
Pacific Islands Whale Watch Tourism: 2005
An Economic Valuation

Submitted to the Commission
by the Government of Australia

This paper provides a summary of initial findings of an economic valuation of whale watch tourism in the Pacific Islands.

Pacific Islands Whale Watch Tourism: 2005

An Economic Valuation

Summary of initial findings

May 2006



Prepared by:

ecolarge
Economists @ Large and Associates
Consulting Economists

Report of initial findings prepared for project partners:



Introduction

The Pacific Islands region is home to a high diversity of cetaceans. It contains critical breeding, calving and feeding grounds and migratory pathways for many species. Historically, the region was a focus for whaling from the late 1700s. Many species were hunted to the brink of extinction and are recognised internationally as still threatened today (IUCN Red List¹). Nevertheless, the presence of populations of cetaceans has led to the development of whale and dolphin watching tourism industries over the last 10-15 years. Cetaceans are now increasingly an important element of the region's economy.

In 2001, a report by Eric Hoyt (the 'Hoyt Report'²) provided a global assessment of whale watching³ tourism expenditures and participant numbers. The report assessed several countries and territories in the Pacific Islands region (Fiji, New Caledonia, Solomon Islands, Guam, Midway, Federated States of Micronesia, Tonga, French Polynesia, Niue). Whale watching industries have subsequently developed in other Pacific Island countries and territories not included in the Hoyt assessment.

Since the Hoyt Report, there has been increased interest in the conservation of the region's cetaceans through, for example, the Secretariat of the Pacific Regional Environment Programme's 2003-2007 Whale and Dolphin Action Plan and increased membership of the International Whaling Commission (IWC) by Pacific Island countries.

In February 2006, the International Fund for Animal Welfare (IFAW), Secretariat of the Pacific Regional Environment Programme (SPREP), South Pacific Tourism Organisation (SPTO), and the South Pacific Whale Research Consortium (SPWRC) commissioned an assessment of the whale and dolphin watching industry in the Pacific Islands region (as defined by SPREP's member countries⁴). A region-wide review of the status of whale watching activities was seen as a valuable tool to further support the development of responsible whale and dolphin watching tourism and to support regional initiatives promoting the conservation of these species. This report compiles the preliminary findings of this assessment. A full report will be released in September 2006 which will cover additional aspects including the economic value of whale watching in the Pacific Islands region and a country-by-country assessment of the potential for the development of whale watching tourism.

Research methods

The data in this report have been attained primarily through an extensive survey of operators involved in marine-based tourism activities in the 22 countries, states and territories covered by this assessment. In total, 139 operators were surveyed with a response rate of 29%. Further data have come from interviews and questionnaires sent to tourism authorities, government agencies, researchers and non-government organisations in all countries covered by the scope of this project. These findings are initial results that aim to provide estimates of growth patterns of the whale watch industry in the Pacific Islands region.

¹ The World Conservation Union, www.redlist.org.

² Hoyt, E. (2001), *Whale Watching 2001: Worldwide tourism numbers, expenditures and expanding socioeconomic benefits: a report for IFAW*.

³ For the purposes of this report, 'whale watching' refers to viewing activities of any cetacean species from land, sea or air. Importantly, this refers also to dolphin and porpoise watching activities where they occur in a non-caged, 'wild' environment.

⁴ For the purposes of this assessment, the Pacific Islands region follows SPREP member countries and encompasses 22 distinct countries, states and territories across the South and North Pacific Ocean, but excludes Australia, France, New Zealand and the US. French, New Zealand, UK and US territories are included in this assessment.

