



Clear waters: assessing regulation transparency of website advertising in South Africa's boat-based whale-watching industry

Caitlin Judge , Gwenith Susan Penry , Mark Brown & Minke Witteveen

To cite this article: Caitlin Judge , Gwenith Susan Penry , Mark Brown & Minke Witteveen (2020): Clear waters: assessing regulation transparency of website advertising in South Africa's boat-based whale-watching industry, Journal of Sustainable Tourism, DOI: [10.1080/09669582.2020.1844723](https://doi.org/10.1080/09669582.2020.1844723)

To link to this article: <https://doi.org/10.1080/09669582.2020.1844723>



Published online: 19 Nov 2020.



Submit your article to this journal [↗](#)






View related articles [↗](#)



View Crossmark data [↗](#)



Clear waters: assessing regulation transparency of website advertising in South Africa's boat-based whale-watching industry

Caitlin Judge^a, Gwenith Susan Penry^{a,b} , Mark Brown^c  and Minke Witteveen^{a,d} 

^aNature's Valley Trust, Natures Valley, South Africa; ^bInstitute for Coastal and Marine Research, Nelson Mandela University, Port Elizabeth, South Africa; ^cCentre for Functional Biodiversity, School of Life Sciences, University of KwaZulu Natal, Durban, South Africa; ^dDepartment of Oceanography, Institute for Coastal and Marine Research, Nelson Mandela University, Port Elizabeth, South Africa

ABSTRACT

Long-term sustainability of South Africa's boat-based whale-watching (BBWW) industry requires any desired growth to be achieved within sustainable parameters. Given that advertising is often the first point of exposure for potential tourists, transparency regarding permit regulations that support sustainable tourism and manage tourist expectations is important. To assess transparency, textual information and photographic content from 17 South African government permitted BBWW company websites were analysed. Regulation-related information in textual content was low across all websites (5-28% of sentences extracted); 91% of photographs containing whales, and 55% containing dolphins, appeared non-compliant for distance of vessel to animal. These results demonstrate that misleading advertising may result in tourist expectations that conflict with legal requirements for a sustainable industry and can place operators under pressure to provide the experiences as advertised. Solutions to address this problem and promote ecological sustainability in the industry include clearer advertising guidelines in permit regulations, standardised resources supplied to industry for advertising and tourist education, and greater awareness of advertising effects and how to positively promote regulations in website content.

ARTICLE HISTORY

Received 19 March 2020
Accepted 25 October 2020


KEYWORDS

Marine ecotourism;
sustainable tourism;
marketing; cetacean
watching; science
communication

Introduction

The marine tourism sector, particularly boat-based whale-watching (hereafter BBWW), has grown exponentially into a global multi-billion dollar industry (Hoyt, 2001; O'Connor et al., 2009). Although often marketed as a 'non-consumptive' or 'green' alternative to commercial whaling, it has been widely acknowledged in literature that it has many negative impacts on marine mammals (reviewed in Bejder & Samuels, 2003; Parsons, 2012; Bearzi, 2017; Machernis et al., 2018). The long-term cumulative effect of tourism-induced behavioural changes and stress may result in population decline and displacement (Bejder et al., 2006; Lusseau & Bejder, 2007). These negative impacts on cetaceans draw into question the long-term ecological sustainability of the

CONTACT Minke Witteveen  minke.witteveen@gmail.com  Nature's Valley Trust, Natures Valley, South Africa

 Supplemental data for this article can be accessed at <https://doi.org/10.1080/09669582.2020.1844723>.

© 2020 Informa UK Limited, trading as Taylor & Francis Group

BBWW sector (Hoyt & Parsons, 2014), however, this narrative is not frequently nor effectively conveyed to tourists (Finkler & Higham, 2020). Globally, voluntary codes of conduct and governmental permitting systems have been developed as one way to mitigate and minimise negative impacts (Allen et al., 2007; Amerson & Parsons, 2018; Guerra & Dawson, 2016; Higham et al., 2016; Wiley et al., 2008). While these exist in South Africa, no research has been done on the efficacy of these regulations to minimise disturbance, or on the long-term sustainability of the industry covering social, ecological, or financial aspects.

Boat-based whale-watching regulations in South Africa

In South Africa, BBWW operators need to hold a government-issued permit in order to advertise and conduct close encounter trips legally. The BBWW industry became formally regulated in 1998 with the adoption of national regulations and a permitting system (Department of Environmental Affairs, 2017a). These aim to manage the growth of the industry and impacts on cetaceans, enabling the sustainability of the industry and the conservation of animals (Department of Environmental Affairs, 2017a). As of 2017 there was an upper limit of 40 permits available for 28 designated areas of the coastline extending from Port Nolloth on the west coast to Sodwana Bay on the east coast (Department of Environmental Affairs, 2017a). This constitutes a doubling in industry size from 20 available permits for 20 designated areas of the coastline in 1998 (Department of Environmental Affairs, 2017a). Currently, permit regulations cannot be found online, including on governmental and the national BBWW association websites.

In the absence of a BBWW permit, encounters with cetaceans are governed by the Threatened or Protected Marine Species (TOPS) regulations, that stipulate cetaceans cannot be approached closer than 300 m (Department of Environmental Affairs, 2017b). The BBWW permit stipulates how permitted vessels may legally interact with marine mammals. It includes a section for whale regulations, dolphin regulations, and to a lesser extent seal and seabird regulations. For cetaceans, these regulations specify the minimum distance of encounter, speed and direction of approach, manoeuvring around animals, and the maximum duration of encounters as well as the number of encounters an individual animal can be exposed to in a single day. These general aspects of boat-cetacean encounters are globally recognised as central to ensuring sustainable interactions (Lewis & Walker, 2018). The BBWW permit also governs tourist-related aspects such as expectation management, education, and marketing.

Online tourism marketing

With over 4.6 billion internet users worldwide (Internet Live Stats, 2020), the vast audience reaching capabilities and information accessibility the internet provides has revolutionised tourism marketing and advertisement (Lu et al., 2002; Ukpabi & Karjaluoto, 2017). Technological advancement and accessibility have resulted in noticeable changes to how tourists plan and experience their travels because consumers have increasingly adopted web-based platforms (Buhalis & Law, 2008; Lu et al., 2002; Navío-Marco et al., 2018; Ukpabi & Karjaluoto, 2017). Before visiting destinations or undertaking an experience, potential tourists will often seek information to ensure that the destination or experience aligns with their own requirements (Ye & Tussyadiah, 2011). With the widespread availability of computer systems and the internet this information has become readily accessible (Lu et al., 2002; Ye & Tussyadiah, 2011). Besides textual information, tourism advertising is also heavily influenced by multimedia; photographs hold persuasive properties (Joffe, 2008) and promote a tangible image or experience (Buhalis & Law, 2008). The psychological principle of the 'picture-superiority effect' states that concepts and facts are better remembered if photographs are present (Childers & Houston, 1984). The use of photography, alongside the textual information and structure of a website, can stimulate an emotional

response which then relates to or influences decision making (Björk, 2010). Other factors such as: design quality, quality of information, and usefulness and ease of use, are also important for tourists' engagement with websites (Bai et al., 2008; Chung et al., 2015; Kaplanidou & Vogt, 2006; Ku & Chen, 2015; Kucukusta et al., 2015; San Martín & Herrero, 2012; Wen, 2012).

By portraying text and photographs based on what are deemed to be attractive qualities, a destination image is formed (Ye & Tussyadiah, 2011). A destination image is the functional (tangible) and psychological (abstract) beliefs, ideas, and impressions held of a place or activity (Echtner & Ritchie, 1991). A destination image is formed at three stages: organically through everyday life, induced through marketing, and experientially (Fakeye & Crompton, 1991; Gunn, 1988; Ye & Tussyadiah, 2011). Websites are designed to reflect attractive attributes that will influence a tourists' destination image (Sparks & Pan, 2009; Ukpabi & Karjaluoto, 2017). This image is known to be a key element in tourists' decision making process, and affects the quality of the experience, the perceived value, satisfaction, and future behaviour (Bigne et al., 2001; Chen & Tsai, 2007; Chi & Qu, 2008; Court & Lupton, 1997; Lin et al., 2003; Rittichainuwat et al., 2001). A tourist visiting a destination is influenced by their emotional and mental image, their destination image, based on the expected experience of the destination (Oh et al., 2007).

