Encourage and support wildlife tourism attractions becoming actively involved in research on their target species
- Investigate and implement incentives to encourage shifts from traditional agriculture to wildlife or nature based tourism on private land in cases where this is economically viable
- Increase use of economic instruments in management
- Improve quality of interpretation to raise conservation awareness
- Recognise that hunting can be ecologically sustainable and contribute to conservation

**Make regulation more operator-friendly, while still achieving conservation management goals**

- Streamline and integrate current licensing requirements between government departments; more national consistency
- Minimise compliance costs by operators

**Improve accreditation systems**

- Improve accreditation standards
- Introduce accreditation for information centres
- Improve linkages between different accreditation schemes
- Raise consumer awareness of accreditation schemes
- Highlight best practice and genuinely accredited businesses in marketing campaigns
- Educate travel agents and operators re best practice and accreditation standards

**Increase government support for sustainable development of wildlife tourism**

- Develop and implement wildlife tourism training programs
- Develop suitable policies
- Increase entry fees at government subsidised venues
- Introduce appropriate government subsidies to private operators

**Facilitate greater role of host communities and Indigenous communities in wildlife tourism**

- Develop and encourage communication between host communities (especially Indigenous communities) and operators
- Use cross-cultural workshops to raise operator awareness of Aboriginal issues
- Promote the advantages of employing Aboriginal people in wildlife tourism
- Develop guidelines and recommendations for host community involvement, including Indigenous host communities

**Build communication channels**

- Organise events such as meetings, camp-outs, conferences and conventions, where wildlife viewers can meet, exchange ideas and news and participate in wildlife viewing experiences
- Establish a national body facilitate greater communication - or organise more effectively within existing organisations
- Develop stronger links and communication channels between wildlife tourism operators, and between operators and management organisations by promoting a common ground

**Coordination and strategic development**

- Establish a national body to provide leadership on marketing and lobbying
- Initiate a funded, coordinated government initiatives in wildlife tourism

## 5.6 Overall Conclusions

### 5.6.1 *The current status of wildlife tourism in Australia*

Wildlife tourism in Australia consists of a wide range of different types of activities, and involves a very range of species. There are at least 1196 enterprises that include wildlife as a planned component of the experience they offer to tourists. The largest number of operators of organised wildlife tourism are those running nature-based tours, and about 65% of wildlife tourism activities include wildlife as only one component of a more generalised experience. With eight million visitors per year, zoos and wildlife parks probably attract by far the greatest number of visitors. Other types of activities include snorkelling and diving with a focus on underwater life, specialised wildlife tours, wildlife farms, farmstays and other accommodation featuring nearby wildlife, fishing and hunting. In addition, an unknown but probably very large number of visitors experience wildlife as independent travellers, often in protected areas. Kangaroos and their relatives seem to be the wildlife-group that features most often in wildlife tourism activities; kangaroos and koalas are the most popular among international visitors. Principally because of the diversity of sub-sectors involved, there is no overarching organisation or coordination of wildlife tourism in Australia. Instead there are a wide range of stakeholders covering tourism and wildlife-related interests.

Wildlife tourism is economically important globally, with annual visitation at least in the high hundreds of millions, and multi-billion dollar annual revenues. In Australia wildlife tourism also has high participation rates and has been estimated to generate several billion dollars in annual revenue. One major wildlife attraction alone has been estimated to produce an annual gross economic benefit of AUS\$96 million. In some cases, economic benefits are provided to regional areas where there may be few other major sources of income and employment. There is some evidence that wildlife tourism has the potential to bring even greater economic and employment benefits to Australia than is currently the case, although this has not been clearly established. A recent survey showed that 18.4% of international visitors were influenced in their decision to visit Australia 'to

experience native animals'; there is some evidence that opportunities to see wildlife are very important to a majority of tourists in Australia, and are perhaps growing for some international groups. However there has been a tendency in the literature to make sweeping statements about recent and expected continued growth of wildlife tourism that are not well supported by any data.

Australia has a number of important competitive advantages in relation to wildlife tourism. These advantages principally relate to features of the wildlife such as high biodiversity and unusual species, a natural environment that is in some ways unusually conducive to wildlife viewing, and perhaps a high level of demand from tourists. There are also a number of serious constraints and obstacles, as summarised in the next paragraph. Sustainability and particularly growth of wildlife tourism will require that future development builds on the strengths of Australia as a tourism destination and its particular strengths in relation to wildlife, but that it does so with awareness of the constraints, and with coordinated efforts to overcome the obstacles.

The most critical obstacles that the wildlife tourism industry needs to overcome to maximise its sustainability are probably:

- Apparent deficiencies within the industry in capacity to deliver high quality wildlife tourism and financially sustain businesses
- The risk of negative effects of wildlife tourism on wildlife and habitats if the current regimes of monitoring and management are not improved
- Low levels of communication, coordination, strategic direction and government support for wildlife tourism

In addition, the major gaps in knowledge and understanding of factors influencing sustainability of wildlife tourism in Australia, and how these can most effectively be addressed, are a serious impediment. This topic is explored further in section 5.6.2.

Although an original aim of the study was to determine potential unrealised opportunities for wildlife tourism in Australia, it was not

possible to arrive at definite conclusions about what opportunities should be pursued given the lack of adequate research, particularly on the nature of demand. However many stakeholders raised suggestions about new products that could be developed, and these will be detailed in a later CRC report by C. Fausnaugh, K. Higginbottom and S. Noakes that will also provide a framework for approaching new product development.

