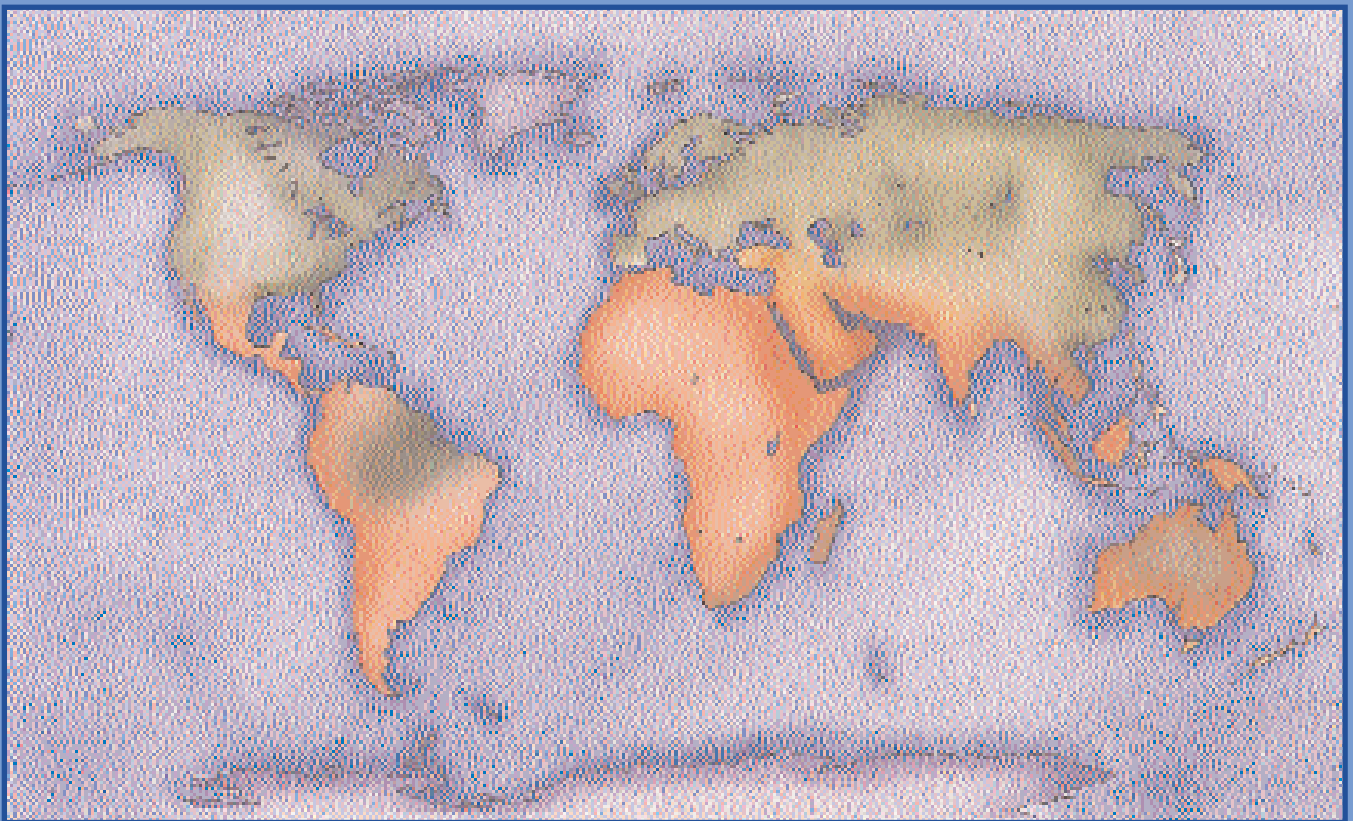
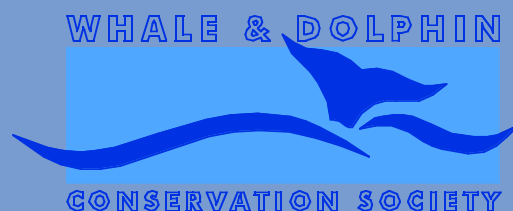


# THE WORLDWIDE VALUE AND EXTENT OF WHALE WATCHING 1995

By ERICH HOYT



A SPECIAL REPORT FROM THE WHALE AND DOLPHIN CONSERVATION SOCIETY



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ISBN: 0 9519078 8 3

Publication date: 25 May 1995

Citation: Hoyt, E. 1995. *The Worldwide Value and Extent of Whale Watching: 1995*. Whale and Dolphin Conservation Society, Bath, UK, pp. 1-36.

*The Worldwide Value and Extent of Whale Watching: 1995* is one in a series of publications on whale watching produced by the Whale and Dolphin Conservation Society. The first report—*Whale Watching Around the World: A report on its value, extent and prospects*—was published in 1992. This publication documented the rapid spread of whale watching to some 30 countries of the world plus Antarctica. As of 1991, 4 million people a year were spending an estimated US \$318 million (UK £185 million) to go whale watching. In 1993, *Kujira Watching: Whales and Dolphins Alive and Being Watched Japanese-style* revealed that whale watching had spread to some seven Japanese communities, including one former whaling centre. In April 1994, *Whale Watching and the Community: The Way Forward (Five Case Studies)* explored five communities around the world where whale watching has become a way of life and *The Potential of Whale Watching in Latin America and the Caribbean* analysed the status and future potential for whale watching in these important tourism regions which, in the early 1990s, have been the fastest growing whale-watching areas in the world. Also published in May 1995 is *Discover Whale and Dolphin Watching in Northern Europe*, a special 20-page booklet illustrating the new opportunities for cetacean tourism in the countries of northern Europe, including Ireland, Iceland, Greenland, Norway, Russia and the United Kingdom. Future reports will focus on the prospects for watching whales and dolphins in Europe, Africa, Asia, Australia and the South Pacific, and will consider various other aspects in an effort to improve the scientific, educational, recreational as well as economic values of watching whales and dolphins, with the ultimate aim of helping in their conservation.

Acknowledgments: Thanks are due to the several hundred local operators, researchers, tourism officials and whale-watching managers who provided statistics or informed estimates of numbers and revenues which have made this report possible. For helping to edit and check the text and figures and prepare the layout, I especially want to thank Alison Smith and George Berry. Also: Chris Stroud, Peter West, Mark Carwardine, Hal Sato, Shigeki Komori, Tom Walmsley, Birgit Wining and Clive Stacey.

The IWC and Whalewatching—an unpublished report prepared in 1994 by Ray Gambell from the International Whaling Commission (IWC) country questionnaires—was also helpful.

Some of the information I have received for and from various countries has been conflicting. I have tried to sort out inconsistencies, relying on the more conservative numbers. In any case, the final figures are my own, and I am responsible for them.

## Overview and Conclusions

Whale watching as a commercial endeavour has continued to grow in existing countries and to expand to others during the first half of the 1990s. Since the last worldwide survey in 1992, the number of countries and overseas territories where whale watching is practised has more than doubled from 31 to 65. At the same time, the number of whale watchers has increased from a little more than 4 million for the year 1991, to 5.4 million for the year 1994. Total estimated revenues, pegged at about US \$318 million (UK £185 million) in 1991, have now increased to US \$504 million (UK £311 million). As a further measure of its influence, whale watching is now carried on in some 295 communities around the world. In many cases, it provides valuable tourism income to a community. In other places, whale watching helps to foster an appreciation of the importance of marine conservation, as well as providing a ready platform for researchers wanting to study cetaceans or the marine environment. In a number of places, it does all of the above, literally transforming a community.

This report covers watching of all cetaceans, not just large whales. “Whale watching” is thus defined as tours by boat, air or from land, formal or informal, with at least some commercial aspect, to see and/or listen to any of the some 80 species of whales, dolphins and porpoises. As well as tours that are strictly whale- or dolphin-oriented, we also include general nature tours and cruises which feature or include whales and dolphins as a prominent aspect. However, in these cases, the numbers and revenues have been reduced to reflect the estimated value of the cetacean component of the trip alone.

Here is a summary of my other findings:

- Since 1991, when 4 million people went whale watching, the number of people participating has grown by an average of 10.3 percent per year, reaching 5.4 million in 1994. The direct revenues (the amount whale watchers spent on the tours) increased from US \$77 million in 1991 to \$122.4 million in 1994—an average annual increase of 16.7 percent. The total revenues (the amount whale watchers spent on the tours, as well as travel, food, hotels and souvenirs) increased from US \$317.9 million in 1991 to \$504.3 million in 1994—an average annual increase of 16.6 percent.
- A total of 65 countries and overseas territories or dependencies now have at least some level of commercial whale watching. The breakdown is 50 independent countries and 15 overseas territories or dependencies, including Antarctica.
- 27 of the 40 member countries of the International Whaling Commission (IWC) now have at least some whale-watching activity. In addition, 24 countries outside of the IWC also have whale watching. The economic value of whale watching in non-IWC countries, however, is comparatively small. Most whale watching occurs within IWC countries. Canada is the main country outside of the IWC where whale watching occurs, with an estimated 462,000 whale watchers in 1994.
- Some of the communities transformed by whale watching—that is, having a substantial economic and, in some cases, educational and scientific impact—include: Kaikoura, New Zealand; Provincetown, Massachusetts, USA; Tofino, British Columbia, Canada; Telegraph Cove, British Columbia, Canada; Ogata, Kochi, Japan; Ogasawara, Japan; Andenes, Norway; Hermanus, South Africa; Tadoussac, Québec, Canada; Friday Harbor, Washington, USA; Lahaina, Hawaii, USA; Puerto Pirámides, Patagonia, Argentina; Monkey Mia, Australia; Dingle, Ireland; among others.
- Most of the some 80 species of cetaceans are included in whale-watching programmes, with the exception of almost all of the various beaked whales. The most common focal species for whale-watching industries are humpback whales, gray whales, northern and southern right whales, blue whales, minke whales, sperm whales, short-finned pilot whales, killer whales, and bottlenose dolphins. There is no doubt

that certain species such as blue whales and right whales would be watched more if they could be reliably found in more locations; wherever they are found, they are very popular. An estimated 85 percent of all whale-watching activity (calculated by numbers of whale watchers) is based primarily on large whales, with 15 percent based on various dolphins and smaller toothed whales. The percentage of tours that focus on smaller cetaceans appears to be steadily increasing. Besides the proven appeal of killer whales, pilot whales and bottlenose dolphins, the lesser known smaller cetaceans often attract seasoned whale watchers eager to see the more unusual species.