Boat-based whale-watching marketing

Globally, tourism operators have official websites which are used to both market the experience, develop the destination image, and often provide a booking platform (Buhalis & Law, 2008; Lu et al., 2002; Navío-Marco et al., 2018). Marketing is an important consideration for conservation messages (Wright et al., 2015) and has been highlighted as an area that can influence tourist expectations for BBWW trips (Finkler & Higham, 2020; Harms et al., 2013). Indeed, marketing of BBWW can create unrealistic, irresponsible, and often unobtainable expectations if not done responsibly (Finkler & Higham, 2020; Higham et al., 2014). Marketing is an important consideration for BBWW sustainability for a number of reasons: tourist expectation management, satisfaction, coherent narratives, and awareness of regulation compliance (Finkler & Higham, 2020). These factors are closely intertwined because the level of satisfaction achieved by tourists can be directly linked to how closely the destination image corresponds with the actual experience (Britton, 1979). Therefore, advertising of BBWW must be in line with the narrative of a permit compliant trip for tourists to be expectant and supportive of a compliant trip. In general, tourists have been shown to hold a strong preference for minimising negative impacts on wildlife, but there is a lack of awareness of the (in)direct effects of their actions, as well as the current regulations and their function in wildlife protection (Shackley, 1996; Andersen & Miller, 2006; Kessler et al., 2014). Finkler and Higham (2020) further highlighted the lack of awareness that tourists have with regards to impacts on wildlife and accredited it to a lack of information available to tourists. BBWW vessels have been identified as valuable platforms for raising conservation awareness and encouraging pro-environmental behaviour (Finkler & Higham, 2020; García-Cegarra and Pacheco, 2017; Lopez & Pearson, 2017; Stamation et al., 2007; Zeppel & Muloin, 2014).

While the South African BBWW permit touches on ensuring accurate marketing and expectation management, there have been no studies on the type of trip being advertised, and whether these are in line with and transparent regarding permit regulations. As such, this study is the first of its kind in South Africa to investigate whether current advertising of BBWW adequately displays and explains the permit regulations and legal parameters for the industry. We used the online marketing content of permitted BBWW operators' official websites to determine whether BBWW permit regulations are responsibly and accurately represented in website advertising and explore the implications of the narrative displayed on this platform. We aim to respond to the global call for an increase in social science research for the management of the BBWW industry and provide evidence for themes discussed in Finkler and Higham (2020).

Methods

Photographic content and textual information extraction/website processing

An online search was used to locate governmentally permitted BBWW operators' official company websites in South Africa, following a list of operators awarded permits in 2017 (Department of Environmental Affairs, pers. comm. 2019). Every page on each website was manually browsed and all photographic content and textual information relating to BBWW was extracted for analysis during August 2019. All text, including titles and captions, on website pages offering information relevant to BBWW tours was copied into a separate Word document for each operator's website. Pages containing contact information, experiences not related to BBWW, trip reviews, text on linked external websites, and news and weather-related information were excluded (Govers & Go, 2004). Social media pages (Facebook, Instagram, Twitter) and blog pages, in addition to TripAdvisor reviews were excluded from this study.

Similarly, all photographic content was copied into a separate Word document for each operator's website. Videos, thumbnails, buttons, icons, logos, maps, design elements, and photographs not relating to BBWW e.g. township tours were excluded (Govers & Go, 2004). For this study only cetaceans were included; seals and seabirds were not incorporated.

Photographic content and textual information analysis

To determine whether, and which, BBWW permit regulations were mentioned in website textual information, text was critically examined and each sentence assigned to its corresponding governmental permit regulation/s (Table 1, Appendix 1), or recorded as not permit-related. All permit regulations relating to encounters or impacts on the animals were investigated. Each permit-related sentence was categorised as either upholding (correctly advertising trip/encounter details as pertaining to the permit), conflicting (multiple sentences referring to the same regulation category contradicting each other), or opposing (incorrect trip/encounter details) the permit regulations.

To determine apparent compliance of photographic content with BBWW permit regulations, all photographs containing commercial BBWW vessels and cetaceans were examined and compared against a selected list of applicable permit regulations (Table 1, Appendix 1). The regulations were selected based on whether they could be assessed in photographs. Photographs were only classified as appearing non-compliant when the images were clearly in breach of the permit regulations (e.g. closer than the legal distances, such as animals within touching distance of the vessel); if there was any uncertainty images were excluded. Because the true nature of the encounter (compliant or not) could not be determined, we classified photographs based on how they would appear to a tourist. Therefore, if any captions associated with the photograph expressly related to permit regulations (e.g. animal controlled the encounter distance and stating legal approach distance) this was taken into account and the photograph was recorded as compliant. Examples of typical photographs on websites, and how they were classified, can be seen in Figure 1. The number of photographs showing active surface behaviours (ASB: aerial behaviours that break the surface of the water including breaches, half breaches, tail slaps, pectoral slaps, and spy-hopping (Chilvers & Corkeron, 2001; Di Clemente et al., 2018), were recorded (Table 1, Appendix 1).

Results

Textual extraction

The online search resulted in 17 permitted BBWW operator websites being found. A total of 1280 sentences were extracted, of which 13% related to permit content (Figure 2). However, the total number of sentences extracted, and the amount of permit-related content varied greatly over websites (Figure 3). The highest representation of permit-related sentences in an individual

Table 1. Summary table of the transparency of South African boat-based whale-watching permit regulations represented in the textual information and photographic content of 17 permitted BBWW operators' websites. Data are expressed as a percentage of all websites analysed in this study. The percentage of websites that mentioned and upheld, mentioned but conflicted, mentioned but opposed, or did not mention a specific permit regulation is shown. The number of websites that did (present) or did not (absent) have photographs that could be assessed for regulation transparency are presented, as is the overall number of photographs that were assessed as appearing compliant or non-compliant with a particular regulation. See full table in Appendix 1. Not Applicable (NA) refers to situations in which photographs were not able to represent a particular regulation.

Permit regulations	Regulation transparency in text *				Regulation transparency in photographs			
	Upholding	Conflicting	Opposing	Not Mentioned	Present	Absent	Compliant	Non-compliant
Existence of permit	14 (82%)	0	0	3 (18%)	NA	NA	NA	NA
Speed (general)	2 (12%)	0	0	15 (88%)	NA	NA	NA	NA
Speed of approach (whales)	1 (6%)	0	0	16 (94%)	NA	NA	NA	NA
Speed of approach (dolphins)	0	0	0	17 (100%)	NA	NA	NA	NA
Speed of encounter (whale)	0	0	0	17 (100%)	NA	NA	NA	NA
Speed of encounter (dolphins)	0	0	0	17 (100%)	NA	NA	NA	NA
Permitted encounter distances	1 (6%)	0	0	16 (94%)	NA	NA	NA	NA
(unspecified species)								
Encounter distance for whales	4 (23%)	3 (18%)	0	10 (59%)	10 (59%)	7 (41%)	8 (9%)	77 (91%)
Encounter distance for dolphins	1 (6%)	0	0	16 (94%)	6 (35%)	11 (65%)	5 (45%)	6 (55%)
Distance mother-calf whale	1 (6%)	0	0	16 (94%)	1 (6%)	16 (94%)	8 (10%)	76 (90%)
Distance mother-calf dolphin	0	0	0	17 (100%)	0	17 (100%)	0	0
Duration of encounter for whales	1 (6%)	0	0	16 (94%)	NA	NA	NA	NA
Duration of encounter for dolphins	0	0	0	17 (100%)	NA	NA	NA	NA
Approach Type	1 (6%)	0	0	16 (94%)	NA	NA	NA	NA
Touching, feeding, swimming	1 (6%)	0	0	16 (94%)	11 (65%)	6 (35%)	101 (98%)	2 (2%)
Manoeuvring	1 (6%)	0	0	16 (94%)	NA	NA	NA	NA
Manoeuvring whales	0	0	0	17 (100%)	NA	NA	NA	NA
Manoeuvring dolphins	0	0	0	17 (100%)	NA	NA	NA	NA
Guarantees	7 (41%)	1 (6%)	1 (6%)	8 (47%)	NA	NA	NA	NA
Seasonality	13 (76%)	0	0	4 (24%)	NA	NA	NA	NA
Harassment behaviours	4 (24%)	0	0	13 (76%)	NA	NA	NA	NA
Active surface behaviour (ASB) whales	1 (6%)	2 (12%)	0	14 (82%)	17 (100%)	14 (82%)	ASB not shown: 253 photographs (63%) ASB not shown: 107 photographs (75%)	ASB shown: 150 photographs (37%) ASB shown: 36 photographs (25%)
Active surface behaviour (ASB) dolphins	0	1 (6%)	0	16 (94%)	13 (76%)	4 (34%)		
Control	2 (12%)	1 (6%)	0	14 (82%)	NA	NA	NA	NA
Noise	1 (6%)	0	0	16 (94%)	NA	NA	NA	NA
Smoking	2 (12%)	0	0	15 (88%)	NA	NA	NA	NA

*If websites had multiple sentences pertaining to permit regulations which fell into different mentioned categories, the website was classified as conflicting.

