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# Conservation Hub: The Added Value of the Whale-Watching Industry

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**Abstract:** Nature-based tourism activities are often sold as 'ecotourism', yet not all are educational, environmentally friendly, provide economic benefits to local communities, nor help achieve conservation goals. Whale-watching has the potential for ecotourism due to opportunities for supporting cetacean research, environmental education, and community engagement. Whalesafari, the first whale-watching company in the Arctic, is based in Norway and combines whale-watching with research, interpretation, and benefits for the local community. Researchers from around the world have carried out research on several aspects of sperm whales (the main target species), from abundance to diving behaviour, as well as other species. Tourists learn about cetaceans during a guided experience in the company's museum before the trip. This whale-watching model has attracted over 350,000 tourists over the years, benefiting the local community (e.g., hotels, restaurants, other attractions). Tourism and whale research can establish synergistic relationships, involving several agents and promoting research careers, while at the same time leading to innovative advances in the ecology and tourism fields. Here, we summarise over 30 years of whale-watching eco-tourism activities and research in Northern Norway, highlighting synergistic examples and the opportunities opened through linking marine tourism and research.

**Keywords:** ecotourism; marine tourism; whale research



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## 1. Introduction

Nature-based tourism activities are part of an ever-growing industry [1,2], giving visitors the opportunity to enjoy wildlife in different and unique ways, from safaris in the African savannah to diving with sharks. These activities are often sold as "ecotourism", defined as "responsible travel to natural areas that conserves the environment, sustains the well-being of the local people and involves interpretation and education" [3]. Ecotourism must include positive interpretative experiences for visitors as well as minimising impact, improving environmental conservation goals, and providing financial benefits for the local community. However, not all nature-based tourism is responsible, nor environmentally friendly, and can impact on both flora and fauna [4,5].

Among nature-based and ecotourism activities, marine tourism [6] has grown over the last few decades [7] and received renewed attention, projected as one of the largest value-adding segments of the ocean economy by 2030 [8]. In this context, different initiatives (e.g., Blue Growth) aim at fostering the promotion of new activities directed to locals, visitors, and tourists, involving coastal populations in different ways, including as facilitators, as well as new consumers. In this context, cross-sectorial opportunities can arise via synergies [9] and coordinated policies for sustainable development. In addition, the tourist experience can be improved by innovation and new research programmes, such as investments and funds available specifically for innovation triggered by the COVID-19 pandemic.

Whale watching provides unique opportunities for environmental awareness and cetacean research, and this is why it has been identified as an activity with potential for ecotourism [10,11]. The first organised whale watching took place in 1950 in Monterey Bay (California, USA), when people gathered on cliffs to see grey whales (*Eschrichtius robustus*) during their annual migration [12]. Today, whale watching is one of the most important tourism activities, carried out from land, vessels, and aircrafts in most coastal countries in the world [13]. It was estimated that almost 14 million people go whale watching every year—either as a specific goal of their trip or opportunistically when in an area that offers that possibility [13]. As the activity became popular enough to attract tourists consistently, it became a cost-effective method to regularly observe cetaceans in their natural environment as never before. It did not take long for whale-watching vessels to become research platforms.

In recent decades, the increase in whale-watching offers and demand led to concerns about the negative impacts on the target animals, resulting in hundreds of studies on that subject (see [14] for an overview); however, the literature on the (negative and positive) impacts on tourists and the local community is lacking. Many companies, especially in developing countries, actively engage with the locals, for example, through hiring practices. It is common practice within the industry to offer interpretation before or during the trip, providing information ranging from basic facts about cetaceans to information on a wide range of topics, including evolutionary history and threats. The effectiveness of interpretation is still under studied, but there is evidence that it enhances the tourist experience and can lead to environmentally friendly behaviour [6,15].

Tourists value interpretation as well as companies that carry out research on the species they target. The results of searching for "whale watching" literature would suggest that most of the research has been focused on understanding the impact that whale watching has on the target species [16,17]; however, studies that have contributed to a better understanding of different aspects of cetaceans' ecology abound [18–21]. On the other hand, little has been done to study the long-term benefits—for both the animals and researchers—of the opportunities that these platforms offer, as well as the outcomes of the whale-watching research activities within the tourist experience.

This work presents the case study of Whalesafari, the first whale-watching company in Norway and in the Arctic. Based in Andenes (Andøya, Vesterålen Archipelago, Norway), today it is the largest company in the Arctic and, with its growth, the tourism opportunities (and economic benefits) in the area have flourished. Since it was established in 1989, over 350,000 tourists have participated in whale-watching trips, enjoyed an extensive guided tour on the Whalesafari premises, and many of them have become cetacean researchers, inspired by the experience. Many have completed their Master's or PhD thesis with Whalesafari, and countless scientific manuscripts have been published on a range of topics, by dozens of researchers, many of whom are now leading researchers or scientific advisors. This selection was motivated by the fact that it can exemplify a success story in terms of synergies between the cetacean research promotion and the promotion of marine ecotourism products in the Artic.

