Annex R

Report of the Whale Watching Sub-Committee

1. INTRODUCTORY ITEMS

Participants: Suydam (Chair), Urbán (Co-Chair), Aguilar, al Jabri, Bell, C., Bouzouma, Cassani, Cha, Chauca, Choi, Coscarella, Fernández, Fyfe, Holm, Lee, M., Lee, K., Lundquist, Miketa, Minton, Natoli, New, Noren, Parsons, Porter, Renell, Rojas-Bracho, Rose, Simmonds, Soro, Stachowitsch, Stack, Svoboda, Trejos-Lasso, Viloria, Webster, Weinrich.

1.1 Opening remarks

Suydam welcomed everyone to the first in-person meeting of the sub-committee since 2019 in Nairobi, Kenya. He noted that the sub-committee had made limited progress during the pandemic years; indeed, in the first virtual meeting (SC68B), the sub-committee did not have any virtual sessions and conducted its business entirely by email correspondence. He hoped this year's meeting would help reinvigorate the sub-committee and its work stream and requested all members to give thought and consideration regarding how to do so. Urbán seconded this sentiment and noted it was a 'new moment' for the sub-committee, which should clearly identify its future priorities.

1.2 Election of Chair and Co-Chair

Suydam and Urbán were elected Chair and Co-Chair.

1.3 Appointment of Rapporteur

Rose was appointed rapporteur.

1.4 Adoption of agenda

The adopted agenda is given as Appendix 1.

1.5 Review of available documents

The documents available to the sub-committee were identified as: SC/69A/WW/01-07; SC/69A/E/10; Natoli *et al.* (2021); Anderson *et al.* (2022); and Castro *et al.* 2022).

2. ASSESS THE IMPACTS OF WHALE WATCHING AND SWIM-WITH-WHALE OPERATIONS ON CETACEANS

2.1 Studies on assessing impacts: (i) short term; (ii) mid to long term; (iii) swim-with operations; (iv) emerging issues of concern; (v) emerging technology

SC/69A/WW/02 described the development of a descriptive model of energy expenditure (high energy, energy-saving, underwater), derived from changes in behavioural state of southern right whales (*Eubalaena australis*) targeted by whale watching boats, as a source of information for management decision-making in whale watching operations. There are currently only four commercial vessels operating in the study site (Bahía San Antonio Marine Protected Area, Rio Negro, Brazil), all adhering to guidelines regarding vessel operation. Markov chains and model simulations showed that high energy behaviours were the most sensitive to vessel presence. Vessel exposure thresholds depended on the group type (e.g. solitary individuals, socially active groups) and were always lower in solitary whales. However, while responding to whale watching vessels, whales may have some energetic costs, the current level of vessel exposure has so far fallen below threshold values emerging from the model. The authors caution that the potential for future growth in commercial tourism activities in this area needs careful consideration, as the whales are also exposed to other activities, including artisanal fishing and kayaking. An understanding of vessel exposure thresholds is essential for the development of management strategies that allow the sustainable development of whale watching activity in this area.

The sub-committee welcomed this paper and commended the authors, as it offers a straightforward approach for managers to determine vessel exposure thresholds (e.g. number of whale watching trips per day) that is likely to cause a meaningful additional energy expenditure by the whales. One potential improvement to this approach would be to focus more attention on the length of time required for the animals to return to a baseline energy expenditure, as the relationship between length of exposure and time taken to return to baseline activity is probably non-linear. Another possible improvement might be to focus more on finer-scale changes in specific behaviours rather than changes in behavioural states (e.g. resting to travelling). It was noted that whales may expend little additional energy when travelling at a steady pace than when resting; therefore, pooling certain behaviours into 'high energy' and 'energy-saving' might be misleading.

In further discussion, it was noted that including operators from the outset in discussions to develop protocols for whale watching operations in this area was commendable. A management plan for the area is in the process of being prepared at this time, with input from operators. As a final note, mother-calf pairs are the favoured targets of whale watching operations elsewhere in the region, but these dyads are only now starting to be observed in the Bahía San Antonio Marine Protected Area. It is hoped that this ongoing project will be able to determine a vessel exposure threshold that minimises disturbance to mother-calf pairs in this area.