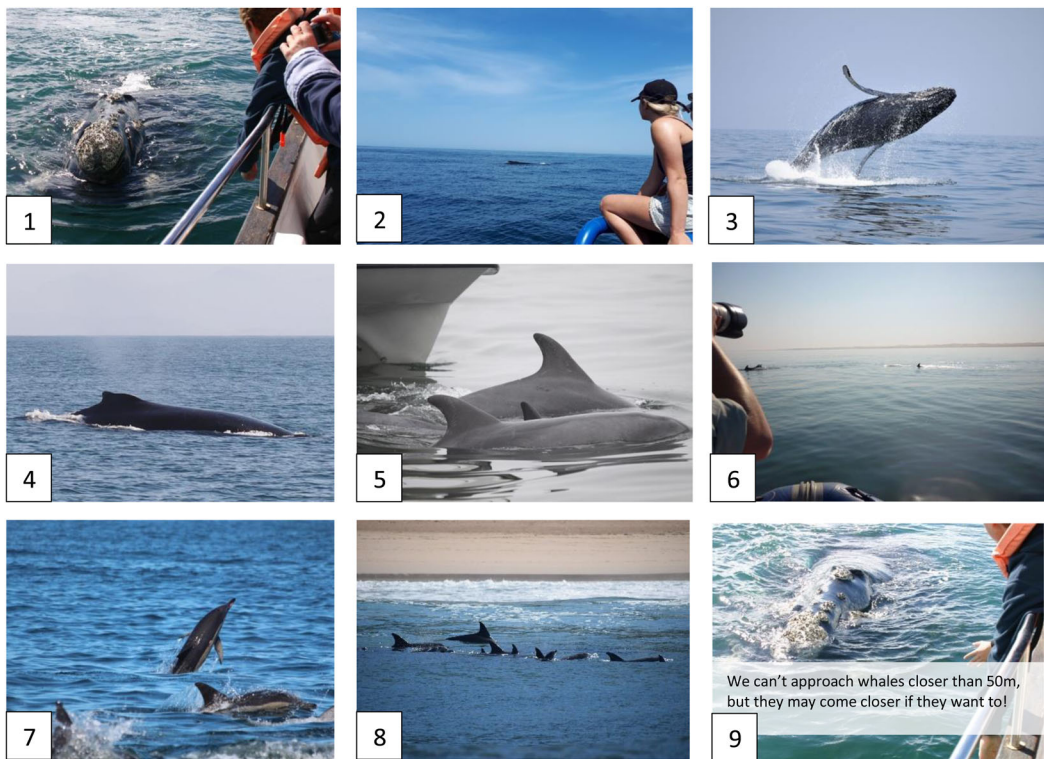


Figure 1. Photographic examples that show: (1) typical non-compliance for whale distance regulations; (2) compliance with whale distance regulations; (3) active surface behaviour for whales; (4) non-active surface behaviour for whales; (5) typical non-compliance for dolphin distance regulations; (6) compliance with dolphin distance regulations; (7) active surface behaviour for dolphins; (8) non-active surface behaviour for dolphins; (9) compliance with distance regulations due to captioning.

website was 28% (with a total of 39 sentences extracted) and the lowest 5% (with a total of 141 sentences extracted).

Textual boat-based whale-watching regulation mention and compliance

Fourteen websites (82%) mentioned the existence of a government issued BBWW permit at least once (Table 1, Appendix 1). However, all the websites displayed little information on the content of the permit regulations (Table 1, Appendix 1). The most frequently mentioned permit regulation that directly related to impacts on cetaceans was encounter distance to whales (41%, 7 websites, Table 1, Appendix 1). Seasonality of different species was the most frequently mentioned permit regulation overall (76%, 13 websites, Table 1, Appendix 1). There were multiple permit regulations that were not mentioned on any of the websites, including whale- or dolphin-specific speed of approach, speed of encounter, manoeuvring around animals, and encounter distances where dolphin calves are present (Table 1, Appendix 1).

Six of the permit regulations could be separated into whale- or dolphin-specific regulations (manoeuvring, encounter duration, encounter distance in the presence and absence of calves, speed of encounter and speed of approach). In all cases where these regulations were mentioned, they were more often mentioned for whales than for dolphins (Table 1, Appendix 1). Of these six categories encounter distance was mentioned the most with 41% (7 websites) for whales and 6% (1 website) for dolphins (Table 1, Appendix 1).

Five categories of regulations mentioned on the websites were found to contain either conflicting or opposing information to what is entailed in the permit. These categories were: whale

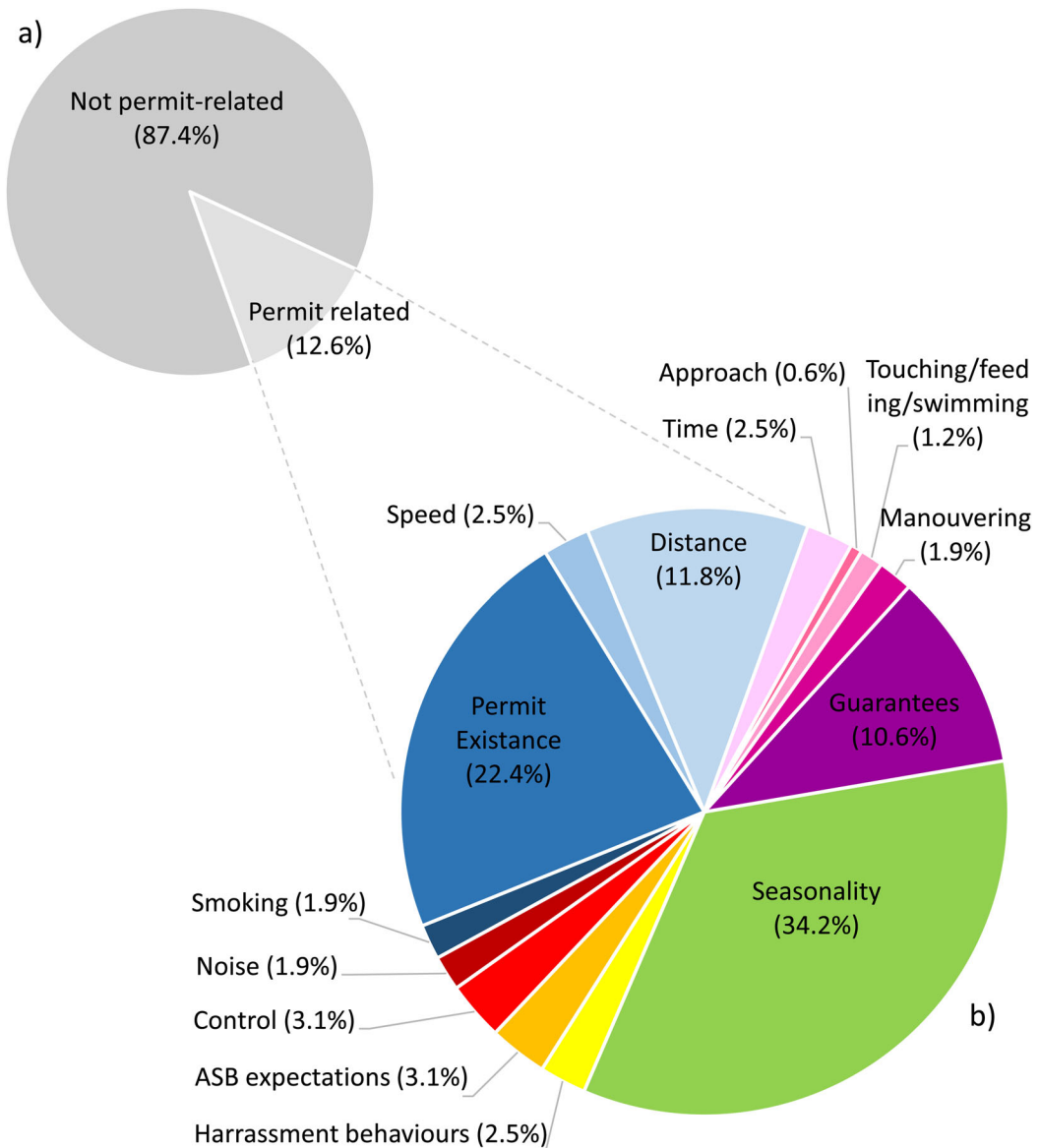


Figure 2. Breakdown of total sentences ($n = 1280$) extracted from 17 permitted South African boat-based whale-watching (BBWW) operator websites showing a) permit-related and not permit-related content and b) the breakdown of permit-related sentences ($n = 161$) classified into permit regulations, when all sentences that were not-permit related are removed.

encounter distance, encounter time, guarantees, ASB expectations, and animals controlling encounters. For each of these, at least one website contained either conflicting or opposing content. While encounter distance was the permit regulation most frequently mentioned, three of the seven websites contained conflicting information about this regulation (Table 1, Appendix 1).