However, at this stage it can be said that, judging by international trends, there may be opportunities for:

- Increasing the level or number of specialised wildlife tourism products
- Including new species and environments
- Increasing the use of interpretation
- Increasing the use of technology to facilitate wildlife viewing
- Creating more experiences that combine captive and free-ranging wildlife tourism
- Building further synergies between tourism and conservation within wildlife tourism experiences

Suggestions for new products from stakeholders mostly fell within one or more of these categories. Developments in any of these areas should however be informed by proper market research.

### **5.6.2 Key gaps in research**

There are huge gaps in our knowledge of many aspects of wildlife tourism, and it would be fair to say that there is no aspect that has been well studied in Australia. This is a major impediment to the sustainability and development of this industry. On the basis of the various inputs to this project, the research gaps that at this stage seem to have the most serious implications for sustainability and growth of wildlife tourism in Australia are summarised here.

Probably the most critical research gap is in relation to understanding of demand-side issues. Fundamental to strategic planning of wildlife tourism is a better understanding of the levels and nature of demand (both existing and latent), and how this differs between different market segments. Knowledge of visitor reactions (e.g. satisfaction, educational outcomes) to existing experiences is also critical in improving product quality. In particular, the effectiveness of existing interpretation has not been determined, yet this is thought to influence visitor satisfaction and many stakeholders perceive it to be an area with serious deficiencies.

A lack of research on product development opportunities is another impediment to sustainable growth of wildlife tourism, and will become critical if the industry is to develop further. However in most cases expending significant resources on product development research would be premature before a better general understanding of the market is achieved.

Although there was no substantial evidence that Australia is yet experiencing significant problems in terms of negative effects of wildlife tourism on wildlife, this is difficult to ascertain given the very limited research and monitoring that has occurred. This issue is likely to become more critical if wildlife tourism on free-ranging species expands further. It is particularly important for Australia given the high conservation value of its natural environment on a global scale, and the high number of threatened species. There has also been very little development and application of techniques to measure and monitor these effects for Australian wildlife, particularly in terms of techniques that could readily be used by the industry and natural resource managers. Most critically, little is known of the relative effectiveness of different management approaches for minimising negative effects of wildlife tourism on wildlife. There are also major research gaps in determining the extent to which wildlife tourism currently contributes to conservation. This is particularly important for those sectors whose social acceptability could be an impediment to sustainability, mainly hunting and zoos.

The lack of good information on the economic value of wildlife tourism and its various sub-sectors is an impediment to arguments for increased government support for wildlife tourism. If it can be

demonstrated that a particular sub-sector or site provides significant economic benefits to regions or to Australia as a whole, then this may be an effective political argument for greater government funding and support for the industry and for its sustainable management. In particular, the inadequacy of funds for monitoring and managing tourist activities in protected areas might be addressed if it can be shown that this would support sustainability of economically important activities.

In terms of sustainability of individual businesses, there is a serious lack of research on critical success factors for wildlife tourism enterprises, although some broad principles applying to tourism and nature-based tourism can be applied. Most importantly, although there is a strong feeling that marketing is the area of most serious deficiencies, there has been no published research to determine how effective marketing of wildlife tourism is, and what approaches work best. Although some of the broad principles known to apply to tourism marketing can be expected to apply, some issues are specific to wildlife tourism.

While stakeholders raised a range of criticisms of current government and industry mechanisms for supporting and regulating wildlife tourism, these have not been systematically assessed. Ensuring that the bureaucratic environment supports the industry and yet protects the natural environment is critical to the sustainability of wildlife tourism. In particular, there is a need for a critical analysis of the existing legislative and policy frameworks, along with further consultation with stakeholders. Ways to improve the effectiveness of accreditation systems also need to be examined, although this issue has a broader scope than wildlife tourism. Similarly, the licensing system relating to wildlife tourism needs to be critically examined within the broader context of that relating to nature-based tourism in general.

A number of specific suggestions for development of specific written and training materials to support sustainability of wildlife tourism were given in section 4.1.2 and Box 6, and deserve further investigation.

### **5.6.3 The need for a holistic, coordinated approach**

This report has shown the value of examining wildlife tourism from an interdisciplinary, holistic perspective. Sustainability of wildlife tourism requires simultaneous attention to visitor satisfaction and education, financial viability of individual businesses, economic benefits to society as a whole, impacts on wildlife and their habitats, and social effects on host communities. These influences do not occur in isolation but in an interactive fashion. A simple hypothetical example demonstrates some of these inter-relationships. Satisfaction levels of some visitors to free-ranging wildlife attractions has been found to be influenced by their proximity to the animals. However in some cases this may lead to unacceptable negative effects on the animals. Visitor expectations about how close they will be able to get can however be made more realistic through appropriate marketing, and visitor satisfaction with a more distant encounter than they would otherwise have wished can be enhanced by use of appropriate interpretation. Creative ways of allowing people to have close up views of the animals without disturbing them can be designed. Thus by effectively combining marketing, setting design, interpretation and management of visitors, it is possible to provide an experience which is satisfying to the visitor, maintains the wildlife population, provides good word-of-mouth advertising and enhances financial viability of the business. Future research designed to understand factors contributing to sustainability of wildlife tourism enterprises should where possible adopt this interdisciplinary approach.

This report has also highlighted some of the deficiencies in communication and coordination among wildlife tourism stakeholders. It has also shown that there is support for developing greater levels of communication and cooperation, and for a coordinated and strategic approach to sustainable development of wildlife tourism, particularly with regard to marketing. This status assessment project has begun the process of facilitating communication among wildlife tourism stakeholders, and will continue to do so, most notably in the near future through a national convention on wildlife tourism to be held in Tasmania in late October 2001. However it is the responsibility of governments and industry to drive any future process of coordinated strategic development of wildlife tourism.