- Photographic identification (individual photo-ID studies using natural markings and pigmentation on the bodies of live whales) is now a component of whale watching in some 38 countries and overseas territories—57 percent of all countries where there is some whale watching. The most common form of whale watching is boat-based (72 percent of all whale watching), everything from kayaks to converted ferry ships. Land-based whale watching (28 percent of all whale watching)—which has substantial commercial implications in Québec, South Australia, South Africa, and California—now occurs in 37 countries and overseas territories.

- In most countries, whale watching is primarily one of the tourism activities of outside (foreign) visitors and, as such, a source of foreign currency. However, the following countries draw the majority of their whale watchers from their own country: the United States, Canada, Australia, Japan and a few others. In many cases, they too are visiting “tourists” from one region of a country to another, but they do not bring in foreign currency. However, the United States and Canada also have substantial numbers of outside visitors and because of the sheer size of the industry in these countries, the numbers of foreign visitors certainly outnumber most of the total numbers for many smaller whale-watching countries.

- 66 percent of the world’s whale watching occurs in the United States, where whale watching started in 1955 and where it continues to flourish in all regions. However, whale-watching growth has started to level off here. The five highest rates of increase between 1991 and 1994 (in countries with more than 40,000 whale watchers) are as follows: Brazil, Spain, Japan, Argentina and New Zealand. The fastest growing continental region for whale watching is South America, with an average 117.8 percent annual increase between 1991 and 1994. Second fastest was Central America and the West Indies with 111.4 percent, followed by Asia at 88.1 percent.

- From 1992 to 1994, 17 new countries and overseas territories started whale watching. In addition, 8 new countries are undergoing pilot tours or are expected to start whale watching in 1995 and 1996. By 1996, there may be 73 countries and overseas territories participating in commercial whale watching.

## Explanations and notes on data presented

*Main species:* This category refers to main species watched—the species regularly seen on commercial whale-watching trips. It is not a complete list of species for a country, nor is it always the most common species found in a country's waters.

*Year whale watching began:* The year whale watching with some commercial aspect started in the country's waters.

*Types of whale watching:* This category broadly defines the types of whale watching that occur, and is drawn from the following list—whales, dolphins, porpoises, boat-based, cruise ships, air, land-based, educational, photo-ID research, research. Educational, photo-ID research and research refers to activities specifically carried on in conjunction with commercial whale watching.

*Number of communities involved in whale watching:* These are the port towns or cities from which whale-watching operations are conducted and, in most cases, where whale-watching businesses are located. In cases where foreign operators are working in a country with no local businesses involved in whale watching, "none" is listed. Communities can range from Boston, Massachusetts, USA, where several profitable whale-watching operations represent only a tiny fraction of the city's tourism business to the high profile of whale watching in Kaikoura, New Zealand, where whale watching is now a key factor in the town's economic and cultural life.

*Year:* Statistics for the year 1991 are according to Hoyt, E. 1992. "Whale watching around the world: a report on its value, extent and prospects." *International Whale Bulletin*, no. 7, pp. 1-8. A few 1991 figures have been revised slightly due to new information. 1994 statistics were collected for this report. All 1994 exchange rates have been made on May 1, 1995 (US \$1.62 = UK £1.00). Please note that 1991 revenues were converted to dollars and pounds at exchange rates prevailing at the time the earlier data was assembled. This leads to some minor discrepancies when comparing revenues from 1991 to 1994. The key exchange rate difference is between the US dollar and UK £, which was \$1.72 = £1 on March 24, 1992, and \$1.62 = £1 on May 1, 1995.

*No. of whale watchers:* These are the best estimates based on information collected from tour operators, tourism authorities, researchers, and sometimes published accounts. Where possible, estimates have been obtained by several routes and the most conservative result used.

*Direct revenues:* Estimated amounts spent on whale-watching tours for the year. In most cases, these are based on minimum or average unit cost of the tours—the direct cost of going whale watching. However, package tours, which have all costs included and may be multi-day trips, are also considered as direct revenues.

*Total revenues:* The sum of direct and indirect revenues. Indirect revenues are all the additional money spent in the course of going whale watching, including food, travel, accommodation, film, and souvenirs. In general, the total revenues from whale watching near urban centres with day (or less) trips are approximately 3.5x the direct revenues. In remote centres which require considerable travel, total revenues are usually at least 7.67x the direct revenues. Estimated total revenues, based on these multiples, are given for areas where detailed figures are unavailable. For package tours in which all costs are included, no multiplier is used. In some cases, however, tour operators have provided specific estimates of additional travel and other expenditures. These have been included in total revenues. In a few cases where 1994 revenues were unavailable, 1993 revenues have been used. All figures for direct and indirect revenues are rounded to the nearest 1,000 dollars or pounds.

*Average annual % increase 1991-94:* This calculation is based on the numbers of whale watchers only, not the revenues.

*Total number of tourists:* This category provides some indication of the total potential market for tourism in a country. Tourism statistics are total numbers of arrivals to each country according to the 1994 *Yearbook of Tourism Statistics, Vol. 1*, published by the World Tourism Organisation (WTO). All statistics are for the latest year available, 1992.

*Whale-watching assessment:* This is a comparative evaluation of future potential based on information about existing and new whale-watching operations, reports of future developments, combined with evaluations of overall tourism potential, infrastructure, and other factors.

# WORLD

## Worldwide summary

*Number of countries & territories involved in commercial whale watching: 65.*

*Number of potential new countries to start commercial whale watching, 1995-96: 8.*

*Number of communities involved in whale watching: 295.*

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>               | <i>Total revenues</i>         |
|-------------|------------------------------|--------------------------------------|-------------------------------|
| 1991        | 4,046,957                    | US \$77,034,000<br>or UK £44,787,000 | \$317,854,000<br>£184,799,000 |
| 1994        | 5,425,506                    | \$122,445,000<br>£75,583,000         | \$504,278,000<br>£311,283,000 |

*Average annual % increase 1991-94: 10.3%.*

## Estimated Growth of Whale Watching Worldwide

| <i>Year</i> | <i>Direct revenues</i>                 | <i>Total revenues</i>                   | <i>Sources</i>                                     |
|-------------|--|---|--|
| 1981        | US \$4.1 million<br>or UK £2.4 million | \$14 million<br>£8.4 million            | Kaza, 1982; Kelly, 1983;<br>Sergeant (pers. comm.) |
| 1988        | \$11-16 million<br>or £6.4-9.3 million | \$38.5-56 million<br>£22.4-32.6 million | Kraus, 1989  |
| 1991        | \$77.0 million<br>or £44.8 million     | \$317.9 million<br>£184.8 million       | Slightly revised from Hoyt, 1992                   |
| 1994        | \$122.4 million<br>or £75.6 million    | \$504.3 million<br>£311.3 million       | This report  |

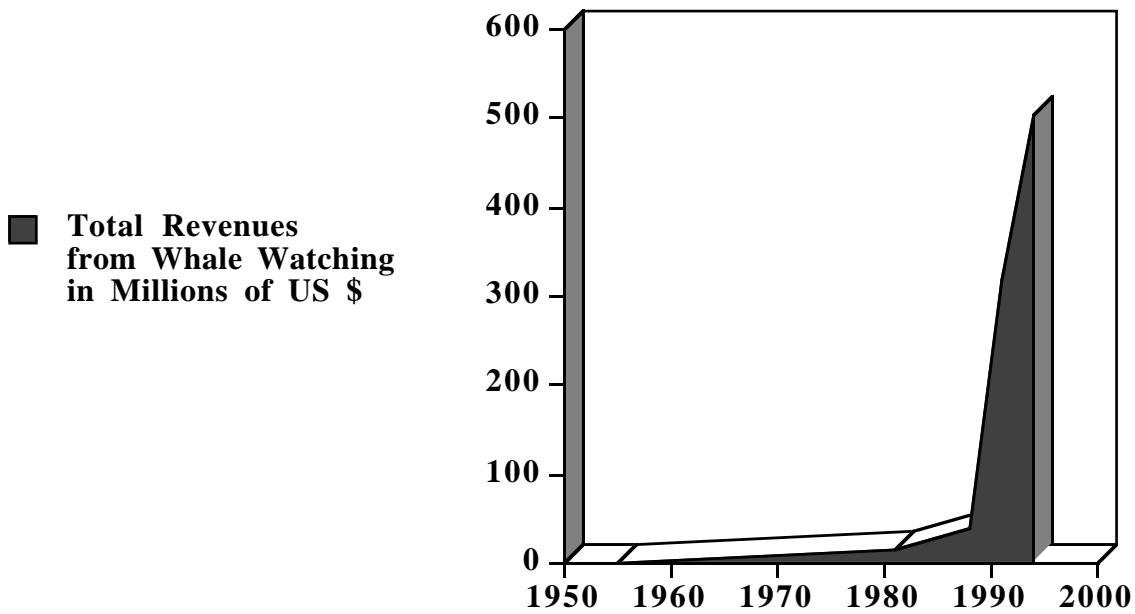
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# The Growth of Whale Watching Worldwide



# NORTH AMERICA

Area-wide summary

*Number of countries & territories involved in commercial whale watching:* 4.

*Number of additional countries soon to start commercial whale watching:* 0.

*Number of communities involved in whale watching:* 122.

| Year | No. of whale watchers | Direct revenues   | Total revenues |
|------|-----------------------|-------------------|----------------|
| 1991 | 3,430,225             | US \$46,230,000   | \$225,275,000  |
|      |                       | or UK £26,878,000 | £130,974,000   |
| 1994 | 4,074,195             | \$65,791,000      | \$293,397,000  |
|      |                       | £40,612,000       | £181,109,000   |

*Average annual % increase 1991-94:* 5.9%.

*Total number of tourists:* 76,659,000.