Photograph extraction

In total 546 photographs containing cetaceans were extracted from 17 BBWW operators' websites. The number of photographs displayed on each website varied greatly (range 1-236, with an average of 32). Of all photographs extracted, 404 were of whales, and 142 were of dolphins.

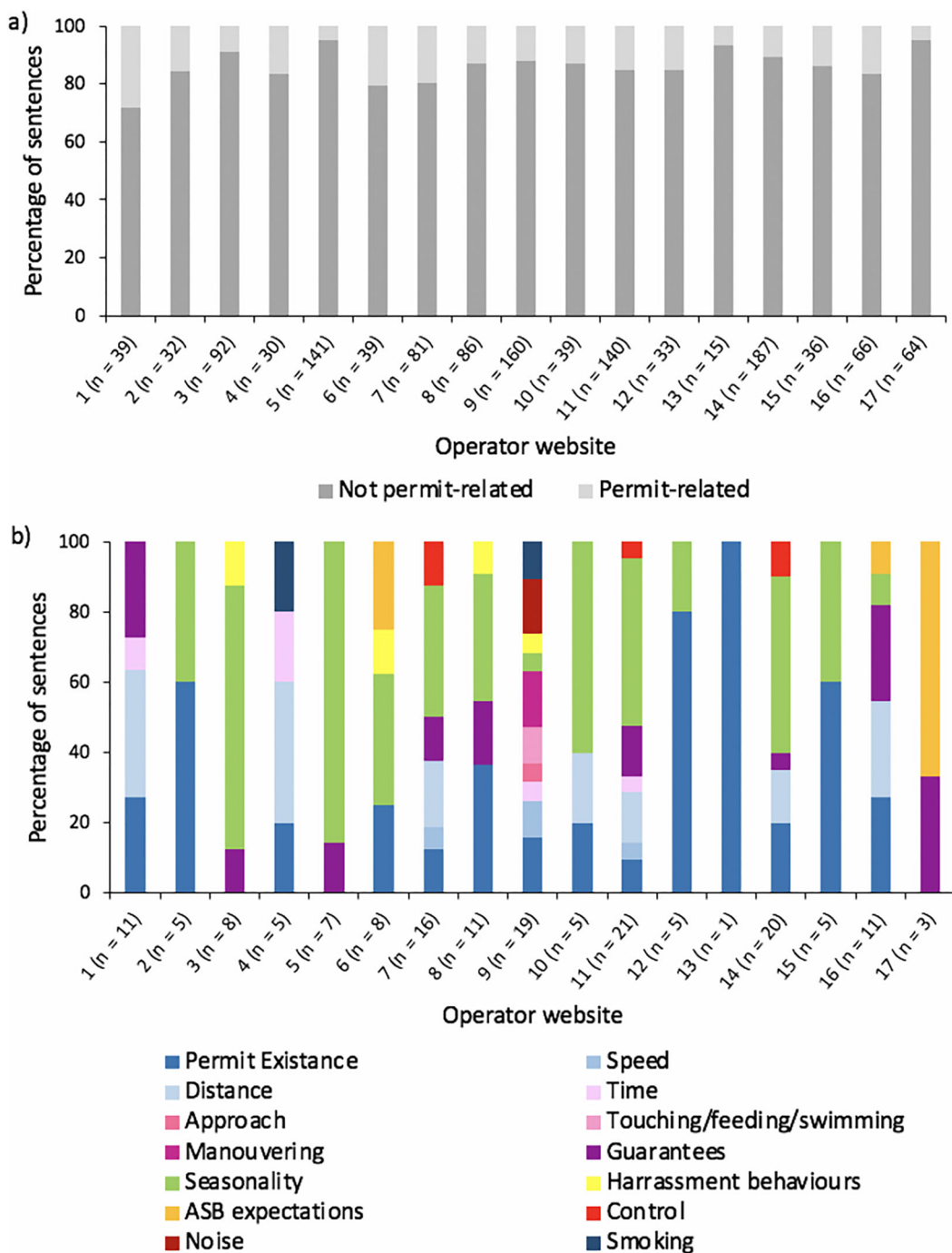


Figure 3. Breakdown of sentences extracted from 17 permitted South African boat-based whale-watching (BBWW) operator websites showing the percentage of sentences that were a) operator-specific permit-related (light grey) and not permit-related (dark grey) and b) the operator-specific breakdown of permit-related sentences classified into permit regulations, when all sentences that were not-permit related were removed.

Furthermore, of the whale photos, 313 photographs were of whales alone while 91 were of whales in the presence of a vessel. Similarly for dolphins, 131 photographs were of dolphins alone and 11 were of dolphins in the presence of a vessel.

Photograph compliance and active surface behaviour representation

Apparent compliance with three regulations: distance of vessel to animal, touching, swimming and/or feeding of cetaceans, and calf presence for whales and dolphins, were measurable from 103 photographs (92 of whales, 11 of dolphins) on 11 of the websites. After removing six photographs for uncertain compliance, 91% of photographs containing whales appeared non-compliant for distance of vessel to animal, and 55% for dolphins (Table 1, Appendix 1). Only one photograph used a relevant explanatory caption which enabled a distance non-compliant photograph to be marked as compliant (Figure 1.9). Calf presence was only applicable for one whale photograph which appeared non-compliant. Two photographs appeared non-compliant for touching/feeding of cetaceans (2%). These two photos were of whale encounters.

The proportion of photographs showing whales exhibiting ASB varied from 9% to 100% (average 57%) across websites. Similarly, the proportion of photographs showing dolphins exhibiting ASB varied widely, ranging from 0% to 100% with an average of 23%. Of all whale photographs extracted from all 17 websites, 37% contained ASB for whales, and of all dolphin photographs extracted 25% contained ASB (Table 1, Appendix 1). When looking at individual operator websites, all displayed at least one photograph of whales exhibiting ASB, and four websites displayed only photographs of whales exhibiting ASB. On the other hand, one website displayed only dolphin ASB photographs, two websites displayed only photographs of dolphins not exhibiting ASB, and four websites displayed no photographs of dolphins at all.

Discussion

The results of this study highlight South African BBWW operators' websites as insufficiently transparent in the display and explanation of the current governmental permit regulations. The textual information relating to these regulations is poorly represented across all websites, and photographic content tended to promote non-compliant trips, specifically with regards to distances from whales. Through either a lack of information or conflicting content, there is disconnect between the advertisement of BBWW on websites and a regulation compliant, legal trip. Through failing to make the trip boundaries that are in line with permit regulations clear, it can be anticipated that tourists may develop an expectation for the experience that the operator will be challenged to fulfil legally, and therefore responsibly.

It is well documented that BBWW can be a form of consumptive tourism with various adverse impacts on the target species (Bearzi, 2017; Higham et al., 2016; Machernis et al., 2018). Many leading non-governmental organisations, such as the International Whaling Commission (IWC), World Wildlife Fund (WWF), World Cetacean Alliance (WCA) and academic institutions highlight the need for 'responsible' whale-watching operations in order to ensure sustainability, but few differentiate specifically between 'responsible' and 'irresponsible practice' (Commission International Whaling, 2020; Corkeron, 2006; Iñíguez, 2013; World Cetacean Alliance, 2020). One aspect of 'responsible' whale-watching that is widely acknowledged and mutually agreed upon, however, is that explicit regulations which minimise disruption to target species, and enforcement of them, is required (Carlson, 2012; Corkeron, 2006; Kessler & Harcourt, 2013; Ryan et al., 2018). Stakeholder focus groups also highlighted the importance of factors such as proximity, approach, and how long you stay with the animals as key to BBWW management (Finkler & Higham, 2020). In South Africa these regulations exist and should govern the responsible and legal manner in which trips are conducted and should be transparent in all forms of advertising used by the industry.

