

# WHALES: MORE VALUABLE ALIVE THAN DEAD? A QUESTION FOR DECISION MAKERS IN EASTERN CARIBBEAN WHALE-WATCHING DESTINATIONS

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## *ABSTRACT*

*This paper utilizes preliminary information from four islands in the eastern Caribbean (Dominica, St. Lucia, St. Vincent & Grenadines and Grenada) where whale watching is currently being promoted and marketed. The goal is to demonstrate that whales are potentially worth more alive than dead and that responsible and sustainable whale watching can serve as the basis for a profitable ecotourism industry capable of offering desirable employment to local people while simultaneously benefiting whales and their habitat.*

**Keywords:** whale watching, whaling, Eastern Caribbean, sustainability, ecotourism, tourists

## **1.0 Introduction**

Since the 1980s, non-consumptive recreational use of wildlife resources has attracted a large and growing number of enthusiasts. The growth has stemmed from development of the tourism industry and the desire for tourists to see wildlife in its natural state. One such area has been in the worldwide development of whale watching which has now grossed over US\$1 billion per annum and provides a high rate of return and significant economic benefit to many coastal regions throughout the world. The development of whale watching has been quite evident in the eastern Caribbean islands of Dominica, Grenada, St. Lucia and St. Vincent and

the Grenadines where commercial whale-watching, which began in the early to mid- 1980s, is now being promoted as an economic alternative to the hunting of whales. This new ecotourism industry has been hailed as a major source of foreign exchange revenue for these islands. A number of whale species inhabit the waters in the eastern Caribbean, making the area an ideal destination for watching whales.

On a parallel level, the six eastern Caribbean members of the International Whaling Commission support the bid of whaling countries to resume commercial whaling. Although once considered whaling countries, some of these islands are now being promoted as major tourist destinations. Thus the support for the resumption of commercial whaling has been seen by many as a direct contradiction to the development of whale watching and the antithesis to the evidence that whales are worth more alive than dead.

Whales have a history of interaction with humans and have been a source of fascination for peoples residing in coastal communities throughout the world. The human involvement with whales in the distant past has primarily been one of commercial exploitation based on their value as a source of products for human use (Orams, 2002). This period of commercial exploitation has had a profound impact on the numbers of whales that were hunted, as it resulted in a severe depletion in the numbers of almost every large whale species that was hunted. Many species were driven to the brink of extinction by the middle of the 20<sup>th</sup> century (Orams 2002, Bowen & Siniff, 1999). As a result of these unsustainable hunting practices and, perhaps as a result of growing compassion and empathy for these animals, whales have become icons for the environmental movement (Orams, 2002). The current debate surrounding the future management of whales has taken place at both the cultural, economic, political, and scientific levels, a responsibility that has been vested in the International Whaling Commission (Orams, 2002). On one side are those who argue that whales should be protected from any commercial consumptive use; on the other are those who argue that whales should be hunted, claiming that this will be done on a sustainable basis. However, historical whaling and the current exploitation of marine

species by Japan shows that such claims of sustainability are rarely achieved in practice.

In recent decades a further “value” for these animals has arisen: they have become popular as a tourism attraction. This is being driven by the non-consumptive recreational use of wildlife resources (Duffus & Dearden, 1990) and a growing recognition within natural resource agencies that wildlife also holds other use values such as existence, bequest and option values (Giraud & Turcin, 2001). This growth has also stemmed from development of the tourism industry and the desire for tourists to see wildlife in its natural state. This growing industry is dependent on large numbers of whales easily accessible for observation and has placed an economic value on whales being alive (Hoyt, 2000). These values have, in some instances, been utilized as an argument against the lethal use of whales as a consumable product (International Fund for Animal Welfare, 1998). This is certainly the case in the Eastern Caribbean, where an attempt to support the resumption of commercial whaling by pro-whaling advocates has been argued against by those who consider the whales of greater value alive as a tourism attraction. These arguments are centred on the evidence that as tourism-dependent economies with tourism accounting for around a quarter of GDP, and with the projections of an increase in tourist arrivals to the region, it would be prudent for governments to pursue a policy that favours the non-consumptive use of whales and the positive image that a pro-conservation position provides. This is further supported by the exponential growth in nature-based tourism activities and the need to secure alternative sustainable livelihood opportunities for coastal communities.

