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# TOOLKIT FOR IMPLEMENTING MARINE MAMMAL WATCHING GUIDELINES IN THE WIDER CARIBBEAN REGION

For reasons of public health and safety associated with COVD-19, this meeting is being convened virtually. Delegates are kindly requested to access all meeting documents electronically for download as necessary.

# **TABLE OF CONTENT**

1.1CONTEXT 1.2UNEP/SPAW GUIDELINES 1.3IMPLEMENTATION AND USE OF THE UNEP GUIDELINES IN WCR COUNTRIES  2IDENTIFICATION OF AREAS WHERE MORE WORK IS NEEDED  3PROPOSED ACTIONS 3.1EDUCATION AND OUTREACH 3.1.1Objective 3.1.2Description 3.2CAPACITY BUILDING 3.2.1Training 3.2.2Technical exchanges 3.3Networking 3.4Certification schemes 123.3Networking 3.4Certification schemes 123.3CONCLUSION	1INTRODUCTION	
1.3IMPLEMENTATION AND USE OF THE UNEP GUIDELINES IN WCR COUNTRIES  2IDENTIFICATION OF AREAS WHERE MORE WORK IS NEEDED  3PROPOSED ACTIONS  3.1EDUCATION AND OUTREACH		
1.3IMPLEMENTATION AND USE OF THE UNEP GUIDELINES IN WCR COUNTRIES  2IDENTIFICATION OF AREAS WHERE MORE WORK IS NEEDED  3PROPOSED ACTIONS  3.1EDUCATION AND OUTREACH	1.1CONTEXT	
1.3IMPLEMENTATION AND USE OF THE UNEP GUIDELINES IN WCR COUNTRIES  2IDENTIFICATION OF AREAS WHERE MORE WORK IS NEEDED  3PROPOSED ACTIONS  3.1EDUCATION AND OUTREACH	1.2UNEP/SPAW GUIDELINES	
2IDENTIFICATION OF AREAS WHERE MORE WORK IS NEEDED       6         3PROPOSED ACTIONS       8         3.1EDUCATION AND OUTREACH       8         3.1.1Objective       8         3.1.2Description       8         3.2CAPACITY BUILDING       9         3.2.1Training       9         3.2.2Technical exchanges       10         3.3NETWORKING       12         3.4CERTIFICATION SCHEMES       12	1.3IMPLEMENTATION AND USE OF THE UNEP GUIDELINES IN WCR COUNTRIES	
3PROPOSED ACTIONS       8         3.1EDUCATION AND OUTREACH       8         3.1.1Objective       8         3.1.2Description       8         3.2CAPACITY BUILDING       9         3.2.1Training       9         3.2.2Technical exchanges       10         3.3NETWORKING       12         3.4CERTIFICATION SCHEMES       12		
3.1EDUCATION AND OUTREACH       8         3.1.1Objective       8         3.1.2Description       8         3.2CAPACITY BUILDING       9         3.2.1Training       9         3.2.2Technical exchanges       10         3.3Networking       12         3.4Certification schemes       12		
3.1.10bjective       8         3.1.2Description       8         3.2CAPACITY BUILDING       9         3.2.1Training       9         3.2.2Technical exchanges       10         3.3Networking       12         3.4Certification schemes       12		
3.2CAPACITY BUILDING       9         3.2.1Training       9         3.2.2Technical exchanges       10         3.3NETWORKING       12         3.4CERTIFICATION SCHEMES       12	3.1.10bjective	
3.2CAPACITY BUILDING       9         3.2.1Training       9         3.2.2Technical exchanges       10         3.3NETWORKING       12         3.4CERTIFICATION SCHEMES       12	3.1.2Description	8
3.2.1Training       9         3.2.2Technical exchanges       10         3.3Networking       12         3.4Certification schemes       12	3.2Capacity Building	
3.2.2Technical exchanges       10         3.3Networking       12         3.4Certification schemes       12	3.2.1Training.	
3.3Networking	3.2.2Technical exchanges	10
3.4Certification schemes	3.3Networking	11
3.CONCLUSION	3.4Certification schemes	11
	3.CONCLUSION	13

# **ACRONYMS**

ACCOBAMS Agreement on the Conservation of Cetaceans of the Black Sea,

Mediterranean Sea and contiguous Atlantic Area

CARI'MAM Caribbean Marine Mammals Preservation Network

CEP Caribbean Environment Programme
NGO Non-Governmental Organization

RAC Regional Activity Center

SPAW Specially Protected Areas and Wildlife

STAC Scientifical and Technical

IFAW International Fund for Animal Welfare
IWC International Whaling Commission

UNEP United Nations Environment Programme

WCR Wider Caribbean Region

# TOOLKIT FOR IMPLEMENTING MARINE MAMMAL WATCHING GUIDELINES IN THE WIDER CARIBBEAN REGION

This document presents a toolkit for implementing marine mammal watching guidelines in the Wider Caribbean Region (WCR). It is an output of the work performed by the SPAW STAC Species working group under the chair of SPAW RAC. The toolkit covers suggestions for an array of possible options, including education and outreach, capacity building, networking, and certification schemes for commercial whale watch operators.