## 2. Whalesafari and Norwegian Whale Watching

In the spring of 1987, members of a Nordic group called the "Centre for Studies of Whales and Dolphins" (CSvD) sailed along the coast of Norway in search of killer whales (*Orcinus orca*), with the goal of establishing a long-term research project. Off Andenes (Figure 1), they found sperm whales (*Physeter macrocephalus*) just 15 km offshore. Here, the continental shelf drops steeply from the flat 200–300 m deep continental platform, forming a deep subaquatic canyon, the Bleik Canyon, unusually close to shore.

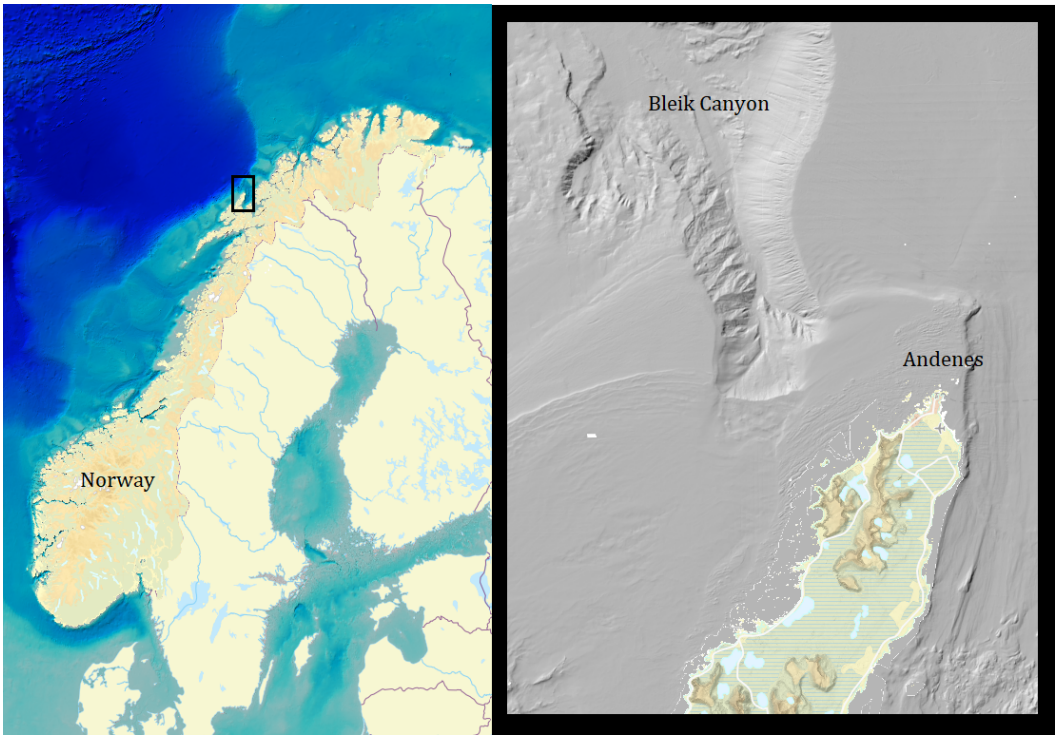


**Figure 1.** Map of the study area.

The Norwegian Sea had been identified as an important area for male sperm whales based on whaling data (summarised in [22]), but the new sightings suggested they remained in the canyon for long periods. In August 1987, a seminar was held in Andenes to discuss the possibilities of establishing a whale-watching operation in the town, and with financial support from the Norwegian government, the project went ahead. Despite the perceived conflicts between whalers, and what was seen as a fundamentally anti-whaling industry [23], the first captain was Ragnvald Dahl, a former whaler from Lofoten. The first whale-watching vessel was a whaling boat from Lofoten, hired specifically for that purpose, and the crew were also whalers, highly experienced in finding and approaching whales. Whale watching became an alternative source of income for those who had stopped whaling in 1986 when a 5-year ban on commercial whaling by the International Whaling Commission (IWC) came into effect. In the summer of 1988, an interpretation centre, the Whale Centre, was established as a small temporary exhibition in a local club.