SC/69A/WW/04 reported on a new project to measure the impacts on humpback whales (*Megaptera novaeangliae*) of whale watching and swim-with-whale operations in Okinawa, Japan. The market is primarily domestic and the operators specialise, conducting either traditional whale watching or swim-with-whale excursions. The sub-committee has previously encouraged further research into the impacts to cetaceans from swim-with-whale operations (IWC, 2003, p. 387) and recommended that swim-with-whale operations not be allowed until impacts are further understood (IWC, 2019, p. 357) – this recommendation is echoed in the IWC's General Principles for Whale Watching[1]. This ongoing study is intended to provide a scientific basis for future recommendations (e.g. mitigation measures) for managing whale watching and swim-with-whale operations in Japan.

The sub-committee commended the authors for the initiation of this research project and was pleased to hear that the industry in Okinawa was willing to accept science-based guidance. Unfortunately, a willingness to establish regulations may not extend to the Okinawan authorities, but discussions with them are ongoing. It was noted that perhaps a productive way to frame the problem with these authorities would be to emphasise the risk to human swimmers. As a caveat to the operators being open to guidance on appropriate behaviour around whales, the lack of reports of swimmer injuries, aggressive behaviour by whales, or inappropriate swimmer behaviour could be due to selective reporting to date. In response to a question, it was noted that the operators in this area are very competitive and this has led to potentially problematic methods for searching for whales, including 360-degree sonar in Amami. The sub-committee also cautioned that lack of an overt reaction from whales to the presence of swimmers does not mean there is no impact. The sub-committee welcomed the swim-with-whale research being undertaken in Okinawa and **agreed** this research should continue and results reported at future meetings.

Attention: G

*The IWC General Principles for Whale Watching discourage the development of direct interactions between humans and cetaceans, including swim-with-cetacean interactions, where they do not currently exist and strict regulation where they already do. The sub-committee **recommended** that the government of Japan and local authorities in Okinawa consider the General Principles and work with local researchers to develop protective and science-based regulations where swimming with humpback whales is currently occurring to minimise the risk of injury or transmission of zoonotic disease to swimmers and harassment to whales.*

SC/69A/WW/07 described how, in Mexico, whale watching on large cetaceans is controlled by the Official Mexican Standard 131, which clearly prohibits swimming with whales. Any company that offers swim-with-whale or swim-with-dolphin activities without a non-extractive use permit is doing so illegally. Despite this, swimming with dolphins (e.g. *Tursiops truncatus, Stenella attenuata* and *Stenella longirostris*) has been a tourist activity for more than 20 years and follows some of the international standards for swimming with cetaceans. In recent years, an activity known as "Sea Safari" has emerged in Baja California Sur, offering to swim with killer whales (*Orcinus orca*). Several vessels surround a group of killer whales and people jump into the water, swim and dive. The operators do not discriminate the ecotype of a killer whale group (mammal eaters are in this area). The Mexican Government should develop regulations to manage this situation – at this point, trying to enforce a prohibition would probably be ineffective.

In discussion, it was noted that no human swimmers had been injured to date, but it was probably only a matter of time before someone is. The impact of intense human activity on the whales and people in the water with them is unknown. The local authorities have expressed interest in regulating the activity, but there has yet to be any regulatory or enforcement actions undertaken.

Attention: CG

*The sub-committee **expressed strong concern** regarding the swim-with-killer-whale activities occurring in Baja California Sur, Mexico. Currently, such activities are illegal under Mexican law and therefore are not regulated. Given that it is unlikely the prohibition on such activities will (or can) be enforced after years of no action, the sub-committee **strongly recommended** that the activity be regulated as a matter of urgency, to protect swimmers and the animals.*

[1] *General Principles for Whale Watching [hyperlink].*

Attention: SC, R

*The sub-committee **recommended** that research to assess the impact of swim-with-whale activities on targeted killer whales and other cetaceans in Mexico be undertaken as a matter of urgency.*

Attention: SC, R

*The sub-committee **recommended** that social science research be undertaken to determine the demographics and motivations of participants in swim-with-killer-whale excursions in Mexico. This activity is clearly dangerous and it would be valuable in terms of developing effective regulations and outreach messaging to understand why people choose to participate in this risky activity. In addition the sub-committee **recommended** that such social science research be undertaken in all circumstances where management of cetacean watching and swim-with-cetacean operations has been a challenge with the aim to modify and adapt management to improve effectiveness.*

Attention: SC, R

*The sub-committee **recommended** the continuation of all whale watching-related research that provides relevant information for the adoption of best practices globally, while also providing a foundation for science-based advice to decision-makers on the most effective management of these activities.*

2.2 Review responses to MAWI questionnaire

Suydam reported that progress on the Modelling and Assessment of Whale Watching Impacts (MAWI) project, undertaken to develop more substantive, robust modelling approaches to assessing whale watching impacts, had been largely halted by the pandemic. The plan to distribute a questionnaire to outside modellers and report results to the sub-committee was not implemented during this period. The sub-committee needs to consider whether and how the project should be revived. The intersessional steering group (see Annex V ICGs) will consider ways forward and report to SC/69B.