#### 1 INTRODUCTION

# 1.1 Context

- 1. Ecotourism to view marine mammals has continued to increase in the Wider Caribbean Region (WCR). The activity of observing marine mammals is defined as "a visit aboard a boat, from the air or the ground, or in the water in order to observe, interact with, or hear marine mammals. It is understood that this activity has a lucrative/commercial aspect" (UNEP, 2011).
- 2. The unregulated development and conduct of the marine mammal watching industry can have deleterious impacts on marine mammals and the ecosystems they inhabit. Throughout the world, numerous studies and reports highlight the potentially major impacts of marine mammal watching on populations, particularly whales and dolphins, but also on water quality and local infrastructures (Fumagalli et al., 2019; Parsons, 2012; UNEP, 2011). Indeed, unmanaged commercial marine mammal watching causes disturbances likely to prevent the individual animals from fulfilling their vital needs (Mayol and Beaubrun, 2005). When these disturbances are repeated over time, the result can be declining population health, habitat displacement (e.g., changes in migratory corridors), and declining reproduction. They can also have repercussions at the economic (loss of employment in certain sectors) and social levels (pressure on local services, conflicts between users) (UNEP, 2011). In order to reduce these impacts, it is recommended that marine mammal watching activities operate in a responsible and sustainable manner (UNEP, 2011). Responsible marine mammal watching businesses can bring many benefits to operators, tour operators, communities, and even the marine mammals themselves (IWC(a), 2020). Indeed, in addition to socioeconomic development, wellmanaged marine mammal watching activities can provide opportunities for enhanced awareness of major environmental issues; data collection on marine species; and observation and reporting of injured or stranded marine mammals (IWC(a) 2020, IWC(b) 2020).
- 3. At the regional scale, commercial observation of marine mammals began in the early to mid-1980s with the development of dolphin watching and swimming tours in The Bahamas and humpback marine mammal watching off the Dominican Republic. By the 1990s commercial observation of marine mammals was attracting visitors in Dominica, Turks and Caicos Islands, the U.S. and British Virgin Islands, Puerto Rico, Martinique, Grenada, St. Vincent and the Grenadines, St. Lucia, St. Kitts and Nevis, St. Barthelemy, and Guadeloupe (Hoyt, 1999). Commercial observation of marine mammals is a growing tourism business in the region. An International Fund for Animal Welfare (IFAW) study shows that in Central America and the Caribbean the direct and indirect turnover generated by the economy of this activity went from US\$1.7

million in 1991 to US\$53.7 million in 2009 (O'Connor et al., 2009). As a result of this growth, the impact of this activity on marine mammal populations has become of major concern.

# 1.2 UNEP/SPAW Guidelines

- 4. The SPAW Protocol, in which all marine mammal species are listed in Annex II, is committed to the preservation of these species in the WCR. It means that the countries signatory to the Protocol recognize that these species require the strictest protection afforded under the Protocol and commitment from the parties to ensure that protection. The SPAW Protocol references the regulation of "tourist and recreational activities that might endanger the ecosystems of protected areas or the survival of threatened or endangered species of flora and fauna," among other measures that should be taken to achieve the objectives of protected areas.
- 5. The Dominican Republic has the largest whale-watching industry in the Caribbean and was the first country in the region to develop guidelines for commercial marine mammal watching activities in 1994 (IWC (c), 2020). UNEP/SPAW marine mammal watching guidelines were developed during a workshop in 2011 (UNEP, 2011) and were endorsed by the SPAW COP and STAC (UNEP, 2012); they will be referred to as "UNEP guidelines" in this document. The UNEP guidelines can be found in Annex I.