Some ideas about how to effectively promote sustainable development of wildlife tourism in Australia may be derived from overseas initiatives in this direction, particularly the US National Watchable Wildlife Program in (see Part I of this report, section 2.3). It seems however that such initiatives can be problematic. Duffus and Wipond (1992) express a number of concerns about The British Columbia Wildlife Watch initiative (Canada). They believe the program failed to adequately address wildlife management concerns and that there was a lack of sufficient evidence of public support for the program. Further they express scepticism about whether promotion of wildlife-related recreation necessarily promotes greater protection of wildlife, stressing the importance of education. Further examination of the US and Canadian programs would provide some useful lessons for Australia.

## **5.7 Recommendations**

Recommendations to enhance the sustainability of wildlife tourism in Australia can be divided into research that is needed and actions that stakeholders should take. Given the major gaps in research at present, detailed action recommendations are generally not justified until further research has been conducted.

### **5.7.1 Recommended research priorities**

#### *1. Understanding visitors*

- Determine size and nature of demand for various forms of wildlife tourism. Note: this research cannot be conducted by academics alone; it requires involvement of governments. In particular it is recommended that a standard set of questions be incorporated into State and national visitor surveys
- Determine visitor expectations and reactions in relation to existing wildlife tourism experiences, especially in relation to satisfaction, and factors that influence these
- Determine variability between market segments in the above

- Assess responses to different approaches to visitor management designed to minimise negative effects on wildlife

#### *2. Effects of wildlife tourism on wildlife and management of these effects*

- Determine the magnitude and nature of negative effects (if any) on wildlife for high risk species and situations, and factors that influence these
- Assess the relative effectiveness of different management approaches in minimising negative effects and maximising positive effects of wildlife tourism on wildlife
- Develop tools that can be used to more effectively manage effects of wildlife tourism on wildlife

#### *3. Economic Value*

- Determine the total economic value of various forms of wildlife tourism in Australia

#### *4. Business operation*

- Determine critical factors influencing business success in wildlife tourism
- Identify major areas of deficiencies in wildlife tourism business performance
- Assess effectiveness of current marketing of wildlife tourism and identify areas for improvement

#### *5. Opportunities for new product development*

- Develop a framework for investigating potential for, and developing new wildlife tourism products
- Investigate feasibility of specific product development ideas. Note: this research should not proceed in detail until a better

understanding of demand is achieved. However individual proponents who wish to proceed with development of new products should ensure that they do this in conjunction with careful market research

#### 6. Policy and legislation

- Critically assess policy and legislative environment for wildlife tourism in consultation with stakeholders
- Evaluate the performance of wildlife watching initiatives in North America and derive lessons applicable to Australia

There is a wide range of other research topics - particularly those that relate to specific sub-sectors - that would generate useful information to inform sustainability and growth of wildlife tourism. These are listed in the sections of recommendations within chapters 3 and 4.

#### 5.7.2 Recommendations for future directions of wildlife tourism in Australia

Given the current serious deficiencies in research, it is not possible at this stage to provide a detailed list of recommendations for action by wildlife tourism stakeholders. The following list is a broad guide to the steps that need to be taken to improve sustainability.

- Encourage innovation and adoption of world's best practice in product development, supported by adequate research
- Raise standards of product quality
- Improve effectiveness of marketing
- Build industry capacity to deliver high quality wildlife tourism experiences and be financially successful
- Improve and expand application of techniques for minimising negative effects of wildlife tourism on wildlife

- Improve and expand application of techniques for maximising positive effects of wildlife tourism on wildlife
- Make regulation more operator-friendly while still achieving goals for high industry and environmental standards
- Improve effectiveness of accreditation programs
- Increase levels of government support for sustainable development of wildlife tourism
- Increase the role of Indigenous people and issues in wildlife tourism
- Build communication channels between wildlife tourism stakeholders
- Initiate coordination and strategic development of wildlife tourism
- Provide and facilitate funding for research to address key priorities

A range of potential mechanisms for achieving these goals is listed in section 5.5, Box 6. Before proceeding with any of these actions, the likely effectiveness of different measures needs to be assessed in conjunction with further research and consultation.

#### 5.8 The Future of the Wildlife Tourism Research Program

Some of the research priorities proposed in section 5.7.1 are already being addressed through the National Integrated Project, which comprises the core of the second stage of the wildlife tourism research program. The objectives of this project are to:

- determine the relationships between the various components of the wildlife tourism experience; and between these components and outcomes in terms of visitor satisfaction and education, financial viability, economic value and sustainability of wildlife populations and the natural environment as a whole;
- estimate the economic value of wildlife tourism in Australia;

- recommend practical measures to be undertaken by individual wildlife tourism operators, and strategies to be adopted by the wildlife tourism sector as a whole to promote sustainable development and management; and
- develop a set of practical methodologies for monitoring and assessing key outcomes of wildlife tourism operations by operators, researchers and government.

Additional projects that address the above priorities are focusing on:

- Opportunities for development of new wildlife tourism products
- Assessing the contribution of zoos to conservation
- Assessing the demand for wildlife tourism by international visitors to Australia

Further funding and participation from the tourism industry is needed to address the remaining research gaps, particularly in relation to gaining a broader understanding of the size and nature of demand for wildlife tourism in Australia.

Combined with a coordinated and strategic effort from governments and commitment from operators, obtaining this strategic knowledge will allow Australia to develop a sustainable and thriving wildlife tourism industry that will bring substantial economic, conservation and social benefits.