3. PROGRESS WITH REGIONAL REVIEWS OF WHALE WATCHING

3.1 Sri Lanka

No papers were received on this item.

3.2 Latin America

SC/69A/WW/01 updated information presented in Coscarella and Riera (2022), describing the cetacean species present in Golfo San Jorge, Chubut, Argentina. The high diversity of cetaceans, with regular sightings of three species of baleen whales (sei whales (*Balaenoptera borealis*), humpback whales (*Megaptera novaeangliae*) and southern right whales (*Eubalaena australis*)) and at least five species of dolphins (dusky dolphin (*Lagenorhynchus obscurus*), Risso's dolphins (*Grampus griseus*), Commerson's dolphin (*Cephalorhynchus commersonii*), killer whale (*Orcinus orca*) and Peale's dolphin (*Lagenorhynchus australis*), attracted the local community's attention as a potential resource for tourism-related activities. From data collected since 2019 from a cliff top station, behaviour, seasonal occurrence and relative abundance were recorded. The most abundant species in the area is the endangered sei whale, which is present in the area from October until June. Its abundance is one order of magnitude higher than any other species, and whales are present in the area to feed, mainly on squat lobster (*Munida gregaria*). An abundance estimate was determined from aerial surveys: there were 796 whales for the low season (November) and 2,777 whales for the high season (May). This extraordinary local abundance has led the province to grant four provisional permits to perform tourist trips, but not yet focused whale watching trips. Currently a project investigating whales' reaction to vessels approximating whale watching manoeuvres is underway, and the permit holders are part of the project, setting from the very beginning a collaboration among researchers, private entrepreneurs and the government, in order to establish future regulations.

The sub-committee welcomed this paper as an example of a location where baseline data are being collected before whale watching operations begin. In response to a question, it was clarified that foraging sei whales recently began appearing in this location, coincident with a sharp increase in squat lobster abundance after the collapse of the hake fishery. Sei whales feed on the pelagic form of this lobster. The increasing number of sei whales came to the attention of researchers and management authorities about five years ago and both realised this represented a good whale watching opportunity (on a species not frequently targeted by whale watching operations), but also a situation where collecting baseline data, before any impacts might occur, was possible. Managers therefore agreed to delay issuing any licenses for whale watching, to allow research to proceed.

In addition to gathering baseline information (and subsequently monitoring for any impacts on whales of future whale watching operations), further discussion noted that there is a need to study the complex ecosystem change the area has undergone since the collapse of the hake fishery. In response to a question, it was noted that to date there appear to have been few interactions between sei whales and fishing vessels, with only one entanglement so far reported. However, numerous humpback whales in this area have been entangled and drowned in the king crab fishery. Given few fisheries exist in the coastal zone frequented by cetaceans here, interactions are likely few generally, but more research is needed. The sub-committee **encouraged** presentations from researchers in this location on interactions between whales and fisheries, and the development of whale watching and any impacts on sei whales and other cetaceans, at future meetings.

Castro *et al.* (2022) reported on the socioeconomic impact of the whale watching industry in one of the poorest areas in Ecuador. Puerto López, in Manabí province, went from being a fishing village to leading the whale watching industry in Ecuador. The number of tourists in the area has increased by 15,000% since 1980, with most visiting from June to September, when whales are present. As a result, tourism services and employment opportunities also increased, bringing increased development and a higher quality of life to the region. The industry's value was estimated at USD4.5 million in 2019. Whale watching benefits have not only been economic; this industry has also brought a sense of identity to the region, which has helped promote whale conservation laws at the national level. In recent years, the emergence of illegal (unpermitted) whale watching operations has become a threat to the industry, necessitating urgent action.