Although the existence, and possession, of a BBWW permit was mentioned on most of the websites examined in this study (82%), the contents of the permit and the regulations were, in general, poorly represented. Most permit-related content on websites involved proud announcements of being permit holders (e.g. "We also boast one of the limited whale watching permits

allocated country wide”) and not information on the actual permit regulations. The former builds confidence that the operator has appropriate permissions and the latter (should) temper expectations about how the interaction can and ought to proceed. This has the potential to affect tourist experiences, as well as cetacean welfare. Information quality and quantity was inconsistent throughout websites; where information was present, it was sometimes conflicting or opposing the actual permit regulations. Finkler and Higham (2020) acknowledge that there is a lack of communication of scientific information within the industry that needs to be more effectively shared to help operators promote sustainable standards of practice. If tourists are well informed about negative impacts on cetaceans, they are prepared to stay further away from them (Finkler & Leon, 2019; Kessler et al., 2014).

For photographs, the main non-compliance to legal regulations was seen in the distances to whales regulation. The majority (91%) of whale photographs that could be assessed for distance showed encounters clearly closer than 50 m, often right beside the boat, with no accompanying text to explain why this may be (e.g. the whale led the nature of the encounter and approached them, not the other way around). One of the photographs extracted was non-compliant with distance regulations but contained a caption explaining that while there are regulations in place the animal can control the encounter and approach closer of its own volition. As such, this photograph was recorded as compliant.

It is important that not all close encounter advertisement should be solely labelled as irresponsible or illegal. The narrative of close encounters needs to change from one of simply “keep your distance” to one of respectful encounters, where vessels comply with legal regulations and allow close contact to be controlled by the animal (Finkler & Higham, 2020). As discussed previously, photographs are a highly persuasive visual tool (Joffe, 2008) which are often superior over text to capture a viewer’s attention (Özdemir, 2010; Wedel & Pieters, 2007). Therefore, their use in websites in which they imply irresponsible conduct could be powerful in public expectation formation (Finkler & Higham, 2020). As such, changing photographs to be in line with regulations could be a simple way to use them to promote sustainable practices and conservation messages.

In text, conflicting information occurred most frequently for ASB and trip guarantees. Websites included statements guaranteeing the sighting of cetaceans and promoting that ASB would often be seen (e.g. “They are very inquisitive and often perform spectacular breaches”). These behaviours, although natural, are less common than non-active surface behaviours regularly seen during travelling such as a simple rise or blow (Di Clemente et al., 2018). The advertisement of ASB and providing guarantees for particular sightings or behaviours both fall under (and contradict) regulations that stipulate tourists must be provided information on ‘the realistic expectation of seeing whales’ as per the permit. It is important to acknowledge the link between tourist expectations and the reality of a legal trip, and if the two align. In the case of responsible BBWW, tourist expectations that aligned with a legal trip would inherently include practices that benefit (or do not harm) cetaceans, assuming permit regulations are in place, and are strict enough. The principle that Govers and Go (2004) state on destination image formation could suggest that a driving force for tourist expectations not aligning with a legal and responsible trip could be stemming from operator marketing.

When marketing a tourist experience, there is often a trade-off between projecting an authentic and realistic representation of the experience, and commoditising it for tourist consumption by exhibiting a desirable experience (Cohen, 1988; Govers & Go, 2004). Understandably, when the actual experience differs markedly from the marketed, expected experience, tourists’ responses and reviews can be negative (Fairweather & Swaffield, 2002). Therefore, in order for the experience to leave tourists satisfied, the marketed experience needs to be in line with the actual experience (Govers & Go, 2004). This can be done in two ways: either the marketed experience needs to mirror the actual experience, or the actual experience needs to be changed to mirror the marketed experience (which may not be in line with legal regulations). Globally, it would seem that in the case of BBWW the latter route is often taken to ensure tourist

satisfaction, resulting in incomplete compliance with BBWW regulations (Allen et al., 2007; Kessler & Harcourt, 2013; Meissner et al., 2015; Sitar et al., 2016; Whitt & Read, 2006). If advertising is in line with legal permit regulations, there will be a smaller gap between this information (the destination image) and the reality of a legal trip. Therefore, in theory, it may aid in increasing tourist satisfaction with a responsible trip as the actual experience would mirror the marketed experience (Govers & Go, 2004). If marketed messages are consistent with legal or best-practice trips informed through science, BBWW experiences will better balance the visitor experience and the animals' welfare (Finkler & Higham, 2020). The effects of and relationship between tourist views and satisfaction are an area that requires further study.

In literature, enforcement is often raised as a necessary tool to ensure responsible BBWW, however, enforcement is challenging and rarely implemented properly (Garrod & Fennell, 2004; Kessler & Harcourt, 2013; Whitt & Read, 2006), making self-regulation a critical component to sustainability (Hassan, 2000). However, in the case of BBWW, it has been shown that self-regulation often results in low compliance, and instead requires monitoring, enforcement and evaluation (Wiley et al., 2008). Public pressure and social diffusion are two aspects that may be useful in regulating the industry to abide by legal regulations (Kessler & Harcourt, 2013; McKenzie-Mohr, 2011). In other environmental areas it has been shown that public pressure by consumers can be powerful in achieving conservation goals (Sodhi et al., 2011). Bearzi (2007) also emphasises the need for public pressure in marine conservation, but states that consumers need to be aware and understand the implications of their actions in order to do so effectively.

Duffus and Dearden (1990) highlight a shift in consumers changing from specialist to generalists in wildlife tourism whom are usually less interested in conservation and education. Malcolm and Duffus (2003) describe them as consumers with little or no experience, little prior knowledge, and general expectations. However, there is a drive towards ethical and ecologically sustainable approaches becoming more salient in some public desires (Boley et al., 2017; Juvan & Dolnicar, 2016). Additionally, studies have shown that tourists want to receive environmental education on wildlife tourism trips (Andersen & Miller, 2006; Ballantyne et al., 2009; Lück, 2003). Hryciuk and Forestell (2012) suggest that during a tour, post-contact of viewing animals is the most effective time to convey environmental issues and conservation messages, while pre-tour briefs (just before the actual tour) were shown to be ineffective. It is argued that onboard education at any stage of the trip may not be successful as a sole method of educating generalist consumers because they struggle to receive messages amongst novel stimulus (Malcolm & Duffus, 2003). Any information given during the experience is introductory rather than supplemental; it is a catalyst for the message but requires additional inputs such as pre- and/or post-trip messages (Higham, 1998; Malcolm & Duffus, 2003).

Website advertising is one of the first points of exposure to the BBWW experience and is used by most operators to supply information and online booking. Official websites were used in this study as they provide a platform where information can be statically displayed, as opposed to the nature of other social platforms such as Facebook and Instagram which have new content regularly uploaded. Official websites make specific information more easily accessible and allow for a higher level of control over information than other social media platforms; the influence of the cognitive image (tourists own knowledge or beliefs) is greater when social media is used (Molinillo et al., 2017). Therefore, official websites may provide a good platform to display standardised pre-trip information on regulations that is not influenced by opinion. This could be important in raising public awareness and increasing knowledge and understanding of regulations, thereby shaping consumer expectations and attitude towards enforcing legally compliant trips. It does, however, need to be acknowledged that there are multiple avenues by which information can be received, and they all have their own influence and merits, such as social media, documentaries, books, third party websites and other online content. Tourist expectation formation is complex and may arise from many different factors (Cohen et al., 2014; Ye & Tussyadiah, 2011). It is not currently known which information sources are more influential

in BBWW; future studies on this topic will help to prioritise efforts. However, regardless of the specific impact websites have on expectation formation, this does not disregard the fact that they are one element that influences tourists, are viewed by tourists pre-trip, and occasionally unnecessarily conflict with permit regulations instead of being a platform to promote them.

A limitation of this study is that only information displayed on permitted BBWW operators' official websites was included and analysed for regulation transparency and accuracy. This leaves important focal points for further study including what is currently available on other platforms (Facebook, Twitter etc) and how that influences tourists; increased information on the South African whale-watching tourist demographic and characteristics may be needed for this. Methods for displaying clear and effective information should also be assessed. For example, only photography was looked at in this study because it was more standardised across websites (rarely any websites included videos, and if they did it was not regulation-related content) and less subjective in interpretation. However, videos are another vital tool to effectively convey information (Finkler & Leon, 2019) which should be considered. It also leaves scope to research how regulations are incorporated into education and communication at different levels of the trip (pre, during and post) and how consumers would best digest information at each point.