The first paying customers went out to sea in the summer of 1988, most of whom were members of the Swedish Tourist Union, the first tourism organization to support the project (Figure 2). The project received several hundred tourists and they not only saw sperm whales, but also killer whales, minke whales (*Balaenoptera acutorostrata*), harbour porpoises (*Phocoena phocoena*), white-beaked dolphins (*Lagenorhynchus albirostris*), and a fin whale (*Balaenoptera physalus*). After this promising year, plans began for a permanent interpretation centre with a large exhibition on whales and the history of north Norwegian whaling. Biologists were provided with a permanent space for research purposes. Finally, in 1989, Hvalsafari AS (Whalesafari) was formed as a shareholding company, and the major shareholders were the municipality of Andøy, Nordland County Hall, Hotel Andrikken, Andøy Trafikklag, and the CSvD. Thus, Whalesafari became the first whale-watching company in Norway and in the Arctic and the only one in the world that offered the possibility to observe solitary adult male sperm whales in high latitudes. Today, three additional companies are based in the Vesterålen Archipelago, two in Andenes and one in Stø, which conduct daily trips in the same waters, although the nature of the trips is different between companies. While Whalesafari offers trips that are family-friendly,

especially for those with young children, others offer more adventure-focused trips, in small ribs, or focus on other wildlife, such as marine birds and seals.

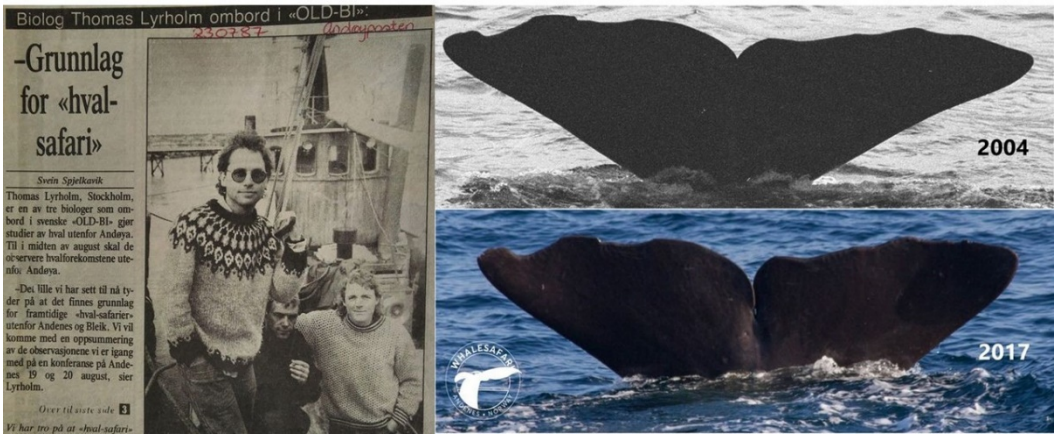


**Figure 2.** First biologists involved in the cetacean research in Andenes and an example of the sperm whale research activities through photo identification. Source: Whalesafari.

## 3. Science Hub and Knowledge Dissemination

The proximity of the Bleik canyon provided a unique opportunity to study adult male sperm whales in high latitudes, about which we still know very little. Since 1987, dozens of scientific manuscripts have been published by researchers working for, or in collaboration with, Whalesafari on topics ranging from the acoustic characteristics of sperm whale sounds [24,25], to killer whale hunting techniques [26,27], and the impact of whale watching on the target animals [28]. The bulk of the work, however, is focused on different aspects of sperm whale distribution, abundance, and ecology [29–31].

### *3.1. Literature Review*

Before Whalesafari was officially established, researchers were already collecting detailed information about sperm whale sightings, including coordinates and photographs of the animals when they dive, as their tail fluke is visible. These photographs were used to develop the first male sperm whale catalogue in the world [29], currently holding the largest number of individuals for this demographic ($n > 900$, Hvalsafari AS, unpublished data). This led to a better understanding of the social structure of males off Andenes and elsewhere [32], their residency patterns [33], abundance in the area [34], migration routes [35], and aggressive interactions with killer whales [36]. Photographs, in combination with other methodologies, led to learning important aspects of their behaviour, such as foraging dives [37,38]—with the discovery of the longest (56 min) and deepest (1861 m) dive by a male sperm whale up to that moment—as well as their behavioural and acoustic response to predator calls [39] and anthropogenic activities [40].

Research in the area conducted using acoustic recorders was the key to understanding the unique characteristics of sperm whale sounds, including the discovery of the fact that they produce the loudest sound in the animal kingdom [23]. It also helped improve the methodology used to measure sperm whale length based on the peculiar features of their clicks [41].

The knowledge acquired over the years was key for Whalesafari's goal to understanding and minimising the impact of the activity on the animals themselves. The first studies carried out within the company showed that the animals were disturbed by the presence of the vessels (Hvalsafari, unpublished data), responding by disappearing under the surface without showing their flukes, a behaviour known as a shallow dive or subsurface event [28]. At first, almost 75% of the sperm whales would react this way, but a greater understanding of what was triggering that response (e.g., speed, direction of approach) led

to better navigation around the animals. This, in turn, reduced the levels of disturbance to negligible levels [28].

