



Whale Watching in Europe

Aspects of sustainability

Leiden, May 2002

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Introduction

Whale watching, the observation of any of the 83 species of cetaceans (whales, dolphins and porpoises) in their natural habitat from any type of platform, has quickly developed as an alternative to whaling (Greenpeace, 2001). While commercial whaling is on a moratorium since 1986, whale watching is booming. This is not only the case in America and Australia, but also in Europe. In 1998 1.4 million people went whale watching in Europe and this number is still growing (Hoyt, 2001). Little is known about European whale watching, especially not on the sustainability of the sector. This report tries to raise awareness on this subject.

In the first chapter today's whale watching is compared with sustainable whale watching. The following questions are answered:

1. What aspects of sustainability should be integrated in whale watching?
2. To what extent are these aspects currently integrated according to literature?

In the second chapter whale watching is compared with other uses of whales and fishing. Two questions will be answered in the chapter, namely:

1. Is whale watching more sustainable than whaling, capturing whales and fishing?
2. Is whale watching an alternative for local fishermen and whalers?

In the third chapter an indication is given on which instruments can be used for making whale watching more sustainable. Answers on the following questions are provided:

1. Which methods are most likely to contribute to the sustainable development of whale watching?
2. Which desirable methods are currently used and which are not?

In the fourth chapter the operators' adherence to guidelines is measured. These questions are answered:

1. To what extent do operators adhere to guidelines?
2. Which guidelines are problematic in practice and why?

The most attention has been given to the fourth chapter, which was fundamental for this research. For this chapter NGOs, experts, tourists and primarily whale watch operators were interviewed. In this chapter an indication is given which guidelines are problematic for the operators to adhere to. Information sorted by operator is not included in this report, but is presented on the Coastal Guide to Europe (www.coastalguide.to); this information is tailored specifically to aid tourists' decision making.

The other chapters form an essential background to this research. Literature review was used to answer the research questions for these chapters. The text is meant to give an introduction to the themes but does not intend to cover them completely. Chapters are ended with the most important discussions, which are new beginnings for the next chapter.

The target groups of the information sorted by operator are primarily tourists and visitors. These results are presented in a popular way on the Internet, thus leaving out a lot of background information. This background information is presented in this report for professionals, students, tourists, operators and others interested in whale watching. This report should stimulate the discussion about the sustainable development of whale watching.

Chapter 1: Sustainable whale watching?

This chapter presents some benefits and environmental impacts of whale watching in Europe, as well as describing sustainable whale watching. When comparing the sustainable situation with present whale watching, some problems come to light. The method used to give this comparison is literature research. This does not intend to cover all, but tries to grasp the biggest problems.

Sustainable whale watching

Whales and dolphins intrigue humans because of their size, intelligence, social behaviour and mystique (Raymo, 2002). They seem to live a free and peaceful life in another world. Because of this human fascination for whales and dolphins and because the activity 'watching' seems relatively harmless, whale watching could be an activity where the benefits outweigh the negative impacts. Eventually whale watching could be sustainable. Following the World Tourism Organisation "sustainable whale watching meets the needs of present tourists and host regions while protecting and enhancing opportunities for the future. It is envisaged as leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support systems" (WTO). In this situation, local people benefit through job availability and income. Tourists benefit through education and entertainment. Researchers benefit from a research platform that the boat provides. All of them become conservation minded through the experience. Last but not least whales and their environment benefit through increased conservation measures. In this situation whales are watched, but the watching has no harmful impact on the survival of cetaceans and a minimal impact on their quality of life. The number of animals and their health increase. It is clear that whale watching provides many opportunities, but to what extent has this sustainable situation been reached?

Benefits

According to Erich Hoyt (an international whale watching expert) whale watching is now at least a 1 billion-dollar industry attracting 9 million participants world-wide each year. In Europe, the number of participants was 1.4 million (in 1998), spending €121 million and increases by 20% a year (Hoyt, 2001). There are probably around 200 whale watch operators in 18 European countries and territories, while there was only one in 1983. The first dolphin tour in Europe started from Gibraltar (Hoyt, 1994) and was arranged by a former fisherman.

Whales and dolphins, being charismatic animals, are excellent for marketing. Ask any shopkeeper which animal sells best (e.g. on a card, poster or T-shirt) and they will answer "dolphins". Many studies show that 'charismatic' animals are more worth alive, in tourist euros, than dead (Woods-Ballard). So whale watching and related activities also provide opportunities for local people to get reliable income. Often these locals are more experienced in the field because of their former jobs as fishers and whalers. The communities Andenes (Norway), Dingle (Ireland) and Húsavík (Iceland) have gained substantial benefits although there are many cases where the

benefits have gone to outsiders (Hoyt, 2001). Some fishing (and whaling) communities fail to take advantage of this new economic opening.

In some cases research is benefiting because whale watching offers a research platform. Killing whales is not needed for most research anymore. Important information, not only about whales but also other, wider facets of marine ecology are increasingly studied from a whale watch boat. This cannot be gained from the mere study of dead animals. The economic value for scientists of using a boat as a research platform has been estimated at 1150 Euro a day (Hoyt, 1994). However on some locations whale watch operators do not give sufficient opportunities for research. In addition it is suspected that some operators falsely promote doing research to be permitted to come close to the animals.

Some whale watch operators also have a considerable educational component with a naturalist providing information about cetaceans and their marine environment. However many operators give no information. The information provided is in many cases false or not helpful. The content of the educational message is important. In the general whale watch tour emphasis is almost exclusively and repeatedly on size, on mating habits and fertility, on distance travelled and time spent underwater. Only things that are seen are explained. Less visible and spectacular things like other species and historical, geographical and environmental contexts are insufficiently covered (Mühlhäusler & Peace, 1999). It is demonstrated that when people know little about whales and their environment, they show little understanding. Anthropomorphism and unrealistic expectations of feeding, getting very close to, and even touching wildlife are common. This is because marketing focuses on dramatic experiences. (Malcolm, 2000; Neil *et al*, 1999). An international workshop concluded that whale watching should have an educational component, desirably from pre-journey to post-journey (IFAW, 1997).

Some operators promote conservation goals (e.g. a cetacean sanctuary) or draw attention to whale watching regulations or codes of conduct. Most operators make almost no contribution of this kind. Occasionally some operators directly invest money in conservation goals.

Unfortunately, whale watching is currently under-performing on the non-commercial side. Hoyt estimated that in 1994 more than 75% of all whale watching was entirely commercial and other values were largely overlooked (Hoyt, 1995). This is a missed opportunity, especially because some operators have proven that these other values were compatible with commercial goals. Results from chapter 4 indicate that nowadays the situation in Europe is better, but clearly not all operators are performing well.

