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INTERNATIONAL WHALING COMMISSION

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Initial survey of global commercial swim-with-whale operations

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Background

Swim-with-whale (SWW) operations have become wide-spread and increased in numbers over the last decade (Rose *et al.* 2003, 2005, 2007; Hendrix and Rose 2014). While SWW has grown substantially, research on the behaviour of swimmers, vessel approaches and the impacts of in-water interactions is lacking. Where studies exist on SWW activity, researchers have found that it can disturb the target species by inducing behavioural changes (Vermeulen *et al.* 2012; Lundquist *et al.* 2013).

Swimming, snorkelling, or scuba diving with cetaceans in an effort to observe, photograph, or touch the animals may place both the animals themselves and the swimmers at risk. Risks to swimmers include: potential physical harm or stress, physical challenges (e.g. preventing them from leaving the water), changes in ambient conditions or unexpected events (e.g. bad weather, currents, low visibility, lack of proper safety equipment or training by operators), physical confrontations with target species (e.g. biting, hitting with flukes or pectorals, ramming, dragging), or transmission of disease (IWC 2013).

Risks to the target species include: potential physical harm or stress (e.g. changing its behaviour or that of conspecifics), affecting the integrity of its population, social structure or habitat (e.g. interactions that may cause injury, stress, habituation, tolerance, or sensitisation to human or boat presence), adjustments to activity budgets, alteration of local habitat, changes in population parameters, or transmission of disease (IWC 2013). Due to the inherent risks to the target species and/or swimmers, bans on this type of activity, without special permits, exist in the following areas or countries: the Parties to ACCOBAMS[1], Argentina, Australia, Brazil, Canada, Canary Islands, Chile, Dominican Republic, Ecuador, French West Indies, Hong Kong, Ireland, Japan, Madagascar, Mexico, Puerto Rico, South Africa, St. Lucia, Turks and Caicos, UK, USA, and Uruguay (Carlson 2011).

As part of the ongoing effort by the IWC Scientific Committee's Sub-committee on Whalewatching to address SWW operations, an intersessional working group was established to

[1] http://accobams.org/images/stories/ACCOBAMS_Parties_and_signatories.pdf

monitor and assess the extent and impact of these operations (IWC 2006). This paper summarizes the results of an initial survey undertaken by this group to assess the extent of global commercial SWW operations, the activities undertaken by these tours, and their potential impact on the whales.

Methods

A web search was conducted to compile a list of, and identify, operators around the world offering SWW tours. A dedicated questionnaire (Appendix 1) developed by the intersessional working group (Rose *et al.* 2007) was distributed to 75 operators in 14 countries, covering all continents except Antarctica.

Results

Developing a complete list of operations proved impossible, in part due to the ever growing number of operations, many of which are unregulated and poorly documented or not documented at all. Of the 75 operators who received the survey, 8 (10.7%) replied stating they did not offer SWW opportunities and only 11 (14.7%) replied and completed the survey (25.3% overall response rate). The 11 operators who completed the survey, by country and number, were from Australia (1), Dominican Republic (3), France (1), Iceland (1), Kingdom of Tonga (2), Dominica (2) and New Zealand (1). (Original questionnaire responses are available from the authors.)

Species Targeted

A total of nine whale species were the target of SWW operations including: blue whales, bowhead whales, Bryde's whales, Cuvier's beaked whales, dwarf minke whale, fin whales, humpback whales, southern right whales, and sperm whales[2]. Humpback whales were the most common, being listed as a target species by 27 of the 75 (36%) operators in their advertising, and in 8 of the 11 (73%) surveys returned.

Safety and Education

All 11 respondents indicated they provided their clients with a safety briefing, which included information on vessel and in-water safety; as well as information on safety procedures that, in the opinion of the operator, ensure the swim-with interactions were appropriate for the animal's conservation. All briefings included educational interpretation about the natural history of the target species.

Cetacean behaviour and group size

The majority (91%) of respondents indicated SWW operations focused on mother-calf pairs, primarily for humpback and sperm whales. Operators targeting humpbacks reported that singing and other courtship behaviours were the behavioural patterns most conducive to good in-water encounters, while competition, breaching and traveling made swim-with encounters less likely. Operators targeting sperm whales, reported resting and socializing behavioural patterns were preferred for swim-with encounters.

[2] Short-finned pilot whales were also targeted.

Group size, number and duration of excursions

SWW locations varied depending on number and duration of excursions. In some cases excursions involved the same group of swimmers on multi-day tours (ranging from 7 to 10 days), while other excursions were short (daily), going out multiple times each day. Daily excursions varied between 1 and 12. The number of swimmers per excursion ranged between 4 and 28. The duration of daily excursions varied between 3 and 8 hours, indicating that in some locations daily excursions took advantage of most of the daylight hours. Longer excursions appeared to be associated with multi-day tours. Excursions focusing on humpback and sperm whales operated between 0.8 and 144 km from shore, while the dwarf minke whale SWW activities in Australia typically operated in waters surrounding the Great Barrier Reef.

Swimmer behaviour and whale behavioural responses

Operator responses indicated that the number of times per day swimmers entered the water was variable, weather/sea state-dependent and driven by presence/absence of whales. Two respondents reported swim-with attempts ranged between 2 and 10 per day. Length of time spent in the water per swim attempt ranged from 5-30 minutes. Swimmers' distance from the target species varied from 3-50 m. Swimmers were prohibited from touching whales by 6 of the 11 (55%) operators; however, 5 (45%) operators did not respond to this question. Swimmers were tethered to the vessel in only one case, the SWW operation focusing on dwarf minke whales in Australia. Humpback swim-with encounters took place in waters between 6 m and 2000 m deep, while sperm whale swims took place in waters between 100 m and 3000 m. Dwarf minke whale swim-with encounters took place in waters shallower than 35 m. All SWW operations provided the opportunity to use personal camera gear to collect photos and video. All operators reported some behavioural response from the target species to the presence of swimmers. The most common swim-with responses were curiosity and approaching the vessel or swimmers; in only one case did the operator suggest the whales "mostly ignore" the swimmers.