# 1.3 Implementation and use of the UNEP guidelines in WCR countries

- 6. In the framework of the SPAW workplan and the on-going CARI'MAM project (Caribbean Marine Mammals Preservation Network), the SPAW RAC developed and disseminated a survey to the SPAW focal points of the WCR in January 2020 (UNEP(DEPI)/CAR WG 42/INF.29, Addendum 2) in order to assess the current legislation and threats concerning marine mammals in their countries. This study was complemented by the surveys carried out as part of the SPAW Marine Mammals Action Plan analysis and implementation review (UNEP(DEPI)/CAR WG 42/INF.29, Addendum 1).
- 7. Simultaneously, in order to census the national measures governing marine mammals observation activities in the WCR, the SPAW RAC developed an <u>online questionnaire</u>. Nineteen organizations (governments, NGOs, marine mammal watching operators, MPA) from nine Caribbean countries (including 7 SPAW Contracting Parties) responded to the survey (SPAW RAC, 2019¹). Recently the SPAW RAC supplemented the study through a legal analysis of regulatory instruments with a goal of developing a sustainable marine mammal watching activity in the WCR (UNEP(DEPI)/CAR WG 42/INF.31, Addendum 2).
- 8. Lastly, during May and November 2019, CARI'MAM whale-watching workshops were conducted with practitioners (operators, marine protected areas managers, NGOs) on how to promote responsible marine mammal watching practices through a regional certification scheme (CARI'MAM, 2019).
- 9. Data collected through these efforts indicate that five SPAW Contracting Parties (the Dominican Republic, Bahamas, USA, Panama, and France) have legislation that regulate marine mammal watching and voluntary guidelines have been developed in Colombia (Table 1). In Belize, legislation is under development as the marine mammal watching activities is increasing. In some Dutch Caribbean territories, voluntary guidelines are under development, marine mammal watching has been identified as a high threat in four countries, among which three have legislation that regulates the activity. In the other countries, the

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<sup>&</sup>lt;sup>1</sup>https://car-spaw-rac.org/IMG/pdf/marine mamals watching survey en-3.pdf

threat has been assessed as moderate (N=6) or low (N=7). In St Lucia, the threat was classified as moderate, but it is important to note that the activity is increasing. Half of the respondents (from seven SPAW Parties) of the study conducted in the framework of CARI'MAM (Annex 1) indicated that where rules (voluntary guidelines and/or legislation) have been established, compliance is poor. During CARI'MAM workshops, stakeholders pointed out that resources (human / financial) were insufficient to enforce marine mammal watching rules. They also highlighted that the general public is rarely aware of the impacts of marine mammal watching on wildlife or the existence of guidelines or regulations governing the conduct of marine mammal watching activities. Very few stakeholders mentioned the UNEP guidelines during any of these surveys and workshops.

10. In conclusion, marine mammal watching rules (legislation or voluntary guidelines) have been developed in less than half (N=6) of SPAW Parties. Limited resources result in poor compliance with and enforcement of the guidelines. Few WCR countries' stakeholders are aware of UNEP guidelines. Therefore, there is a significant need to achieve broader implementation of the UNEP guidelines throughout the WCR.

#### 2 IDENTIFICATION OF AREAS WHERE MORE WORK IS NEEDED

- 11. To work towards sustainable commercial marine mammal watching activities in the WCR, this document outlines a series of tools that could be implemented to build upon UNEP guidelines, encouraging and facilitating their implementation in SPAW parties throughout the WCR. Focus should be given to countries where the marine mammal watching threat has been assessed as high or moderate and no legislation nor voluntary guidelines are implemented (Table 1).
- 12. Three objectives have been identified:
  - Disseminate the UNEP/SPAW guidelines
  - Encourage the implementation of the UNEP/SPAW guidelines
  - Facilitate the implementation of the UNEP/SPAW guidelines
- 13. Four categories of action have been identified:
  - Education and outreach (objectives 1 and 2)
  - Capacity building (objective 3)
  - Develop a network of marine mammal watching practitioners (all objectives)
  - Develop a certification scheme for commercial operators (objectives 2 and 3)
- 14. These actions will be examined in more detail in the paragraphs below.

Table 1: Summary of marine mammal watching regulation in WCR countries (IWC handbook; SPAW-RAC, 2019; SPAW-RAC, 2020a&b; Hoyt & Iñiguez, 2008).

Country	Legislation on marine mammal watching	Voluntary guidelines	marine mammal watching threat level	Country response level
USA	Yes (in some territories)		High	High
France	Yes	No	Low	High
Panama	Yes	No	High	Low (poorly enforced)
Dominican Republic	Yes	No	High	High
The Bahamas	Yes	No	Moderate	Moderate
Belize	Under development	No	High (increasing)	Low
Colombia	No	Yes	Low	Low
Dutch Caribbean	No	Under development	Low	Moderate
Trinidad and Tobago	No	No	Moderate	Low
Cuba	No	No	Moderate	Low
Saint Vincent and the Grenadines	No	No	Moderate	Low
Saint Lucia	No	No	Moderate (increasing)	Low
Grenada	No	No	Moderate	Low
Venezuela	No	No	Low	Low
Guyana	No	No	Low	Low
Barbados	No	No	Low	Low
Honduras	No	No	Low	Low

## 2. PROPOSED ACTIONS

#### 2.1 Education and Outreach

## **Objective**

- 15. To disseminate the UNEP guidelines and encourage their implementation.
- 16. To increase awareness and implementation among the SPAW Parties and throughout the WCR, marine mammal watching regulators and industry, of the UNEP marine mammal guidelines.
- 17. To increase awareness of the potential negative impacts on marine mammals of poor marine mammal watching practices.
- 18. To increase awareness of best practices among operators' staff and their clients on marine mammal activities, including while on vessels.