In the field of education, the availability and accessibility of data or resources has long been associated with performance improvements (O'Mahony et al., 2009; Odunlade, 2017). In essence, the easier it is to access and use quality information, the more it will be successfully utilised. This study not only highlighted a lack of regulation content, and occasional inaccurate information sharing in official BBWW operators' websites, but also how difficult this information is to source anywhere online, including governmental and the national BBWW association websites. The permit states that operators should make information that prevents the formation of unrealistic expectations available to marketers and clients before they book, but there is no clarity on how to do this and exactly what information it should convey. Assistance from the government on how to display permit regulations and manage expectations at any stage of the BBWW process is lacking. The differing socio-economic backgrounds and levels of environmental education experience of operators must be taken into account, and sufficient aid provided to standardise and allow for accurate delivery of conservation messages (Finkler & Higham, 2020). Although only official websites were analysed, the findings highlight the need for operators and government to align their information to convey the same message at all points of the BBWW experience. Shifting the focus of both marketing and the actual trip to responsible BBWW can be a powerful and complementary combination, providing better experiences for tourists, cetaceans, and operators (Finkler & Higham, 2020). Operators should also take responsibility to adopt this narrative to promote the sustainability of the industry.

Conclusion and recommendations

The main conclusions that can be drawn from this study are: a) transparency in explicit regulations is lacking such that regulations are not well, or often accurately, represented in South African permitted BBWW operators' official website content, and b) for public pressure to be effective in supporting enforcement of a legally compliant trip, regulation information needs to be consistent, correct, widely available, and cohesive across all aspects of BBWW, including official websites. For practical implementation, clear guidelines on marketing need to be incorporated into governmental permit regulations. It should be stated that the regulations should be displayed clearly and correctly. These guidelines must help to manage tourist expectations and show clear regulations and operating practices whilst not disregarding the operators need for advertising to be enticing to maintain and drive tourist interest. To keep the quality consistent and information correct, we recommend that a mandatory resource, or resources, are supplied by the government to each operator that is awarded a permit, and these should be displayed on

all platforms. Standardised booklets, posters and infographics displaying permit regulations for the South African BBWW industry are currently being produced by the authors to assist government and industry. Photographic content should always have captions explaining the context of that photograph whether it appears legal or not, and it is recommended that at least half of all photographs must be legal appearing, regardless of captions. The same balance should apply for displaying ASB and non-ASB photographs. Operators should take care to ensure that their narrative promotes that of a responsible and legal trip across all media platforms.

This study adds to the limited literature investigating the advertising of industry regulations in wildlife tourism and is the first of its kind for the South African BBWW industry. Using the BBWW industry as a case study we highlight website marketing as an area which seems to be overlooked as an important avenue for encouraging sustainable wildlife tourism through education and regulation transparency. In wider applications, the sentiment from this study should be echoed in the management of marketing of any sustainable tourism sector, creating a heightened awareness of the coherent narratives required in media to support responsible tourism. The theory behind the study should be applied to all avenues of marketing, e.g. social media, brochures and websites. With a natural environment under increasing anthropogenic pressure, there is a need to direct narratives in a sustainable direction to educate tourists with a unified message from decision makers, scientists, and the tourism industry itself. It is understood that advertising in wildlife tourism is effective in selling an experience, however, the tourist industry must take more responsibility to ensure it is done within sustainable parameters. This is particularly important when specific regulations are already in place; ones that have been established on a thorough understanding of the animals and endorsed by government. The negative effects of tourism on wildlife and environments is well published, however this study highlights an industry where this knowledge is not being implemented in advertising and is still neglecting to responsibly market sustainable practices.

In conclusion, this study reports low figures of permit regulation transparency and high rates of content that appears illegal on official South African BBWW websites. It highlights a gap between governmental permit regulation content and what is displayed on BBWW operators' websites; advertisement does not always align with the portrayal of a legal trip experience. We provide some solutions for reducing this gap which we believe is a poorly recognised and underestimated cause of ecological unsustainability in the BBWW tourism industry. This study forms a basis for further research into different media narratives, tourist expectation formation, and how marketing and advertisement relates to this in BBWW.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This work was supported by the World Wildlife Fund Nedbank Green Trust under grant number GT5651. MW and MB acknowledge funding from the National Research Foundation. CJ, MW, GSP and MB thank the Nature's Valley Trust and Nelson Mandela University for logistical and salary support. Three anonymous reviewers are thanked for their valuable comments on a draft manuscript.

Notes on contributors

Caitlin Judge is a conservation scientist and communications manager for Nature's Valley Trust. She has a BSc. Hons degree in Zoology from Newcastle University in the UK, F.G.A.S.A guiding experience and research skills. Alongside her academic studies she has creative experience in videography, social media and graphic design. This mixture of experience helps to bridge the gap between scientific research and communication to the public.

Gwenith is a marine mammal biologist who has specialised her research on the Bryde's whale, contributing vital new information on their taxonomy, abundance, and seasonal movements. She has worked closely with the South African whale-watching industry for 15 years, recognising their value as platforms of opportunity for data collection and education of the general public about the threats to the marine environment. Gwenith coordinates the local marine mammal stranding network and is a participating member in several national and international cetacean research groups that are working towards better conservation of several threatened species. Gwenith is a postdoctoral research fellow at Nelson Mandela University, but is based in Plettenberg Bay and partners with the Nature's Valley Trust on marine related research.

ResearchGate: https://www.researchgate.net/profile/Gwenith_Penry

Mark Brown, As a conservation biologist, Mark is passionately interested in the interface between biodiversity and people. Understanding the impact we have on local biodiversity, and creating novel ways to mitigate that through inclusive conservation programs is the focus of much of his work. His academic work is varied and includes a wide variety of plant and animal taxa, ranging from fish to birds to marine mammals. Mark holds an honorary research fellow position in the School of Life Sciences at the University of KwaZulu-Natal.

ResearchGate: http://www.researchgate.net/profile/Mark_Brown13

Minke Witteveen is a PhD candidate at Nelson Mandela University, studying the sustainability of boat-based whale-watching tourism in South Africa. Minke has an MSc in Conservation from the University of Cape Town. She is passionate about the natural environment and conservation, and enjoys pursuing her interests in a wide variety of topics, as well as instilling passion for conservation through environmental education.

ResearchGate: https://www.researchgate.net/profile/Minke_Witteveen

ORCID

Gwenith Susan Penry  <http://orcid.org/0000-0003-0545-7723>

Mark Brown  <http://orcid.org/0000-0002-0253-9363>

Minke Witteveen  <http://orcid.org/0000-0003-4115-763X>

References

- Allen, S., Smith, H., Waples, K., & Harcourt, R. (2007). The voluntary code of conduct for dolphin watching in Port Stephens, Australia: Is self-regulation an effective management tool? *Journal of Cetacean Research and Management. International Whaling Commission*, 9(2), 159–166.
- Amerson, A., & Parsons, E. C. M. (2018). Evaluating the sustainability of the gray-whale-watching industry along the pacific coast of North America. *Journal of Sustainable Tourism. Taylor & Francis*, 26(8), 1362–1380.
- Andersen, M. S., & Miller, M. L. (2006). Onboard marine environmental education: Whale watching in the San Juan Islands, Washington. *Tourism in Marine Environments. Cognizant Communication Corporation*, 2(2), 111–118.
- Andersen, M. S., & Miller, M. L. (2006). Onboard marine environmental education: Whale watching in the San Juan Islands. *Tourism in Marine Environments*, 2(2), 111–118.
- Bai, B., Law, R., & Wen, I. (2008). The impact of website quality on customer satisfaction and purchase intentions: Evidence from Chinese online visitors. *International Journal of Hospitality Management*, 27(3), 391–402.
- Ballantyne, R., Packer, J., & Hughes, K. (2009). Tourists' support for conservation messages and sustainable management practices in wildlife tourism experiences. *Tourism Management*, 30(5), 658–664. <https://doi.org/10.1016/j.tourman.2008.11.003>
- Bearzi, G. (2007). Marine conservation on paper. *Conservation Biology. JSTOR*, 21(1), 1–3.
- Bearzi, M. (2017). Impacts of marine mammal tourism. In D. Blumstein, B. Geffroy, D. Samia, & E. Bessa (Eds.), *Ecotourism's promise and peril* (pp. 73–96). Springer.
- Bejder, L., & Samuels, A. (2003). Evaluating the effects of nature-based tourism on cetaceans. *Marine Mammals: Fisheries, Tourism and Management Issues*, 1, 229–256.
- Bejder, L., Samuels, A. M. Y., Whitehead, H. A. L., Gales, N., Mann, J., Connor, R., Heithaus, M., Watson, -Capps, J., Flaherty, C., & Krützen, M. (2006). Decline in relative abundance of bottlenose dolphins exposed to long-term disturbance. *Conservation Biology : The Journal of the Society for Conservation Biology*, 20(6), 1791–1798. <https://doi.org/10.1111/j.1523-1739.2006.00540.x>
- Bigne, J. E., Sanchez, M. I., & Sanchez, J. (2001). Tourism image, evaluation variables and after purchase behaviour: Inter-relationship. *Tourism Management*, 22(6), 607–616.
- Björk, P. (2010). Atmospherics on tour operators' websites: Website features that stimulate emotional response. *Journal of Vacation Marketing*, 16(4), 283–296. <https://doi.org/10.1177/1356766710372243>