## **2.0 The Growth of Whale-Watching Worldwide**

Increasingly, people around the world are enjoying whale watching and this rapid worldwide growth over the past decade has been widely reported in the literature. Hoyt’s (2000) review of the industry worldwide illustrates its spectacular growth. Hoyt estimates that the worldwide economic impact derived from whale-watching activities in 1998 totalled

more than US\$1 billion per annum with almost 100 countries or territories and nearly 500 communities involved in whale watching. As a consequence there appears to be widespread optimism about the future potential of this industry, and predictions are that whale-watching will continue this rapid rate of growth (Hoyt, 2000). Whale-watching also provides important educational, environmental, scientific and other socioeconomic benefits, including whale population data collection that has proved instrumental in establishing marine protected areas and sanctuaries in various regions of the planet. There have also been a number of studies that give estimates of the economic impact of whales as a tourism attraction. This includes Duffus and Dearden (1990), who reported the results of studies on the economic impact of whale-watching on the Vancouver Island (British Columbia, Canada) community. They found that whale-watchers spent an average of CAN\$370–\$400 per trip and estimated that whale-watching contributed around CAN\$4 million into the Vancouver Island economy. Similarly, Forestell and Kaufman (1990) estimated in 1990 that in Hawaii whale-watching fares alone were worth in excess of US\$3.9 million. Work conducted by Lincoln University in New Zealand has also identified the significant economic impacts of whales as a tourism attraction in the New Zealand town of Kaikoura (Horn, Simmons, & Fairweather, 1998; Orams, 2002).

### **3.0 Whaling, Whale-Watching and Sustainable Development**

Whales are an integral component of the marine and coastal fauna in the Wider Caribbean. For many species, these waters serve as a primary habitat for a range of critical activities including feeding, mating and calving. To date, 32 species of whales have been documented from the region with the most common sighted species being sperm whales, humpback whales, pilot whales, bottlenose, pan-tropical spotted and spinner dolphins (Ward et al, 2002). Commercial exploitation of whales dates back to the early inhabitants of the Caribbean basin (Romero, 2005) and to the introduction of whaling technology to the people of the Lesser Antillean Islands by “Yankee Whalers” to the Caribbean (Price, 1985,

Reeves et al, 2001). At one stage there were about ten commercial whaling stations operating in the Caribbean, four in St. Vincent and the Grenadines; three shore whaling stations in Barbados; Copper's Hole, Monos Island, Trinidad; and Glover Island, Grenada (Romero, 2005).

It is important to note that the exploitation of whales in the Caribbean, whether opportunistic or deliberate, is exclusively used for local consumption. Any international trade in whale products would be prohibited by the Convention on the International Trade of Endangered Species of Flora and Fauna (CITES). Despite a moratorium on commercial whaling the IWC nevertheless permits limited whaling by indigenous people for subsistence purposes, provided that a continual nutritional subsistence need can be demonstrated and provided that products are not sold. Thus the commercial value of a dead whale is entirely minimal and restricted to the locale where the actual exploitation takes place.

During the past two decades, awareness of whales and their habitats in the Caribbean has increased. With the onset of Agenda 21, the SIDS/POA, St. George's Declaration, SPAW Protocol and the myriad of international environmental treaties that govern various aspects of environmental management, the governments of the eastern Caribbean region have reiterated their commitment to addressing environmental issues within the context of sustainable development. In recent years eastern Caribbean governments have made significant investments to support the development of tourism, through promotional campaigns and infrastructure improvements and in some cases a focus on niche marketing. In 1988, commercial whale-watching started in the eastern Caribbean with tours to see sperm whales and various dolphins off Dominica. In 1991, 1,914 people went whale-watching in the greater Caribbean, spending about \$1.7 million in total expenditures, but by 1994, 18,700 whale watchers spent \$6.6 million (Hoyt, 2001). A report on whale watching in 2001 cited St. Lucia as the fastest growing whale watch country in the world since 1998, while countries like Dominica and St. Vincent and the Grenadines doubled in popularity as whale-watch

destinations. Given these rapid rates of increase, there is significant potential for growth in the commercial whale-watching industry.

In a region focused on selling sustainable tourism with a goal of becoming a “Green” destination, whale-watching as opposed to whale hunting can contribute significantly and can only serve to bolster the tourism industry, making the protection and conservation of whales a socio-economic priority as well as a conservation obligation.