#### Description

- 19. Using readily available materials (https://wwhandbook.iwc.int/en/), SPAW Parties should consider developing educational materials that present the guidelines and best marine mammal watching practices (flyers, field leaflet, web pages...). These materials should be disseminated throughout the WCR, particularly to all marine mammal watching operators. See for example:
  - https://www.fisheries.noaa.gov/topic/marine-life-viewing-guidelines
  - wedocs.unep.org/bitstream/handle/20.500.11822/27275/Brochure\_GuidelinesForWatchingMM\_web.pdf?sequence=1&isAllowed=y
- 20. To limit the cost, whenever this seems feasible and valuable, material could be created jointly by the territories that need them.
- 21. Integration of SPAW Guidelines into existing marine mammal watching materials and campaigns (e.g., voluntary guidelines for Barbados and Bahamas developed by NGOs)
- 22. Launch of a social media outreach campaign by the Caribbean Environment Programme (CEP) to share marine mammal watching best practices and connectivity with mariner, recreational, tourism and other stakeholder channels in the Region.

# 2.2 Capacity Building

# 2.2.1 Training

#### **Objective**

- 23. To facilitate the implementation of the guidelines.
- 24. To enable marine mammal watching regulators and operators to understand and correctly implement the UNEP guidelines.
- 25. To enable regulators to develop operational tools that best match the needs of their country.

# Description

- 26. A high quality commercial marine mammal watching activity requires many skills. The training of marine mammal commercial operators and crew is essential. Training should be specific to the site and involve local culture and the environment. Any training program should include operational standards such as: (1) knowledge of safety, first aid, hospitality and etiquette; (2) where and when to find marine mammals and general knowledge on the biology of species present; (3) knowledge of regulations and techniques to reduce impact on marine mammal individuals and populations; (4) knowledge of the potential impacts of observation activities on marine mammals.
- 27. A public education component could also be included in the training. marine mammal watching has the potential to educate people of all ages and from all backgrounds to appreciate, value and understand marine mammals and to connect humans to marine life and to the sea. Hence, quality marine mammal watching experiences should have a strong education component.
- 28. In the WCR, training programs for marine mammal watching may build on training already implemented by regional partners such as the Agoa sanctuary, ACCOBAMS. Where marine mammal watching already exists, the resources of local contacts, local museums, research institutions and local NGOs can assist in developing the training modules, which should be developed in conjunction with naturalists in existing marine mammal watching operations to ensure commitment and relevancy. Training should be conducted at a site that is convenient to the people being trained. The training should be flexible and involve local taxa and ecology. Workshops are recommended as a primary way of training guides. These are already in use, sponsored primarily by international NGOs such as Whale and Dolphin Conservation (WDC, formerly Whale and Dolphin Conservation Society) and IFAW assisting local NGOs. Collaborative training workshops with the IWC should also be considered.
- 29. In parallel, a training program could be developed to support regulators in the implementation of tools that best match the needs of their country. Guides and/or model legislation could be drafted that present the various regulatory and non-regulatory tools, with and without legal basis, that may be implemented at the national level for sustainable marine mammal watching. In addition, workshops could be organized to bring together regulators, industry, and scientists to develop and address various aspects of implementation of guidelines (and/or regulations) to achieve sustainable marine mammal watching activities.

### 2.2.2 Technical exchanges

# **Objective**

30. To facilitate developing the technical skills needed by marine mammal watching operators when implementing the UNEP guidelines.

#### Description

- 31. Technical exchanges can assist in improving the implementation of the UNEP guidelines. For example, boat operator training is vital to the well-being of both marine mammals and passengers. Irresponsible operations may negate the educational experience. As reflected above, most countries do not have laws, regulations or standards for boat operators, and even where regulations exist, adequate enforcement does not, and some operators continue to harass marine mammals. It is helpful for NGOs, operators and local authorities to work together. Local NGOs and governments can develop technical exchanges between boat operator apprentice and more experienced operators in the region or in a different country (e.g., boat operators visit marine mammal operations in sister sanctuaries). Alternatively, experienced captains from other regions or countries could come to the WCR and accompany boat operators on trips and work with them to improve their behavior and skills around marine mammals. As part of these exchanges, the vessel operator could accumulate credits toward an overall training or certification. At the very least, these technical exchanges could result in greater understanding of and adherence to the UNEP guidelines.
- 32. In addition, the convening of regional workshops could help marine mammal operations to develop and operate sustainably and in accordance with the UNEP guidelines. Such workshops could discuss:
  - Conservation initiatives that support a sustainable marine mammal watching industry (e.g., go slow zones within popular marine mammal watching areas, educational programs, best practices, citizen science)
  - Steps outlining how to establish a sustainable marine mammal watching operation, including challenges that have been experienced by others;
  - Information on how marine mammal watching can benefit local and regional communities more broadly, such as through the development of service infrastructure (e.g., fuel supplies, catering, vessel maintenance, accommodation, souvenirs) to support the industry;
  - Development of education and interpretation guides for local schools and other education/interpretive centers;
  - Examples of responsible marketing.