## United States of America (including Puerto Rico and US Virgin Islands)

*Main Species:* California: gray whales, blue whales, humpback whales, Pacific white-sided dolphins; Oregon: gray whales; Washington: killer whales, Dall's porpoises, minke whales, gray whales; Hawaii: humpback whales, short-finned pilot whales, spinner dolphins, bottlenose dolphins; Alaska: humpback whales, killer whales, gray whales, fin whales, minke whales; Florida to Texas: bottlenose dolphins, northern right whales, Atlantic spotted dolphins; Carolinas to New Jersey: humpback whales, bottlenose dolphins; New England: humpback whales, northern right whales, fin whales, minke whales, Atlantic white-sided dolphins, harbour porpoises; Puerto Rico: humpback whales, bottlenose dolphins; US Virgin Islands: humpback whales, spinner dolphins.

*Year whale watching began:* 1955 (San Diego, California).

*Types of whale watching:* Large whales, dolphins, porpoises, boat-based, cruise ships, air, land-based, swimming, educational, photo-ID research.

*Number of communities involved in whale watching:* 74 (Maine, 6; Massachusetts, 7; New Hampshire, 3; New Jersey, 1; New York, 1; Oregon, 4; Washington, 4; California, 23; Hawaii, 11; Alaska, 10; Puerto Rico, 2; US Virgin Islands, 2).

| Year | No. of whale watchers | Direct revenues   | Total revenues |
|------|-----------------------|-------------------|----------------|
| 1991 | 3,243,025             | US \$37,506,000   | \$192,930,000  |
|      |                       | or UK £21,806,000 | £112,169,000   |
| 1994 | 3,600,000             | \$41,632,000      | \$214,152,000  |
|      |                       | £25,699,000       | £132,193,000   |

*Total number of tourists:* 47,774,000 (includes Alaska, Hawaii, Puerto Rico, US Virgin Islands).

*Whale-watching assessment:* Industry is mature with only slow growth potential. Largest recent growth has been in the Northwest.

## Canada

*Main Species:* British Columbia: killer whales, Dall's porpoises, minke whales, gray whales; Manitoba: belugas; Northwest Territories: belugas, narwhals; Newfoundland: humpback whales, minke whales, fin whales, long-finned pilot whales, Atlantic white-sided dolphins and white-beaked dolphins, harbour porpoises; Nova Scotia and New Brunswick: humpback whales, northern right whales, long-finned pilot whales, fin whales, minke whales, Atlantic white-sided and white-beaked dolphins, harbour porpoises; Québec: blue whales, fin whales, humpback whales, belugas, minke whales, Atlantic white-sided and white-beaked dolphins, harbour porpoises.

*Year whale watching began:* 1971 (St. Lawrence River, Québec).

*Types of whale watching:* Large whales, dolphins, porpoises, boat-based, cruise ships, air, land-based, educational, photo-ID research.



## Canada (*continued*).

*Number of communities involved in whale watching:* 39 (Québec, 7; Nova Scotia, 4; Newfoundland, 10; New Brunswick, 5; Manitoba, 1; British Columbia, 9; Northwest Territories, 3).

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>             | <i>Total revenues</i>       |
|-------------|------------------------------|------------------------------------|-----------------------------|
| 1991        | 185,200+                     | US \$5,724,000<br>or UK £3,328,000 | \$29,145,000<br>£16,945,000 |
| 1994        | 462,000                      | \$14,154,000<br>£8,737,000         | \$64,239,000<br>£39,654,000 |

*Total number of tourists:* 14,741,000.

*Whale-watching assessment:* Continues to grow steadily, particularly in southern British Columbia and in the St. Lawrence River, responsible for most of the growth from 1991 to 1994.

## St. Pierre & Miquelon (overseas department of France)

*Main Species:* Humpback whales, minke whales, fin whales, killer whales, Atlantic white-sided dolphins.

*Year whale watching began:* 1993.

*Types of whale watching:* Large whales, dolphins, boat-based.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>     | <i>Total revenues</i> |
|-------------|------------------------------|----------------------------|-----------------------|
| 1991        | None                         | None                       | None                  |
| 1994        | 195                          | US \$5,000<br>or UK £3,000 | \$5,000<br>£3,000     |

*Total number of tourists:* Recent figures unavailable.

*Whale-watching assessment:* Moderate potential.

## México

*Main Species:* Baja lagoons: gray whales, bottlenose dolphins; Gulf of California: blue whales, Bryde's whales, fin whales, humpback whales, minke whales, common dolphins, bottlenose dolphins, Pacific white-sided dolphins, vaquitas; west coast México: humpback whales; Atlantic/ Caribbean side of México: bottlenose dolphins, spotted dolphins.

*Year whale watching began:* 1972 (Baja California).

*Types of whale watching:* Large whales, dolphins, porpoises, boat-based, cruise ships, air, land-based, educational, photo-ID research.

*Number of communities involved in whale watching:* 8.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>             | <i>Total revenues</i>      |
|-------------|------------------------------|------------------------------------|----------------------------|
| 1991        | 2,000+                       | US \$3,000,000<br>or UK £1,744,000 | \$3,200,000<br>£1,860,000  |
| 1994        | 12,000+                      | \$10,000,000<br>£6,173,000         | \$15,000,000<br>£9,259,000 |

*Total number of tourists:* 17,271,000.

*Whale-watching assessment:* Outstanding potential.

# CENTRAL AMERICA & THE WEST INDIES

Area-wide summary

*Number of countries & territories involved in commercial whale watching:* 12.

*Number of additional countries soon to start commercial whale watching:* 2.

*Number of communities involved in whale watching:* 17.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>           | <i>Total revenues</i>     |
|-------------|------------------------------|----------------------------------|---------------------------|
| 1991        | 2,034                        | US \$1,524,000<br>or UK £886,000 | \$1,734,000<br>£1,008,000 |
| 1994        | 19,212                       | \$3,526,000<br>£2,177,000        | \$7,357,000<br>£4,541,000 |

*Average annual % increase 1991-94:* 111.4%.

*Total number of tourists:* 14,055,000 (includes all countries in the region, not just those listed below).

## Belize

*Main Species:* Bottlenose dolphins, spotted dolphins, short-finned pilot whales.

*Year whale watching began:* 1991.

*Types of whale watching:* Dolphins, boat-based, swimming, educational, photo-ID research.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>         | <i>Total revenues</i> |
|-------------|------------------------------|--------------------------------|-----------------------|
| 1991        | Minimal                      | Minimal                        | Minimal               |
| 1994        | 262                          | US \$460,000<br>or UK £284,000 | \$500,000<br>£309,000 |

*Total number of tourists:* 247,000.

*Whale-watching assessment:* Moderate to considerable potential.

## Costa Rica

*Main Species:* Bottlenose dolphins, spinner dolphins, spotted dolphins, humpback whales.

*Year whale watching began:* 1990.

*Types of whale watching:* Large whales, dolphins, boat-based, land-based, educational, photo-ID research.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>         | <i>Total revenues</i> |
|-------------|------------------------------|--------------------------------|-----------------------|
| 1991        | Minimal                      | Minimal                        | Minimal               |
| 1994        | 100+                         | US \$200,000<br>or UK £123,000 | \$250,000<br>£154,000 |

*Total number of tourists:* 610,000.

*Whale-watching assessment:* Moderate potential.

## Panamá

*Main Species:* Bottlenose dolphins, Bryde's whales, humpback whales, sperm whales, tropical dolphins.

*Year whale watching began:* Tours may start in 1995 or 1996.

*Types of whale watching:* Large whales, dolphins, boat-based.

*Number of communities involved in whale watching:* None yet.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | None                         | None                   | None                  |
| 1994        | None                         | None                   | None                  |

*Total number of tourists:* 291,000.

*Whale-watching assessment:* Moderate to considerable potential, especially on the Pacific side.

## Bermuda (UK)

*Main Species:* Humpback whales, short-finned pilot whales, various dolphins.

*Year whale watching began:* 1981.

*Types of whale watching:* Large whales, dolphins, boat-based, cruise ships, land-based, educational.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>     | <i>Total revenues</i> |
|-------------|------------------------------|----------------------------|-----------------------|
| 1991        | 120                          | Minimal                    | Minimal               |
| 1994        | 150                          | US \$8,000<br>or UK £5,000 | \$26,000<br>£16,000   |

*Total number of tourists:* 375,000.

*Whale-watching assessment:* Moderate potential.

## The Bahamas

*Main Species:* Spotted dolphins, bottlenose dolphins, sperm whales, humpback whales, false killer whales, short-finned pilot whales.

*Year whale watching began:* 1981.

*Types of whale watching:* Large whales, dolphins, boat-based, land-based, swimming, educational, photo-ID research.

*Number of communities involved in whale watching:* 2.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>           | <i>Total revenues</i>     |
|-------------|------------------------------|----------------------------------|---------------------------|
| 1991        | 1,000                        | US \$1,500,000<br>or UK £872,000 | \$1,650,000<br>£959,000   |
| 1994        | 1,500                        | \$2,250,000<br>£1,389,000        | \$2,475,000<br>£1,528,000 |

*Total number of tourists:* 1,399,000.

*Whale-watching assessment:* Moderate to considerable potential.

## Turks and Caicos Islands (UK)

*Main Species:* Humpback whales, bottlenose dolphins.

*Year whale watching began:* Early 1990s.

*Types of whale watching:* Large whales, dolphins, boat-based, photo-ID research.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>      | <i>Total revenues</i> |
|-------------|------------------------------|-----------------------------|-----------------------|
| 1991        | Minimal                      | Minimal                     | Minimal               |
| 1994        | 100+                         | US \$10,000<br>or UK £6,000 | \$35,000<br>£22,000   |

*Total number of tourists:* 52,000.

*Whale-watching assessment:* Moderate potential.

## Dominican Republic

*Main Species:* Humpback whales, bottlenose dolphins, spotted dolphins, spinner dolphins.

*Year whale watching began:* 1986.

*Types of whale watching:* Large whales, dolphins, boat-based, cruise ships, air, land-based, educational, photo-ID research.

*Number of communities involved in whale watching:* 2.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>      | <i>Total revenues</i>     |
|-------------|------------------------------|-----------------------------|---------------------------|
| 1991        | 900+                         | US \$10,000<br>or UK £6,000 | \$70,000<br>£41,000       |
| 1994        | 15,300                       | \$500,000<br>£309,000       | \$3,500,000<br>£2,160,000 |

*Total number of tourists:* 1,524,000.

*Whale-watching assessment:* Outstanding potential.

## British Virgin Islands (UK)

*Main Species:* Humpback whales, bottlenose dolphins.