#### **4.0 The Growth in Nature-based Tourism**

There is a general consensus in the literature that demand for opportunities to interact with nature has shown a rapid increase (Curtin, 2003). Relatively undisturbed natural environments and wild animals in their natural environment are highly sought after. Considerable direct and indirect economic benefits, as well as conservation benefits, are shown to be generated by these nature-based tourism activities (Wilson & Tisdell, 2003). Such tourism can strengthen the case for using economic instruments to conserve species. The Caribbean is considered to be the most tourism-dependent region in the world as tourism accounts for around a quarter of its GDP (CTO, 2004). Tourist arrivals in the region have increased at an average annual rate of 5.3 percent per annum since 1970, marginally above the world’s average over the same period (CTO, 2004). The region remains the premier cruising destination, accounting for around 48 percent of the world cruise bed days over the last five years. Since 1980, cruise arrivals in the region have grown by an average rate of 7.1 percent and The World Tourism Organization estimates that world travel will exceed 1 billion by 2010, growing at an average annual rate of 4.1 percent per annum (CTO, 2004).

Special interest tourism, encompassing the gamut of niche areas such as nature or eco-tourism, cultural tourism etc., has been recognized as a viable form of sustainable tourism development. Its capacity to generate economic benefits by contributing to the protection of natural and cultural resources and involving the local communities has made it an alternative form of tourism, especially in protected and remote rural areas.

Sustainable tourism practices may result in increased competitiveness, quality and better position in the market; greater overall efficiency; improved image, credibility and better basis for growth and higher quality environment for local communities. The Caribbean region has long recognized the importance of developing a cohesive policy framework for the sustainable development of the region's tourism sector.

### **5.0 The structure of the Whale-watching Industry in the Eastern Caribbean**

Whale watching in the Eastern Caribbean was started by scuba dive and sport fishing operators who reported regular sightings of groups of whales and dolphins during their outings. A brief assessment of the whale-watching industry in four islands in the eastern Caribbean has shown an industry made up of 16 operators conducting both fulltime and seasonal whale watching. There is a total of 32 boats currently engaged in whale watching with a daily capacity ranging from 730 persons to 250 (Table 1). Whale watching has also created a number of local jobs ranging from naturalists, whale-watch tour guides, taxi operators and vendors selling whale souvenirs. The whale-watch industry is divided into fulltime whale-watch tour operators operating on a year-round basis and seasonal operators, working in the months when a migratory species of whale is present in local waters. In one sense whale watching in the these islands can also be considered an opportunistic endeavour, since they are not yet at a point where whale watching is seen and recognized as a targeted niche market. Rather, whale watching is left to the whale-watch tour operators who with their limited capacity and resources tend to offer whale watching as part of the scuba diving and sport fishing experiences.

### **6.0 The Potential of the Whale-watching Industry in the Eastern Caribbean**

Since the Hoyt 2001 report, it appears that whale watching in the Eastern Caribbean has undergone a strong growth period. It is likely that this

Table 1

Country	Operators	Boats	Daily Capacity
St Lucia	8	16	730
Dominica	5	8	590
St. Vincent	2	6	324
Grenada	1	2	250
<b>Totals</b>	<b>16</b>	<b>32</b>	<b>1,894</b>

growth trend will continue. On the islands currently engaged in whale watching, whale-watch tour operators have begun to market their tours through the cruise ship industry, which has helped increase the volume and bring more cruise ship money into the local economies. This is quite important to note as one of the criticisms levied against the cruise ship industry has been the little money left behind in the local communities and the need to spread the cruise ship visitor dollar among many more small entrepreneurs.

As can be seen in Fig 1, a number of these islands have recorded strong growth in the number of whale watchers since 1988 when commercial whale watching started in the eastern Caribbean. 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 of whale species in the region is improved.

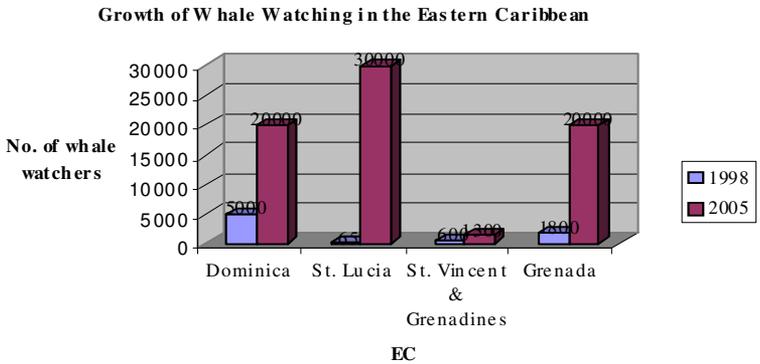
A brief economic analysis by whale-watch tour operators at an International Fund for Animal Welfare (IFAW) sponsored meeting in April 2006 yielded the following results.