# 2.3 Networking

## **Objective**

33. To disseminate the UNEP guidelines and encourage and facilitate their implementation.

#### Description

- 34. The network of practitioners (operators, marine protected area managers, NGOs) developed through the CARI'MAM project could be maintained and used as a mechanism to assist in implementation of the UNEP guidelines. Exchanges between practitioners could provide an opportunity for communication on the use of the guidelines, identification of areas where the guidelines could be improved or areas where support is needed for operators who would like to implement them.
- 35. For example, one workshop per year could be organized with the members of the network, along with field sessions, the WhatsApp group could be maintained, and a Facebook page could be developed.
- 36. Renewal or initiation of a regional Whale Watch Operator's Association (e.g., CaribWhale) could be considered.

#### 2.4 Certification schemes

#### **Objective**

37. To encourage operators to implement the UNEP guidelines and support them in their implementation.

# Description

- 38. A sustainable marine mammal watching certification scheme or label, as envisioned in this document, is not a legally enforceable tool. A label targets operator but cannot be imposed upon them. It is a voluntary tool to encourage and promote the application of the existing UNEP guidelines and augment those guidelines with best practices, thus differentiating and recognizing operators that are truly sustainable. Valuable lessons can be learned from other experiences with certification schemes, such as the ACCOBAMS High Quality Whale-Watching certification.
- 39. A marine mammal watching certification could be offered to all commercial operators and should set eligibility criteria for operators to be able to use it, considering that some criteria could be imperative [i] while others could be guidelines or desirable [g] . Example criteria could include which may also be reviewed/updated as required:
  - Completing a training program;
  - Committing to follow the UNEP guidelines or stronger measures or best practices;
  - Placing certified guides who have taken training on each trip;
  - Collecting data for scientific programmes;

- Having a strong education component;
- Environmental management, safety and services of operations.
- 40. Any establishment and implementation of a certification scheme requires oversight to determine eligibility, award and the compliance with the certification scheme. Such oversight can be accomplished by any of three approaches (not mutually exclusive):
  - an online rating system for users;
  - an onboard assessment made during an excursion by a competent authority;
  - periodic evaluation by an evaluation committee based on visit reports or questionnaires.
- 41. An evaluation system should also include penalties and sanctions for non-compliance with the regulations and guidelines of the certification scheme. Sanctions could range from a warning to the suspension and the loss it. There should also be a system and criteria that operations must meet to regain the certification in the event that they lose the certification. The evaluation system should also determine how frequently operations should be evaluated and develop terms of reference with role and functions for governing body(es).
- 42. Any certification scheme would require infrastructure(s), specifically governing body(es) to implement, administer, and oversee the certification. Such an organization would be in charge of disseminating the certification in their country, training and monitoring and assessing the certified operators. Examples of such organizations at a local level could include NGOs, local associations, or marine sanctuary team.
- 43. The costs of managing the certification (training, folder assembly, etc.) could be partially covered by the operators benefiting from the certification. Other possibilities, based on other coastal certification schemes (UNEP, UNWTO, FEE 2006) include grants from government agencies and ministries (such as environment, transport, tourism) given that the industry may respond to or be complimentary to government policies and programmes (including at the local level). Sponsorships from the private sector (such as business, travel and leisure or commercial associations, individual companies, financing institutions and banks) may provide incentive programmes, operate in areas and with products compatible with the objectives of the scheme

## Other Resources

- 44. The scheme can also benefit from the involvement of different partners:
  - Volunteers which can substantively reduce costs and bring new dimensions and varied expertise directly from local communities or partner institutions
  - Technical partners individual companies, non-governmental organizations, universities, technical
    centers and social programmes, which can assist through control visits as well as criteria
    development and assessment

- Communication partners publications can increase awareness of the certification, major events in coastal areas such as cultural fairs, shows or sport competitions can support awareness raising and education
- Official partners recognized official bodies that may help promote the certification through their network and name

45. In the framework of the SPAW workplan implemented though the CARI'MAM project, SPAW RAC has conducted additional work on the potential content and framework that could be suitable for the development, in the long term, of a regional high-quality whale-watching certification. This work drawing on the ACCOBAMS Hight Quality work, IWC blue book and a study of the legal context will be presented at the STAC as a complement to this document.

# 3 CONCLUSION

46. This document is an outcome of the SPAW Species working group. It presents several tools aimed at improving implementation of the UNEP marine mammal watching guidelines in the Wider Caribbean Region: outreach and communication tools, capacity building tools, network development, as well as a voluntary certification scheme for commercial operators. Other tools with a legal basis that may be implemented in national laws have not been presented in the present document. However, these tools are also important instruments for the regulation of marine mammal watching activity. The various tools presented in this document have been purposely not prioritized, as each country could use a combination of tools that meets its local needs and implementation of its guidelines or regulations.