*Year whale watching began:* Late 1980s.

*Types of whale watching:* Large whales, dolphins, boat-based, cruise ships, air, educational.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>      | <i>Total revenues</i> |
|-------------|------------------------------|-----------------------------|-----------------------|
| 1991        | Minimal                      | Minimal                     | Minimal               |
| 1994        | 300+                         | US \$10,000<br>or UK £6,000 | \$35,000<br>£22,000   |

*Total number of tourists:* 117,000.

*Whale-watching assessment:* Moderate potential.

## Guadeloupe & islands (France)

*Main Species:* Humpback whales, sperm whales, short-finned pilot whales, spotted dolphins, striped dolphins.

*Year whale watching began:* 1994.

*Types of whale watching:* Large whales, dolphins, boat-based.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | None                         | None                   | None                  |
| 1994        | Minimal                      | Minimal                | Minimal               |

*Total number of tourists:* 300,000.

*Whale-watching assessment:* Whale watching is just starting here through a fishermen's cooperative and a diving center, but so far has only been sporadic. There is some potential for moderate growth.

## Martinique (France)

*Main Species:* Sperm whales, spotted dolphins, pygmy sperm whales, false killer whales, short-finned pilot whales, spinner dolphins, Risso's dolphins.

*Year whale watching began:* 1991.

*Types of whale watching:* Large whales, dolphins, boat-based.

*Number of communities involved in whale watching:* 2.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | Minimal                      | Minimal                | Minimal               |
| 1994        | 100+                         | Minimal                | Minimal               |

*Total number of tourists:* 321,000.

*Whale-watching assessment:* The potential here is considerable, mainly because there is a comparatively large tourism base on this eastern Caribbean island. A diving club and fishermen offer tours but at present only on a sporadic basis.

## Dominica

*Main Species:* Sperm whales, spotted dolphins, pygmy sperm whales, false killer whales, short-finned pilot whales, spinner dolphins, Risso's dolphins.

*Year whale watching began:* 1988.

*Types of whale watching:* Large whales, dolphins, boat-based, land-based, swimming, educational, photo-ID research.

*Number of communities involved in whale watching:* 2.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>      | <i>Total revenues</i> |
|-------------|------------------------------|-----------------------------|-----------------------|
| 1991        | 14+                          | US \$14,000<br>or UK £8,000 | \$14,000<br>£8,000    |
| 1994        | 1,100                        | \$50,000<br>£31,000         | \$383,000<br>£236,000 |

*Total number of tourists:* 47,000.

*Whale-watching assessment:* The first spot in the eastern Caribbean to develop whale watching, Dominica has a rapidly expanding ecotourism industry and outstanding potential for further development.

## St. Lucia

*Main Species:* Spinner dolphins, spotted dolphins, short-finned pilot whales, bottlenose dolphins, humpback whales, sperm whales.

*Year whale watching began:* Tours may start in 1995 or 1996.

*Types of whale watching:* Large whales, dolphins, boat-based.

*Number of communities involved in whale watching:* None yet.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | None                         | None                   | None                  |
| 1994        | None                         | None                   | None                  |

*Total number of tourists:* 177,500.

*Whale-watching assessment:* With its recent interest in marine ecotourism, whale watching is now being considered, but it will require one or more dedicated operators, or government test tours, to get things rolling.

## St. Vincent and the Grenadines

*Main Species:* Spinner dolphins, spotted dolphins, bottlenose dolphins, short-finned pilot whales, Fraser's dolphins, humpback whales.

*Year whale watching began:* late 1980s.

*Types of whale watching:* Large whales, dolphins, boat-based, land-based.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>       | <i>Total revenues</i> |
|-------------|------------------------------|------------------------------|-----------------------|
| 1991        | Minimal                      | Minimal                      | Minimal               |
| 1994        | 800                          | US \$24,000<br>or UK £15,000 | \$153,000<br>£94,000  |

*Total number of tourists:* 53,000.

*Whale-watching assessment:* Excellent spot for tropical dolphins and whale watching; could well be expanded.

## Grenada

*Main Species:* Spinner dolphins, spotted dolphins, short-finned pilot whales, bottlenose dolphins, humpback whales, sperm whales.

*Year whale watching began:* 1993.

*Types of whale watching:* Large whales, dolphins, boat-based, educational.

*Number of communities involved in whale watching:* 2.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | None                         | None                   | None                  |
| 1994        | Minimal                      | Minimal                | Minimal               |

*Total number of tourists:* 88,000.

*Whale-watching assessment:* With two operators offering year-round dolphin and seasonal whale watching as part of diving and nature tours, the industry has started here and there is moderate to considerable potential.

## SOUTH AMERICA

Area-wide summary

*Number of countries & territories involved in commercial whale watching:* 8.

*Number of additional countries soon to start commercial whale watching:* 0.

*Number of communities involved in whale watching:* 21.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>              | <i>Total revenues</i>       |
|-------------|------------------------------|-------------------------------------|-----------------------------|
| 1991        | 22,418                       | US \$15,447,000<br>or UK £8,981,000 | \$29,692,000<br>£17,263,000 |
| 1994        | 231,530                      | \$19,117,000<br>£11,801,000         | \$62,581,000<br>£38,630,000 |

*Average annual % increase 1991-94:* 117.8%.

*Total number of tourists:* 10,423,000 (includes all countries in the region, not just those listed below).

### Colombia

*Main Species:* Amazon River: Amazon River dolphins, tucuxi; west coast: humpback whales, bottlenose dolphins, spinner dolphins; Caribbean coast: Bryde's whales, bottlenose dolphins, tucuxi.

*Year whale watching began:* Mid-1980s.

*Types of whale watching:* Large whales, dolphins, boat-based, land-based, educational, photo-ID research.

*Number of communities involved in whale watching:* 4.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>         | <i>Total revenues</i>     |
|-------------|------------------------------|--------------------------------|---------------------------|
| 1991        | Minimal                      | Minimal                        | Minimal                   |
| 1994        | 5,000                        | US \$250,000<br>or UK £154,000 | \$1,918,000<br>£1,184,000 |

*Total number of tourists:* 1,076,000.

*Whale-watching assessment:* Considerable potential, particularly on the west coast.

### Venezuela

*Main Species:* Spinner dolphins, common dolphins, tucuxi dolphins, Bryde's whales.

*Year whale watching began:* 1994.

*Types of whale watching:* Large whales, dolphins, boat-based, educational.

*Number of communities involved in whale watching:* None yet.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | None                         | None                   | None                  |
| 1994        | Minimal                      | Minimal                | Minimal               |

*Total number of tourists:* 434,000.

*Whale-watching assessment:* Moderate to considerable potential.

## Ecuador

*Main Species:* Galapagos: bottlenose dolphins, Bryde's whales, sperm whales; mainland coast: humpback whales, bottlenose dolphins.

*Year whale watching began:* Early 1980s.

*Types of whale watching:* Large whales, dolphins, boat-based, cruise ships, land-based, educational, photo-ID research.

*Number of communities involved in whale watching:* 4.

| Year | No. of whale watchers | Direct revenues                     | Total revenues             |
|------|-----------------------|-------------------------------------|----------------------------|
| 1991 | 5,020                 | US \$15,060,000<br>or UK £8,735,000 | \$15,060,000<br>£8,735,000 |
| 1994 | 6,650                 | \$15,100,000<br>£9,321,000          | \$15,300,000<br>£9,444,000 |

*Total number of tourists:* 403,000 (41,000 to the Galapagos).

*Whale-watching assessment:* Outstanding potential, particularly on the coast. 5,020 whale watchers and \$15 million of the revenues represents the Galapagos contribution to cetacean watching as part of nature tours through the islands. In 1994, whale watching along the coast took off with 1,630 whale watchers, mostly to Machalilla National Park.

## Peru

*Main Species:* Amazon River: Amazon River dolphins, tucuxi; coastal waters: bottlenose dolphins, dusky dolphins, common dolphins, Burmeister's porpoises, Bryde's whales, humpback whales.

*Year whale watching began:* 1985.

*Types of whale watching:* Large whales, dolphins, porpoises, boat-based, land-based, swimming, educational, photo-ID research.

*Number of communities involved in whale watching:* 2.

| Year | No. of whale watchers | Direct revenues              | Total revenues        |
|------|-----------------------|------------------------------|-----------------------|
| 1991 | 27                    | US \$40,000<br>or UK £23,000 | \$40,000<br>£23,000   |
| 1994 | 150                   | \$360,000<br>£222,000        | \$450,000<br>£278,000 |

*Total number of tourists:* 217,000.

*Whale-watching assessment:* Moderate potential.

## Brazil

*Main Species:* Amazon: tucuxi, Amazon River dolphins (boto); Santa Catarina Island: tucuxi, southern right whales, bottlenose dolphins; Laguna: bottlenose dolphins; Tramandaí: bottlenose dolphins; Abrolhos: humpback whales; Fernando de Noronha: spinner dolphins.

*Year whale watching began:* Mid-1980s (Amazon).

*Types of whale watching:* Large whales, dolphins, boat-based, land-based, swimming, educational, photo-ID research.

*Number of communities involved in whale watching:* 5.

| Year | No. of whale watchers | Direct revenues                    | Total revenues            |
|------|-----------------------|------------------------------------|---------------------------|
| 1991 | Minimal               | Minimal                            | Minimal                   |
| 1994 | 175,000               | US \$2,500,000<br>or UK £1,543,000 | \$8,750,000<br>£5,401,000 |

*Total number of tourists:* 1,475,000.

*Whale-watching assessment:* Outstanding potential with a diversity of cetaceans and places to watch them.



## Argentina

*Main Species:* Península Valdés: southern right whales, killer whales, dusky dolphins; other prospective whale-watching areas in Argentina: franciscana, bottlenose dolphins, Peale's dolphins, Commerson's dolphins.

*Year whale watching began:* 1983.

*Types of whale watching:* Large whales, dolphins, boat-based, cruise ships, land-based, educational, photo-ID research.

*Number of communities involved in whale watching:* 3.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>         | <i>Total revenues</i>       |
|-------------|------------------------------|--------------------------------|-----------------------------|
| 1991        | 17,371                       | US \$347,000<br>or UK £202,000 | \$14,592,000<br>£8,484,000  |
| 1994        | 44,580                       | \$892,000<br>£551,000          | \$36,110,000<br>£22,290,000 |

*Total number of tourists:* 3,031,000.