## REFERENCES

- ATSIC and The Department of Primary Industries and Energy. 1997. *Aboriginal and Torres Strait Islander Rural Industry Strategy*. Commonwealth of Australia, Canberra, Australian Capital Territory.
- Bauer, J. and Giles, J. 2001. Wildlife Tourism Research Report No. 13, Status Assessment of Wildlife Tourism in Australia Series, *Recreational Hunting: an international perspective*. CRC for Sustainable Tourism, Gold Coast, Queensland.
- Birtles, A., Valentine, P. and Curnock, M. 2001. Wildlife Tourism Research Report No. 11, Status Assessment of Wildlife Tourism in Australia Series, *Tourism Based on Free-Ranging Marine Wildlife: opportunities and responsibilities*. CRC for Sustainable Tourism, Gold Coast, Queensland.
- Burns, G.L. and Sofield, T.H.B. 2001. Wildlife Tourism Research Report No. 4, Status Assessment of Wildlife Tourism in Australia Series, *The Host Community, Social and Cultural Issues Concerning Wildlife Tourism*. CRC for Sustainable Tourism, Gold Coast, Queensland.
- Cartmill, M. 1993. *A view to a death in the morning: hunting and nature through history*. Harvard University Press, USA.
- Choquenot, D., Caughley, G. and McLeod, S. 1998. *Scientific, Economic and Social Issues of Commercial Use of Wild Animals in Australia*. Bureau of Resource Sciences, Commonwealth Government, Canberra, Australian Capital Territory.
- Commonwealth Department of Tourism. 1994. *National Ecotourism Strategy*. Commonwealth of Australia, Canberra, Australian Capital Territory.
- Davis, D., Tisdell, C. and Hardy, M. 2001. Wildlife Tourism Research Report No. 3, Status Assessment of Wildlife Tourism in Australia Series, *The Role of Economics in Managing Wildlife Tourism*. CRC for Sustainable Tourism, Gold Coast, Queensland.

Donnelly, R. 1998. *Wildlife based tourism in the Australian marine environment: key issues for operators and managers*. Unpublished Honours Thesis. Bachelor of Applied Science honours. Southern Cross University, Lismore, New South Wales.

Duffus, D.A. and Wipond, K.J. 1992. A review of the institutionalization of wildlife viewing in British Columbia, Canada. *The Northwest Environmental Journal* . 8: 325-345.

Gartside, D. 2001. Wildlife Tourism Research Report No. 12, Status Assessment of Wildlife Tourism in Australia Series, *Fishing Tourism: charter boat fishing*. CRC for Sustainable Tourism, Gold Coast, Queensland.

Green, R.J. and Higginbottom, K. 2001. Wildlife Tourism Research Report No. 5, Status Assessment of Wildlife Tourism in Australia Series, *The Negative Effects of Wildlife Tourism on Wildlife*. CRC for Sustainable Tourism, Gold Coast, Queensland.

Green, R.J., Higginbottom, K. and Northrope, C.L. 2001. Wildlife Tourism Research Report No. 7, Status Assessment of Wildlife Tourism in Australia Series, *A Tourism Classification of Australian Wildlife*. CRC for Sustainable Tourism, Gold Coast, Queensland.

Harris, R. and Howard, J. 1996. *Dictionary of travel, tourism and hospitality terms*. Hospitality Press, Melbourne, Victoria.

Higginbottom, K., Northrope, C.L. and Green, R.J. 2001. Wildlife Tourism Research Report No. 6, Status Assessment of Wildlife Tourism in Australia Series, *Positive Effects of Wildlife Tourism on Wildlife*. CRC for Sustainable Tourism, Gold Coast, Queensland.

Higginbottom, K. and Buckley, R. 2001. Wildlife Tourism Research Report No. 9, Status Assessment of Wildlife Tourism in Australia Series, *Viewing of Free-Ranging Land-Dwelling Wildlife*. CRC for Sustainable Tourism, Gold Coast, Queensland.

Jones, D. and Buckley, R. 2001. Wildlife Tourism Research Report No. 10, Status Assessment of Wildlife Tourism in Australia Series, *Birdwatching Tourism in Australia*. CRC for Sustainable Tourism, Gold Coast, Queensland.

Moore, S. and Carter, S. 1993. Ecotourism in the 21st Century. *Tourism Management*. April 1993: 123-130.

Moscardo, G., Woods, B. and Greenwood, T. 2001. Wildlife Tourism Research Report No. 2, Status Assessment of Wildlife Tourism in Australia Series, *Understanding Visitor Perspectives on Wildlife Tourism*. CRC for Sustainable Tourism, Gold Coast, Queensland.

Muloin, S., Zeppel, H. and Higginbottom, K. 2001. Wildlife Tourism Research Report No. 15, Status Assessment of Wildlife Tourism in Australia Series, *Indigenous Wildlife Tourism in Australia: wildlife attractions, culture and interpretation and indigenous involvement*. CRC for Sustainable Tourism, Gold Coast, Queensland.

Palmer, L. 2001. Wildlife Tourism Research Report No. 8, Status Assessment of Wildlife Tourism in Australia Series, *Indigenous Interests in Safari Hunting and Fishing Tourism in the Northern Territory: assessment of key issues*. CRC for Sustainable Tourism, Gold Coast, Queensland.

Pearce, P.L., Morrison, A.M. and Rutledge, J.L. 1998. *Tourism: bridges across continents*. McGraw-Hill, Sydney. New South Wales.

Tribe, A. 2001. Wildlife Tourism Research Report No. 14, Status Assessment of Wildlife Tourism in Australia Series, *Status Assessment of Wildlife Tourism in Australia: captive wildlife*. CRC for Sustainable Tourism, Gold Coast, Queensland.

World Tourism Organisation (WTO). 1997. *International tourism: A global perspective*. WTO, Madrid, Spain.