- 47. Finally, to ensure that marine mammal observation activities operate in a responsible and sustainable manner in the region, the WG and SPAW RAC recommend that Parties:
  - implement the UNEP guidelines or other guidelines or regulations to ensure sustainable marine mammal watching activities;
  - develop regional tools to fully implement the UNEP guidelines;
  - support, where appropriate, training and technical exchanges;
  - facilitate the development of outreach materials;
  - support networking among marine mammal stakeholders.

# **REFERENCES**

CARIMAM, 2019. Report of the second meeting of the CARIMAM network. 25 p. <a href="http://www.car-spaw-rac.org/IMG/pdf/meeting">http://www.car-spaw-rac.org/IMG/pdf/meeting</a> cari mam 2 fr s.pdf

Fumagalli M., Cesario A, Costa M, Notarbartolo di Sciara G., Harraway J., Slooten E., 2019. Population ecology and the management of marine mammal watching operations on a data-deficient dolphin population. Ecology and evolution, pages 1-15.

Hoyt E., 1999. The Potential of marine mammal watching in the Caribbean: 1999+. Whale and Dolphin Conservation Society, Bath, UK. Presented as IWC/51/WW2 by the United Kingdom Government to the International Whaling Commission, May 1999, Grenada, pages 1-81.

Hoyt E. & Iñíguez M., 2008. 'The State of marine mammal watching in Latin America', WDCS, Chippenham, UK; IFAW, Yarmouth Port, USA; and Global Ocean, London, 60 pp.

IWC (a), 2020 « Benefits of responsible marine mammal watching », https://wwhandbook.iwc.int/en/industry-support/benefits-of-responsible, 08/10/2020.

IWC (b), 2020 « Contributing to science and conservation », https://wwhandbook.iwc.int/en/industry-support/contributing-to-science-and-conservation-1, 08/10/2020.

IWC (c), 2020. « Dominican Republic », https://wwhandbook.iwc.int/en/country-profiles/dominican-republic, 08/10/2020.

Mayole P. & Beaubrun P., 2005. Le marine mammal watching en Méditerranée française : État des lieux et Perspectives. Étude réalisée pour le Ministère de l'Écologie et du Développement Durable (Sanctuaire Pelagos pour les mammifères marins en Méditerranée). 116 pages

O'Connor, S., Campbell, R., Cortez, H., & Knowles, T., 2009. marine mammal watching Worldwide: tourism numbers, expenditures and expanding economic benefits, a special report from the International Fund for Animal Welfare, Yarmouth MA, USA, prepared by Economists at Large. 295 pages.

Parsons E.CM., 2012. The Negative Impacts of Whale-Watching. Journal of marine biology, 2012, 9 pages (doi:10.1155/2012/807294)

SPAW-RAC, 2019. Current Status of Marine Mammal Watching Activities-Surveys Results. 24 pages. http://www.car-spaw-rac.org/IMG/pdf/marine mamals watching survey en-3.pdf

UNEP, UNWTO, FEE (2006). Awards for Improving the Coastal Environment: The Blue Flag Example. 35p.

UNEP, 2008. Action plan for the Caribbean of Marine Mammals (MMAP) in the Wider Caribbean Region. 52 pages.

UNEP, 2011. Report of the regional workshop on marine mammal watching in the wider Caribbean region. 56 pages.

UNEP, 2012. Fifth Meeting of the Scientific and Technical Advisory Committee (STAC) to the SPAW Protocol, 22 October 2012.