In discussion, it was noted that Puerto López is an excellent example of a community completely and positively transformed by the development of a whale watching industry and that the management of whale watching here is impressive. The operators are subject to regulations developed in 2014, including a requirement to take a training course periodically before the season starts. It was also noted that much of the information in this paper should be presented to the Conservation Committee, which addresses socioeconomic issues of, and capacity building for, whale watching communities such as Puerto López. While short-term behavioural reactions by the humpback whales to the presence of whale watching vessels were reported in earlier studies here, the sub-committee **encouraged** more research on impacts to the whales of the area's whale watching.

Attention: CG

*The emergence of unpermitted whale watching on humpback whales in Puerto López, Ecuador, threatens a currently well-regulated industry. The sub-committee **expressed concern** about this illegal activity and **recommended** that the national government and local authorities exercise greater management control to minimise short- and long-term impacts on this whale population.*

3.3 Timor-Leste

SC/69A/WW/08 reported the progress of the Timor-Leste intersessional correspondence group. It was not possible to travel to Timor-Leste as planned during 2021 because of the global pandemic; however, New and Porter attended three online meetings of the Assosiasaun Turizmu Maritima Timor-Leste (ATM-TL) and were able to contribute to the whale watching guideline development process. Porter was able to travel to Timor-Leste in late 2022, where she met with three of the four marine tourism companies that include whale watching as one of their activities. The President of the ATM-TL welcomed the input of the IWC to the currently drafted, but not-yet government endorsed, whale watching guidelines and indicated that any training that the Committee could provide would be welcome.

SC/69A/WW/09 reported that, since 2016, whale-related tourism has been rapidly expanding in the waters of Timor-Leste, with a focus on whale watching and swim-with-whale tourism. However, there remain no regulations governing whale watching activities in Timor-Leste to date. In the absence of whale watching regulations or accredited training for whale watching operators, reports of poor practice and unsustainable vessel behaviour are also rising, which may be causing distress and harm to animals. While national whale watching guidelines and preliminary industry certification and accreditation have been developed, both are voluntary. Timor-Leste has enormous potential to develop a world-class, responsible whale tourism industry, including the opportunity to develop community-based whale tourism with local subsistence fishing. However, this is only possible with a 'best practice' whale watching regulatory framework and an educated and appropriately trained whale tourism sector. Timor-Leste has requested support to formally join the IWC, in order to seek expert advice and support and to participate in global cetacean conservation efforts. The IWC's General Principles for Whale Watching would also be helpful to Timor-Leste's efforts to improve whale tourism management.

In discussion, it was noted that, while encouraging whale watching operators to take photos as a way to engage with researchers, the vessels in Timor-Leste are fairly basic and taking photos or indeed collecting any data may currently be beyond their capacity.

Attention: SC, CC, G

Recommendation SC2047 supported the Government of Timor-Leste in their pursuit of sustainable marine tourism and encouraged continued communication with them regarding whale watching guidelines. The Government continues to seek expert advice on how to improve whale tourism management. An intersessional correspondence group was formed to continue this communication. In this context, the sub-committee warmly welcomed these updates on the whale watching situation in Timor-Leste. The sub-committee ***recommended*** *that the Conservation and Scientific Committees directly assist the Government of Timor-Leste to:*

(1) Develop and finalise national whale watching legislation to regulate, monitor and support sustainable whale tourism;

(2) Work to reduce economic leakage (i.e. ensure the national economy, including local communities, receives the majority of economic benefits from whale watching activities); and

(3) Support and assist the whale tourism sector to adopt 'best practices', i.e. responsible, precautionary and sustainable whale tourism practices (particularly for swim-with-whale operations), through supporting whale watching monitoring, reporting, accreditation and training.

The intersessional correspondence group will continue to facilitate this assistance.

3.4 Southern Ocean Sanctuary (SOS)
No papers were received on this item. The sub-committee **encouraged** the submission of papers relevant to whale watching in the SOS at next year's meeting, as the SOS will undergo its 10-year review in 2024.