The commitment to minimising the impact on the animals and the environment led to the installation of directional hydrophones mounted on the hull of Whalesafari vessels [42]. Because sperm whales emit clicks almost continuously, the crew can listen to them while they are underwater and use the information to approach the animals before they surface. This technological improvement led to an important reduction in the disturbance of the animals, as it meant waiting for the sperm whales to appear with the engine idling, usually a few hundred metres away (Hvalsafari AS, unpublished data). It also meant that the vessel spent less time in search of animals, reducing both chemical and noise pollution.

Because the hydrophones were developed specifically to track sperm whales, other species (although occasionally heard) cannot be tracked. Despite this, since the early days, there have been hundreds of sightings of other species, including killer, long-finned pilot (Globicephala melas), fin, minke, and humpback whales (Megaptera novaeangliae), as well as harbour porpoises, white-sided (Lagenorhynchus acutus), white-beaked, and even Risso's dolphins (Grampus griseus), which are rare in latitudes over 45° [43]. Some of these species have also been sighted during the winter months. Whalesafari began winter trips in 2011 when the Norwegian Spring Spawning Herring (Clupea harengus) wintering grounds moved northwards. Although fishermen knew sperm whales were in the area year-round [34], it was only then that observations were made regularly during winter months (Hvalsafari AS, unpublished data), and with them, the discovery of large aggregations of up to 12 males, gathered in tight groups, close enough to engage in physical contact (Hvalsafari AS, unpublished data available at https://cutt.ly/FCrMG0l). This apparent social behaviour was also recorded by Whalesafari as a response to killer whale harassment (Hvalsafari AS, unpublished data).

### *3.2. Interpretation and Science Communication*

The Whalesafari interpretation centre, the Whale Centre (Figure 3), has received over 350,000 tourists since 1988. The centre is a permanent feature of the company, and it is highly valued by visitors, despite the rustic style. The value comes from the displays—many of which are hand-painted, but especially from the guided tours, provided by trained guides. The tour includes information about Andenes, the Bleik canyon, and the area; the importance of scientific research for Whalesafari and for conservation; and key aspects about the whales, from general characteristics to their evolutionary history.


**Figure 3.** (**a**) Permanent exhibition in the Whalesafari museum; (**b**) M/S Reine boat; (**c**) Preparing the skeleton room; (**d**) Killer whales near the coast of Andenes. Source: Whalesafari.

The Whale Centre has a male sperm whale skeleton on display. The male, estimated at 15.8 m long, stranded in Andenes in 1996, and Whalesafari staff, together with locals, worked together to preserve the skeleton and set it up for display in the early 2000s. It is one of a handful of male skeletons on display in the world and it is the item tourists are most impressed by. The interpretation centre is ideal for managing tourist expectations as well as educating them about conservation issues, such as entanglement and plastic pollution.

### *3.3. Research Impact*

There are many aspects of cetacean biology, ecology, and behaviour that have been learned through research carried out from whale-watching platforms around the world, including humpback whale migration routes in Australia [44], false killer whales (Pseudorca crassidens) predating on bottlenose dolphins [45] and killer whales predating on false killer whales [18] in New Zealand, the general behaviour of different cetacean species off Pico Island (Azores, Portugal) [46], and killer whales predating on dolphins in Mexican waters [47]. Two of the most staggering observations made from whale-watching vessels include the birth of a humpback whale, which was filmed underwater [48], and the resighting of a humpback whale who was seen two years prior almost 10,000 km away [49], the longest migration ever recorded for a cetacean species. These discoveries and observations would not have been possible with dedicated research surveys alone.

These studies mentioned above, as well as those carried out using Whalesafari platforms, were published in specialised scientific journals, many of which have been pivotal studies [23]. Additionally, countless students have had the opportunity to present their work at international conferences, such as the European Cetacean Society and the Society for Marine Mammalogy. These conferences are unique environments to meet potential collaborators and enhance the professional careers of the attendees. Many current and past leading researchers and scientists who provide conservation advice to governments have collaborated with, worked as guides for, or completed their Masters or PhD theses with Whalesafari.