# ANNEX I-OVERARCHING PRINCIPLES AND BEST PRACTICES FOR MARINE MAMMAL WATCHING IN THE WIDER CARIBBEAN REGION UNEP 2011

#### **PREAMBLE**

- 1. The people of the Wider Caribbean Region (WCR) depend greatly on coastal and marine resources for their economic, social and cultural well-being. One of the region's major economic activities—tourism—is dependent on these resources and, therefore, it is critical that it be developed and carried out in a responsible and sustainable manner. A growing, yet not fully realized component of tourism in the WCR is marine mammal watching.
- 2. With a potential for growth in existing operations and the possibility of new ones emerging, it is an opportune time to develop a regional plan for the development of a high-quality, responsible marine mammal tourism industry that conforms with best practices, including enhanced coordination and partnering among stakeholders and information sharing.
- 3. In 2000, the Protocol Concerning Specially Protected Areas and Wildlife in the Wider Caribbean Region (SPAW) entered into force. This Protocol, one of three supplementing the Convention for the Protection and Development of the Marine Environment in the Wider Caribbean Region (Cartagena Convention), is the only regional biodiversity legal agreement for the advancement of the conservation and protection of the marine environment in the Wider Caribbean Region. The SPAW Protocol calls for the development and implementation of conservation, recovery or management programmes, as well as guidelines and criteria for the management of protected species (http://www.cep.unep.org/about-cep/spaw).
- 4. As part of its obligations under the Action Plan for the Conservation of Marine Mammals in the Wider Caribbean Region (MMAP), the United Nations Environment Programme Caribbean Environment Programme (UNEP-CEP), through the SPAW sub-programme, convened a Regional Workshop on Marine Mammal Watching in the Wider Caribbean Region which brought together marine mammal tour operators and government regulators from across the WCR to discuss the marine mammal watching industry in the region. The Workshop, with funding provided by the National Fish and Wildlife Foundation, U.S. Marine Mammal Commission, Humane Society International, the Pacific Whale Foundation, Animal Welfare Institute, the World Society for the Protection of Animals, International Fund for Animal Welfare, the French Marine Protected Area Agency and the Agoa Marine Sanctuary, took place between the 19-22 October 2011 in Panama City, Panama to:
  - Assess the extent of problems and needs in existing marine mammal watching operations;
  - Identify opportunities in existing marine mammal watching operations;
  - Discuss the formulation of a regional code of conduct for observing marine mammals;
  - Standardize data collection forms and organize baseline research on marine mammals;
  - Document existing marine mammal educational materials; and
  - Discuss next steps with regards to marine mammal watching in the WCR.
- 5. A product of the Workshop was the development of overarching principles and best practice guidelines for marine mammal watching in the WCR. These principles and guidelines take into consideration pre-existing codes of conduct and regulations from countries within, and outside, the WCR, on issues such as swimming with marine mammals in the wild, and the type of vessels that should be used during interactions, and closely follows the steps and language used in the document, Pacific Islands Regional Guidelines for Whale and Dolphin Watching (IFAW, 2008). All of the principles and guidelines developed for the WCR were agreed upon by the tour operators and regulators present at the

workshop and may serve as the basis upon which each country's own codes of conduct and regulations may be developed.

6. These overarching principles and best practice guidelines for marine mammal watching in the WCR will be presented by the UNEP-CEP Secretariat to the Seventh Conference of the Parties to the SPAW Protocol for consideration and decision on further action.

#### INTRODUCTION

- 7. The Wider Caribbean Region (WCR) region is important for a great number of marine mammals, whether as a permanent habitat, a breeding ground or a migration corridor. Currently, at least thirty-two species of marine mammals have been identified in this area. The presence and diversity of marine mammals in the WCR region has led to the development of marine mammal watching, both on a commercial and recreational basis. Marine mammal watching, in this context, is defined as viewing activities in the natural environment, of any marine mammal species from land, sea or air.
- 8. In order to ensure the conservation of marine mammals in the WCR region, it is our responsibility to minimize the disturbance caused by our presence. An initial step towards that goal is the development of best practice guidelines for the WCR to ensure the sustainable development of the marine mammal watching industry. These codes would apply to all types of marine mammal watching, including dedicated, seasonal and opportunistic, commercial operators, and recreational vessels.

#### **OVERARCHING PRINCIPLES**

- 9. Overarching principles of these guidelines might include:
  - Ensure the conservation of marine mammals and their habitats in the Wider Caribbean Region;
  - Ensure a precautionary approach to the development and management of marine mammal watching in the Region;
  - Minimize the impact of viewing activities on marine mammals, other species and the ocean ecosystems in the Region;
  - Provide long-term benefits for the livelihood of local communities;
  - Promote local knowledge and understanding of marine mammals and the marine environment through training, education and dedicated research.
- 10. The following management considerations and guidelines for marine mammal watching were developed for the Wider Caribbean Region (WCR) in 20111 taking into account the existing national guidelines, decrees and regulations in the Region.

#### MANAGEMENT CONSIDERATIONS

11. In an effort to minimize the risk of adverse impacts caused by marine mammal watching and to ensure the sustainable development of this industry, effective management strategies need to be implemented. Several tools and approaches should be considered:

- National licensing or permitting schemes to regulate:
  - The number, size and type of vessels,
  - Standards of operation
  - Site specific and species-specific requirements
  - Research and media
  - Training for operators
- sanctions for non-compliance, such schemes subject to change and improvement;
- National measures to regulate approaches, frequency, length and type of exposure in encounters with marine mammals;
- Development of cooperative regional management provisions wherever appropriate;
- Management measures, to include closed seasons, exclusion zones, and 'no approach times' to provide additional protection to habitats, populations, and individuals;
- Assessment of the numbers, distribution and other characteristics of the target population/s before the implementation
  of tourism operations to establish the feasibility of the industry and a baseline for monitoring;
- Where new marine mammal watching operations are evolving, start cautiously, moderating activity and adapting management until sufficient information on populations and species is available to guide further development;
- Monitoring the effectiveness of management provisions and modifying them as required to reflect new information and circumstances, with the consultation of stakeholders;
- Establishment of an enforcement framework to ensure compliance with regulations;
- Scientific and socio-economic research and monitoring, assessment of potential impacts on marine mammals, and collection and sharing of information by all stakeholders;
- Dissemination of information on best practice and research to improve public awareness, including all stakeholders;
- Ongoing operator and naturalist training and accreditation programmes on the biology and behavior of target species, local ecosystems, navigation, culture, best practice of marine mammal watching operations, and the management provisions in effect;
- Supporting, protecting and empowering WCR communities' participation and ownership of the marine mammal watching industry;
- Educational standards for the provision of accurate and informative material to marine mammal watch participants, to:
- Develop an informed and environmentally responsible public;
- Encourage development of realistic expectations during encounters;