*Whale-watching assessment:* The “carrying capacity” of whale watching may have been reached at Península Valdés, and careful management will be needed to protect the whales as well as to maximize the educational, scientific and commercial aspects. Whale watching may expand to small cetaceans in other areas along the Argentine coast both north and south of Península Valdés. The high total revenues to this area are the result of the international attraction of Patagonian right whales—and the great distances people travel to see them.

## Chile

*Main Species:* North coast: Bryde's whales, sperm whales, Burmeister's porpoises; central coast: Bryde's whales, sperm whales, killer whales, blue whales, fin whales; southern fjords: Peale's dolphins, Commerson's dolphins, southern right whale dolphins, killer whales, fin whales.

*Year whale watching began:* Early 1990s.

*Types of whale watching:* Large whales, dolphins, porpoises, boat-based, cruise ships, land-based, educational, research.

*Number of communities involved in whale watching:* 2.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>      | <i>Total revenues</i> |
|-------------|------------------------------|-----------------------------|-----------------------|
| 1991        | Minimal                      | Minimal                     | Minimal               |
| 1994        | 300+                         | US \$15,000<br>or UK £9,000 | \$53,000<br>£33,000   |

*Total number of tourists:* 1,283,000.

*Whale-watching assessment:* Considerable to outstanding potential.

## Falkland Islands (UK)

*Main Species:* Killer whales, pilot whales, Commerson's dolphins, Peale's dolphins.

*Year whale watching began:* Early 1990s.

*Types of whale watching:* Dolphins, boat-based, cruise ships, land-based.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | None                         | None                   | None                  |
| 1994        | Minimal                      | Minimal                | Minimal               |

*Total number of tourists:* 6,500.

*Whale-watching assessment:* Moderate potential.

## EUROPE

Area-wide summary

*Number of countries & territories involved in commercial whale watching:* 15.

*Number of additional countries soon to start commercial whale watching:* 1.

*Number of communities involved in whale watching:* 34.

| Year | No. of whale watchers | Direct revenues                    | Total revenues             |
|------|-----------------------|------------------------------------|----------------------------|
| 1991 | 158,763               | US \$2,261,000<br>or UK £1,316,000 | \$5,690,000<br>£3,312,000  |
| 1994 | 204,627               | \$4,123,000<br>£2,546,000          | \$21,985,000<br>13,571,000 |

*Average annual % increase 1991-94:* 8.8%.

*Total number of tourists:* 290,219,000 (includes all countries in the region, not just those listed below).

### Norway (including Svalbard)

*Main Species:* Northern Norway: sperm whales, killer whales, minke whales; Svalbard: belugas.

*Year whale watching began:* 1988.

*Types of whale watching:* Large whales, dolphins, boat-based, cruise ships, educational, photo-ID research.

*Number of communities involved in whale watching:* 4.

| Year | No. of whale watchers | Direct revenues                | Total revenues            |
|------|-----------------------|--------------------------------|---------------------------|
| 1991 | 4,563                 | US \$459,000<br>or UK £266,000 | \$1,607,000<br>£931,000   |
| 1994 | 11,227                | \$834,000<br>£515,000          | \$4,567,000<br>£2,819,000 |

*Total number of tourists:* 2,375,000.

*Whale-watching assessment:* Outstanding potential, some of it being realized at Andenes, one of the best whale-watching operations in Europe.

### Iceland

*Main Species:* Humpback whales, killer whales, minke whales, white-beaked dolphins, harbour porpoises.

*Year whale watching began:* 1991.

*Types of whale watching:* Large whales, dolphins, porpoises, boat-based, educational, photo-ID research.

*Number of communities involved in whale watching:* 2+.

| Year | No. of whale watchers | Direct revenues              | Total revenues       |
|------|-----------------------|------------------------------|----------------------|
| 1991 | 100                   | US \$17,000<br>or UK £10,000 | \$60,000<br>£35,000  |
| 1994 | 200                   | \$32,000<br>£20,000          | \$146,000<br>£90,000 |

*Total number of tourists:* 143,000.

*Whale-watching assessment:* Considerable potential. From one operator between 1991 and 1993, 1994 saw the arrival of three new operators in different parts of the country. More operators may be starting in 1995.

## Greenland (Self-governing territory of Denmark)

*Main Species:* South: humpback whales, minke whales, harbour porpoises; Disko Bay area: fin whales, belugas, narwhals; Northwest: belugas, narwhals, killer whales; East coast: narwhals, belugas.

*Year whale watching began:* Early 1990s.

*Types of whale watching:* Large whales, dolphins, porpoises, boat-based, cruise ships, air, land-based, photo-ID research.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>       | <i>Total revenues</i> |
|-------------|------------------------------|------------------------------|-----------------------|
| 1991        | Minimal                      | Minimal                      | Minimal               |
| 1994        | 100+                         | US \$16,000<br>or UK £10,000 | \$57,000<br>£35,000   |

*Total number of tourists:* < 5,000.

*Whale-watching assessment:* Considerable potential because of the Arctic cetaceans that many whale watchers and nature enthusiasts have never seen. Tourism has been restricted in the past, but over the next decade the figures are expected to rise to 35,000 a year.

## The Faroe Islands (Self-governing territory of Denmark)

*Main Species:* Long-finned pilot whales, Atlantic white-sided dolphins, white-beaked dolphins, killer whales, sperm whales.

*Year whale watching began:* Tours may start in 1996 (feasibility study 1995).

*Types of whale watching:* Large whales, dolphins, boat-based.

*Number of communities involved in whale watching:* None.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | None                         | None                   | None                  |
| 1994        | None                         | None                   | None                  |

*Total number of tourists:* 25,000.

*Whale-watching assessment:* Moderate to considerable potential. Substantial numbers of British and other European tourists travel long distances in part to watch pilot whales off the Canary Islands. If only a small percentage knew they could see these and other cetaceans closer to home in the Faroes, it could mean a substantial rise in tourism.

## United Kingdom

*Main Species:* Scotland: minke whales, bottlenose dolphins, killer whales, harbour porpoises, Risso's dolphins, Atlantic white-sided dolphins, white-beaked dolphins, common dolphins; England and Wales: bottlenose dolphins, harbour porpoises.

*Year whale watching began:* Mid-1980s.

*Types of whale watching:* Large whales, dolphins, porpoises, boat-based, land-based, swimming, educational, photo-ID research.

*Number of communities involved in whale watching:* 9.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>       | <i>Total revenues</i>      |
|-------------|------------------------------|------------------------------|----------------------------|
| 1991        | 400+                         | US \$43,000<br>or UK £25,000 | \$330,000<br>£192,000      |
| 1994        | 15,000+                      | \$1,380,000<br>£850,000      | \$10,500,000<br>£6,500,000 |

*Total number of tourists:* 18,535,000.

*Whale-watching assessment:* Considerable potential.

## Ireland

*Main Species:* Bottlenose dolphins, harbour porpoises, Risso's dolphins, common dolphins and minke whales.

*Year whale watching began:* 1986 at Dingle (solitary dolphin); 1992 elsewhere.

*Types of whale watching:* Large whales, dolphins, porpoises, boat-based, land-based, swimming, educational, photo-ID research.

*Number of communities involved in whale watching:* 5.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>           | <i>Total revenues</i>     |
|-------------|------------------------------|----------------------------------|---------------------------|
| 1991        | 150,000                      | US \$1,290,000<br>or UK £750,000 | \$3,010,000<br>£1,750,000 |
| 1994        | 165,000                      | \$1,337,000<br>£825,000          | \$4,679,000<br>£2,888,000 |

*Total number of tourists:* 3,666,000.

*Whale-watching assessment:* Considerable potential. The bulk of the numbers are directed toward the wild solitary dolphin at Dingle and will be dependent on his continuing presence in the area. Still, cetacean watching, mainly through nature tours, is starting up all around Ireland. Rapid growth seems likely for land and boat-based watching of resident bottlenose dolphins in Shannon estuary.

## Germany

*Main Species:* Harbour porpoises.

*Year whale watching began:* Early 1990s.

*Types of whale watching:* Porpoises, boat-based, land-based, swimming, research.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | Minimal                      | Minimal                | Minimal               |
| 1994        | Minimal                      | Minimal                | Minimal               |

*Total number of tourists:* 15,147,000.

*Whale-watching assessment:* Minimal to moderate potential.

## France

*Main Species:* Normandy: bottlenose dolphins, common dolphins, pilot whales, Risso's dolphins; Brittany: bottlenose dolphins, striped dolphins, harbour porpoises; Mediterranean especially Ligurian sea: fin whales, sperm whales, striped dolphins, Cuvier's beaked whales, long-finned pilot whales, Risso's dolphins, common dolphins, bottlenose dolphins.

*Year whale watching began:* 1983.

*Types of whale watching:* Large whales, dolphins, porpoises, boat-based, cruise ships, land-based, educational, photo-ID research.

*Number of communities involved in whale watching:* 4.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>        | <i>Total revenues</i> |
|-------------|------------------------------|-------------------------------|-----------------------|
| 1991        | 1,000                        | US \$100,000<br>or UK £58,000 | \$203,000<br>£118,000 |
| 1994        | 800                          | \$80,000<br>£49,000           | \$280,000<br>£173,000 |

*Total number of tourists:* 59,590,000.

*Whale-watching assessment:* Moderate to considerable potential, particularly to the western Ligurian Sea.

## Spain (including Balearic Islands)

*Main Species:* Mediterranean coast, Almería and Murcia: bottlenose dolphins, striped dolphins, Risso's dolphins, long-finned pilot whales, sperm whales; Bay of Biscay (Gijón): minke whales, striped dolphins, common dolphins, bottlenose dolphins, killer whales, Risso's dolphins; Cadiz: fin whales, striped dolphins, common dolphins, bottlenose dolphins; Barcelona-Costa Brava: common dolphins, striped dolphins, long-finned pilot whales, fin whales, bottlenose dolphins, sperm whales.

*Year whale watching began:* Late 1980s.

*Types of whale watching:* Large whales, dolphins, boat-based, photo-ID research.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>       | <i>Total revenues</i>   |
|-------------|------------------------------|------------------------------|-------------------------|
| 1991        | Minimal                      | Minimal                      | Minimal                 |
| 1994        | 1,000                        | US \$29,000<br>or UK £18,000 | US \$101,000<br>£62,000 |

*Total number of tourists:* 39,638,000.