## 4. Opportunities for Ecotourism and Sustainable Whale Watching

The Whale Watching Sub-Committee of the Scientific Committee of the IWC has defined "whale ecotourism" as a tourist activity focused on cetacean observation that: (a) actively assists with the conservation of the resource (e.g., by collaborating with researchers, via their own research projects, allowing their vessels to be used as platforms of opportunity). In this aspect, the role of Whalesafari in providing their platforms for whale research has been key to the company's growth and sustainability; (b) Provides tourists with appropriate, accurate, and detailed interpretative/educational materials about the cetaceans they will see and their habitat. In this regard, the Whale Centre and the guided tour of the premises are a unique tourist experience within the whale-watching industry; (c) Minimises their environmental impact (e.g., reducing emissions, disposing of waste appropriately). Whalesafari has implemented a series of policies directed at reducing their impact, for example, using hydrophones to find sperm whales, slow vessels, and reusable items on board; (d) Adheres to whale-watching regulations or an appropriate set of guidelines, if no specific regulations are available for the area. There are no specific laws regulating whale watching in Norway, but Whalesafari's assessment of the impact of the activity on the animals led them to implement protocols on how to approach the different species in order to minimise the disturbance; (e) Provides benefits to the host community within which the company operates. Such benefits include preferential employment of locals, selling local products, or supporting (either financially or in-kind), local community-based conservation, education, cultural, or social projects or activities. For example, Whalesafari has employed locals to work at the reception, supports the community by selling handicrafts (e.g., paintings) made by locals, and researchers and other staff members have organised activities with local schools and the Andenes community at large.

The development of Whalesafari as a tourist attraction led to the development of the entire island of Andøya. Since 1989, the island has seen a steady increase in visitors and associated demand for other services as well as other tourist offers. To meet these demands, locals and third parties invested in Andenes and Andøya, opening hotels, restaurants, and cafes, and offering a wide range of tourism opportunities, including surfing, hiking, and bird and marine-life watching, as well as thematic museums. In 2012, the west side of Andøya received the Norwegian Scenic Route status, one of the 18 routes in the country awarded due to their unique land and seascape characteristics. This recognition has also increased the number of visitors to the area and the tourism on offer.

*Tourists Validating the Whale-Watching Experience*

Between 2021 and 2022, Whalesafari has collaborated with different researchers, managers, and institutions through the project titled 'Breathing Andenes' (https://cutt.ly/OCr6VGi, accessed on 16 October 2022). In the summer of 2021, between 22nd August and 25th September, different interviews were carried out with tourists, using a questionnaire specially designed to evaluate the satisfaction of the whale-watching experience. Interviews were conducted during the trips and a total of 264 responses were obtained, from visitors of at least 16 different nationalities. German and Italian customers were the most common. While German and central European tourists are common in the Vesterålen and Lofoten areas, the presence of south European visitors (e.g., Italians, French) revealed the effectiveness of the international promotional strategies and company relations. For most customers, it was their first whale-watching trip, and they were also interested in other activities, such as hiking and bird watching in the region. Most Whalesafari customers expected to see killer whales and/or sperm whales, but most believed they would see sperm whales, the target species. As expected, the majority of respondents stated that they saw sperm whales, as they are seen in 95% of the trips. Customers rated the overall experience as "satisfactory" or "very satisfactory", with the interpretation centre obtaining a higher score than the trip. The centre obtained the maximum score (on a scale from 1 to 5) 178 times, highlighting the importance of eco-briefings and environmental interpretation in managing the expectations and the satisfaction of wildlife tourists. In this regard, we can consider that the company offers a complete experience, not only based on sea trips, but also incorporating the environmental view and the scientists' performance, committed to the ecotourism premises.

Despite the weather conditions in which the activity takes place, in the Arctic (i.e., average 11C in August, some ocean currents), less than 1% of the interviewees said that they would not recommend the company and approximately 20% said that they would not come back; the reasons for this were mainly the existence of other whale-watching destinations of interest to them or the impossibility for them to come back to Norway. In this regard, some interviewees answered, for example, 'I'll go somewhere else to see different species of whales', 'one-time experience, there is so much to see everywhere' or 'Seen it twice myself but will recommend to others'. These testimonies make us confident in the success of the tourism product, and support the idea that, over and above destination conditions, science and environmental communication may improve the whale-watching experience through different supports (e.g., museums, guiding).

Surprisingly, just a few customers knew that Whalesafari was the first whale-watching company in the Arctic (approximately 25%) and less than 50% were aware of the company's research activities. These responses suggest the need to increase collective efforts between researchers and companies, to make visible the synergistic relationship between whale watching and marine research. At the same time, the experience of working with tourists and visitors serves to highlight the contribution of different academic disciplines and backgrounds on tourism research and improving the whale-watching experience.

## 5. Conclusions

Studying cetaceans in their natural environment is a difficult and expensive task and the value of whale-watching platforms cannot be understated. Social and marine scientists can play an important role in diversifying the tourism system by identifying ways to minimise the pressure on resources and contributing to the reinvention of the destinations. During the last few decades, mass coastal and marine tourism, including whale watching, has made use of ecosystem and landscape resources at a large scale, with a wide-ranging impact not only on the ecosystems but also on economic growth, employment, and social development [50]. In the context of the economic challenges due to the COVID-19 pandemic, it is paramount to address environmental and social challenges beyond any economic considerations, as there is a need to 'understand the site-specific idiosyncrasies of governance' [51]. Whale-watching research is not just about the animals, as encompassed by the wide variety of disciplines and fields of study [52]; the social and economic aspects of whale watching have not yet been fully explored.