Negative impacts

There are operators who optimise all benefits. These benefits do not conflict; they are to a large extent compatible. There is an inherent conflict with whales and their environment however, because any ship in the water is interfering with the animals and their environment. For the sake of the whales the extent of this interference needs to be minimised. This minimisation of impacts is very difficult. It is often not possible in a financial way to adjust boats or to use desirable boats. It is often more attractive to stay close to the animals for a very long time. This is all about

minimising costs and maximising income. A lack of knowledge is another reason why impacts are not minimised. But research necessary to overcome this lack of knowledge is also harmful because this usually requires close approaches. It is clear that operators often have a short-term impact on whales, there is doubt however, on what behaviour leads to these impacts. There is also a lack of knowledge on whether (and to what extent) these short-term impacts lead to long-term impacts (IFAW, 1995). However the energy spent on responding to boats is part of an overall energy budget that must be spent on maintenance and reproduction of the individual (Duffus & Dearden, 1993). Alteration of this budget on a large scale could therefore probably have long-term effects. But the only clearly established link between short and long-term impacts has been found in Australia. Interactions (feeding and touching) that were seen as beneficial to humans and dolphins led to lower reproductive success for hand-fed dolphins (Arnold, 1997).

The sheer (and growing) number of boats could well be harmful to whales and their environment. Concerns have arisen about impacts such as noise, pollution and disturbance. In addition vessels have hit whales. Vessel strikes on sperm whales have been a particular problem in the Canaries (IFAW, 1996). In the UK there is ample evidence that harassment of cetaceans is a growing problem (Simmonds, 2000). But most impacts are not known. Rossiter, President of Cetacean Society International, said on this subject "Human impacts from whale watching tourism are like an iceberg, with most of the impacts hidden from view" (Rossiter, 1998). These are all reasons why international organisations as well as local authorities and operators have developed voluntary codes of conduct. Frequently operators are in heavy competition with each other to win the most tourists. This means, in the absence of rules, getting as near to the whales as quickly as possible to get the best views. Inevitably, in the absence of good information, tourists are most likely to choose these operators because they generally have more money to advertise and they provide more spectacular 'entertainment'. Close approach can disturb animals, but it could in addition lead to domestication. Whales get used to the presence of boats (and swimmers). This can have detrimental effects, because these animals become dependent on humans and sometimes become a nuisance when approaching humans for food and attention. In addition cetaceans that are used to approach boats are very easy targets for whalers.

Two factors increase concern about negative impacts of whale watching (McNie, 2001):

- Areas targeted have generally large concentrations of cetaceans. These high densities are often only found in areas used for breeding and feeding.
- Most publicity goes to endangered animals, so whale watchers are most curious to see these animals.

Sensitive populations are therefore likely to be targeted.

Discussion and conclusion

Economically whale watching is doing fine, but there is more to whale watching than economic performance. Income and employment for local communities, education, research and conservation are important social aspects of whale watching. Former Director General of IUCN Martin Holdgate linked local development with conservation by saying, "if wildlife becomes valuable for local people, they will have an incentive to conserve it" (Holdgate, 1992). The failure of fishing (and whaling) communities to

take advantage of this new economic opening is clearly a missed opportunity. It is to be regretted that many profits flow to outsiders.

If we want to develop a knowledgeable and conservation minded public, whales should not be promoted primarily as large, because if you promote it as 'big is beautiful' then you do not get a broad ecological view. One of the major metaphors of ecology is that life is a co-operation and big and small things all have an equally important role to play, which is in contrast with 'the survival of the fittest' and 'bigger is better' metaphor. Rutger Hauer said on this subject "Ecology is who's eating whom in life. Everything is either eating or being eaten". This is a very narrow (ecological?) view. But operators often advertise like this.

According to Mühlhäusler & Peace information should rather be on:

1. Impact of the boat
2. Long term perspective, history
3. Less visible, wider environment
4. Conflicts between local people, whales and their environment, and tourists. (Mühlhäusler & Peace, 1999)

The thing about whale watching is the connection with the wider environment; it is all interconnected. This is also an advantage above watching captive whales & dolphins. Captive animals are essentially different because they have lost the part that connects them with nature. To get a better education message, trips should be nature trips where whales are part of the story. An additional advantage will be that visitors have more realistic expectations; unrealistic expectations can lead to increased pressure on operators for 'bad' behaviour. The potential for education is not yet fulfilled.

More research is needed because we know very little about cetaceans and their environment. But research often requires close approach that can be harmful for the animals. The value of such research should be high; otherwise research can be no excuse to disturb whales.

The operator can also promote conservation goals or invest in them directly. Only occasionally operators make a contribution to conservation. Without this contribution the negative impacts on the whales outweigh the non-existent benefits for the animals. From the viewpoint of the whale these operators should be stopped, but when looking at this anthropocentrically compromises are allowed for human good. This means that possible impacts have to be avoided but at the same time compromises will have to be made for socio-economic benefits. But in the future, operators who provide no benefits except to them selves and who have a sub-standard environmental performance will need to be stopped. Other operators that are better, but not sustainable can be allowed to continue if whale watching proves to be the best option. Whale watching should not only be compared with the desirable, sustainable situation, but should also be compared with alternative options.

Chapter 2: a sustainable development?

A historical perspective gives attention to the sustainable development of the use of cetaceans rather than the development of whale watching per se. It is important to look at whale watching this way, because this stresses that whale watching is at least much more sustainable than whaling. Key facts about whale hunting and capturing were reviewed for this chapter. Especially facts that point towards a direct transformation from fishing and whaling to whale watching were noted.

Killing and capturing

Humankind has used whales intensively for more than 800 years. Around 1200 the Basques started with commercial whaling, they hunted the Northern Right Whale and they found a market for almost all parts of the whale's body. In the 17th century the English, Dutch and Americans started large-scale whaling. In the years from 1850 till 1870 a couple of technological inventions made it possible to hunt whales on a much larger scale than ever before. In 1925 the last constraint were removed, from then on whales could be processed on the ship. In the year 1930-1931 28.325 blue whales were killed and in 1963-1964 29.255 sperm whales. In twentieth century it became forbidden to kill certain species. In 1986 the International Whaling Commission issued a moratorium on whaling, but this was rather late: Most big whale populations around the world have diminished to about 5 to 10 percent of their former level (Carwardine *et al*, 1998-Whales, Dolphins and Porpoises). The only countries that currently hunt whales commercially are Japan and Norway. Iceland is seriously considering to resume whaling. For 2002 Norway announced the killing of 674 Minke Whales. To make things worse, pregnant mother whales are targeted because they are easier targets and provide more meat. This of course has a big impact on the population. Other countries like Russia and the Faeroes are allowed to go on with their 'traditional' whale hunt. Some of their methods are in fact very modern and there is no dependency on this kind of whaling anymore. In these whaling countries you could be served whale meat on your dish.

More than 100 hundred years ago the first bottlenose dolphins were captured for the purpose of entertaining people. Nowadays more than 25 species are being displayed in zoos and the like. A lot of animals die early in captivity, others are generally unhappy. In addition removals from the wild can have serious implications for the continued viability of the targeted populations. The capture of whales and dolphins presents a serious risk to the welfare and survival of the animals (Carwardine *et al*, 1998).