3.5 Other priority regions
No papers were received on this item.

4. COLLABORATIVE WORK WITHIN THE IWC

4.1 Update on IWC's Whale Watching Handbook
SC/69A/WW/03 offered updates on the IWC Whale Watching Handbook, which is available online in three languages. The searchable table of literature has been updated and now includes the details of more than 550 reports, book sections and peer-reviewed papers relevant to whale watching. Relevant new papers presented at this meeting will also be added. There have been minor revisions to existing content, including one species account, one case study and one country profile. These have been completed for all three languages, with input from relevant experts and Commissioners as necessary. The Secretariat has also been scoping for possible new content and invited suggestions from the sub-committee. Finally, after many rounds of review, the General Principles for Whale Watching were endorsed last year at IWC68 and were linked to the Handbook and the whale watching pages on the IWC website in November 2022. The sub-committee welcomed this update, expressed gratitude for the posting of the General Principles to the website and looked forward to future progress with the Handbook.

4.2 Communication with the Conservation Committee's Standing Working Group on Whale Watching
SC/69A/WW/03 reported that, at the meeting of the Conservation Committee at IWC68, Ryan Wulff stepped down as chair of the Standing Working Group on Whale Watching. The sub-committee recognised and thanked him for his years of leadership and dedication to the Standing Working Group. His departure, along with several sub-committee recommendations regarding membership of the Standing Working Group, prompted a review of membership. The Standing Working Group added the Chair and Vice-Chair of the Committee, the convenors of the sub-committee and other nominated sub-committee members. In addition, the Standing Working Group welcomed Cristina Castro (Ecuador) and Miguel Bottazzi (Argentina) as industry representatives and Lissette Trejos (Commissioner, Panama) and Dr Putu Liza Mustika from Indonesia to the Standing Working Group. The Chair position is still vacant and nominations remain open. Once a Chair is in place, there will be a review of the outputs of the IWC Whale Watching Strategic Plan, in preparation for the revision and drafting of the new Ten-Year Strategic Plan, which will need to go to IWC69 next year for endorsement.

In addition, the Secretariat recently attended the European Cetacean Society workshop on 'Setting up an international network to reinforce the collaboration with Marine Mammal Tourism companies and enhance their sustainability'. This engagement has already led to the submission of papers for the Table of Literature in the Handbook and interest in developing case studies.

Finally, the Secretariat reported on the Whale Watching Communications Plan, presented as Annex A of SC/69A/WW/03 (see Item 6 for additional discussion on communications). This promotional plan was developed by the Secretariat and there will be renewed efforts in 2023 to increase support for the French and Spanish language versions of the Handbook.

In addition, promoting the General Principles, which were endorsed at IWC68 and are now available online, was included in the plan. The most recent website analytics show Handbook visits have risen to 500 different users per day, a rapid rise over the past year. In addition, for the first time, three of the top ten most frequently viewed pages were in Spanish. Next steps include focusing on the cruise ship industry and working with CMS to get the Handbook shared with other United Nations bodies, including the United Nations Environment Programme and the World Tourism Organisation. The Secretariat wished to thank the Government of New Zealand for its financial contribution, toward maintenance, translation and content development of the Handbook.

In discussion, it was noted that it might be better to use 'responsible' instead of 'sustainable' when referring to whale watching in various IWC promotional materials and communications to help avoid confusion between economic and ecological sustainability. However, although the Secretariat began by using 'responsible' whale watching and still does, it also uses 'sustainable', as this was and is the term used by other entities. The sub-committee was also reminded that it had addressed some of the semantics of the whale watching industry as 'ecotourism' in 2006 (IWC, 2006, pp. 249-251). At that time, the sub-committee accepted a definition of whale-based ecotourism that, *inter alia*, included (a) tourism operators should take major steps to actively assist with the conservation of their resource (cetaceans), such as cooperating with researchers, and (b) benefits should be provided to the local host community within which the company operates.

4.3 Collaboration with other SC subgroups on platforms of opportunity and citizen science

Natoli *et al*. (2021) highlighted the potential of citizen science for gathering data on cetacean occurrence and distribution in under-surveyed areas. These opportunistic data, if methodically and scientifically validated, can be useful for detecting the occurrence of rare species and estimating the habitat utilisation of common species. In the United Arab Emirates (UAE), a website provided information on various dolphin species and a means for members of the public to report sightings. The authors conducted a public awareness campaign, relying on good technology penetration in UAE society and use of social media by the public. In seven years, 1,103 sightings were successfully validated. For most of the 12 different species reported, only a few sightings were validated but still provided important information. These included a sighting of a humpback whale mother and calf and Bryde's whales (*Balaenoptera edeni*) and enabled the detection of the first long-distance movement of killer whale individuals between the Arabian/Persian Gulf and the Indian Ocean. Spatial distribution analysis and Ecological Niche Modelling for the three most frequently reported species – Indo-Pacific bottlenose dolphins (*Tursiops aduncus*), Indian Ocean humpback dolphins (*Sousa plumbea*) and Indo-Pacific finless porpoises (*Neophocaena phocaenoides*) – indicated subtle niche partitioning among them. This suggested different diets and energy requirements for finless porpoises, whereas bottlenose and humpback dolphins segregated mostly through different patterns of space usage. Humpback dolphins showed the narrowest suitable habitat, which overlapped greatly with the most developed coastline. This raises concern for its conservation.