## APPENDIX A: GLOSSARY OF TERMS USED IN WILDLIFE TOURISM REPORT SERIES

TERM	DEFINITION
<b>Captive wildlife</b>	Animals existing in a man-made environment, with confinement. Note that in some cases wildlife may be considered in a situation that is intermediate between free-ranging and captive, for example because they are in their natural habitat that has been enclosed by a fence.
<b>Consumptive wildlife tourism</b>	Wildlife tourism which involves killing or directly injuring animals (e.g. hunting, fishing, bullfighting). Although the term 'consumptive' is used for descriptive purposes, this should not be taken to automatically reflect on the ecological sustainability of such activities, as consumptive use may have less impact on populations as a whole than non-consumptive use in some cases.
<b>Domestic tourist</b>	A tourist who travels within their own country (Harris and Howard 1996, p. 88).
<b>Ecotourism</b>	Nature-based tourism that involves education and interpretation of the natural environment and is managed to be ecologically sustainable (Commonwealth Department of Tourism 1994).
<b>Excursionist</b>	A visitor who does not make an overnight stay in a destination (Harris and Howard 1996, p. 92).
<b>Free-ranging wildlife</b>	Animals existing in their natural habitat, without confinement. Also referred to as 'non-captive'. Also referred to as 'wildlife in natural areas'.
<b>International tourist</b>	A tourist from another country who stays for at least one night in a country (Harris and Howard 1996, p. 111).
<b>Nature-based tourism</b>	Tourism based on features of the natural environment. This includes tourism based in protected areas, sites of scenic beauty, beaches, marine areas and environments with unusual natural features (WTO 1997). Typically nature-based tourism is taken to exclude zoos, but to include large wildlife sanctuaries and other recreated natural environments (although wild animals even in captivity could be seen as a feature of the natural environment).
<b>Non-consumptive wildlife tourism</b>	Wildlife tourism which does not involve killing or directly injuring animals. This is also sometimes referred to as 'wildlife watching' or 'wildlife viewing', which strictly speaking is not accurate as it ignores other forms of interaction such as feeding, handling and listening.
<b>Tourism</b>	The sum of government and private sector activities which shape and serve the needs and manage the consequences of holiday, business and other travel (Pearce <i>et al.</i> 1998, p. xvi).

TERM	DEFINITION
<b>Tourist</b>	A person who travels 40km or more away from their home for a period of at least one night, for any reason other than paid employment (Harris and Howard 1996, p. 88).
<b>Visitor</b>	A person who undertakes temporary travel outside their home to another location for any purpose other than engaging in paid employment in the location visited (Harris and Howard 1996, p. 162).
<b>Wildlife</b>	Non-domesticated (non-human) animals: these include animals in captive and free-ranging settings; vertebrates and invertebrates; native and exotic species.
<b>Wildlife tourism (WT)</b>	Tourism based on encounters with non-domesticated (non-human) animals. (Alternatively known as wildlife-based tourism)
<b>Wildlife tourism activity</b>	Generic term used for any managed wildlife tourism experience, including wildlife tourism attractions, accommodation providers and tours. Note that unguided encounters with wildlife are not included.
<b>Wildlife tourism experience or encounter</b>	A broader term referring to any type of tourist encounter with wildlife, whether managed or not.
<b>Wildlife tourism operation or enterprise</b>	Any business or organisation (whether public or private sector) that includes wildlife encounters as a planned component of its operation. Note that this is a very broad definition, that includes, for example, ecotours with a small wildlife component, or theme parks with a wildlife section.

## APPENDIX B: LIST OF INDIVIDUAL STATUS ASSESSMENT REPORTS

### Discipline-based Status Assessments

- Burns, G.L. and Sofield, T.H.B. 2001. Wildlife Tourism Research Report No. 4, Status Assessment of Wildlife Tourism in Australia Series, *The Host Community, Social and Cultural Issues Concerning Wildlife Tourism*. CRC for Sustainable Tourism, Gold Coast, Queensland.
- Davis, D., Tisdell, C. and Hardy, M. 2001. Wildlife Tourism Research Report No. 3, Status Assessment of Wildlife Tourism in Australia Series, *The Role of Economics in Managing Wildlife Tourism*. CRC for Sustainable Tourism, Gold Coast, Queensland.
- Green, R.J. and Higginbottom, K. 2001. Wildlife Tourism Research Report No. 5, Status Assessment of Wildlife Tourism in Australia Series, *The Negative Effects of Wildlife Tourism on Wildlife*. CRC for Sustainable Tourism, Gold Coast, Queensland.
- Green, R.J., Higginbottom, K. and Northrope, C.L. 2001. Wildlife Tourism Research Report No. 7, Status Assessment of Wildlife Tourism in Australia Series, *A Tourism Classification of Australian Wildlife*. CRC for Sustainable Tourism, Gold Coast, Queensland.
- Higginbottom, K., Northrope, C.L. and Green, R.J. 2001. Wildlife Tourism Research Report No. 6, Status Assessment of Wildlife Tourism in Australia Series, *Positive Effects of Wildlife Tourism on Wildlife*. CRC for Sustainable Tourism, Gold Coast, Queensland.
- Moscardo, G., Woods, B. and Greenwood, T. 2001. Wildlife Tourism Research Report No. 2, Status Assessment of Wildlife Tourism in Australia Series, *Understanding Visitor Perspectives on Wildlife Tourism*. CRC for Sustainable Tourism, Gold Coast, Queensland.