International trade in cetaceans is strictly controlled by CITES and they can only be imported into the European Union for very exceptional reasons. However, they still are captured from the wild and imported into the EU for public display. Only recently policy begins to refuse this import of captured animals. Portugal has refused an application to use captured bottlenose dolphins from West Africa in the Lisbon Zoo. Excellent opportunities to watch this dolphin specie in the wild are available very close to Lisbon. According to WDCS forty European countries display captured whales (WDCS.org).

Even some of these captured whales and dolphins were stars on the screen. Six different bottlenose dolphins played the famous Flipper's role. At least one of them

was known to outright hate the filming; she attacked her trainer. Keiko the Orca starring in the Free Willy movie is back in Iceland after spending 19 years in captivity. They are preparing his full release, but Keiko is still dependent on human attention; he does not hunt fish. Years in captivity have clearly blunted his natural instincts.

It is clear that captivity still has detrimental effects on the animals, although regulation efforts have minimised these effects.

A desirable and feasible alternative

With killing and capturing decreasing, a new opportunity had to be found in whale watching. It is one thing that killing and capturing is not generally accepted anymore. But it is another thing that watching is on many fronts a very good alternative to whaling and many former whalers and fishers use this alternative. Whalers and other fishers now have excellent opportunities for alternative jobs with a much better future. Increasing effort is needed for whales and fishers to catch the same number of animals because numbers are declining. For whaling this resulted in a moratorium, fishing still continues but signs indicate a complete collapse of fisheries by 2010 (www.newscientist.com, 2002). Whales are increasingly accused for having a negative impact on fishing stocks and are used as an argument to resume whaling. Iceland and Norway feel that whaling is a basic principle for marine resource management (Björgvinsson (2001); Greenpeace briefing). In reality whales have a far smaller impact on fishing stocks than fishers have, so fish eating whales have more and more trouble finding food. Thus besides having less food, they are also killed by their competitors. The choice is between depletion of whale and fish stocks, and a shift away from fishing and whaling. Tourism in general and whale watching in particular provides new livelihoods for many fishers and whalers. Fishing boats are often used to take tourists on the sea and watch the wildlife and its environment. Former whaling communities in for example Norway, Ireland and Iceland have a larger income from whale watching than whaling ever provided. In countries like the Azores former whaling stations are now used as a tourist base. Whalers now have jobs as skippers on whale watch vessels, because of their experience they have higher success rates for finding whales. Whaling does not seem compatible with whale watching. Not only is a large population more attractive for whale watchers, but also at least one survey indicates that whale watchers rather don't go watching in countries that kill whales. (WDCS.org). In addition whale watching can lead to whales approaching boats, which makes them easy targets for whalers. Because of the public opinion against whaling, markets become smaller and smaller. It is clear that whale watching does the opposite. More and more people go watching each year; this business is booming. However in Japan a lot of money is paid for whale meat. This means that whaling still is commercially viable and will not stop naturally (except when the stocks are depleted). Scientific whaling does not seem necessary anymore for most research. Whale watching vessels are often used for researching whales, their behaviour and numbers. In addition much is learned in watching whales in relation to their wider marine environment. A recent development in research is a method to use DNA testing on bodily waste for determining the stomach contents. Arguments to kill whales for these research reasons are therefore getting weaker and weaker. Economically and scientifically whale watching seems much more interesting than whaling, let alone the environmental and ethical

arguments for killing whales. The few people who still benefit from whaling clearly have opportunities in the whale-watching sector and should take this opportunity. Even in Norway switching to whale watching happened as early as 1987. Kromhout, a whaling boat from Lofoten, was hired to take out tourists. The whaling boats, with crews and a crew experienced in finding and approaching whales, were considered the best choice for the trips. One of the ideas was to bring an alternative income for the whalers, who had stopped whaling after the moratorium in 1986. But the big reason is the economic downturn in many smaller coastal communities. These communities needed to switch from reliance on fishing to tourism (Hoyt, 1995). Tourism provides a future for these locals; it is more sustainable in a socio-economic way. In addition there seems to be a general consensus that correctly managed tourism may well be more ecologically sustainable than many other industries in coastal areas (Hall, 2001).

Discussion and conclusion

The switch from whaling to whale watching is happening. Although information on this subject is scarce, there are many examples of fishers and whalers who made a successful switch to whale watching. It is clear that direct impacts from watching are less than from capturing or killing, but it all depends on the scale. Capturing or killing one whale has probably a smaller impact than disturbing hundreds of whales. If the quantity and quality of whale watching operators will not get out of hand, it is a desirable alternative. Whalers and fishers have the opportunity for a more sustainable livelihood. In addition whale watching provides a desirable alternative for killing and capturing whales for research purposes. We can conclude from the above that this switch is a sustainable development, but that whale watching is not yet a sustainable use of cetaceans. Whale watching should not get out of hand; measures should be taken to prevent this.

Chapter 3: Developing whale watching in Europe

The method used for this chapter is literature research. Especially literature on what kind of regulations and guidelines do exist. And information on what stimulation measure usable by the EUCC is likely to have effect.

Regulation

In the light of this perspective it is clear that whale watching is far too valuable to prohibit. With the growth of the number of whale watch trips it becomes clear however that there is a need to regulate the operators. Because of the differences between species and geographical conditions worldwide, international regulations are not possible because they would not be appropriate for all species and situations in all countries (WDCS.org). Sperm whales behave for example very different from the more commonly watched baleen whales and this is relevant in the way whale watching should be conducted (IFAW, 1996). There are however certain elements that should be used as a minimum in each case. Several bodies including the IWC as well as conservation organisations like the WDCS and Greenpeace have developed minimum guidelines aimed at providing a framework for local/national regulations (see appendix 3). To be effective regulations must be established at a national level. Regulations are a compromise between the needs of cetaceans and the desire of people to interact with them. The goal of the regulations is the sustainable development of whale watching and do not only regulate operators' behaviour but also the overall size of activities (IFAW, 1995). A good example of whale watch regulations is New Zealand, where operators need to be permitted. In the Azores and the Canary Islands there are now regulations, in other countries they have yet to be established (Carlson, 2001). These regulations are on some principles less strict than minimum guidelines. In addition to national regulations the habitat directive provides a conservation tool in the form of Special Areas of Conservation (SAC). A few SACs have been established, for example in the Shannon Estuary (Ireland), the Ligurian Sea (Italy) and in the North Sea off the Islands of Sylt and Amrum (Germany) that have regulations on a smaller scale. In most other areas no regulations exist (except perhaps voluntary codes of conduct) and operators can continue with 'business as usual'. Most operators have no commercial motivation to adhere to the many voluntary codes of conduct. However through the promotion of minimum guidelines and responsible operators, they could be stimulated to act in a more sustainable way.

Stimulation

The question is to what extent stimulation can help the sustainable development of European whale watching. The most likely way to stimulate an operator is making it clear that it is good for business to be responsible. Good for business means for operators getting a lot of tourists. However this stands or falls with the sensitivity of tourists for operators' environmental performance.

