

# ECONOMIC BENEFITS, CONSERVATION AND WILDLIFE TOURISM

*Clem Tisdell*

*School of Economics*

*The University of Queensland*

*Email: [c.tisdell@economics.uq.edu.au](mailto:c.tisdell@economics.uq.edu.au)*

*Prepared for Wildlife Tourism Australia's 3<sup>rd</sup> National Workshop, "Using Wildlife for Tourism: Opportunities, Threats, Responsibilities". Currumbin Wildlife Sanctuary, Gold Coast, 16-18 May, 2012. This keynote presentation is scheduled for 8.45 am, Wednesday 16 May*

---

# COVERAGE

---

1. Introduction
2. Economic Benefits from Wildlife Tourism, How Are They Measured? How Large Are They?
3. Consequences of Wildlife Tourism for Conservation: Does Wildlife Tourism Conserve Biodiversity?
4. Diversity Within the Wildlife Tourism Industry and Its Economic Challenges
5. Conclusions

# 1. INTRODUCTION

---

- Wildlife tourism is claimed to generate massive economic benefits and to contribute significantly to nature conservation, especially biodiversity conservation.
- However, estimates of its economic benefits vary dramatically depending on how they are measured.
- Tourism Research Australia estimates that nature tourism could be responsible for injecting an expenditure of over \$30 billion annually into our economy; a very large sum indeed. Is this a reasonable estimate of the economic benefits from nature tourism?
- To what extent do these economic benefits contribute to conservation? To what extent do those in the front line of wildlife tourism and nature conservation benefit? What are their economic challenges?

## 2. ECONOMIC BENEFITS FROM WILDLIFE TOURISM

---

- The economic value of the stock of wildlife is enhanced when it can be sustainably used for tourism and depending on the circumstances, this increased economic benefit can be a powerful force for the conservation of nature.
- Whether or not this extra benefit supports nature conservation depends on several factors. These include how large it is, how it is distributed between the stakeholders and the nature of property rights in wildlife, and associated governance.
- Consider first the measurement of the size of economic benefits from wildlife tourism.

## Two Different Approaches to Measuring the Economic Benefits of Wildlife Tourism

---

- Basically two different approaches to measuring the economic benefit from wildlife tourism are to be found in the literature.
- These are:
  - Measures of its net economic value
  - Measures of its economic impact
- Estimates based on net economic value or worth focus on estimating and aggregating
  - The surplus which wildlife tourists obtain from their experiences (consumers' surplus), that is their valuation of their experience less their costs, plus
  - The profits of these businesses catering for their needs of wildlife tourists (producers' surplus).
- Economic impact analysis measures the consequences of wildlife tourism for economic variables such as the level of expenditure, income and employment. It focuses on what tourists actually pay for their experience rather than its net economic value or worth to them.

## The Application of These Measures

---

- Estimating the net economic worth of wildlife tourism can be costly and difficult. It has generally only been applied as a measure of nature or wildlife as an attraction at particular sites e.g. turtles at Mon Repos, flamingos at a lake in Kenya.
- Economic impact analyses are more common. Their geographical coverage can be at the local, regional or national levels. Most government estimates of the economic benefit of tourism are based on this approach.
- The dollar values of the results from applying these two methods can differ a lot.