The development of responsible marine tourism should include a range of opportunities based on new interactions between stakeholders, including the administrators, research institutions, civil society, and the private sector. The socio-economic and socio-cultural aspects should be emphasised, and whale research should be made visible in the tourism experience. The analysis of the 'tourist experience' is relevant to the advancement of research, as well as researchers' testimonies and interactions contributing to the improvement of the marine tourist products. These interactions can be positive for both the scientific community and the tourism industry, as the Whalesafari model exemplifies.

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**Institutional Review Board Statement:** The study did not require ethical approval.

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** This essay is related to the project titled 'Breathing Andenes', which is still ongoing. For this reason, data provided are preliminary and they are not yet available in any additional database. Please consult the website of the project for further information: https://cutt.ly/OCr6VGi, accessed on 16 October 2022.

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## References

1. Christ, C.; Hillel, O.; Matus, S.; Sweeting, J. *Tourism and Biodiversity—Mapping Tourism's Global Footprint*; Conservation International: Washington, DC, USA, 2003.
2. Balmford, A.; Beresford, J.; Green, J.; Naidoo, R.; Walpole, M.; Manica, A. A Global Perspective on Trends in Nature-Based Tourism. *PLoS Biol.* **2009**, *7*, e1000144. [CrossRef] [PubMed]
3. TIES. What Is Ecotourism? 2015. Available online: http://www.ecotourism.org/what-is-ecotourism (accessed on 20 August 2022).
4. Pickering, C.; Hill, W. Impacts of recreation and tourism on plants in protected areas in Australia, Brisbane: Sustainable Tourism Cooperative Research Centre. *J. Environ. Manag.* **2007**, *85*, 791–800. [CrossRef] [PubMed]