Research (for the Ministry of Economic Affairs) indicates that 78% of the consumers want a lot more information on sustainable tourism and nature based recreation. Many consumers say this information is not available or not accessible (Beke *et al*, 1990). There is a discrepancy between the interest in sustainability and the (lack of)

information provided on the subject. Without this information it is very difficult for the consumer to act responsibly. The WDCS and Hoyt have developed simple rating system on operators' quality including information on whether a naturalist is available, whether education and research are supported and whether the operator is well equipped (www.wdcs.org and Hoyt, 1998). Other whale watching information for tourists does hardly touch the subject, let alone compare operators on their performance. Information about prices, seasons and species are however frequently mentioned. Questions as what whales you want to see, and how much time and money you have for this are important, I do not want to deny that. But there are other values at stake. Among them is the operators' environmental performance.

For a sustainable development it is very important that a consumer (here: tourist) can choose the option that stimulates such a development. Likewise it is important to blacklist the operators who hinder a sustainable development. This information has to be accessible on the web. Ultimately this can lead to a second objective, namely stimulation for operators to become more sustainable. Stimulation can theoretically occur because of two different sets of reasons:

- For some operators it is the first time they are confronted with certain guidelines, this could lead to eye-openers and new policy. Other operators are confronted time and again with guidelines; this could be the final pressure convincing them to make a change of policy.
- It is smart in an economic sense. Operators perceive that it is good for business to be 'green'. Or operators with low marks get fewer tourists.

It is clear that there is a big and growing market for sustainable tourism. When consumers have to choose between two comparable destinations, and only one has an (high) environmental performance mark, almost everybody will choose the marked destination. Even a cost increase of 1% will not stop consumers choosing the high marked destination; 80% will still choose this destination (Harmsen, 1995). Companies with the green tourism label had occupancy of 10% higher than non-members (Proctor pers. com, 2002). One-fourth of the people totally avoid using services of companies that they consider having a poor environmental record (MORI, 1996). If there is sufficient accessible information, tourists generally choose a responsible operator above a less responsible one. The Dolphin Space Programme, an accreditation scheme for whale watch operators in Scotland got a lot of publicity and attracted more tourists. Whale watchers are perceived to be more sensitive to performance marks. Studies indicate that whale watchers are typically well educated, are from upper-socioeconomic groups, and are strongly conservation minded (Orams, 2001). These people generally use Internet a lot. Over 65% of alternative travellers, with approximately the same characteristics as the whale watchers, use Internet for travel planning (GoNOMAD.com, 2002). An Internet directory, listing operators with environmental performance marks, is therefore likely to be an effective tool or method.

Discussion and conclusion

Methods used to reduce negative impacts are mostly voluntary codes of conduct with vague guidelines. Because of the voluntary nature of these codes of conduct, they are often not a motivation to observe the guidelines. Regulations that are enforced can motivate operators. These regulations are in many cases not strict enough; some

minimum guidelines are stricter. This is because these regulations do not take sufficiently into account the precautionary principle. In addition it is difficult to regulate because of lack of knowledge on local conditions and carrying capacity and on the species observed. Now slowly regulations begin to develop, but only when it became clear that trips were harmful for the animals. In the future it has to be the other way around; regulate before getting into harms way and not after. In the absence of (sufficient) regulations other measures are necessary. Not based on penalties for doing wrong but based on 'carrots' for doing right. Operators are most sensitive for measures affecting their income, which in turn depends on the number of tourists participating in their trip. Thus: if there is a strong link between operators' environmental performance and the number of participants they get, operators will be stimulated. This link exists but tourists cannot execute their wish for the sustainable trip because they have absolutely no information about operators' environmental performance. This information should be provided. In addition more should be known about the validity of guidelines. They will only be implemented when there is sufficient proof and support. Operators should be helped and stimulated to overcome the problems associated with adhering to guidelines. However, unsustainable operators who are not open for advice should be stopped.

Chapter 4: Adherence to guidelines

It is clear that there is a need for information about the sustainability of operators. Tourists have no means to choose an operator through sustainability criteria. Therefore we need to compare operators on the question: "to what extent does the operator adhere to minimum guidelines on whale watching." This information will be available on a website for tourists. In this chapter we provide more general answers on "to what extent do operators adhere to minimum guidelines and to what extent are minimum guidelines adhered to".

Methods

It is clear that environmental performance marks in whale watching are filling a niche and will probably influence tourist choice. These marks need to cover most of the sustainability problems associated with whale watching. Furthermore there should be support for the scope of the problems used as criteria for evaluation. We therefore decided to use existing guidelines on how to whale watch as criteria. It will become very confusing if we would develop new guidelines, because there are already many workable codes in the business. We used four codes of conduct with a global outreach, based on research or judgement of foremost whale watch experts, namely:

- Greenpeace (2001): *Principles and policy guidelines on whale watching*.
- Hoyt (1998): *whale and dolphin watching, minimum key points*.
- International Whaling Commission (IWC, 1996): *General principles for whale watching*.
- The Whale and Dolphin Conservation Society (WDCS, 2001): *Cetacean watching code of conduct*.

In appendix 3 the codes of conduct are compared. Guidelines applicable for operators can only be used, because some guidelines are not about the operators (core) business. These are local or national authority's responsibility or these are not applicable to ask all operators. So this excluded assessment of whale population (characteristics) and possible impacts, time outs and restricted areas, land-based whale watching, co-operation with science and monitoring. Guidelines that were not mentioned often and in addition were vague and doubtful were also not included. This excluded keeping sight of whales or letting whales see you.

The other guidelines are used for the evaluation. The clearest formulation is used. In some cases a clear formulation was not provided by the codes. For the theme 'providing written information' the text was simplified. The guideline on mothers and calves is vague, but nobody seems to agree on what exactly that 'special care' means. It is because of the consensus that some special care is needed that we have included this vague formulation.

The marks give an indication of how responsible an operator acts. Operators generally observe most of the minimum guidelines. If these guidelines are not always observed we describe which guideline is not met, sometimes there is an explanation sometimes not. We can expect the explanations in the following categories:

1. It is difficult or impossible to meet the guideline
2. They have serious reservations on the guideline
3. Other (conflicting) goals have priority, some noble some not.

These explanations make it easier to understand why minimum guidelines are not met, however the harmful impact on the whale is the same as without an explanation and thus the marks are the same. Who is to say that research benefits outweigh additional short-term impacts on the whale? It surely depends on the value of the research. Some operators could well have a larger contribution to sustainable development while having a lower adherence percentage. Sustainable whale watching should of course be more than adhering to minimum guidelines. Without benefits whale watching could never be sustainable, because of the inherent negative impacts of the activity. Therefore I touch this subject by mentioning the conservation, education and research benefits the operator seems to provide. Literature, operators' feedback and operators' promotional material is used to give this indication.

To obtain the information operators were the main response group. Only operators have sufficient knowledge to provide answers on all questions. International NGOs and experts on whale watching are not able to evaluate all operators and in addition they are often not able to answer all questions. Local NGOs and experts could also not answer all questions on all operators. In addition they were often involved in whale watching in such a way that they were biased. Tourists and visitors are no experts, so it is very difficult for them to give extensive and accurate feedback. If tourists were able it would be very difficult for each operator to get in contact with at least one visitor. Fieldwork would be the best way to evaluate operators accurately and objectively, if done by a knowledgeable person with tools to measure distance. This would however be very expensive and take a lot of time. Operators are therefore the only realistic option to provide most of the data. NGOs, experts and tourists are whenever possible asked to contribute.