### Sub-sector Status Assessments

- Bauer, J. and Giles, J. 2001. Wildlife Tourism Research Report No. 13, Status Assessment of Wildlife Tourism in Australia Series, *Recreational Hunting*. CRC for Sustainable Tourism, Gold Coast, Queensland.

- Birtles, A., Valentine, P. and Curnock, M. 2001. Wildlife Tourism Research Report No. 11, Status Assessment of Wildlife Tourism in Australia Series, *Tourism Based on Free-Ranging Marine Wildlife: opportunities and responsibilities*. CRC for Sustainable Tourism, Gold Coast, Queensland.
- Gartside, D. 2001. Wildlife Tourism Research Report No. 12, Status Assessment of Wildlife Tourism in Australia Series, *Fishing Tourism: charter boat fishing*. CRC for Sustainable Tourism, Gold Coast, Queensland.
- Higginbottom, K. and Buckley, R. 2001. Wildlife Tourism Research Report No. 9, Status Assessment of Wildlife Tourism in Australia Series, *Viewing of Free-Ranging Land-Dwelling Wildlife*. CRC for Sustainable Tourism, Gold Coast, Queensland.
- Jones, D. and Buckley, R. 2001. Wildlife Tourism Research Report No. 10, Status Assessment of Wildlife Tourism in Australia Series, *Birdwatching Tourism in Australia*. CRC for Sustainable Tourism, Gold Coast, Queensland.
- Muloin, S., Zeppel, H. and Higginbottom, K. 2001. Wildlife Tourism Research Report No. 15, Status Assessment of Wildlife Tourism in Australia Series, *Indigenous Wildlife Tourism in Australia: wildlife attractions, culture and interpretation and indigenous involvement*. CRC for Sustainable Tourism, Gold Coast, Queensland.
- Palmer, L. 2001. Wildlife Tourism Research Report No. 8, Status Assessment of Wildlife Tourism in Australia Series, *Indigenous Interests in Safari Hunting and Fishing Tourism in the Northern Territory: assessment of key issues*. CRC for Sustainable Tourism, Gold Coast, Queensland.
- Tribe, A. 2001. Wildlife Tourism Research Report No. 14, Status Assessment of Wildlife Tourism in Australia Series, *Status Assessment of Wildlife Tourism in Australia: captive wildlife*. CRC for Sustainable Tourism, Gold Coast, Queensland.

## APPENDIX C: SENIOR GOVERNMENT STAFF INTERVIEWED

STATE/ TERRITORY	STAFF INTERVIEWED IN TOURISM AGENCY	STAFF INTERVIEWED IN CONSERVATION AGENCY
NT	None available within study timeframe	David Lawson, Mike Butler (PWCNT)
WA	Steve Crawford (WATC)	Daryl Moncrieff, Colin Ingram (CALM)
TAS	Stuart Lennox (TT)	Nick Mooney, Bob Tyson
SA	Paul Donnellan, Susan Novak (SATC)	Fraser Vickery (DENR)
QLD	David Morgans (TQ)	Ralph Henderson (EPA)
NSW	None available within study timeframe	None available on this topic
VIC	Bill Fox (TV)	Russell Mason (Parks VIC), Brian Doolan (DNR)

## AUTHORS

### Dr Karen Higginbottom

Karen Higginbottom is the Coordinator of the Wildlife Tourism Subprogram of the CRC for Sustainable Tourism. She is responsible for the coordination and editing of the 23 volume Wildlife Tourism Report Series in which this report is included. Karen is a lecturer at Griffith University, where she teaches in wildlife management, vertebrate biology, and nature-based tourism. Her research has involved wildlife ecology and behaviour; and environmental and wildlife management, especially regarding its integration with 'human dimensions'. Her current research focuses on wildlife management issues relating to wildlife tourism. She has extensive experience as a wildlife tourist in many countries, and recently spent three years working in Africa. Email: [k.higginbottom@mailbox.gu.edu.au](mailto:k.higginbottom@mailbox.gu.edu.au)

### Kelley Rann

Kelley Rann, CA, MintHotMgt, is a Chartered Accountant. She has twelve years experience in finance, management and hospitality. Kelley is currently working part-time at Southern Cross University and is also involved in various consultancies on small business development. Kelley's research interests include sustainable tourism development, small business development, event management and yield management. She has a special interest in staff training in tourism and hospitality organisations. E-mail: [krann@scu.edu.au](mailto:krann@scu.edu.au)

### Dr Gianna Moscardo

Gianna Moscardo is a Principal Research Fellow with James Cook University's Tourism Program working on nature based tourism research projects. Her PHD in Social Psychology was focused on understanding visitor behaviour in, and responses to, natural settings and informal educational settings such as museums. Her research interests are understanding visitor behaviour in, attitudes towards, and evaluations of, natural settings, evaluating interpretive practice and developing tourism research methods. She has been an author or co-author of more than 50-refereed academic publications.

Email: [Gianna.Moscardo@jcu.edu.au](mailto:Gianna.Moscardo@jcu.edu.au)

### **Derrin Davis**

Derrin Davis was Associate Professor in Resource Economics in the Graduate Research College at Southern Cross University. He has published widely on resource management, particularly in relation to nature-based tourism in the coastal zone. His PhD, undertaken at the University of Queensland, was focused on the use of economics in managing the environmental impacts of tourism in the marine environment. Additionally, he regularly undertakes consulting activities in Pacific Island nations, with a focus on the sustainable use of natural resources, including their use in tourism. A/Prof Davis is also currently the Director of a large research project on the sustainable management of the live reef fish trade in Solomon Islands.