*Whale-watching assessment:* Modest to considerable potential, particularly near existing tourism centres.

## Gibraltar (UK Dependency)

*Main Species:* Common dolphins, bottlenose dolphins, striped dolphins, sometimes killer whales.

*Year whale watching began:* 1980.

*Types of whale watching:* Dolphins, boat-based.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>       | <i>Total revenues</i> |
|-------------|------------------------------|------------------------------|-----------------------|
| 1991        | 2,500                        | US \$52,000<br>or UK £30,000 | \$180,000<br>£105,000 |
| 1994        | 10,000                       | \$243,000<br>£150,000        | \$850,000<br>£525,000 |

*Total number of tourists:* 88,000.

*Whale-watching assessment:* Moderate to considerable potential.

## Portugal

*Main Species:* Bottlenose dolphins.

*Year whale watching began:* Early 1980s in Portugal.

*Types of whale watching:* Dolphins, boat-based, land-based, educational, photo-ID research.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | Minimal                      | Minimal                | Minimal               |
| 1994        | Minimal                      | Minimal                | Minimal               |

*Total number of tourists:* 8,884,000 (including Azores)

*Whale-watching assessment:* Modest potential. The currently low level of whale watching in the Sado estuary may be expanded.

## Azores (Portugal)

*Main Species:* Sperm whales, bottlenose dolphins, spotted dolphins, common dolphins, Risso's dolphins, striped dolphins, short-finned pilot whales, various beaked whales.

*Year whale watching began:* 1989.

*Types of whale watching:* Large whales, dolphins, boat-based, land-based, educational, photo-ID research.

*Number of communities involved in whale watching:* 2.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>       | <i>Total revenues</i> |
|-------------|------------------------------|------------------------------|-----------------------|
| 1991        | Minimal                      | Minimal                      | Minimal               |
| 1994        | 1,000                        | US \$31,000<br>or UK £19,000 | \$664,000<br>£410,000 |

*Total number of tourists:* Figures included under Portugal.

*Whale-watching assessment:* Considerable to outstanding potential.

## Monaco

*Main Species:* Fin whales, sperm whales, Cuvier's beaked whales, long-finned pilot whales, Risso's dolphins, striped dolphins, common dolphins, bottlenose dolphins.

*Year whale watching began:* Early 1990s, as part of whale watching from Italy to the western Ligurian Sea.

*Types of whale watching:* Large whales, dolphins, boat-based, educational, photo-ID research.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | Minimal                      | Minimal                | Minimal               |
| 1994        | Minimal                      | Minimal                | Minimal               |

*Total number of tourists:* 246,000.

*Whale-watching assessment:* Moderate potential.

## Italy (including Sardinia)

*Main Species:* Fin whales, sperm whales, Cuvier's beaked whales, long-finned pilot whales, Risso's dolphins, striped dolphins, common dolphins, bottlenose dolphins.

*Year whale watching began:* 1988.

*Types of whale watching:* Large whales, dolphins, boat-based, educational, photo-ID research.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>         | <i>Total revenues</i> |
|-------------|------------------------------|--------------------------------|-----------------------|
| 1991        | 200                          | US \$300,000<br>or UK £174,000 | \$300,000<br>£174,000 |
| 1994        | 160                          | \$81,000<br>£50,000            | \$81,000<br>£50,000   |

*Total number of tourists:* 26,113,000.

*Whale-watching assessment:* Moderate to considerable potential both in terms of the Ligurian Sea and access to other areas of the Mediterranean.

## Croatia

*Main Species:* Bottlenose dolphins.

*Year whale watching began:* 1991.

*Types of whale watching:* Dolphins, boat-based, educational, photo-ID research.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>       | <i>Total revenues</i> |
|-------------|------------------------------|------------------------------|-----------------------|
| 1991        | None                         | None                         | None                  |
| 1994        | 60                           | US \$24,000<br>or UK £15,000 | \$24,000<br>£15,000   |

*Total number of tourists:* Recent figures unavailable.

*Whale-watching assessment:* Moderate potential.

## Greece (including Crete and Aegean Islands)

*Main Species:* Bottlenose dolphins, common dolphins, striped dolphins.

*Year whale watching began:* 1980s.

*Types of whale watching:* Dolphins, boat-based, cruise ships, educational, photo-ID research.

*Number of communities involved in whale watching:* None.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>       | <i>Total revenues</i> |
|-------------|------------------------------|------------------------------|-----------------------|
| 1991        | Minimal                      | Minimal                      | Minimal               |
| 1994        | 80                           | US \$36,000<br>or UK £22,000 | \$36,000<br>£22,000   |

*Total number of tourists:* 9,331,000.

*Whale-watching assessment:* Moderate potential.

## AFRICA

Area-wide summary

*Number of countries & territories involved in commercial whale watching:* 8.

*Number of additional countries soon to start commercial whale watching:* 1.

*Number of communities involved in whale watching:* 17.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>           | <i>Total revenues</i>       |
|-------------|------------------------------|----------------------------------|-----------------------------|
| 1991        | 46,150                       | US \$1,150,000<br>or UK £668,000 | \$4,146,000<br>£2,407,000   |
| 1994        | 282,550                      | \$7,379,000<br>£4,554,000        | \$26,647,000<br>£16,449,000 |

*Average annual % increase 1991-94:* 82.9%.

*Total number of tourists:* 17,471,000 (includes all countries in the region, not just those listed below).

### Canary Islands (Spain)

*Main Species:* Short-finned pilot whales, bottlenose dolphins, sperm whales.

*Year whale watching began:* 1991 (incidental whale watching began in the late 1980s).

*Types of whale watching:* Large whales, dolphins, boat-based, land-based, swimming, educational, photo-ID research.

*Number of communities involved in whale watching:* 2.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>           | <i>Total revenues</i>     |
|-------------|------------------------------|----------------------------------|---------------------------|
| 1991        | 40,000                       | US \$1,144,000<br>or UK £664,000 | \$4,004,000<br>£2,324,000 |
| 1994        | 250,000                      | \$7,150,000<br>£4,413,000        | 25,025,000<br>£15,448,000 |

*Total number of tourists:* Figures included under Spain.

*Whale-watching assessment:* The explosive numbers of pilot whale watchers from Tenerife in the Canary Islands (at least 250,000, though estimates range as high as 600,000) may well present a situation beyond carrying capacity. Regulations and enforcement are needed to ensure the whales are protected. Bottlenose dolphin watching has recently started up from Gomera.

### Egypt

*Main Species:* Spotted dolphins, bottlenose dolphins, Risso's dolphins, humpbacked dolphins.

*Year whale watching began:* Early 1990s.

*Types of whale watching:* Dolphins, boat-based, cruise ships, swimming.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | None                         | None                   | None                  |
| 1994        | Minimal                      | Minimal                | Minimal               |

*Total number of tourists:* 2,944,000.

*Whale-watching assessment:* Moderate to considerable potential. Dolphin watching is growing in the Red Sea where there is substantial tourism development and many diving-oriented tours.



## Mauritania

*Main Species:* Bottlenose dolphins, Atlantic humpbacked dolphins, killer whales.

*Year whale watching began:* Early 1990s.

*Types of whale watching:* Dolphins, land-based.

*Number of communities involved in whale watching:* 2.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | Minimal                      | Minimal                | Minimal               |
| 1994        | 50                           | Minimal                | Minimal               |

*Total number of tourists:* Recent figures unavailable.

*Whale-watching assessment:* Moderate potential; there have been some organized tours from France which could increase.

## South Africa

*Main Species:* Southern right whales, Heaviside's dolphins, humpback whales, Bryde's whales, killer whales, bottlenose dolphins, Indo-Pacific humpbacked dolphins.

*Year whale watching began:* Early 1980s.

*Types of whale watching:* Large whales, dolphins, land-based, educational, photo-ID research.

*Number of communities involved in whale watching:* 6.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>       | <i>Total revenues</i> |
|-------------|------------------------------|------------------------------|-----------------------|
| 1991        | 6,000                        | None                         | \$121,000<br>£71,000  |
| 1994        | 25,000                       | US \$29,000<br>or UK £18,000 | \$512,000<br>£316,000 |

*Total number of tourists:* 2,892,000.

*Whale-watching assessment:* Considerable potential. An assessment of boat-based whale watching is now being undertaken which will help set future whale watching policy and determine the extent of the expansion.

## Madagascar

*Main Species:* Humpback whales, bottlenose dolphins, spinner dolphins, Indo-Pacific humpbacked dolphins, sperm whales.

*Year whale watching began:* 1988.

*Types of whale watching:* Large whales, dolphins, boat-based, land-based, swimming, educational, photo-ID research.

*Number of communities involved in whale watching:* 3.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>     | <i>Total revenues</i>   |
|-------------|------------------------------|----------------------------|-------------------------|
| 1991        | 150                          | US \$6,000<br>or UK £4,000 | \$21,000<br>£12,000     |
| 1994        | 7,500                        | \$200,000<br>£123,000      | \$1,110,000<br>£685,000 |

*Total number of tourists:* 54,000.

*Whale-watching assessment:* Considerable potential.

## Seychelles

*Main Species:* Tropical dolphins.

*Year whale watching began:* Late 1980s.

*Types of whale watching:* Dolphins, boat-based.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | Minimal                      | Minimal                | Minimal               |
| 1994        | Minimal                      | Minimal                | Minimal               |

*Total number of tourists:* 99,000.

*Whale-watching assessment:* Moderate potential. Mainly dolphin watching associated with dive tours.

## Mauritius

*Main Species:* Tropical dolphins.

*Year whale watching began:* Early 1990s.

*Types of whale watching:* Dolphins, boat-based.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | None                         | None                   | None                  |
| 1994        | Minimal                      | Minimal                | Minimal               |

*Total number of tourists:* 335,000.

*Whale-watching assessment:* Moderate potential. Mainly dolphin watching associated with dive tours.

## Kenya

*Main Species:* Humpback whales, tropical dolphins.

*Year whale watching began:* Mid-1980s.