Results

The growth of whale watching in the Pacific Islands region

This assessment has found that cetacean-based marine tourism in the Pacific islands region has undergone a strong growth period since Hoyt's 1998 analysis⁵. Findings indicate that whale watching now occurs across a wider range of countries than Hoyt's 1998 survey indicated. The main findings include:

- The average annual growth rate⁶ of whale watching in the Pacific Islands region is estimated to be **45%** for the period 1998-2005⁷. By comparison, over a similar period, Australian and New Zealand whale watch annual average growth rates were estimated at 15%⁸ and 11%⁹ respectively. The high recent growth of whale watching in the Pacific Islands region demonstrates a strongly emerging industry, beginning at a very low level in 1998 to a point seven years later where it is a well established element of the tourism industry in several countries in the region.
- This is based on initial estimates of the total number of whale watchers in the Pacific Islands region in 2005 as being **109,540**. This includes both those participating in dedicated whale watch tourist operations and those undertaking whale watching opportunistically. This has grown from **10,309** whale watchers in 1998.
- Whale watch activities were undertaken in **fourteen (14)** countries in the 2005 calendar year. Hoyt found whale watching activities to be occurring in **nine (9)** countries in the Pacific islands region in 1998.
- The countries that have experienced the strongest annual average growth rates include the Cook Islands, French Polynesia and Guam.
- Countries with well established industries in 1998, such as New Caledonia and Tonga, have continued to experience sustained growth.
- Countries that have emerged since Hoyt's 1998 report to have a newly identified whale watching industries include Palau, Papua New Guinea, Samoa & Solomon Islands.

The table attached sets out estimates for the numbers of whale watchers across the region for the 2005 calendar year and compares these to Hoyt's estimates for 1998.

⁵ Whale watching growth is based on estimates of numbers of 'whale watchers' undertaking whale watch trips in 2005 compared to the numbers estimated by Hoyt's 2000 report. 'Whale watcher' refers to the number of whale watch trips undertaken as opposed to the number of separate individuals undertaking whale watching trips. It is assumed that this has very little effect on final whale watcher numbers due to only a very small proportion of people participating in whale watching greater than once in this time period.

⁶ The average annual growth rate (AAGR) is calculated as the average of a series of percentage growth rates that allows the data to grow steadily from the first survey period (1998) and achieve the result specified in the next survey period (2005) (the 'interpolated' period). This interpolation is based on the assumption that growth in whale watcher numbers is constant over all years between 1998 and 2005. The annual average growth figure is calculated on a country-by-country basis. The regional AAGR is calculated from the average of all 22 country AAGRs.

⁷ This represents a regional growth rate of 45% *each year* over the seven year period assessed.

⁸ Economists @ Large & Associates (2004), *The Growth of Whale Watching Tourism in Australia : An IFAW Report* – Growth data relates to the period 1998 - 2003

⁹ Economists @ Large & Associates (2005), *The Growth of the New Zealand Whale Watching Industry: An IFAW Report*. – Growth data relates to the period 1998 – 2004.

The structure of the whale watching industry in the Pacific Islands region

This assessment of the whale watching industry in the Pacific has shown an industry made up of four main groups of operators:

- **Full-time, dedicated whale watching:** operators who run cetacean-based tourism activities all year. This segment makes up a low number of total operators, however accounts for a large number of the region's whale watchers. For example, this segment includes a well established, boat-based dolphin watching industry in Guam taking up to 500 tourists dolphin watching each day.
- **Seasonal, dedicated whale watching:** these operations are full-time whale watch tours in the months when a migratory species of whale is present in local waters. These operations tend to be focused on the humpback whale migration (such as the yacht charters of New Caledonia who commit to dedicated whale watching charters in the peak humpback season). This segment has a higher number of operators than full-time, dedicated whale watch operators, and is more geographically dispersed, occurring in a larger number of countries.
- **Opportunistic whale watching** occurs when an operator is undertaking a tour whose primary aim is not the viewing of cetaceans but will divert the intended course of the tour if cetaceans are sighted. These are often scuba dive operators and yacht or game fishing charter companies. Often dive operators will divert their course when cetaceans are sighted whilst travelling to or from dive sites and spend some unplanned time with the animals, either swimming with cetaceans or viewing cetaceans from a boat. This group covers, for instance, the many dive operators of Papua New Guinea who operate near resident populations of spinner dolphins and have occasional sightings of large cetaceans. This segment makes up the largest group of operators, however accounts for low numbers of total whale watchers.
- **Land-based whale watchers** are those who watch whales from shore, which has little or no direct expenditure demands on the tourist through ticketing. Islands such as Niue and the Cook Islands have the capacity for land based viewing as whales come close to shore in the deep waters. In the Cook Islands, land-based whale watching is encouraged through daily reports of best viewing locations at a whale education centre and a whale viewing platform has been recently built. This segment makes up a low proportion of total whale watchers.