### **Sue Muloin**

Sue Muloin is completing doctoral research on the psychological benefits of wildlife tourism through James Cook University of North Queensland. Her field research sites included humpback whale watching in Hervey Bay, Queensland, and orca (killer whale) watching around the San Juan Islands, Washington State, USA. Sue's research interests include wildlife tourism, interpretation, and leisure activities for persons with specific needs. From 1990 to 1998, Sue was a Lecturer in the Department of Leisure and Tourism Studies at the University of Newcastle, NSW. Her subjects included Leisure, Tourism and Environmental Issues, Tourist Behaviour and Interactions, Leisure and Lifespan Development, Leisure, Tourism and Persons with Specific Needs, and the Social Psychology of Leisure. Sue has also been employed as a Senior Research Officer for the Hunter Valley Research Foundation in Newcastle, NSW. She was project manager for a number of studies, including tourism ones.

Email: [muloin@bigpond.com](mailto:muloin@bigpond.com)

## **ACKNOWLEDGEMENTS**

This study was funded by the CRC for Sustainable Tourism. It was a team effort which relied heavily on the efforts of other authors in preparing individual status assessment reports (Appendix B). We are very grateful to the government staff interviewed (Appendix C) and the numerous workshop participants for their time and valuable insights. Thanks also to Chelsea Northrope for assisting with preparation of the report. A special thanks to the wildlife tourism subprogram steering committee for their advice and in particular to the following committee members and others for their input into the SWOT analysis: Rex Chapman (On the Wallaby tours), Terry De Lacy (CRC for Sustainable Tourism), Aileen Forester (Seaworld), Daniel Gschwind (at the time, representing the Tourism Council Australia), Jack Giles (Taronga Zoo), Mike Hatton (Australian Federation of Travel Agents), David Lawson (Parks and Wildlife Commission of NT), David Morgans (Tourism Queensland), Peter O'Clery (CRC for Sustainable Tourism), Jeremy Thompson (Queensland Parks and Wildlife Service), Marguerite Young (Worldwide Fund for Nature) and a number of academics.

## Wildlife Tourism Report Series

Other reports in the wildlife tourism report series are listed below and can be ordered from the Cooperative Research Centre for Sustainable Tourism online bookshop: [www.crctourism.com.au/bookshop](http://www.crctourism.com.au/bookshop)

- Wildlife Tourism in Australia Overview – Higginbottom, Rann, Moscardo, Davis & Muloin
- Understanding Visitor Perspectives on Wildlife Tourism – Moscardo, Woods & Greenwood
- The Role of Economics in Managing Wildlife Tourism – Davis, Tisdell & Hardy
- The Host Community, Social and Cultural Issues Concerning Wildlife Tourism – Burns & Sofield
- Negative Effects of Wildlife Tourism – Green & Higginbottom
- Positive Effects of Wildlife Tourism – Higginbottom, Northrope & Green
- A Tourism Classification of Australian Wildlife – Green, Higginbottom & Northrope
- Indigenous Interests in Safari Hunting and Fishing Tourism in the Northern Territory: Assessment of Key Issues – Palmer
- Terrestrial Free-Ranging Wildlife – Higginbottom & Buckley
- Birdwatching Tourism in Australia – Jones & Buckley
- Tourism Based on Free-Ranging Marine Wildlife: Opportunities and Responsibilities – Birtles, Valentine & Curnock
- Fishing Tourism: Charter Boat Fishing – Gartside
- Recreational Hunting: An International Perspective – Bauer & Giles
- Captive Wildlife Tourism in Australia – Tribe

- Indigenous Wildlife Tourism in Australia: Wildlife Attractions, Cultural Interpretation and Indigenous Involvement – Muloin, Zeppel & Higginbottom
- Rangeland Kangaroos: A World Class Wildlife Experience – Croft
- Assessment of Opportunities for International Tourism Based on Wild Kangaroos – Croft & Leiper
- Evaluation of Organised Tourism Involving Wild Kangaroos – Higginbottom, Green, Leiper, Moscardo, Tribe & Buckley
- Kangaroos in the Marketing of Australia: Potentials and Practice – Chalip, Arthurson & Hill
- Economic, Educational and Conservation Benefits of Sea Turtle Based Ecotourism: A Study Focused on Mon Repos – Tisdell & Wilson
- A Biological Basis for Management of Glow Worm Populations of Ecotourism Significance – Merritt & Baker
- International Market Analysis of Wildlife Tourism – Fredline and Faulkner
- Traditional Ecological Knowledge of Wildlife: Implications for Conservation and Development in the Wuyishan Nature Reserve, Fujian Province, China – Boyd, Ren, De Lacy & Bauer

Online publications can be downloaded from the website as .pdf files and read using Adobe Acrobat Reader. Hard copies can also be ordered via the email order form provided on the site. For more information on the production of these CRC for Sustainable Tourism publications, contact Trish Kalle, email: [trish@crctourism.com.au](mailto:trish@crctourism.com.au) or Telephone: +61 7 5552 9053



The Cooperative Research Centre for Sustainable Tourism was established under the Australian Government's Cooperative Research Centres Program to underpin the development of a dynamic, internationally competitive, and sustainable tourism industry.

Our mission: Developing and managing intellectual property (IP) to deliver innovation to business, community and government to enhance the environmental, economic and social sustainability of tourism.