- Boley, B. B., McGehee, N. G., & Hammett, A. L. T. (2017). Importance-performance analysis (IPA) of sustainable tourism initiatives: The resident perspective. *Tourism Management*, 58, 66–77.
- Britton, R. A. (1979). The image of the Third World in tourism marketing. *Annals of Tourism Research*, 6(3), 318–329.
- Buhalis, D., & Law, R. (2008). Progress in information technology and tourism management: 20 years on and 10 years after the Internet—The state of eTourism research. *Tourism Management*, 29(4), 609–623.
- Carlson, C. (2012). *A review of whale watch guidelines and regulations around the world version 2012*. Report to the International Whaling Commission, p. 2015.
- Chen, C.-F., & Tsai, D. (2007). How destination image and evaluative factors affect behavioral intentions? *Tourism Management*, 28(4), 1115–1122.
- Chi, C. G.-Q., & Qu, H. (2008). Examining the structural relationships of destination image, tourist satisfaction and destination loyalty: An integrated approach. *Tourism Management*, 29(4), 624–636. Elsevier.
- Childers, T. L., & Houston, M. J. (1984). Conditions for a picture-superiority effect on consumer memory. *Journal of Consumer Research*, 11(2), 643–654.
- Chilvers, L. B., & Corkeron, P. J. (2001). Trawling and Bottlenose dolphins' social structure. *Proceedings. Biological Sciences*, 268(1479), 1901–1905. <https://doi.org/10.1098/rspb.2001.1732>
- Chung, N., Lee, H., Lee, S. J., & Koo, C. (2015). The influence of tourism website on tourists' behavior to determine destination selection: A case study of creative economy in Korea. *Technological Forecasting and Social Change*, 96, 130–143. <https://doi.org/10.1016/j.techfore.2015.03.004>
- Cohen, E. (1988). Authenticity and commoditization in tourism. *Annals of Tourism Research*, 15(3), 371–386. [https://doi.org/10.1016/0160-7383\(88\)90028-X](https://doi.org/10.1016/0160-7383(88)90028-X)
- Cohen, S. A., Prayag, G., & Moital, M. (2014). Consumer behaviour in tourism: Concepts, influences and opportunities. *Current Issues in Tourism*. Taylor & Francis, 17(10), 872–909.
- Commission International Whaling. (2020). *Whale watching*. <https://iwc.int/whalewatching>
- Corkeron, P. J. (2006). How shall we watch whales. In D.M. Lavigne (Ed.), *Gaining ground: In pursuit of ecological sustainability* (pp. 161–170). International Fund for Animal Welfare Guelph.
- Court, B., & Lupton, R. A. (1997). Customer portfolio development: Modeling destination adopters, inactives, and rejecters. *Journal of Travel Research*, 36(1), 35–43.
- Department of Environmental Affairs. (2017a). *National Environmental Management; Biodiversity Act (Act No. 10 of 2004) Policy on Boat-Based Whale and Dolphin Watching*.
- Department of Environmental Affairs. (2017b). *National Environmental Management: Biodiversity Act 2004 (Act No. 10 of 2004) Threatened or Protected Marine Species Regulations*.
- Di Clemente, J., Christiansen, F., Pirotta, E., Steckler, D., Wahlberg, M., & Pearson, H. C. (2018). Effects of whale watching on the activity budgets of humpback whales, *Megaptera novaeangliae* (Borowski, 1781), on a feeding ground. *Aquatic Conservation: Marine and Freshwater Ecosystems*, 28(4), 810–820.
- Duffus, D. A., & Dearden, P. (1990). Non-consumptive wildlife-oriented recreation: A conceptual framework. *Biological Conservation*, 53(3), 213–231.
- Echtner, C. M., & Ritchie, J. R. B. (1991). The meaning and measurement of destination image. *Journal of Tourism Studies*, 2(2), 2–12.
- Fairweather, J. R., & Swaffield, S. R. (2002). Visitors' and locals' experiences of Rotorua, New Zealand: An interpretative study using photographs of landscapes and Q method. *International Journal of Tourism Research*, 4(4), 283–297. <https://doi.org/10.1002/jtr.381>
- Fakeye, P. C., & Crompton, J. L. (1991). Image differences between prospective, first-time, and repeat visitors to the Lower Rio Grande Valley. *Journal of Travel Research*, 30(2), 10–16.
- Finkler, W., & Higham, J. E. S. (2020). Stakeholder perspectives on sustainable whale watching: A science communication approach. *Journal of Sustainable Tourism*, 28(4), 535–549. <https://doi.org/10.1080/09669582.2019.1684930>
- Finkler, W., & Leon, B. (2019). The power of storytelling and video: A visual rhetoric for science communication. *Journal of Science Communication*, 18(05), A02. <https://doi.org/10.22323/2.18050202>
- García-Cegarra, A. M., & Pacheco, A. S. (2017). 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. *Aquatic Conservation: Marine and Freshwater Ecosystems*, 27(5), 1011–1020. Wiley Online Library.
- Garrod, B., & Fennell, D. A. (2004). An analysis of whalewatching codes of conduct. *Annals of Tourism Research*, 31(2), 334–352.
- Govers, R., & Go, F. M. (2004). Projected destination image online: Website content analysis of pictures and text. *Information Technology & Tourism*, 7(2), 73–89.
- Guerra, M., & Dawson, S. M. (2016). Boat-based tourism and bottlenose dolphins in Doubtful Sound, New Zealand: The role of management in decreasing dolphin-boat interactions. *Tourism Management*, 57, 3–9.
- Gunn, C. A. (1988). *Tourism planning*. Taylor & Francis.
- Harms, M., Asmutis-Silvia, R., & Rosner, A. (2013). Whale watching: More than meets the eyes. *Report to NOAA's Fisheries Northeast Region Program Office (NERO)*, 55, 3.
- Hassan, S. S. (2000). Determinants of market competitiveness in an environmentally sustainable tourism industry. *Journal of Travel Research*, 38(3), 239–245.