The biggest problem is to get objective answers. Operators have interest to promote their own business; they are therefore not likely to answer 100% honestly. The answers from operators will be more positive than in reality. But the question is to what extent they are more positive. When interviewing the operators, the following measures to reduce 'dishonesty' were taken:

1. Stress that it is important to give (negative) feedback on the guidelines. Operators have insight in practical problems and conflicts linked to the guidelines, or they have reason to believe that a guideline is not desirable for the animals. An overview of comments is necessary to talk about the guidelines in a practical way.
2. Use more categories. It could well be that there is a tendency to give socially desirable answers not far away from the truth. If you can only choose between yes and no when answering "do you always adhere to the guideline?", a socially desirable answer could be exactly the opposite. If you use more categories (always/frequently/occasionally/never) a socially desirable answer will be at least closer to the truth.
3. NGOs and experts are asked to give feedback. They give second opinions on operators and pick out unrealistic answers.
4. Visitors' feedback is also used so they have to provide realistic answers. Tourists will certainly be angry when discovering that the operator is in reality quite different. They are more likely to report negative impacts when their trip did not meet expectations.

Whale watching in Europe: aspects of sustainability

When negative feedback on operators is received which makes the operators' answers questionable, operators' answers will of course not be used. Answers will therefore be quite realistic although not 100% accurately. Therefore we use broad categories in the Coastal Guide so that it does not suggest extremely accurate answers. The marks are based on minimum guidelines and not on actual impacts. There will be a small discrepancy between the two, but adherence to the guidelines will be a good indicator of impacts. There are cases in which guidelines can be broken without having a harmful impact, but that is no case against minimum guidelines. Strict guidelines, without 'ifs', make things clearer and give credit to the precautionary principle: do observe the guidelines or else there may be harm. Sometimes even observing the guidelines is not sufficient, because of specific circumstances. In these cases stricter rules must apply.

Checklists, based on the guidelines, were sent to European whale watch operators (see appendix 4). Because of the rapid growth of the business it is not clear how many European whale watch operators there are at the moment, especially because not every operator calls himself a *whale watch* operator. There are different databases on the Internet that provide contact information on European operators. The WDCS operators database, the whale guide and the whale watching web (Internet links in appendix 1) provided a lot of information as well as Erich Hoyt's book 'whale and dolphin watching.' During the research other operators were spotted. The checklists were e-mailed to the operators whenever possible; those without e-mail were contacted through conventional mail. E-mail was chosen because replying on e-mail is a lot easier. To get a reasonable response it was also agreed that questionnaires could better not be used. Therefore we used simplified checklist, which could be filled in very fast. Operators were however invited to write down additional considerations.

The results are presented on a website for tourists (www.coastalguide.to). Only information is presented that tourist need; this report is written for people interested in the background. Operators in the tourists' directory, sorted by region, are evaluated through the guidelines. The adherence percentage to the guidelines is based on operators' answers:

- Always: 100%
- Frequently: 67%
- Occasionally: 33%
- Never: 0%

Such a score was given for each guideline and then divided by the number of guidelines filled-in. Because percentages suggest very accurate evaluation, it was decided to use symbols. In this table it can be seen what symbol is used for which adherence percentage.

Adherence to the guidelines	Environmental performance mark
95-100%	● ● ● ● ●
85-95%	● ● ● ●
75-85%	● ● ●
65-75%	● ●
50-75%	■

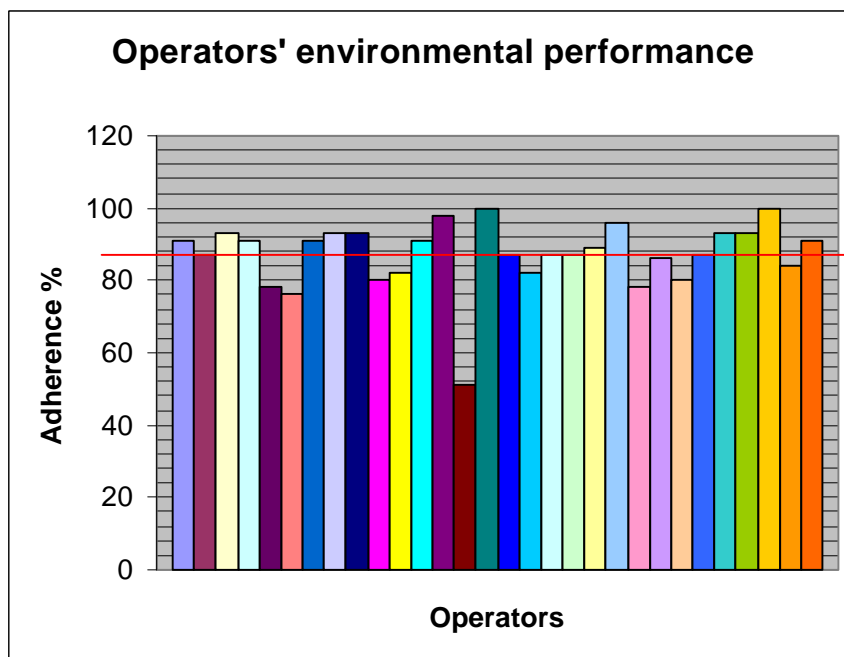
Lower than 50% or repeated negative feedback



Results

In this chapter the adherence to the guidelines is described in a general way. Results per operator are presented on www.coastalguide.to, you are invited to take a look. 138 European checklists were sent over e-mail and mail to local operators and also to tour operators arranging trips in other countries. In some cases operators were contacted twice, because of co-operation between them. We received 30 filled-in checklists. This is 22 percent of the checklists sent. It was clear that response by e-mail was much higher. Postal addresses, especially from the Canary Islands seemed out-dated. In addition more effort is needed to respond by post. Operators not reached still have the opportunity to fill in a checklist on the website. Three operators responded that they did not want to fill in the checklist. It is clear that the highest response rate is from countries with few operators; the non-response in typical whale watch territories was higher, especially in Norway and the Canary Islands. It was also noted that there was no response from France and Dingle. The non-response from Dingle is remarkable, because 3 out of 3 operators contacted from the other major whale watch location in Ireland, the Shannon Estuary, responded. Dingle whale watching is known for questionable operators' behaviour, and therefore we suspect that they have something to hide.

The mean adherence to the guidelines is 87%, ranging from 51 to 100%. When excluding the 51%, the variance is not high. The operators' adherence to the guidelines is summarised by the following diagram.



The adherence percentage suggests that whale watching is performing quite well in Europe. This is supported by whale watching expert Mark Carwardine, he wrote "Although whale watching is fairly new and still developing in the region, many of the

tours on offer are world-class, combining recreation, education, science, conservation and good business sense to provide a high quality service" (markcarwardine.com).