# Australian Estimates of the Economic Benefit from Wildlife Tourism

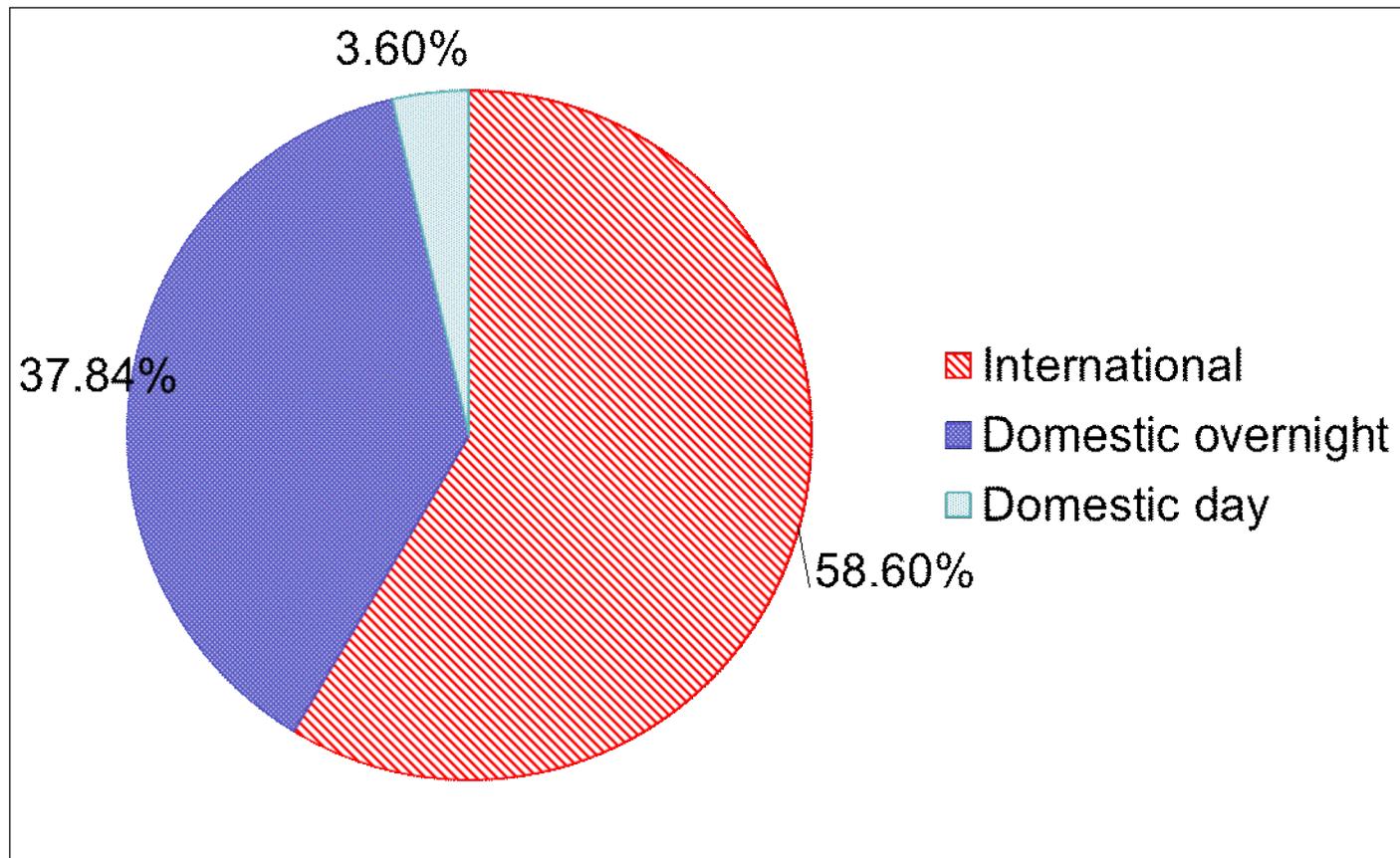
- Tourism Research Australia (part of the Department of Resources, Energy and Tourism of the Australian Government) used the expenditure method to estimate the economic benefit to Australia of nature tourism in 2009. Its estimates are given in Table 1

Type of nature visitors	Total expenditure A\$ billion	Percentage of total expenditure
International	19.5	58.56
Domestic overnight	12.6	37.84
Domestic day	1.2	3.60
TOTAL	33.3	100.00

*Source:* Extracted from Tourism Research Australia (2010) "Snapshots 2009. Nature Tourism in Australia".

- These figures indicate that nature visitors spend over a \$1,000 annually per Australian.
- The major amount of that expenditure (nearly 60%) is attributed to international visitors. The composition of this expenditure is highlighted in Figure 1.
- Although these expenditure figures are interesting, they exaggerate the expenditure generated by nature tourism in Australia.
- Furthermore, the revenue received by those in the wildlife tourism industry is much lower than these figures might suggest.

**Figure 1:** The relative contribution of international and domestic nature visitors to Tourism expenditure in Australia in 2009



## Limitations of the TRA Estimates

---

- Tourism Research Australia's test of whether a visitor is a nature visitor is not very discriminating.
- Anyone who participates in any one of the following activities at least once while travelling in Australia in 2009 was classified as a nature visitor:
  - Visit national parks or state parks
  - Visit wildlife parks, zoos or aquariums
  - Visit botanical or other public gardens
  - Bushwalking or rainforest walks
  - Whale or dolphin watching (in the ocean)
  - Snorkelling
  - Scuba diving



## Limitations of the TRA Estimates (Cont.)

---

- All the tour/travel expenditure of these persons while on a trip is attributed to such visitor being a nature visitor.
- However, much of their expenditure is not generated by the presence of nature or the possibilities for wildlife tourism. Even the distinction made later in its fact sheet by the ATR between purposeful and incidental nature visitors does not completely overcome the problem.



## A Way to Determine the Regional and Local Economic Importance of Wildlife Attractions

---

- Wildlife tourism is often an important source of income for rural regions, many of which have limited local opportunities.
- One way to estimate its economic importance to a region is to survey visitors to find out whether they would have visited the region or area in the absence of the wildlife attraction(s). The expenditure in the region by all visitors who state that they would not have visited the region in the absence of its wildlife attraction(s) can be attributed to the presence of those attractions.
- Those who would have visited the region anyway may have spent more (e.g. stayed longer) because of its wildlife attraction(s). This expenditure can be attributed to the presence of the region's wildlife.