Regulations

All 11 operators reported following some code of conduct, guidelines or regulations (e.g. some indicated they were regulated at the federal, state, or regional level[3]), while others reported following voluntary codes of conduct organized by whale-watching associations or operators in that particular area.

Discussion

There are insufficient questionnaire returns to grasp the extent of SWW operations globally; how they operate at sea or vary in their operations; their impact on the target species or habitat; or the potential risk to humans. However, the SWW questionnaire results indicate this industry is growing, largely unregulated and under-studied (see also Rose *et al.* 2003, 2005, 2007; Hendrix and Rose 2014). As a result, a precautionary approach should be taken when making any recommendations in relation to the growth or regulation and management of the SWW industry, or in relation to how it interacts with the species it exploits. Current research, where it exists, suggests that the extent of SWW operations – in terms of their numbers and the rate at which they are expanding – is beyond what might be deemed prudent for the sustainability of the

[3] See https://iwc.int/private/downloads/ZIGknj3zwgPmvixnuykJqw/WWREGS%202013.pdf for *A Review of Whale Watch Guidelines and Regulations around the World,* Version 2012.

targeted population on which they rely. We strongly recommend further detailed studies, examining specific locations, habitats and operations, as well as collecting data on capacity and socio-economics, of the SWW industry. Research questions that remain include, but are not limited to:

- Capacity and location of all SWW operations
- Impact on individuals, groups, and populations of targeted species and their habitat
- Risks for swimmers and target species
- Nature (and impact) of swim-with interactions
- Evaluation of management options, including self-regulation, voluntary guidelines, legislation and monitoring
- Assessment of socio-economic impacts of SWW

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Appendix 1: Example of survey

International Whaling Commission

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Swim-with-the-whale Tour Operator Survey

The Whalewatching Sub-Committee of the International Whaling Commission requests your help to learn more about the number of whalewatching tours that offer opportunities to swim with whales. Please complete the following survey. The information provided in this questionnaire will be kept anonymous, and will be used to help whale research and management worldwide. We greatly appreciate your time and help.

Company Name:

Manager:

Company Address:

Email:

Website:

1. In which area do you operate? (e.g., Samana Bay)

2. Approximately how many tours do you run per week?
If tours are multiple days, how many days are tours on the water per week?

3. Approximately how many clients do you take per tour?

4. How long is each tour? (in hours)
If tours are multiple days, how many hours is the tour on the water per day?

5. How many times do clients swim with whales per tour? (Entries into the water)
If tours are multiple days, how many entries for swim are made per day?

6. How long do clients spend in the water with whales?

7. On which species do your swim tours focus?
☐ Humpback Whales ☐ Minke Whales ☐ Sperm Whale ☐ Other:
_____

8. Do clients swim with other species? ☐ Yes ☐ No

8a. If yes, which additional species?

9. Are there preferred groups of animals that are preferred for swim-with encounters?

☐ Groups of whales ☐ Single whales ☐ Adult males ☐ Adult Females
☐ Mother-calf pairs ☐ Calves alone ☐ Juveniles ☐ Other:

10. What behaviors are conducive to swim-with encounters?

☐ Resting ☐ Socializing ☐ Courtship/Mating ☐ Fighting
☐ Feeding ☐ Breaching ☐ Swimming/Travelling ☐ Singing
☐ Other:

11. How close do swimmers get to the whales?
Average approach distance:
☐ 0 – 1 m ☐ 1 – 5 m ☐ 5 – 10 m ☐ 10 – 25 m ☐ 25 – 50 m ☐ >50 m

Closest allowable approach distance:
☐ 0 – 1 m ☐ 1 – 5 m ☐ 5 – 10 m ☐ 10 – 25 m ☐ 25 – 50 m ☐ >50 m

12. Do swimmers touch the whales? ☐ Yes ☐ No

13. Are swimmers tethered/tied to a line? ☐ Yes ☐ No

14. Are swimmers provided with any equipment? (Please describe)

15. Do you give a briefing or instructions to swimmers? ☐ Yes ☐ No

15a. If yes, please describe the human safety component of this briefing:

15b. If yes, please describe the educational elements of this briefing:

15c. If yes, please describe the conservation and whale safety component of this briefing:

16. How far do trips get from port? (If you can provide a map, please attach with your filled survey)

17. Across what depth range do you conduct swims?

18. Do you notice a response by the whales to swimmers? ☐ Yes ☐ No

18a. If yes, please describe the whales' response:

19. Can you provide photographs or video of swim encounters if requested? ☐ Yes ☐ No

19a. 19a: Are swimmers allowed to use their own cameras? ☐ Yes ☐ No

20. Are there regulations or guidelines for swimming with whales in your area? ☐Yes ☐No

20a. If yes, which organization regulates or created the guidelines?
(Please attach document with your filled survey)

20b. If no, are their reasons for the absence of regulations/guidelines?

21. Can you provide us with one of your brochures/copies of your publicity and informational materials or a link to them online?

(If hardcopies, please scan and attach document with your filled survey)

Comments:

Thank you very much for taking the time to complete this survey.