But we cannot say that these results are representative for European whale watching. Operators who respond are generally the more responsible operators, who can promote themselves without losing credibility. Also operators who are whale watching primarily because of research and conservation purposes co-operate more because they support the objectives of this research. We did not receive checklists from locations and operators on whom we have had negative reports.

Feedback was received about the harmful impact of several operators and on several locations. This feedback is however not sufficient to give a low environmental performance mark to the relevant operator: we need at least 5 filled-in feedback forms to give a yellow or red card to an operator. People clearly have trouble noticing negative impacts. People who have sufficient knowledge often do not want to give negative feedback for they want to remain neutral. There is a culture of not telling operators' names, even though their own name will remain confidential.

Adherence to guidelines

It became clear that the adherence percentage varies highly between guidelines (see

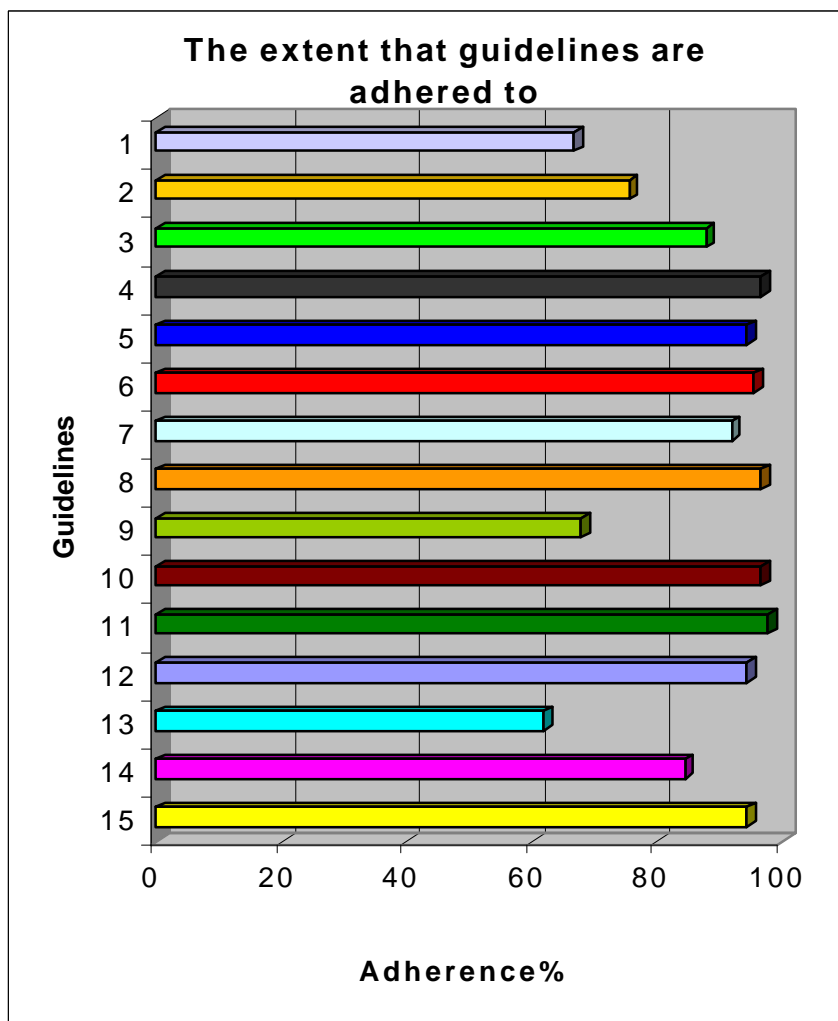


diagram 2). For each guideline an explanation is given for the adherence percentage.

1. Do not go closer than 100 meter.

This guideline is met 66.8% of the time. Often operators approach closer for the following reasons:

- a. Regulations and codes of conduct are less strict on this than the minimum guideline. On the Canary Islands for example 60 meter is used.
- b. Research requires close approach. Research purposes include photo identification and the undertaking biopsies.
- c. When dolphins or porpoises are the target group, operators generally say that they do not know where the animals appear. Operators put the boat in a position where dolphins are likely to approach them.
- d. It is of course more attractive to get close to the animals and therefore tourists often want to get closer. Although the operators did not mention this, it could well be the most important reason.

2. When there are 2 or more boats whale watching: do not go closer than 200 meter.

This guideline is met 75.6% of the time. Explanations are often the same as the above. This percentage is higher because in many locations situations with two or more boats do not occur on a regular basis. On Tenerife this is problematic because often more boats are watching at the same time and regulations allow a closer approach than the minimum guideline.

3. Approach whales and dolphins slowly from behind and to the side, not head on or directly behind.

This is met 87.8% of the time. Problems exist with dolphins and porpoises because of their fast movement. Dolphins approach boats out of curiosity and bow ride if the boat moves.

4. Boats must reduce speed and avoid sudden changes in speed when in the vicinity of cetaceans.

In 96.7% of the cases this was done. Operators agree on this guideline and have no problem to adhere to it. But we have to note that reducing speed is only sufficient when a low base speed is used.

5. Never move between, scatter or separate dolphins. If unsure of the movements simply stop and put the engine into neutral.

This guideline is met 94.5% of the time. In some cases this can be difficult because operators generally are unsure of the movements and they can't let the engine stay in neutral forever. Large sailing ships have trouble with this because they cannot stop quickly. But these are only some exceptions; most of the time there are no problems.

6. Never try to swim with whales.

This guideline is met 95.6% of the cases. It is agreed that this should not be done. There is doubt about safety and disturbance of the whales, but it is clear that it is often not safe to swim close to whales.

7. Never try to swim with dolphins.

In 91.9% of the time this guideline was met. In for example the Azores swimming with certain species is allowed. There are concerns about safety, but not so much as with whales. There is much discussion about this guideline. A lot of people have no objections because not much is known about the impacts of this popular activity. But recent research seems to indicate that, in some areas heavily targeted by commercial swim tours and other human activities, cetaceans are actually leaving their traditional habitat in favour of quieter areas (WDCS.org).

8. Special care must be taken with mothers and young.

This guideline is met 96.7% of the time. Operators do agree that some special care has to be taken and are more careful. In a few cases this is not met. Reasons include probably the demand to see them and questions about what this special care must be.

9. Spend no longer than 15 minutes near the animals.

This guideline is met 67.9% of the time.

- a. Codes of conduct and regulations are less strict on this than the minimum guideline. In the Shannon Estuary for example 30 minutes is used.
- b. Research requires spending more time with the animals.
- c. When dolphins or porpoises are the target group, the animals occasionally surround the boat. Then it is of course not desirable to move away.
- d. A reason not mentioned by the operators is the tourists demand to stay with the animals.

10. Do not dispose of any rubbish, litter or contaminants at sea.

This is met 96.7% of the time. Except for some accidents this guideline is always met.

11. Do not feed cetaceans.

This is met 97.8% of the time. The guideline is this often adhered to because of the clear research results. These results indicate a long-term impact on the reproductivity of the animals.