- Higham, J. E. S. (1998). Tourists and albatrosses: The dynamics of tourism at the Northern Royal Albatross colony, Taiaroa Head, New Zealand. *Tourism Management*, 19(6), 521–531.
- Higham, J. E. S., Bejder, L., Allen, S. J., Corkeron, P. J., & Lusseau, D. (2016). Managing whale-watching as a non-lethal consumptive activity. *Journal of Sustainable Tourism*. Taylor & Francis, 24(1), 73–90.
- Higham, J., Bejder, L., & Williams, R. (2014). *Whale-watching: Sustainable tourism and ecological management*. Cambridge University Press.
- Hoyt, E. (2001). *Whale watching 2001: Worldwide tourism numbers, expenditures, and expanding socioeconomic benefits*. IFAW.
- Hoyt, E., & Parsons, E. C. M. (2014). The whale-watching industry. In J. Higham, L. Bejder, R. Williams (Eds.), *Whale-watching: sustainable tourism and ecological management* (pp. 57–70).
- Hryciuk, J. M., & Forestell, P. H. (2012). Change in focus of attention among whale-watch passengers occurs as a function of temporal phase of the tour. *Tourism in Marine Environments*. Cognizant Communication Corporation, 8(4), 189–198.
- Íñiguez, M. A. (2013). Responsible whale watching and whale welfare. *Animal Welfare*, 22(1), 113–115.
- Internet Live Stats. (2020). *Internet Users, Internet Live Stats*. <https://www.internetlivestats.com/internet-users/>
- Joffe, H. (2008). The power of visual material: Persuasion, emotion and identification. *Diogenes*, 55(1), 84–93.
- Juvan, E., & Dolnicar, S. (2016). Measuring environmentally sustainable tourist behaviour. *Annals of Tourism Research*, 59, 30–44.
- Kaplanidou, K., & Vogt, C. (2006). A structural analysis of destination travel intentions as a function of web site features. *Journal of Travel Research*, 45(2), 204–216.
- Kessler, M., & Harcourt, R. (2013). Whale watching regulation compliance trends and the implications for management off Sydney, Australia. *Marine Policy*, 42, 14–19.
- Kessler, E., Harcourt, R., & Bradford, W. (2014). Will whale watchers sacrifice personal experience to minimize harm to whales? *Tourism in Marine Environments*, 10(1), 21–30.
- Ku, E. C. S., & Chen, C.-D. (2015). Cultivating travellers' revisit intention to e-tourism service: The moderating effect of website interactivity. *Behaviour & Information Technology*, 34(5), 465–478.
- Kucukusta, D., Law, R., Besbes, A., & Legohérel, P. (2015). Re-examining perceived usefulness and ease of use in online booking. *International Journal of Contemporary Hospitality Management*, 27(2), 185–198.
- Lewis, S., & Walker, D. (2018). *Global Best Practice Guidance for Responsible Whale and Dolphin Watching: Tourism activities involving wild cetaceans*. Brighton, UK: A guide by the World Cetacean Alliance with support from ClubMed.
- Lin, J. H., Chen, T. Y., & Liu, C. R. (2003). The influence of tourism image on tourists' behavioral intention on Taiwan's coastal scenic area: Testing the mediating variable of tourists' satisfaction. *Journal of Outdoor Recreation Study*, 16(2), 1–22.
- Lopez, G., & Pearson, H. C. (2017). Can whale watching be a conduit for spreading educational and conservation messages? A case study in Juneau, Alaska. *Tourism in Marine Environments*. Cognizant Communication Corporation, 12(2), 95–104.
- Lu, Z., Lu, J., & Zhang, C. (2002). Website development and evaluation in the Chinese tourism industry. *Netcom*, 16(3), 191–208.
- Lück, M. (2003). Education on marine mammal tours as agent for conservation—but do tourists want to be educated? *Ocean & Coastal Management*, 46(9–10), 943–956.
- Lusseau, D., & Bejder, L. (2007). The long-term consequences of short-term responses to disturbance experiences from whalewatching impact assessment. *International Journal of Comparative Psychology*, 20(2), 228–236.
- Machernis, A. F., Powell, J. R., Engleby, L., & Spradlin, T. R. (2018). An updated literature review examining the impacts of tourism on marine mammals over the last fifteen years (2000–2015) to inform research and management programs. U.S. Dept. of Commerce, NOAA. NOAA Technical Memorandum NMFS-SER-7: p. 66.
- Malcolm, C. D., & Duffus, D. A. (2003). Can whale-watching convey an important message of conservation?: An initial perspective from British Columbia, Canada. *Prairie Perspectives: Geographical Essays*, 6, 75–190.
- McKenzie-Mohr, D. (2011). *Fostering sustainable behavior: An introduction to community-based social marketing*. New society publishers.
- Meissner, A. M., Christiansen, F., Martinez, E., Pawley, M. D. M., Orams, M. B., & Stockin, K. A. (2015). Behavioural effects of tourism on oceanic common dolphins, *Delphinus* sp., in New Zealand: The effects of Markov analysis variations and current tour operator compliance with regulations. *Plos One*, 10(1), e0116962. <https://doi.org/10.1371/journal.pone.0116962>
- Molinillo, S., Liébana-Cabanillas, F., & Anaya-Sánchez, R. (2017). Destination image on the DMO's platforms: Official website and social media. *Tourism & Management Studies*, 13(3), 5–14.
- Navío-Marco, J., Ruiz-Gómez, L. M., & Sevilla-Sevilla, C. (2018). Progress in information technology and tourism management: 30 years on and 20 years after the internet-Revisiting Buhalis & Law's landmark study about eTourism. *Tourism Management*, 69, 460–470.

- O'Connor, S., Campbell, R., Cortez, H., & Knowles, T. (2009). *Whale watching worldwide: Tourism numbers, expenditures and expanding economic benefits, a special report from the International Fund for Animal Welfare*. Economists at Large.
- O'Mahony, C., Ferreira, M., Fernandez-Palacios, Y., Cummins, V., & Haroun, R. (2009). Data availability and accessibility for sustainable tourism: An assessment involving different European coastal tourism destinations. *Journal of Coastal Research*, 2, 1135–1139.
- Odunlade, R. O. (2017). *Availability and accessibility of information resources as predictors of lecturer's teaching effectiveness*. Library Philosophy and Practice, p. 1509.
- Oh, H., Fiore, A. M., & Jeoung, M. (2007). Measuring experience economy concepts: Tourism applications. *Journal of Travel Research*, 46(2), 119–132.
- Özdemir, G. (2010). Photographs in Brochures as the Representations of Induced Image in the Marketing of Destinations. *Tourism and Visual Culture Methods and Cases*, 2, 169.
- Parsons, E. C. M. (2012). The negative impacts of whale-watching. *Journal of Marine Biology*, 2012, 1–9.
- Rittichainuwat, N. B., Qu, H., & Brown, T. (2001). The image of Thailand as an international travel destination. *Cornell Hotel and Restaurant Quarterly*, 42(2), 82–95.
- Ryan, C., Bolin, V., Shirra, L., Garrard, P., Putsey, J., Vines, J., & Hartny-Mills, L. (2018). The development and value of whale-watch tourism in the west of Scotland. *Tourism in Marine Environments*, 13(1), 17–24.
- San Martín, H., & Herrero, Á. (2012). Influence of the user's psychological factors on the online purchase intention in rural tourism: Integrating innovativeness to the UTAUT framework. *Tourism Management*, 33(2), 341–350. <https://doi.org/10.1016/j.tourman.2011.04.003>
- Shackley, M. L. (1996). *Wildlife tourism*. International Tompson Business Press.
- Sitar, A., May-Collado, L. J., Wright, A. J., Peters-Burton, E., Rockwood, L., & Parsons, E. C. M. (2016). Boat operators in Bocas del Toro, Panama display low levels of compliance with national whale-watching regulations. *Marine Policy*, 68, 221–228.
- Sodhi, N. S., Butler, R., Laurance, W. F., & Gibson, L. (2011). Conservation successes at micro-, meso- and macro-scales. *Trends in Ecology & Evolution*, 26(11), 585–594. <https://doi.org/10.1016/j.tree.2011.07.002>
- Sparks, B., & Pan, G. W. (2009). Chinese outbound tourists: Understanding their attitudes, constraints and use of information sources. *Tourism Management*, 30(4), 483–494.
- Stamation, K. A., Croft, D. B., Shaughnessy, P. D., Waples, K. A., & Briggs, S. V. (2007). Educational and conservation value of whale watching. *Tourism in Marine Environments*, 4(1), 41–55.
- Ukpabi, D. C., & Karjaluoto, H. (2017). Consumers' acceptance of information and communications technology in tourism: A review. *Telematics and Informatics*, 34(5), 618–644. <https://doi.org/10.1016/j.tele.2016.12.002>
- Wedel, M., & Pieters, R. (2007). *Visual marketing: From attention to action*. Psychology Press.
- Wen, I. (2012). An empirical study of an online travel purchase intention model. *Journal of Travel & Tourism Marketing*, 29(1), 18–39.
- Whitt, A. D., & Read, A. J. (2006). Assessing compliance to guidelines by dolphin-watching operators in Clearwater, Florida, USA. *Tourism in Marine Environments. Cognizant Communication Corporation*, 3(2), 117–130.
- Wiley, D. N., Moller, J. C., Pace, R. M., & Carlson, C. (2008). Effectiveness of voluntary conservation agreements: Case study of endangered whales and commercial whale watching. *Conservation Biology*, 22(2), 450–457.
- World Cetacean Alliance. (2020). *Responsible tourism*. <https://worldcetaceanalliance.org/what-we-do/responsible-tourism/>
- Wright, A. J., Verissimo, D., Pilfold, K., Parsons, E. C. M., Ventre, K., Cousins, J., Jefferson, R., Koldewey, H., Llewellyn, F., & McKinley, E. (2015). Competitive outreach in the 21st century: Why we need conservation marketing. *Ocean & Coastal Management*, 115, 41–48.
- Ye, H., & Tussyadiah, I. P. (2011). Destination visual image and expectation of experiences. *Journal of Travel & Tourism Marketing*, 28(2), 129–144.
- Zeppel, H., & Muloin, S. (2014). Green messengers or nature's spectacle. In J. Higham, L. Bejder, R. Williams (Eds.), *Whale-watching: Sustainable tourism and ecological management* (pp. 110–127). Cambridge: Cambridge University Press.