- 300 days @ 1,894 persons per day for a total of 568,200 persons per year @ US\$40.00 per person  
Total =US\$22, 728,000 per year

These tourism expenditures, even though they are substantial, represent conservative measures of the socioeconomic benefits of whale watching and are based entirely on the sale of whale-watch tickets. It is

important to note that this figure does not include the income derived from the sale of food, accommodation, travel, and souvenirs, nor does it depict the economic costs to the whale-watch tour operators.

**Fig. 1: Source: Whale watchers presentation IFAW meeting**



**Table 2**

**Whale Watching in the Eastern Caribbean**

Country	Estimate number of whale watchers 1998 <sup>10</sup>	Estimated numbers of whale watchers 2005	Approximate average estimated annual growth rate (1998-2005)
Dominica	5,000	20,000	22%
St. Lucia	65	30,000	140%
Grenada	1,800	20,000	41%
St. Vincent & Grenadines	600	1,300	12%

<sup>10</sup> E. Hoyt (2001)

Source: Whale watchers presentation IFAW meeting April, 2006

## 7.0 Discussion

In the Caribbean, tourism is the leading industry in terms of people employed and revenues generated from foreign exchange. The preliminary information provided for the eastern Caribbean islands of Dominica, St. Lucia, Grenada and the St. Vincent and the Grenadines does portray that whale watching could have a significant impact on the economies of small island states engaged in selling eco-tourism as part of their tourism product. To gauge how successful whale watching could be in the eastern Caribbean as a whole it is useful to look towards the Pacific Islands region, as their industry is run in similar geographic conditions to those found in the Caribbean. The Pacific Islands region contains a high diversity of whales, has a history of whaling like the Caribbean region and has a viable ecotourism industry. The whale-watching operations are considered to be about five years ahead of those in the Caribbean. Evidence from the Pacific islands has revealed an average annual growth rate of 45% for whale watching for the period 1998-2005 (Ecolarge, 2006) resulting in a major contribution to local economies through the provision of much needed revenue and creation of jobs.

These are certainly encouraging signs for the eastern Caribbean islands currently engaged in whale watching and decision makers should take note of the potential economic benefits of the whale-watching industry. There is now a movement to establish an association of Caribbean whale watchers under an umbrella organization called CARIBHALE, which among many of its other functions, would serve as a tool to market the eastern Caribbean as a whale-watch destination. At present the marketing of whale watching is left up to hotel and tourism associations, who tend to market whales within the context of ecotourism. On several islands, whale-watch tour operators have also begun to market their own tours through the cruise ship industry, which has helped increase the volume and bring more cruise ship money into the local economies.

On the issue of whaling, evidence elsewhere suggests that continued eastern Caribbean support for whaling, whether in the

Caribbean or elsewhere, has the potential to undermine the whale-watching industry, as well as to have a negative impact on overall tourism (Hoyt, 2002). Given that the global opposition to whaling is strong, growing countries engaged in whale watching must be cautious about the negative attitudes of incoming tourists (Hoyt, 2002). One of a country's most valuable tourism assets is its image. Millions of dollars are spent to devise, shape, and market the popular image of a tourism destination. In the increasingly competitive world tourism market, a country must carefully consider the implications of any activities that might negatively affect that image.

## **8.0 Conclusion**

The preliminary findings of this paper are by no means complete and highlight the need for studies on the social and economic benefits of whale watching in the eastern Caribbean. There are a number of gaps in the paper due to the lack of existing data and that has severely hampered the ability to provide more concrete information. The intent of this paper was driven by the need to generate a dialogue on the importance of conserving whales and their habitats in the eastern Caribbean and to provide an opportunity to estimate the economic value of whales. Apart from economics it is important to note that whale watching also provides important educational, environmental, scientific and other socioeconomic benefits, including collection of scientific data that has proved instrumental in establishing marine protected areas and sanctuaries in various regions of the planet.

Due to the lack of a targeted niche market it is not known what percentages of tourists are coming to these islands just to see whales. In particular, it would be valuable to determine the views and attitudes of local residents, whale watchers, and other tourists to the Caribbean, about ecotourism, whale-watching, the environment in general, and their concerns, if any, about whaling in general. Similar to what was done for the yachting industry there is an urgent need to assess the economic impact of the whale-watching industry, in terms of direct, indirect and

induced revenues, associated expenditure, merchandise bought, and jobs created and its general contribution to economic development in the eastern Caribbean.

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