12. Reduce the production of potentially disturbing sounds as far as possible and avoid sudden changes in noise.

In 94.5% of the cases this is done. There is general agreement that cetaceans are sensitive to motor and sonar sounds. But it is not agreed what noise level and frequency is harmful. When financially possible noise level is minimised.

13. Vessel design should minimise risk of injury to cetaceans.

In 61.9% of the cases vessel design does minimise risk, in most cases through the shrouding of propellers. In the other cases this is not accomplished. This is not because operators do not agree with this guideline, but because of financial reasons. It is a big investment to adjust boats or even to buy new ones and it seems commercially more attractive to use fast, harmful boats. It is also worrisome that some operators do not know whether the propellers are shrouded, and which other aspects of vessel design are important.

14. A naturalist should be on the boat to provide information.

In 84.5% of the trips some kind of naturalist is on the boat. In some cases this naturalist or biologist is a professional in other cases an amateur. An operator noted that getting a good naturalist could conflict with maximising local benefits, because able naturalists speaking many languages are frequently hired from abroad. This is no structural solution because foreigners often leave after some time. The best option is to train local guides. Trips with a broader perspective than cetaceans do often not use naturalists, because they say that they are only useful for a small part of the trip. It is however important to give commentary on whales and their contexts before and after the sightings, because otherwise the commentary is likely to be superficial.

15. Provide tourists accurate and educational guides and books.

On 94.5% of the trips some kind of written information is given. The quality and scope of the material differs a lot. Operators agree that this is important for commercial, conservation and educational goals. In the few cases where no material is provided, we deal with relatively new operators who have planned it for the future.

Conclusions and recommendations

Discussion and conclusion

The results indicate that tourists can choose from a reasonable amount of responsible operators. Although seldom all guidelines are observed, there are many European operators who have an eye for minimising impacts, as well as education, conservation and research. However, because of lack of knowledge and regulations some operators can still behave badly. There are operators who have a harmful impact, because they have only eye for short-term economic benefits. Most operators do have trouble to always observe all the guidelines. Reasons include that it is difficult to adhere to a guideline or that it is conflicting with other goals. Less strict regulations when compared to the minimum guidelines are also troublesome. All these reasons make it easier to understand the failure to always observe the guidelines, but that does not make these reasons valid. When operators shift their priorities to adhere to the guidelines, performance will be much better. It is positive however that most operators seem to agree that codes of conduct in general and these minimum guidelines in specific are to be adhered to as much as possible.

Recommendations

For NGOs

International NGOs with expertise on the subject should conduct more field research. This could give a more accurate picture of the sustainability of the sector. Because of time and money limits it seems advisable to go to the most intensive used locations. North Scotland, Southwest Ireland, Tenerife, the Azores and the Strait of Gibraltar are locations where a lot of operators can be evaluated with relative ease. These locations plus Norway and Iceland make up more than 90 percent of all European operators. Local NGOs should evaluate the less intensively used places. When participating in whale watch trips, binoculars, hydrophones and a laser rangefinder (to measure distances) would be very useful. Research should be undertaken in summer months and should include interviewing tourists, local people/NGOs and operators. In 1999 a usable report has been written on how to conduct a cost-benefit analysis for whale watching (IFAW, 1999). More than four years later this still has not been done for any location.

For EUCC

Continue to raise awareness on the subject. More operators should be evaluated, and this information should be communicated to tourists. Evaluation should include operators' response as well as visitors' feedback.

For Tourists

- Use a responsible whale watch operator.
- Do not push an operator to the limits.
- Keep eyes open
- Report non-compliance to us and local authorities

For whale watch experts

- Take action to stimulate the sustainable development of whale watching. Now too often things are investigated time and again before taking action. They should take into account the precautionary principle.
- Research:
 - It should become known what kind of behaviour leads to which impact.
 - More should be known about cetaceans' movements and numbers as well as behaviour.

For operators

- Always adhere to the guidelines. When there is a reason not to, please make sure the reason is a good one.
- Get to know all about cetaceans and their environment.

For authorities

- Develop training courses for operators and naturalists.
- Develop and enforce regulations. These regulations should include at least the minimum guidelines plus an adaptation to local conditions. Responsible operators should be permitted, and other operators should be excluded. There should also be a limit to the number of operators and the frequency of trips. This limit should be based on the carrying capacity of the whale and his environment. The regulations of New Zealand can be a good model.
- Stimulate the sustainable development from fishing and whaling to tourism and especially to whale watching

For whales

Live by the precautionary principle because you do not know when a bad operator turns up.

Acknowledgements

This report is one of the results of my internship at EUCC – The Coastal Union from November 2001 to March 2002. A whale-watching guide for tourists was also developed on the Coastal Guide to Europe (www.coastalguide.to) and an article for the magazine Coastline was written. This report is about whale watching in Europe and tries to raise awareness on some aspects of sustainability.

I would like to thank a few people for shaping this project. First I would like to thank Albert Salman, EUCC's secretary general, for guiding me through this project on a weekly basis. Secondly I would like to thank Hans van Zonneveld, from the University of Amsterdam, for helping me focus on the red line. I also would like to thank all the people at EUCC for making me very welcome. Finally I would like to thank my girlfriend who supported me although she is far away in India.

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Appendix II: Glossary of key terms

Cetaceans

A scientific order of various aquatic, chiefly marine mammals characterised by a nearly hairless body, anterior limbs modified into broad flippers, vestigial posterior limbs, and a flat, notched tail. Usually divided in whales, dolphins and porpoises.

A more scientific distinction is between baleen (Mysticetti) and toothed whales (Odontocetti).

The text often mentions whales or animals, when talking about cetaceans.

Code of conduct (voluntary) & Guidelines

A set of principles that operators take into account voluntarily. Together forming a code of conduct, individually a voluntary guideline.

Precautionary principle

"When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically". It includes taking action in the face of uncertainty; shifting burdens of proof to those who create risks; analysis of alternatives to potentially harmful activities; and participatory decision-making methods" (Eco-Compass).

Regulations

Rules issued by governmental agencies. Regulations have the force of law.

Whale watching

Watching cetaceans in the wild. Almost invariably, whale watching is conducted from a platform (e.g., ship, shore, airplane). The definition includes commercial, scientific and educational whale watching and opportunistic amateur whale watching. The last one is not covered by this report.

Whale watch operator:

An organisation or company that offers outsiders (tourists, volunteers etc.) the opportunity to watch cetaceans in the wild. Watching cetaceans is not necessarily the primary goal of the trip.

Sustainability (and sustainable development)

The World Tourism Organisation has applied this concept to tourism:

"Sustainable tourism (development) meets the needs of present tourists and host regions while protecting and enhancing opportunities for the future. It is envisaged as leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support systems" (WTO).

In the sustainable situation economic, social and conservation benefits are not necessarily maximised. They are optimised to fulfil needs. Quantity & quality of flora & fauna should be maintained not only for future generations but also for the environment itself.