*Types of whale watching:* Large whales, dolphins, boat-based, educational.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | Minimal                      | Minimal                | Minimal               |
| 1994        | Minimal                      | Minimal                | Minimal               |

*Total number of tourists:* 699,000.

*Whale-watching assessment:* Moderate potential. Oceanic Society Expeditions has led tours here in the past, but most dolphin watching is currently conducted as part of dive tours.

## Eritrea

*Main Species:* Spinner dolphins, spotted dolphins, bottlenose dolphins, common dolphins, Indo-Pacific humpbacked dolphins.

*Year whale watching began:* May start in 1996.

*Types of whale watching:* Dolphins, boat-based, educational.

*Number of communities involved in whale watching:* None yet.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | None                         | None                   | None                  |
| 1994        | None                         | None                   | None                  |

*Total number of tourists:* Recent figures unavailable.

*Whale-watching assessment:* Moderate potential.

## ASIA

Area-wide summary

*Number of countries & territories involved in commercial whale watching:* 12.

*Number of additional countries soon to start commercial whale watching:* 1.

*Number of communities involved in whale watching:* 32.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>         | <i>Total revenues</i>       |
|-------------|------------------------------|--------------------------------|-----------------------------|
| 1991        | 10,992                       | US \$371,000<br>or UK £216,000 | \$4,748,000<br>£2,760,000   |
| 1994        | 73,192                       | \$3,887,000<br>£2,399,000      | \$24,601,000<br>£15,186,000 |

*Average annual % increase 1991-94:* 88.1%.

*Total number of tourists:* 70,909,000 (includes all countries in the region, not just those listed below).

### Russia (includes European sector)

*Main Species:* Taymyr Peninsula: belugas; Franz Josef Land, Novaya Zemlya, Severnaya Zemlya: bowhead whales, belugas, narwhals; eastern Siberia/Kamchatka: gray whales, killer whales, belugas.

*Year whale watching began:* 1992.

*Types of whale watching:* Large whales, dolphins, boat-based, cruise ships, air, educational, research.

*Number of communities involved in whale watching:* None yet.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>         | <i>Total revenues</i> |
|-------------|------------------------------|--------------------------------|-----------------------|
| 1991        | Minimal                      | Minimal                        | Minimal               |
| 1994        | 100+                         | US \$300,000<br>or UK £185,000 | \$350,000<br>£216,000 |

*Total number of tourists:* 6,900,000.

*Whale-watching assessment:* Moderate to considerable potential. Although the logistics are sometimes difficult and the prices expensive, the conversion of some Russian ice-breakers to tourism, and the use of helicopters, have opened up the Russian Arctic.

### Turkey

*Main Species:* Aegean Sea: striped dolphins, common dolphins, bottlenose dolphins, sperm whales; Black Sea: common dolphins, bottlenose dolphins, harbour porpoises.

*Year whale watching began:* 1994.

*Types of whale watching:* Large whales, dolphins, boat-based, land-based, photo-ID research.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | None                         | None                   | None                  |
| 1994        | Minimal                      | Minimal                | Minimal               |

*Total number of tourists:* 6,549,000.

*Whale-watching assessment:* Considerable potential, especially for small cetaceans in the Aegean, but also some potential in the Black Sea.

## Israel

*Main Species:* Bottlenose dolphins, common dolphins, spotted dolphins, striped dolphins, Risso's dolphins.

*Year whale watching began:* Early 1990s.

*Types of whale watching:* Dolphins, boat-based, cruise ships, land-based, photo-ID research.

*Number of communities involved in whale watching:* 2.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | None                         | None                   | None                  |
| 1994        | 300+                         | Minimal                | Minimal               |

*Total number of tourists:* 1,502,000.

*Whale-watching assessment:* Dolphin watching is growing particularly in the Red Sea where there is considerable tourism development and the dolphins are more easily accessible than in the Israeli Mediterranean. In the Mediterranean, dolphin watching could be combined with commercial fishing.

## Oman

*Main Species:* Humpback whales, Indo-Pacific humpbacked dolphins, bottlenose dolphins, common dolphins, false killer whales.

*Year whale watching began:* Tours may start by 1997.

*Types of whale watching:* Large whales, dolphins, boat-based.

*Number of communities involved in whale watching:* None.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | None                         | None                   | None                  |
| 1994        | None                         | None                   | None                  |

*Total number of tourists:* 192,000.

*Whale-watching assessment:* Moderate to considerable potential. Tourism has only recently started in Oman and more research must be done before whale watching can begin.

## Nepal

*Main Species:* Susu (Ganges River dolphin).

*Year whale watching began:* 1993.

*Types of whale watching:* Dolphins, boat-based, land-based, educational.

*Number of communities involved in whale watching:* None yet.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | None                         | None                   | None                  |
| 1994        | Minimal                      | Minimal                | Minimal               |

*Total number of tourists:* 334,000.

*Whale-watching assessment:* Moderate potential, depending on whether field study tours will resume, perhaps combined with visits to nearby Royal Bardia National Park.

## India

*Main Species:* Goa: bottlenose dolphins, striped dolphins; Ganges River: susu (Ganges River dolphin).

*Year whale watching began:* 1993.

*Types of whale watching:* Dolphins, boat-based.

*Number of communities involved in whale watching:* 3.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>       | <i>Total revenues</i> |
|-------------|------------------------------|------------------------------|-----------------------|
| 1991        | None                         | None                         | None                  |
| 1994        | 3,600+                       | US \$19,000<br>or UK £12,000 | \$68,000<br>£42,000   |

*Total number of tourists:* 1,868,000.

*Whale-watching assessment:* Moderate potential. With the success in Goa, dolphin-based boat trips are being considered in a number of other tourism areas of India along the rivers and coasts.

## Sri Lanka

*Main Species:* Blue whales, sperm whales, Bryde's whales, spinner dolphins, bottlenose dolphins.

*Year whale watching began:* 1983, interrupted due to civil war.

*Types of whale watching:* Large whales, dolphins, boat-based, land-based.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | Minimal                      | Minimal                | Minimal               |
| 1994        | Minimal                      | Minimal                | Minimal               |

*Total number of tourists:* 394,000.

*Whale-watching assessment:* Outstanding potential.

## Thailand

*Main Species:* Tropical dolphins.

*Year whale watching began:* 1994.

*Types of whale watching:* Dolphins, porpoises, boat-based.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>       | <i>Total revenues</i> |
|-------------|------------------------------|------------------------------|-----------------------|
| 1991        | None                         | None                         | None                  |
| 1994        | 1,000+                       | US \$50,000<br>or UK £31,000 | \$175,000<br>£108,000 |

*Total number of tourists:* 5,136,000.

*Whale-watching assessment:* Moderate to considerable potential especially out of Phuket where diving tours are starting to advertise dolphin sightings.

## Indonesia

*Main Species:* Bali: common dolphins, spinner dolphins.

*Year whale watching began:* 1991.

*Types of whale watching:* Dolphins, boat-based, cruise ships, land-based.

*Number of communities involved in whale watching:* 2.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>        | <i>Total revenues</i> |
|-------------|------------------------------|-------------------------------|-----------------------|
| 1991        | Minimal                      | Minimal                       | Minimal               |
| 1994        | 12,000                       | US \$100,000<br>or UK £62,000 | \$350,000<br>£216,000 |

*Total number of tourists:* 3,064,000.

*Whale-watching assessment:* Moderate to considerable potential in North and South Bali, with additional reports of small amounts of sperm whale- and other cetacean-watching activity developing around Lembata Island in East Nusa Tenggara and off East Java.

## Japan (including Okinawa and Ogasawara)

*Main Species:* Ogasawara: humpback whales, bottlenose dolphins, spinner dolphins; Keramas (Okinawa): humpback whales, rough-toothed dolphins, bottlenose dolphins; Ogata, Saga, Shimonokae, Nakamura: Bryde's whales; Muroto: sperm whales, Risso's dolphins, short-finned pilot whales, bottlenose dolphins; Muroran: minke whales, Pacific white-sided dolphins, Dall's porpoises, harbour porpoises, killer whales, short-finned pilot whales; Shibetsu and other Hokkaido communities: minke whales, Baird's beaked whales, Dall's porpoises, killer whales; Nachi-katsuura: sperm whale, various dolphins; Miyake and Mikurajima: bottlenose dolphins; Itsuwa-cho: bottlenose and other dolphins.

*Year whale watching began:* 1988.

*Types of whale watching:* Large whales, dolphins, porpoises, boat-based, land-based, swimming, educational, photo-ID research.

*Number of communities involved in whale watching:* 21.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>         | <i>Total revenues</i>       |
|-------------|------------------------------|--------------------------------|-----------------------------|
| 1991        | 10,992                       | US \$371,000<br>or UK £216,000 | \$4,748,000<br>£2,760,000   |
| 1994        | 55,192                       | \$3,384,000<br>£2,089,000      | \$23,539,000<br>£14,530,000 |

*Total number of tourists:* 2,103,000.

*Whale-watching assessment:* Outstanding potential. Japan continues to be one of the fastest growing whale-watching countries in the world. Despite poor weather in several areas, the numbers of people participating in whale- and dolphin-watching tours more than doubled between 1993 and 1994.

## Philippines

*Main Species:* Dwarf sperm whales, spotted dolphins, spinner dolphins, Risso's dolphins, pilot whales, melon-headed whales, Fraser's dolphins.

*Year whale watching began:* 1991.

*Types of whale watching:* Large whales, dolphins, boat-based, educational, research.

*Number of communities involved in whale watching:* None yet.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | Minimal                      | Minimal                | Minimal               |
| 1994        | Minimal                      | Minimal                | Minimal               |

*Total number of tourists:* 1,043,000.

*Whale-watching assessment:* Whale watches have been mainly conducted for research and as sponsored photographic expeditions for book and video projects, but the potential is outstanding.

## Hong Kong (UK -> China)

*Main Species:* Indo-Pacific humpbacked dolphins.

*Year whale watching began:* 1994.

*Types of whale watching:* Dolphins, boat-based, swimming, educational, photo-ID research.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>       | <i>Total revenues</i> |
|-------------|------------------------------|------------------------------|-----------------------|
| 1991        | None                         | None                         | None                  |
| 1994        | 1,000                        | US \$34,000<br>or UK £21,000 | \$119,000<br>£73,000  |

*Total number of tourists:* 6,986,000.