5. Radley, P.; Davis, R.; Doherty, T. Impacts of invasive rats and tourism on a threatened island bird: The Palau Micronesian Scrubfowl. *Bird Conserv. Int.* **2021**, *31*, 206–218. [CrossRef]
6. Orams, M. *Marine Tourism: Development, Impacts and Management*, 1st ed.; Routledge: London, UK, 1998. [CrossRef]
7. Piñeiro-Corbeira, C.; Barreiro, R.; Olmedo, M.; De la Cruz-Modino, R. Recreational snorkeling activities to enhance seascape enjoyment and environmental education in the Islas Atlánticas de Galicia National Park (Spain). *J. Environ. Manag.* **2020**, *272*, 111065. [CrossRef]
8. Hampton, M.; Jeyacheya, J. Tourism-Dependent Small Islands, Inclusive Growth, and the Blue Economy. *One Earth* **2020**, *2*, 8–10. [CrossRef]
9. Pascual-Fernández, J.J.; De La Cruz Modino, R.; Chuenpagdee, R.; Jentoft, S. Synergy as Strategy: Learning from La Restinga, Canary Islands. *Marit. Stud.* **2018**, *17*, 85–99. [CrossRef]
10. García-Cegarra, A.M.; Pacheco, A.S. Whale-watching trips in Peru lead to increases in tourist knowledge, pro-conservation intentions and tourist concern for the impacts of whale-watching on humpback whales. *Aquat. Conserv. Mar. Freshw. Ecosyst.* **2017**, *27*, 1011–1020. [CrossRef]
11. Lopez, G.; Pearson, H.C. Can Whale Watching Be a Conduit for Spreading Educational and Conservation Messages? A Case Study in Juneau, Alaska. *Tour. Mar. Environ.* **2017**, *12*, 95–104. [CrossRef]
12. Hoyt, E. *Whale Watching 2001: Worldwide Tourism Numbers, Expenditures, and Expanding Socioeconomic Benefits*; International Fund for Animal Welfare: Yarmouth Port, MA, USA, 2001; 158p.
13. O'Connor, S.; Campbell, R.; Cortez, H.; Knowles, T. *Whale Watching Worldwide: Tourism Numbers, Expenditures and Expanding Economic Benefits*; International Fund for Animal Welfare: Yarmouth Port, MA, USA, 2009; 265p.
14. Higham, J.; Bejder, L.; Williams, R. (Eds.) *Whale-Watching: Sustainable Tourism and Ecological Management*; Cambridge University Press: Cambridge, UK, 2014; 418p.
15. Jacobs, M.H.; Harms, M. Influence of interpretation on conservation intentions of whale tourists. *Tour. Manag.* **2014**, *42*, 123–131. [CrossRef]
16. Andréu, E.; Gallego, P.; Cervera, J.L. Long-Finned Pilot Whale (*Globicephala melas*) Response to Whale-Watching Vessels in the Strait of Gibraltar. Master's Thesis, Department of Biology, University of Cadiz, Cadiz, Spain, 5 December 2008.
17. Soller, A.; Parsons, E.C.M. More evidence of unsustainable dolphin-watching practices in Bocas del Toro, Panama. *Hum. Dimens. Wildl.* **2019**, *24*, 1–3. [CrossRef]
18. Visser, I.; Zaeschmar, J.; Halliday, J.; Abraham, A.; Ball, P.; Bradley, R.; Daly, S.; Hatwell, T.; Johnson, T.; Johnson, W.; et al. First Record of Predation on False Killer Whales (*Pseudorca crassidens*) by Killer Whales (*Orcinus orca*). *Aquat. Mamm.* **2010**, *36*, 195–204. [CrossRef]
19. Andréu, E.; Medina, B.; García, A.; Martínez, M.; Gallego, P.; Juan, Y.; Cervera, J.L. Breves periodos de ausencia del calderón común *Globicephala melas* (Traill, 1809) en el Estrecho de Gibraltar. *Galemys* **2009**, *21*, 181–194.
20. Mullin, K.; Steiner, L.; Dunn, C.; Claridge, D.; González García, L.; Gordon, J.; Lewis, T. Short Note Long-Range Longitudinal Movements of Sperm Whales (*Physeter macrocephalus*) in the North Atlantic Ocean Revealed by Photo-Identification. *Aquat. Mamm.* **2022**, *48*, 3–8. [CrossRef]
21. Steiner, L.; Machete, M.; Hammer, M. *Expedition Report: Photo-Identification and Surveys of Cetaceans in the Central Group of the Azores Islands (March–April 2018)*; Biosphere Expeditions: Würzburg, Germany, 2019.
22. Christensen, I.; Haug, T.; Øien, N. Seasonal distribution, exploitation and present abundance of stocks of large baleen whales (*Mysticeti*) and sperm whales (*Physeter macrocephalus*) in Norwegian and adjacent waters. *ICES J. Mar. Sci.* **1992**, *49*, 341–355. [CrossRef]
23. Madsen, P.T.; Wahlberg, M.; Møhl, B. Male sperm whale (*Physeter macrocephalus*) acoustics in a high-latitude habitat: Implications for echolocation and communication. *Behav. Ecol. Sociobiol.* **2002**, *53*, 31–41. [CrossRef]
24. Møhl, B.; Wahlberg, M.; Madsen, P.T.; Heerfordt, A.; Lund, A. The monopulsed nature of sperm whale clicks. *J. Acoust. Soc. Am.* **2003**, *114*, 1143–1154. [CrossRef]
25. Ris, M. Conflicting cultural values: Whale tourism in northern Norway. *Arctic* **1993**, *46*, 156–163. [CrossRef]
26. Similä, T.; Ugarte, F. Surface and underwater observations of cooperatively feeding killer whales in northern Norway. *Can. J. Zool.* **1993**, *71*, 1494–1499. [CrossRef]
27. Cosentino, A.M. First record of Norwegian killer whales attacking and feeding on a harbour porpoise. *Mar. Biodivers. Rec.* **2015**, *8*, 1–5. [CrossRef]
28. Cosentino, A.M. Effects of whale-watching vessels on adult male sperm whales off Andenes, Norway. *Tour. Mar. Environ.* **2016**, *11*, 215–227. [CrossRef]
29. Ciano, J.; Huele, R. Photo-identification of sperm whales at Bleik Canyon, Norway. *Mar. Mammal Sci.* **2006**, *17*, 175–180. [CrossRef]
30. Lettevall, E. Abundance, Association and Movement within Discrete Populations of Sperm Whales *Physeter macrocephalus*. Ph.D. Thesis, Göteborg University, Göteborg, Sweden, 2003.
31. Zanoni, D. (Hamn i Senja, Finnsnes, Norway). Distribution of Sperm Whales According to Physical and Biological Factors. Personal communication, 2003.
32. Lettevall, E.; Ritcher, C.; Jaquet, N.; Slooten, E.; Dawson, S.M.; Whitehead, H.; Christal, J.; McCall Howard, P. Social structure and residency in aggregations of male sperm whales. *Can. J. Zool.* **2002**, *80*, 1189–1196. [CrossRef]