Appendix III: Guidelines compared

	Greenpeace	Whale watch survey (Hoyt)	IWC	WDCS
Title	Principles and policy guidelines on whale watching –Minimum rules of operation	Whale and dolphin watching: the best way to look at cetaceans -minimum key points boat operators	General principles for whalewatching	WDCS Cetacean watching code of conduct
Limit of approach	Yes, not quantified	100 meter		100 meter, 200 if another boat is present
Direction of approach	Appropriate angle and avoid rapid changes	From behind and to the side, no sudden changes	Appropriate angles and no head-on approaches	Steady direction
Speed of approach	Reduce speed and avoid rapid changes	Do not make sudden changes of speed	Maximum speed relative to cetacean	Slow ‘no wake’ speed
Observation	Never split up, encircle or pursue	Do not charge, chase or split up. No more than 2 or 3 boats	Do not pursue, head off, encircle or split up	Never drive head on to, move between, scatter or separate. If unsure of their movements simply stop
Swimming, touching	No new ‘swim with’ programmes should begin before the IWC has finished establishing its guidelines	Do not reach out to try to touch		Never try to swim with cetaceans for your safety and theirs
Mother and calf	Do not approach too closely, except when proven otherwise		Special care	Special care
Maximum interaction time	Based on the number of boats and the need of rest for whales	Limit the time for each boat	Regulate frequency and length of exposure	15 minutes
Rest areas and time outs	Rest areas or time outs		Closed seasons or areas	
Noise	Noise onboard should be minimised	No sudden changes in noise	Reduce noise and rapid changes in noise. Special care with low and high frequency sounds	
Feeding	No feeding	No feeding		
Pollution		Do not throw litter into the water		Do not dispose of any rubbish, litter or contaminants at sea
Ship design			Regulate size and design. Shrouding of propellers.	

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Detectable boats			Do not eliminate all sounds. Special care in rough seas	
Tracking whales			Operators should be able to keep track of whales during an encounter	
Land-based whale watching	Communities should try to develop land-based WW-components with educational display materials			
Assessment of whale population (characteristics) and possible impacts	Full EIA		Must be implemented as an early and integral component of management	
Providing written information			Provide accurate and informative material. Encourage development of realistic expectations	
Providing vocal information	A naturalist provides accurate background information on the target species, the ecosystem and other species.			
Training	All operators and naturalists must undertake basic training in the biology and ecology of target species		Develop training programmes for operators and crew on target species, WW operations and the management provisions in effect	
Co-operation with science	Encourage co-operative relationships between the industry and science			
Monitoring	Regulations must be enforced by the permitting authority		Monitor the effectiveness of management provisions and modify them as required	

Appendix IV: Letter and checklist

Dear Sir/Madam,

EUCC - The Coastal Union is researching the development of whale (cetacean: whales, dolphins and porpoises) watching in Europe. The EUCC is dedicated to the conservation and sustainable development of Europe's coasts. Our mission is to gather and provide information on this subject. In this context we would like to provide tourists information about whale watching.

Today, it is recognised that whale watching is a good alternative to whaling. Whale watching is non-lethal and has many socio-economic benefits. It is important for the sake of the whales, the environment and the people (among them operators) that this development is sustainable. This means that impacts on the whales and their environment must be minimal. Organisations as the Whales and Dolphins Conservation Society (WDCS), Greenpeace, the International Whaling Commission (IWC) and whale watch researcher Hoyt have developed guidelines to minimise possible negative impacts. We want to know which guidelines are serving their purpose well in practice. We would like to know to what extent you observe these guidelines, so we kindly ask you to complete the enclosed checklist (see attachment). If you offer trips in more than one region or country, please copy the checklist and complete it for each different location as accurately as possible.

We are also very interested in the question why you perhaps not observe a certain guideline. There could be many reasons for this, for example that you find them inapplicable. Your considerations could lead to improved guidelines or stimulation of the whale watching business. This will help our common goal: developing a successful and sustainable whale watching business.

Some operators already have or observe local guidelines. There are even some countries that give permits to operators. We would appreciate it if you inform us if this is the case with your company/organisation. If you can send us a copy of those guidelines or regulations, we would be very happy to receive it. If you think that a guideline from the checklist makes no sense please send us information supporting your statement. Other information like a brochure is also very welcome.

Additionally to this research environmental organisations will be asked to give an opinion on their experience of your trip. All the operators who submit the questionnaire will be highlighted with information on the Visitor's Coastal Guide (VCG, our website for tourists) and possibly other media and websites. For each operator we will specify the information received from this checklist. Visitors of the website will be invited to give us feedback on their experience.

Please return the checklist by before 17 January. If you have problems completing the checklist or if you have questions, please do not hesitate to contact me. Thank you for helping us to provide tourist and other visitors with good and accurate information!

Best Wishes for 2002!

Wouter Egas, EUCC-The Coastal Union

Company/ Organisation name:

Location:

Website (if you do not have one please send a folder):

Answer for each guideline the following question:

how often do you observe the guideline?

Guidelines for observing cetaceans	Always	Frequently	Occasionally	Never
1. Do not go closer than 100m(300feet)*. (WDCS)				
2. When there are 2 or more boats whale watching: do not go closer than 200m* (WDCS)				
3. Approach whales and dolphins slowly from behind and to the side, not head on or directly behind (Hoyt)				
4. Boats must reduce speed and avoid sudden changes in speed when in the vicinity of whales (Greenpeace)				
5. Never move between, scatter or separate dolphins. If unsure of their movements, simply stop and put the engine into neutral (WDCS)				
6. Never try to swim with whales (WDCS)				
7. Never try to swim with dolphins (WDCS)				
8. Special care must be taken with mothers and young (WDCS)				
9. Spend no longer than 15 minutes near the animals (WDCS)				
10. Do not dispose of any rubbish, litter or contaminants at sea (WDCS)				
11. Do not feed cetaceans (Hoyt)				
12. Reduce as far as possible the production of potentially disturbing sounds and avoid sudden changes in noise (IWC)				
13. Vessel design should minimise the risk of injury to cetaceans, e.g. propellers should be shrouded (IWC)				
14. A naturalist should be on the boat to provide information (Greenpeace)				
15. Provide tourists accurate and educational information guides and books (IWC)				

*When cetaceans approach the boat, it is not necessary to move away

Please write additional considerations on the next page.

Thank you for very much! You will be informed when the information is published.

Appendix V: Feedback form

Dear Sir/ Madam,

EUCC – The Coastal Union is investigating the development of whale watching in Europe. It is clear that certain whale watching trips have minimal impacts on cetaceans and have value in terms of education, research and/or conservation. Some whale watching trips, however, do have a negative impact on cetaceans. We would like to know the cases in which whale watching was harmful. We do not want to promote operators who harass animals, so please report bad experiences if you have them. With your help we can build a website for tourists in which they can choose a 'sustainable' operator and negate a harmful one. Please try to complete the form as completely as possible. You can refer to the minimum guidelines below.

Feedback on Whale Watching experience (This will be used for the research)

Operator:

Location:

Harmful Impact:

Probable Cause:

Data on respondent (This will be kept confidential)

Name:

Organisation/Company/Profession:

How many times have you gone whale watching?:

Number of bad experiences with relevant operator:

Thank you very much!