*Whale-watching assessment:* This year-round dolphin watching has recently started and is expanding rapidly, though the building of the new Hong Kong airport may affect the dolphins as well as the possibility of watching them. At the current early 1995 rate, more than 8,000 people may go whale watching for the year 1995, with direct revenues of at least US \$300,000.

## China

*Main Species:* Finless porpoises, baiji (Chinese river dolphins).

*Year whale watching began:* Early 1990s.

*Types of whale watching:* Dolphins, porpoises, boat-based, land-based, educational, research.

*Number of communities involved in whale watching:* None yet.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | Minimal                      | Minimal                | Minimal               |
| 1994        | Minimal                      | Minimal                | Minimal               |

*Total number of tourists:* 16,512,000.

*Whale-watching assessment:* Minimal potential as the baiji are close to extinction. An Earthwatch-sponsored trip is bringing a few people on a river dolphin project in 1995.

# AUSTRALIA, OCEANIA & ANTARCTICA

## Area-wide summary

*Number of countries & territories involved in commercial whale watching:* 6.

*Number of additional countries soon to start commercial whale watching:* 3.

*Number of communities involved in whale watching:* 52.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>              | <i>Total revenues</i>       |
|-------------|------------------------------|-------------------------------------|-----------------------------|
| 1991        | 376,375                      | US \$10,051,000<br>or UK £5,844,000 | \$46,569,000<br>£27,075,000 |
| 1994        | 540,200                      | \$18,622,000<br>£11,495,000         | \$67,710,000<br>£41,796,000 |

*Average annual % increase 1991-94:* 12.8%.

*Total number of tourists:* 5,783,000 (includes all countries in the region, not just those listed below).

## Australia

*Main Species:* Queensland: humpback whales; New South Wales: humpback whales; Victoria: southern right whales, bottlenose dolphins; South Australia: southern right whales, bottlenose dolphins, common dolphins; West Australia: humpback whales, southern right whales, bottlenose dolphins.

*Year whale watching began:* 1987 (Hervey Bay); late 1960s (Monkey Mia dolphins).

*Types of whale watching:* Large whales, dolphins, porpoises, boat-based, cruise ships, air, land-based, swimming, educational, photo-ID research.

*Number of communities involved in whale watching:* 24+.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>             | <i>Total revenues</i>       |
|-------------|------------------------------|------------------------------------|-----------------------------|
| 1991        | 335,200                      | US \$3,056,000<br>or UK £1,772,000 | \$32,269,000<br>£18,753,000 |
| 1994        | 446,000                      | \$4,662,000<br>£2,878,000          | \$45,000,000<br>£27,778,000 |

*Total number of tourists:* 2,603,000.

*Whale-watching assessment:* Outstanding potential with rapid growth in many areas. The particularly high estimates of total revenues in relation to direct revenues is due to the substantial numbers of dedicated land-based cetacean tourists who may spend little or nothing on direct revenues (tours) but considerable amounts on total revenues.

## New Zealand

*Main Species:* Sperm whales, dusky dolphins, Hector's dolphins, bottlenose dolphins, common dolphins, killer whales, long-finned pilot whales.

*Year whale watching began:* 1987.

*Types of whale watching:* Large whales, dolphins, boat-based, air, land-based, swimming, educational, photo-ID research.

*Number of communities involved in whale watching:* 25.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>           | <i>Total revenues</i>      |
|-------------|------------------------------|----------------------------------|----------------------------|
| 1991        | 40,000                       | US \$1,095,000<br>or UK £637,000 | \$8,400,000<br>£4,886,000  |
| 1994        | 90,000                       | \$3,900,000<br>£2,407,000        | \$12,500,000<br>£7,716,000 |

*Total number of tourists:* 1,056,000.

*Whale-watching assessment:* Outstanding potential. Current numbers range from 90,000 to 100,000 a year, possibly more. In general, New Zealand is a model country in terms of careful government management of whale watching including the funding of research. Their permit-based system has helped control the number of boats on the water to protect the resource without unduly restricting its sensible development.



## Tonga

*Main Species:* Humpback whales, pilot whales, spinner dolphins, sperm whales.

*Year whale watching began:* 1994.

*Types of whale watching:* Large whales, dolphins, boat-based, land-based (starting 1995), swimming, educational, photo-ID research.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>      | <i>Total revenues</i> |
|-------------|------------------------------|-----------------------------|-----------------------|
| 1991        | None                         | None                        | None                  |
| 1994        | 200                          | US \$10,000<br>or UK £6,000 | \$35,000<br>£22,000   |

*Total number of tourists:* 23,000.

*Whale-watching assessment:* Moderate to considerable potential, with reliable sightings of humpbacks on 90 of 93 trips in 1994.

## French Polynesia (Tahiti and Moorea)

*Main Species:* Various tropical dolphins.

*Year whale watching began:* Early 1990s.

*Types of whale watching:* Dolphins, boat-based.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | None                         | None                   | None                  |
| 1994        | Minimal                      | Minimal                | Minimal               |

*Total number of tourists:* 124,000.

*Whale-watching assessment:* Moderate potential.

## Western Samoa

*Main Species:* Humpback whales, spinner and other tropical dolphins.

*Year whale watching began:* Tours may start in 1995 or 1996.

*Types of whale watching:* Large whales, dolphins, boat-based.

*Number of communities involved in whale watching:* None yet.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | None                         | None                   | None                  |
| 1994        | None                         | None                   | None                  |

*Total number of tourists:* 38,000.

*Whale-watching assessment:* Moderate potential.

## Niue (Self-governing dependency of New Zealand)

*Main Species:* Humpback whales, spinner and other tropical dolphins.

*Year whale watching began:* Tours may start in 1995 or 1996.

*Types of whale watching:* Large whales, dolphins, boat-based.

*Number of communities involved in whale watching:* None yet.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | None                         | None                   | None                  |
| 1994        | None                         | None                   | None                  |

*Total number of tourists:* 2,000.

*Whale-watching assessment:* Moderate potential.

## Guam (US territory)

*Main Species:* Tropical dolphins.

*Year whale watching began:* Early 1990s.

*Types of whale watching:* Dolphins, boat-based.

*Number of communities involved in whale watching:* 1.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>       | <i>Total revenues</i> |
|-------------|------------------------------|------------------------------|-----------------------|
| 1991        | None                         | None                         | None                  |
| 1994        | 2,000                        | US \$50,000<br>or UK £31,000 | \$175,000<br>£108,000 |

*Total number of tourists:* 877,000.

*Whale-watching assessment:* Considerable potential for dolphin watching.

## New Caledonia (French overseas territory)

*Main Species:* Humpback whales, spinner and other dolphins.

*Year whale watching began:* Pilot (test) tours in process.

*Types of whale watching:* Large whales, dolphins, boat-based, photo-ID research.

*Number of communities involved in whale watching:* None.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i> | <i>Total revenues</i> |
|-------------|------------------------------|------------------------|-----------------------|
| 1991        | None                         | None                   | None                  |
| 1994        | None                         | None                   | None                  |

*Total number of tourists:* 78,000.

*Whale-watching assessment:* Minimal to moderate potential depending on outcome of test tours. One Japanese tour company has already advertised the tours.

## Antarctica

*Main Species:* Humpback whales, blue whales, fin whales, sei whales, minke whales, sperm whales, killer whales, various dolphins.

*Year whale watching began:* Tours date from 1957, but whale watching has been a prominent feature only since the 1980s.

*Types of whale watching:* Large whales, dolphins, porpoises, boat-based, cruise ships, air, educational, photo-ID research.

*Number of communities involved in whale watching:* Not applicable.

| <i>Year</i> | <i>No. of whale watchers</i> | <i>Direct revenues</i>             | <i>Total revenues</i>      |
|-------------|------------------------------|------------------------------------|----------------------------|
| 1991        | 1,175                        | US \$5,900,000<br>or UK £3,400,000 | \$5,900,000<br>£3,400,000  |
| 1994        | 2,000                        | \$10,000,000<br>£6,173,000         | \$10,000,000<br>£6,173,000 |

*Total number of tourists:* Approximately 8,000 (1993/94 season).

*Whale-watching assessment:* Moderate to considerable potential. Whales are seen on almost all Antarctic cruises; wildlife including whale watching was a highlight of the trip for more than 44 percent of visitors. Therefore, 25 percent of all tourists and revenues is taken as a conservative indication of whale watching.



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Responses of wintering humpback whales to vessel traffic (abstract only). *Journal of the Acoustic Society of America*, p.3 Hoyt, E. (2001). The worldwide value and extent of whale watching: 1995. Unpublished report to the Whale and Dolphin Conservation Society, United Kingdom. Hoyt, E. (2009). Whale watching: A global overview of the industry's rapid growth and some recent implications and suggestions for Australia. In Colgan, K. Prasser, S. and Jelery, A. *Encounters with whales 1995 proceedings*. Canberra: Australian Nature Conservation Agency. International Fund for Animal Welfare (IFAW) and Whale watching around the world: A report on its value, extent and prospects. *Int. Whale Bull.* 7, summer, pp. 1-5. 1994: Hoyt, E. (1995), "The Worldwide Value and Extent of Whale Watching," pp. 1-34. Whale and Dolphin Conservation Society, Bath, UK. 1985: Hoyt, E. (2001). "Whale Watching 2001: Worldwide Tourism Numbers, Expenditures, and Expanding Socioeconomic Benefits." pp. 1-158. International Fund for Animal Welfare, Yarmouth Port, MA. Until 1995, this was the only fatal whale watch accident. Then, all in the space of a year, in the Dominican Republic, the upper deck of a crowded boat collapsed after being hit by a wave, killing one tourist and injuring others, whereas in Kaikoura, New Zealand, a boat overturned, fatally trapping a person underneath. Whale watching is an international industry worth more than US\$2 billion globally and is currently the greatest economic activity reliant upon cetaceans. However, there is concern that whale watching is detrimental to the target species. In 2004, a review and comparison of international whale watching guidelines and codes of conduct from around the world found that one-third were regulatory, that is, legal requirements and non-voluntary, but two-thirds were entirely voluntary [95]. Most codes of conduct had regulations for minimum approach distances (e.g., 50-100 m or more), but most did not curtail especially invasive activities, for example, two-thirds had no proscriptions on feeding cetaceans and three-quarters did not prohibit touching cetaceans [95].