The sub-committee commended the authors of this study, noting it was an excellent example of citizen science (in short, whale watching from shore or any other publicly accessible platforms of opportunity) being used in sophisticated analyses to provide useful management information on cetaceans. Not all whale watching is commercial or from vessels. It was noted that the success of this project was largely due to the enormous effort put into public outreach, to inform the public of the importance of reporting their observations and how to do so. While the time and effort put into this outreach was extensive, it showed that collecting useful data in this way is feasible, at least in some locations.

Anderson *et al.* (2021) described a bimodal pattern of occurrence of humpback whales in the central Indian Ocean using information collated from various sources, including social media and a citizen science project. The sub-committee noted that this paper, published in the Journal of Cetacean Research and Management, was yet another example of platform of opportunity data used in robust analyses of cetacean distribution and occurrence. It **encouraged** the submission of such papers to the sub-committee at future meetings.

SC/69A/E/10 was primarily discussed in the Environmental Concerns Sub-committee, but relevant aspects were presented here. The paper described the type and number of microplastics in faecal samples obtained from blue whales (*Balaenoptera musculus*) in Sri Lanka. The faecal samples were collected by whale watching vessels that were operating in southern Sri Lankan waters. Only blue whale samples were collected and, for the purposes of this study, only 18 samples were subject to analyses for microplastics (particles <5mm). The whale watching operators also provided researchers with sightings information and photographs.

In discussion, it was noted that this was likely the first time such sample collection was done from a whale watching platform of opportunity. The sub-committee welcomed this paper as yet another way whale watching vessels can assist researchers in certain types of data collection. It was also noted that this study represented one way the sub-committee's work stream could relate to the Commission's Resolution 2022-1 on marine plastics. The sub-committee was also reminded that the definition of whale ecotourism (IWC, 2006, pp.249-251) included not throwing trash overboard.

Attention: R, CG, G, I

*Whale watching vessels have been used by researchers as platforms of opportunity to collect certain types of data, such as occurrence and photo-ID. However, other types of data collection are also possible from these platforms. The sub-committee **recommended** the use of whale watching vessels to collect faecal samples from targeted cetaceans to assess, inter alia, the presence of microplastics. In addition, whale watching vessels can conduct trawls for prey samples, which would also capture any plastics in surface water. The sub-committee **encouraged** local authorities, whale watching associations and other management bodies to include a prohibition against throwing trash overboard in guidelines or regulations related to whale watching. Operators should also be **encouraged** to remove marine debris and macroplastics from the water's surface, if it is safe to do so (gear facilitating this removal should be carried on board) and to report marine debris entanglements of cetacean or other marine species.*

5. OTHER

5.1 Social science studies

SC/69A/WW/06 reported the results of a survey of swim-with-whale tour participants in Hervey Bay, Australia. Results included the demographics of passengers and their expressed motivations for wanting to swim with whales, as opposed to whale watching from a boat. This information should assist the sub-committee to better understand this industry and offer data-informed management advice.

In discussion, it was emphasised that social science, while not commonly presented to the Committee, has substantial value when providing management advice on whale watching. Its results help frame advice to be most effective, as essentially it seeks to manage human behaviour rather than whale behaviour. It can also help in the development of the Conservation and Scientific Committees' whale watching communications plans. Results can show where public knowledge is lacking, allowing communications to focus on educating the public on that point. In response to questions, it was clarified that there are guidelines and regulations in this area and elsewhere in Australia, including Commonwealth waters, but anecdotal observations suggest these are often disregarded. A focused education and outreach program could help address behaviour that endangers swimmers and harasses whales.