The potential of the whale watching industry in the Pacific Islands region

Responses from operators indicate that the size of the whale watching industry in any part of the Pacific Islands region is directly proportional to the accessibility and reliability of cetacean sightings, as well as a large enough base of tourists in the country.

Key constraints to the further development of whale watching in countries where cetaceans are prevalent include low numbers of tourists due to accessibility difficulties (e.g. high travel costs). In other countries where there is a strong tourism market, but low whale watching numbers, operators report that this is primarily due to the inconsistency of cetacean sightings (e.g. Fiji).

Due to the time and expense required to access some countries in this region, whale watching is an activity that complements, and at times forms an important part of, an existing tourism industry. This is often demonstrated by the use of cetaceans in Pacific tourism marketing materials. However, there are a few cases where whale watching has developed to become a core attraction to draw tourists to a location for that sole purpose (e.g. Vava'u in Tonga).

The whale watching industry in the Pacific Islands region is experiencing strong growth. It is likely that this growth trend could continue. As can be seen in the table attached, a number of countries were identified as having minimal or no identified industry as yet. The expansion in whale watching tourism could encompass more countries in the region if regional tourism markets can continue to develop and if knowledge about the occurrence cetacean species in the region be improved.

Estimated numbers of whale watchers and the percentage growth in the whale watching industry for Pacific Island region countries and territories

<i>Country</i>	<i>Estimated numbers of whale watchers 1998¹⁰</i>	<i>Estimated numbers of whale watchers 2005</i>	<i>Annual average growth rate (1998-2005)</i>
Total:	10,309	109,540	45%
American Samoa	None identified	Minimal	0%
Cook Islands	None identified ¹¹	3715	64%
Federated States of Micronesia	230	Minimal	0%
Fiji	Minimal	Minimal	0%
French Polynesia	1,000 ¹²	6,000	30%
Guam	4,000	84,000	70%
Kiribati	None identified	None identified	0%
Marshall Islands	None identified	None identified	0%
Nauru	None identified	None identified	0%
New Caledonia	1,695	4,906	17%
Niue	50	270	28%
Northern Mariana Islands	None identified	Minimal	0%
Palau	None identified	Minimal	0%
Papua New Guinea	None identified ¹³	600	17%
Samoa	None identified ¹⁴	350	8%
Solomon Islands	Minimal ¹⁵	500	14%
Tokelau	None identified	None identified	0%
Tonga	2,334	9000	22% ¹⁶
Tuvalu	None identified	None identified	0%
Vanuatu	None identified	Minimal	0%
Wallis & Futuna	None identified	None identified	0%
Pitcairn Islands	None identified	None identified	0%

¹⁰ Op.Cit, Hoyt, E. (2001)

¹¹ In order to take into account the potential existing low level of opportunistic whale watching in 1998, an estimate was made of 200 opportunistic whale watchers in 1998 from which to interpolate average growth figures. This ensures the AAGR remains conservatively estimated.

¹² Hoyt's 1998 estimate of "minimal" numbers of whale watchers has been restated in this report to 1,000. This is based on feedback from local operators in the country who claim this 1998 figure to be well below actual numbers. This revision gives more conservative growth estimates for the period.

¹³ As Cook Islands above.

¹⁴ As Cook Islands above

¹⁵ As Cook Islands above

¹⁶ This figure needs to be further confirmed. Methodological changes between Hoyt's calculations and those done for this report could affect this result +/- 5%. Hoyt counts individual whale watchers once only. This assessment calculates whale watchers as the number of individual whale watching trips undertaken as our purpose is to calculate economic benefit accrued due to whale watching. For most regions, this has minimal impact on overall numbers, as research has shown that very few people undertake repeat whale watch trips. Vava'u in Tonga is an exception to this rule where many tourists visit especially for whale watching. Operators surveyed have indicated that although total whale watchers for the year may only be around 3,000 individuals, there are up to 9,000 whale watch trips as many tourists repeatedly undertake trips for the duration of their stay.



ecolarge

Economists @ Large and Associates
Consulting Economists

www.ecolarge.com