33. Lamoni, L. Study on the Residence of Male Sperm Whales (*Physeter macrocephalus*) in a North Atlantic Feeding Ground. Master's Thesis, University of Genova, Genova, Italy, 2011.
34. Rødland, E.S. Population Estimation of Sperm Whales (*Physeter macrocephalus*) from Bleik Canyon, Norway. Master's Thesis, University of Oslo, Oslo, Norway, 2011.
35. Steiner, L.; Lamoni, L.; Acosta Plata, M.; Jensen, S.-K.; Lettevall, E.; Gordon, J. A link between male sperm whales, *Physeter macrocephalus*, of the Azores and Norway. *J. Mar. Biol. Assoc. UK* **2012**, *92*, 1751–1756. [CrossRef]
36. van Dongen, C. *Aggressive Interactions between Killer Whales and Male Sperm Whales*; University of Wageningen: Wageningen, The Netherlands, 2022.
37. Sarvas, T.H. The Effects of the Deep Scattering Layer on the Diving Behavior of Sperm Whales off Andøya, Norway. Master's Thesis, University of Helsinki, Helsinki, Finland, 1999.
38. Teloni, V.; Mark, J.P.; Patrick, M.J.; Peter, M.T. Shallow food for deep divers: Dynamic foraging behavior of male sperm whales in a high latitude habitat. *J. Exp. Mar. Biol. Ecol.* **2008**, *354*, 119–131. [CrossRef]
39. Curé, C.; Antunes, R.; Alves, A.C.; Visser, F.; Kvadsheim, P.H.; Miller, P.J.O. Responses of male sperm whales (*Physeter macrocephalus*) to killer whale sounds: Implications for anti-predator strategies. *Sci. Rep.* **2013**, *3*, 1579. [CrossRef]
40. Madsen, P.; Møhl, B.; Nielsen, B.; Wahlberg, M. Male sperm whale behavior during exposure to distant seismic survey pulses. *Aquat. Mamm.* **2015**, *28*, 231–240.
41. Kortsch, S. (University of Helsinki, Helsinki, Finland). Assessment of Length and Age Distribution of Sperm Whales from Their Sonar Clicks. Personal communication, 2005.
42. Nielsen, B.K.; Møhl, B. Hull-mounted hydrophones for passive acoustic detection and tracking of sperm whales (*Physeter macrocephalus*). *Appl. Acoust.* **2006**, *67*, 1175–1186. [CrossRef]
43. Kiszka, J.; Braulik, G. Grampus Griseus. The IUCN Red List of Threatened Species 2018: E.T9461A50356660. 2018. Available online: https://www.iucnredlist.org/species/9461/50356660 (accessed on 15 August 2020).
44. Stamation, K.; Croft, D.; Shaughnessy, P.; Waples, K. Observations of humpback whales (*Megaptera novaeangliae*) Feeding during their southward migration along the coast of southeastern New South Wales, Australia: Identification of a possible supplemental feeding ground. *Aquat. Mamm.* **2007**, *33*, 165–174. [CrossRef]
45. Zaeschmar, J.R.; Visser, I.N.; Fertl, D.; Dwyer, S.L.; Meissner, A.M.; Halliday, J.; Berghan, J.; Donnelly, D.; Stockin, K.A. Occurrence of false killer whales (Pseudorca crassidens) and their association with common bottlenose dolphins (Tursiops truncatus) off northeastern New Zealand. *Mar. Mammal Sci.* **2013**, *30*, 594–608. [CrossRef]
46. Zahn, P.; Kulike, L.; Bloechl, A. Behavior of cetaceans in the waters south of Pico Island (Azores, Portugal)-data obtained during whale-watching 2020. *bioRxiv* **2021**. [CrossRef]
47. Cosentino, M.; Oria, N. Insights into the foraging behaviour of an understudied orca population. *Lat. Am. J. Aquat. Mamm.* **2021**, *16*, 51–53. [CrossRef]
48. Patton, D.; Lawless, S. Surface and Underwater Observation of a Humpback Whale (*Megaptera novaeangliae*) Birth in Progress off Lahaina, Maui, and Subsequent Encounter of the Female with a Healthy Calf. *Aquat. Mamm.* **2021**, *47*, 550–558. [CrossRef]
49. Stevick, P.T.; Neves, M.C.; Johansen, F.; Engel, M.H.; Judith, A.; Marcondes MC, C.; Carlson, C. A quarter of a world away: Female humpback whale moves 10000 km between breeding areas. *Biol. Lett.* **2011**, *7*, 299–302. [CrossRef]
50. EC European Commission. The EU Blue Economy Report. Publications Office of the European Union: Luxembourg, 2021. Available online: https://op.europa.eu/en/publication-detail/-/publication/0b0c5bfd-c737-11eb-a925-01aa75ed71a1 (accessed on 7 October 2021).
51. Pacheco, A.S.; Sepúlveda, M.; Corkeron, P. Editorial: Whale-Watching Impacts: Science, Human Dimensions and Management. *Front. Mar. Sci.* **2021**, *8*, 1126. [CrossRef]
52. Gleason, C.; Parsons, E.C.M. Recent Advances in Whale-Watching Research: 2018–2019. *Tour. Mar. Environ.* **2019**, *14*, 199–210. [CrossRef]