Attention: CG

*In Australia, swim-with-whale tourism currently occurs in the state waters of Western Australia, New South Wales and Queensland. Swim-with-whale operations may also occur in Australian Commonwealth waters. The Committee **recommends** that the Government of Australia:*

(1) Assess the occurrence of swim-with-whale operations in Commonwealth waters and whether operations adhere to the Commonwealth regulations of the Australian Whale Sanctuary;

(2) Assess the risks to swimmers and whales for any swim-with operations in Commonwealth waters and the adequacy of current regulations for managing such activities; and

(3) Consider the IWC General Principles on Whale Watching when developing guidelines and regulations.

5.2 CMS Guidelines for recreational-in-water interactions

Renell, representing the Secretariat of the Convention on the Conservation of Migratory Species of Wild Animals (CMS), presented an outline of the CMS draft Guidelines for Recreational In-water Interactions with Marine Wildlife. She highlighted that this document includes multiple taxa and that the sub-committee and the Conservation Committee's Standing Working Group on Whale Watching had provided comments on initial drafts with regard to cetaceans. The sub-committee was invited to review the current draft document, which would be available on the CMS website at the end of June, and to attend the Sixth Meeting of the Sessional Committee of the Scientific Council[2] in July 2023 for any final contributions. The draft document will then be presented to CMS COP14 in October for adoption. CMS would like this to be another joint product with the IWC.

In discussion, there was consensus that the sub-committee should offer input to the CMS Scientific Council's finalisation of the draft guidelines in July. The mechanism for doing so could be discussed at the Joint Meeting of the Conservation and Scientific Committees on 7 May and reported by email to the sub-committee before the July meeting. There was also consensus on preparing a joint product of the Committee and CMS regarding recreational in-water interactions with cetaceans, with the caveat that any joint product must be consistent with the IWC General Principles on Whale Watching regarding direct interactions. The most seamless option for such a joint product would be adding a section on

[2] *Sixth Meeting of the Sessional Committee of the Scientific Council [hyperlink]*

in-water interactions to the CMS-IWC Whale Watching Handbook. There already are case studies in the Handbook of locations where in-water interactions occur.

Attention: SC, CC, S, IGO

*The sub-committee **recommended** that the Convention on the Conservation of Migratory Species of Wild Animals (CMS) Scientific Council and the Scientific and Conservation Committees produce a joint product presenting guidelines on in-water interactions between people and cetaceans. The sub-committee **agreed** that this joint product should be discussed within the 2023 Joint Meeting of the Scientific and Conservation Committee. It also **agreed** that the joint product should be in keeping with the IWC General Principles on Whale Watching and included in the IWC Whale Watching Handbook. The sub-committee **requested** that the Conservation Committee and Secretariat discuss this joint product with the CMS Scientific Council intersessionally, ideally before the Sixth Meeting of the Sessional Committee of the Scientific Council of CMS.*

5.3 Relationship of the Whale Watching Sub-Committee and Resolution 2022-1 on Marine Plastics
See Item 4.3 and its recommendation on marine debris and plastics.

6. PROGRESS ON PREVIOUS RECOMMENDATIONS

At SC/68D (virtual), the sub-committee recommended (SC2295) the preparation of a comprehensive communications plan for the IWC's whale watching products and work, in conjunction with the Conservation Committee's Standing Working Group on Whale Watching. SC/69A/WW/05, a product of the steering group on a communications plan for outputs of the Whale Watching sub-committee and the Conservation Committee's Standing Working Group on Whale Watching, reported on the preparation of this communications plan. It presented several low cost but effective communications projects for consideration and discussion, including the production of sponsored podcast episodes; additional website content; edits to Wikipedia pages; social media content; articles for ocean science magazines/blogs; and conference/meeting and exhibition materials. A budget for initial implementation of this plan was offered for consideration.

In discussion, it was proposed to submit SC/69A/WW/05 to the Joint Meeting of the Scientific and Conservation Committees for discussion. It was noted that the initial implementation budget was not excessive and outside funding could likely be identified. It was emphasised that this communications plan was parallel to the Standing Working Group's communications plan (see Item 4.2) but was separate from it, highlighting not so much the Handbook as the work of the sub-committee, including the General Principles.