### DEVELOPING OUR IP

Director of Research - Prof Bill Faulkner

#### 1. Tourism environmental management research

Co-ordinator – Prof Ralf Buckley ([r.buckley@mailbox.gu.edu.au](mailto:r.buckley@mailbox.gu.edu.au))

- Wildlife Tourism
- Mountain Tourism
- Nature Tourism
- Adventure Tourism

#### 2. Tourism engineering design and eco-technology research

Coordinator – Dr David Lockington ([d.lockington@mailbox.uq.edu.au](mailto:d.lockington@mailbox.uq.edu.au))

- Coastal and marine infrastructure and systems
- Coastal tourism ecology
- Waste management
- Physical infrastructure, design and construction

#### 3. Tourism policy, products and business research

Coordinator – A/Prof Leo Jago ([Leo.jago@vu.edu.au](mailto:Leo.jago@vu.edu.au))

- Consumers and marketing
- Events and sports tourism
- Tourism economics and policy
- Strategic management
- Regional tourism
- Indigenous tourism

#### 4. E-travel and tourism research

Coordinator – Dr Pramod Sharma ([p.sharma@mailbox.uq.edu.au](mailto:p.sharma@mailbox.uq.edu.au))

- Electronic product & destination marketing and selling
- IT for travel and tourism online development
- Rural and regional tourism online development
- E-business innovation in sustainable travel and tourism

#### 5. Post graduate education

Coordinator – Dr John Fien ([j.fien@mailbox.gu.edu.au](mailto:j.fien@mailbox.gu.edu.au))

#### 6. Centre for Tourism and Risk Management

Director – Prof Jeffrey Wilks ([j.wilks@mailbox.uq.edu.au](mailto:j.wilks@mailbox.uq.edu.au))

#### 7. Centre for Regional Tourism Research

Director – Prof Dick Braithwaite ([dbraithw@scu.edu.au](mailto:dbraithw@scu.edu.au))

#### MANAGING OUR IP

General Manager – Ian Pritchard ([ian@crctourism.com.au](mailto:ian@crctourism.com.au))

1. IP register
2. Technology transfer
3. Commercialisation
4. Destination management products
5. Executive training
6. Delivering international services
7. Spin-off companies

- Sustainable Tourism Holdings  
CEO – Peter O'Clery ([poclery@interact.net.au](mailto:poclery@interact.net.au))
- National Centre for Tourism  
Managing Director – Stewart Moore ([nct@uq.net.au](mailto:nct@uq.net.au))
- Green Globe Asia Pacific  
CEO – Graeme Worboys ([graeme.worboys@ggasiapacific.com.au](mailto:graeme.worboys@ggasiapacific.com.au))

*For more information contact:  
Communications Manager – Brad Cox  
CRC for Sustainable Tourism Pty Ltd  
Griffith University, PMB 50  
GOLD COAST MC, Qld 9726  
Ph: +61 7 5552 8116, Fax: +61 7 5552 8171  
Visit: [www.crctourism.com.au](http://www.crctourism.com.au) or email:  
[Brad@crctourism.com.au](mailto:Brad@crctourism.com.au)*

## DARWIN

Northern Territory Node  
Coordinator  
Northern Territory University  
Alicia Boyle  
Ph: 08 8946 6084  
alicia.boyle@ntu.edu.au

## CAIRNS

Cairns Node  
Prof Philip Pearce  
James Cook University  
Ph: 07 4781 4762  
philip.pearce@jcu.edu.au

## BRISBANE

Tourism Engineering,  
Design and Technology Research  
Dr David Lockington  
Ph: 07 3365 4054  
d.lockington@mailbox.uq.edu.au

Travel and Tourism Information  
Technology Research  
Dr Pramod Sharma  
Ph: 07 3365 6513  
p.sharma@mailbox.uq.edu.au

Sustainable Tourism Services  
Mr Stewart Moore  
Managing Director  
Ph: 07 3229 1188  
nct@uq.net.au

Education Program Coordinator  
Dr John Fien  
Ph: 07 3875 7105  
j.fien@mailbox.gu.edu.au

## GOLD COAST

Director of Research  
Prof Bill Faulkner  
Ph: 07 5552 8532  
b.faulkner@mailbox.gu.edu.au

CRC Tourism Executive  
Prof Terry De Lacy  
Ph: 07 5552 8172  
t.delacy@mailbox.gu.edu.au

Tourism Environmental  
Management Research  
Prof Ralf Buckley  
Ph: 07 5552 8675  
r.buckley@mailbox.gu.edu.au

## LISMORE

Centre for Regional  
Tourism Research  
Prof Dick Braithwaite  
Ph: 02 6620 3785  
dcarson@scu.edu.au

## SYDNEY

New South Wales  
Node Coordinator  
A/Prof Ray Spurr  
Ph: 02 9385 1600  
r.spurr@unsw.edu.au

Bathurst International  
Program Coordinator  
Dr Johannes Bauer  
Ph: 02 6338 4284  
jbauer@csu.edu.au

  
crc  
Sustainable Tourism  
crc tourism.com.au

## PERTH

Western Australia  
Node Coordinator  
Dr Jack Carlsen  
Ph: 08 9400 5698  
j.carlsen@cowan.edu.au

## ADELAIDE

South Australia Node  
Coordinator  
Prof Graham Brown  
Ph: 08 8302 0476  
graham.brown@unisa.edu.au

## CANBERRA

Industry Extension Coordinator  
Mr Peter O'Clery  
Ph: 02 6230 2931  
pocleary@interact.net.au

Australian Capital Territory  
Node Coordinator  
Prof Trevor Mules  
Ph: 02 6201 5016  
tjm@comedu.canberra.edu.au

## MELBOURNE

Tourism Policy, Events and  
Business Research  
A/Prof Leo Jago  
Ph: 03 9688 5055  
Leo.jago@vu.edu.au

## LAUNCESTON

Tasmania Node Coordinator  
Prof Trevor Sofield  
Ph: 03 6324 3578  
trevor.sofield@utas.edu.au

# STATISTICS ASSESSMENT OF WILDLIFE TOURISM IN AUSTRALIA: PART II