## Some Examples of the Importance of Wildlife in Attracting Visitors to Particular Areas

---

- A survey of visitors to Mon Repos Conservation Park (conducted in the turtle season of 1999/2000) found that 40% of respondents would not have visited the Bundaberg region in the absence of sea turtles and 19% would have reduced their length of stay.
- A survey of visitors to the O'Reillys/Green Mountains Section of Lamington National Park revealed that in the absence of birds, 30-40% of respondents would not have visited this site.
- In a survey of passengers on a tour vessel going to Antarctica, only 13.5% said that seeing wildlife there was not very important in their decision to join the cruise. For most, it was a very important consideration.



# 3. CONSERVATION CONSEQUENCES

---

## OF WILDLIFE TOURISM

### General Points

- Wildlife tourism can be a positive, neutral or a negative force for nature conservation depending on how it is conducted.
- This is true of all forms of wildlife tourism, that, whether it relies on captive, semi-captive or free-ranging species, or on whether it is consumptive or non-consumptive.
- There are diverse ways in which wildlife tourism can support nature conservation. It may support conservation:
  - By providing economic benefits directly to those who conserve nature.
  - By giving economic benefits to others.
  - By altering the beliefs, attitudes and behaviours of wildlife tourists and members of the community.

- In some cases, revenue obtained from wildlife tourism by the holders of non-public (non-state) land helps to conserve species.
- For example, revenue obtained from visitors at the following sites provides funds for the conservation of free-ranging wildlife species:
  - Mareeba Wetland and Savannah Reserve (managed by an NGO)
  - Penguin Parade, Phillip Island, Vic.
  - Royal Albatross Colony, Otago Peninsula, New Zealand (managed by a trust)
  - “Penguin Place” a private farm on the Otago Peninsula.
- Other examples could be quoted. However, in most cases, the economic incentives for private landholders to conserve free-ranging wildlife species for tourism is weak. Therefore, there is a high degree of reliance on public (state) land and aquatic areas for wildlife tourism.

## Examples of (Large) Indirect Economic Benefits from Wildlife Tourism

---

- A study which I conducted of wildlife tourism in the Otago Peninsula in New Zealand found that about the equivalent of 70 full-time persons were employed at sites where wildlife tourism was conducted. However, this tourism generated at least 700 extra jobs in the Otago Regions which includes the city of Dunedin.
- As a result of a survey of visitors to Mon Repos turtle nursery, it was estimated that the primary expenditure generated by the rookery in the Bundaberg region was at least 10 times greater than the revenue obtained from entrance fees to the rookery.
- However, the size of the indirect economic benefit varies according to the particular cases involved.



## 4. DIVERSITY IN THE WILDLIFE TOURISM INDUSTRY AND CHALLENGES FACED

---

### General Observations

- On the supply-side, the wildlife tourism industry is extremely diverse. Participants include private businesses, NGOs and government bodies.
- Businesses and NGOs involved in the industry vary a lot. Some rely on free-range wildlife and others depend on captive or semi-captive wildlife.
- Organisations in the industry vary markedly in size and in their cost structures. Some have high overhead costs (for example, zoos, whale watching cruises) whereas some have low overhead costs (for example, tree-kangaroo tours conducted by locals on a demand basis).
- Nevertheless, many of those in the industry in Australia face similar economic pressures.

The following are some of the economic challenges faced in this industry

- Seasonability in the availability of the species, e.g. whales.
  - Vulnerable to catastrophic weather events – Cyclone’s Yasi and Larry reduced (for a time) the number of tourists visiting North Queensland and reduced the population of some wildlife species utilized there for tourism.
  - Demand to engage in wildlife tourism is affected by general economic conditions. For example, the Global Financial Crisis has had a negative effect on tourism.
  - The high Australian dollar has had an adverse effect on the number of international visitors to Australia and consequently, on wildlife tourism here.
  - More research is needed on the economics of businesses and NGOs operating in the wildlife tourism industry.
-

## 5. CONCLUSIONS

---

- Nature tourism is an important industry in Australia but the amount of expenditure attributed to nature tourists by Tourism Research Australia seems to exaggerate its importance.
- The economic benefit obtained from wildlife tourism should not be judged only by the amount of spending generated by wildlife tourism.
- The economic benefits from wildlife tourism can be a powerful force for nature conservation, particularly if its indirect economic benefits are taken into account.
- The wildlife tourism industry involves very diverse participants, and as indicated, faces several economic challenges.

## 6. ADDED COMMENTS

---

According to *Travel Impact Newswire* (11 May, 2012):

- The United States Fish & Wildlife Service estimates that wildlife watchers in the US spend about US\$32 billion per year on this activity.
- There is about the same as Tourism Research Australia's (doubtful) estimates for Australia.
- The UNEP *Green Economy Report* found that ecotourism is increasing at about 6 times the rate of growth in tourism generally.
- The economic importance of wildlife tourism and its continuing growth potential is being more widely recognised as is its potential to support wildlife conservation. However, the industry faces significant restraints in Australia.

# Thank you