Simmonds reported on the 'human-induced behavioural changes of concern' intersessional correspondence group. This topic included learned behaviours that cetaceans develop as a result of interacting with human activities at sea. Best known is the provisioning of dolphins, which leads to changes in behaviour that are often damaging to their welfare and survival. The phenomenon of solitary-sociable dolphins (which this subcommittee has considered historically) is also part of this topic. The damaging interactions between killer whales and vessels (primarily sailing yachts) that are ongoing off the Iberian peninsula and beyond are yet another example (see Annex Q, item 5.5). This killer whale behaviour seems to be spreading. Other topics of interest include cetacean interactions with fishing operations. There continue to be a number of solitary-sociable animals around the world and they continue to present issues (Anon, 2023), including the bottlenose dolphin known as Confi, for example, who lives in Galicia, Spain, and who was shot non-fatally with a spear gun last year. Discussions are ongoing between the local experts monitoring this dolphin and members of the intersessional correspondence group. Simmonds and Nunny (2022) provided a new review of interactions between people and marine mammals.

The sub-committee reviewed all of its recommendations (approximately 40) from 2019 through 2022. It provided a status update to the Secretariat on all of these recommendations – in progress, complete, ongoing or unknown, and added notes for some that had been superseded by other recommendations or otherwise had specific issues related to their progress (including the intention for sub-committee members to provide updates at SC69B). It was noted that the welfare assessment tool for wild cetaceans (SC2044) (Nicol *et al*., 2020) has now been deployed three times, with resulting peer-reviewed publications, and could also be deployed to assess whale watching impacts.

7. BIENNIAL WORKPLAN

For the workplan see Table 1. For details of the intersessional correspondence groups, see Annex V.

Table 1

Summary of the workplan for matters related to whale watching. Several of these Items have intersessional correspondence groups (ICG), intersessional advisory groups (IAG) or intersessional steering groups (ISG). Those groups will work intersessionally and provide updates at the next meeting.

Item	Intersessional 2023/24	2024 Annual Meeting (SC69B)
Assess the impacts of whale watching on cetaceans – PRIORITY (i) Short-term impacts (ii) Mid- and long-term impacts (iii) Swim-with operations (iv) Emerging issues of concern, e.g. solitary sociable and out of habitat cetaceans (v) Emerging technology, e.g. drones and other emerging technology in the context of whale watching	Prepare papers	Present papers
MAWI	Email correspondence and work	Paper to be presented
Review whale watching in priority regions/areas (i.e. Latin America, Timor Leste, Southern Ocean Sanctuary and Australia) or on priority populations identified intersessionally	Intersessional correspondence and work, including soliciting papers	Papers to be presented
Intersessional correspondence groups	Email correspondence and work	Receive reports
Collaborative work with other sub-committees, particularly regarding platforms of opportunity and citizen science data	Email correspondence and work	Papers to be presented, receive updates
Collaborative work with Conservation Committee (SWG on Whale Watching), including communications output and reviewing and updating the Handbook	Intersessional correspondence and work	Present updates on SWG WW work and communications plan outputs

8. ADOPTION OF REPORT

The report was adopted at 12:00 hrs on 02 May 2023. The sub-committee thanked Suydam and Urbán for their able chairing and Rose for her rapporteuring.

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Appendix 1

AGENDA

1. Introductory items
   - 1.1 Convenors' opening remarks
   - 1.2 Election of Chair and Co-chair
   - 1.3 Appointment of rapporteur
   - 1.4 Adoption of Agenda
   - 1.5 Review of available documents
2. Assess the impacts of whale watching and swim-with-whale operations on cetaceans
   - 2.1 Studies on assessing impacts: (i) short-term; (ii) mid- to long-term; (iii) swim-with operations; (iv) emerging issues of concern; and (v) emerging technology
   - 2.2 Review responses to MAWI questionnaire
3. Progress with regional reviews of whale watching
   - 3.1 Sri Lanka
   - 3.2 Latin America
   - 3.3 Timor-Leste
   - 3.4 Southern Ocean Sanctuary
   - 3.5 Other priority regions
4. Collaborative work within the IWC
   - 4.1 Update on IWC's Whale Watching Handbook
   - 4.2 Communication with Conservation Committee's Standing Working Group on Whale Watching
   - 4.3 Collaboration with other SC sub-groups on platforms of opportunity and citizen science
5. Other
   - 5.1 Social science studies
   - 5.2 CMS Guidelines for recreational-in-water interactions
   - 5.3 Relationship of this sub-committee with Resolution 2022-1 (Marine Plastics)
6. Progress on previous recommendations
7. Biennial workplan
8. Adoption of report