- Encourage the provision of naturalist guides on all boats; and
- Encourage public participation in on-board programmes

#### GUIDELINES FOR WATCHING MARINE MAMMALS

- 12. Marine mammal watching activities can potentially have adverse impacts on marine mammal populations, including disruption of important behaviors, displacement from habitat, chronic stress and serious injury. Therefore, persons should:
  - Operate watercraft, and aircraft so as not to disrupt the normal movement or behavior of marine mammals.
  - Stop watching a marine mammal at any sign of the animal becoming disturbed or alarmed.
  - Allow marine mammals to determine the nature, duration and proximity of watching and possible interactions.
- 13. Therefore, the following recommendations should be considered:
  - Do not touch a marine mammal.
  - Do not feed a marine mammal.
  - Do not make any loud or sudden noises that are transmittable under water.
  - Do not make sudden or repeated changes in direction or speed.
  - Do not carry out any activities that might condition marine mammals to approach watercraft.
  - Do not throw litter into the water.
  - Dedicated observer(s) should be on duty, in addition to the captain of the vessel.
  - Do not place a vessel in a position where it will drift into marine mammals.
  - When watercraft are in known manatee habitat, speed should not exceed 5 knots.
  - Leave boat engine on and in idle, or drop sails, when watching marine mammals.
  - Do not disperse or separate a group of marine mammals.
  - Watercraft should not chase, encircle, leapfrog, block the direction of travel of marine mammals or access to the open sea, or position itself in the middle of a group.
  - If marine mammals approach the watercraft, slow down gradually, put engines in idle or drop sails.
  - If dolphins approach a vessel to bow-ride or wake-ride, maintain a steady speed and avoid changes in course.

- When departing from marine mammals, determine where the animals are relative to the watercraft to avoid
  collisions or coming too close to the animals, and increase speed gradually only after confirmation that the
  animals are outside the no approach zone.
- Watching marine mammals for more than 30 minutes, or 3 dive sequences with sperm whales, is discouraged.
- Any accidents or collisions with marine mammals should be documented and reported to relevant authorities.

#### WATERCRAFT

- 14. Watercraft should meet appropriate safety standards.
- 15. Certain watercraft should not be used for marine mammal watching. These include jet skis and similar crafts (e.g., all motorized personal watercraft), parasail, remotely operated craft, wing in ground effect craft, hovercraft, windsurfers, kite surfers. The use of aircraft and helicopters for marine mammal watching is discouraged, except in the case of permitted scientific research and media.

#### ANGLES AND DISTANCES OF APPROACH

#### **Approach**

16. The most appropriate method for approaching a whale or a dolphin is from the side and slightly to the rear of the animal. Avoid approaches from head on or directly from behind. In the case of sperm whales, approach animals from the rear and slightly to the side.

### **Caution zone**

- 17. A caution zone is an area in which watercraft should proceed at a no-wake speed (6 knots or less).
- 18. The caution zone is the area within 300m from a whale, 150m from a dolphin and 50m from a manatee. Within 50m of a manatee, engines should be shut off.
- 19. No more than 3 watercraft should be in the caution zone of a marine mammal at a time.
- 20. When there is more than one watercraft in the caution zone, operators should coordinate movements and maintain radio contact.
- 21. Observe marine mammals at a speed not exceeding the speed of the slowest animal.

#### No approach zone

22. The no approach zone is the minimum distance to which a watercraft may approach a marine mammal. Engines should be in neutral, or sails dropped.

#### Watercraft

- 23. Minimum approach distances for whales in the region range from 50-250m. Minimum approach distances for dolphins in the region range from 30-100m, including the area directly in front of and behind a pod. During discussion a standardized minimum approach distance of 50m for whales and dolphins was recommended but there may be conditions under which it would be recognized that a greater distance would be appropriate e.g., mother-calf pairs.
- 24. Minimum approach distance for manatees is 30m. It was recognized that there may be conditions where greater distances may be appropriate, e.g., mother-calf pairs.

#### Aircraft

25. If permitted, the group recommended that aircraft may not approach (in height or distance) to within 500m of a marine mammal.

#### MOTHER AND CALF PAIRS

26. A marine mammal with a calf, lone calves/mothers or groups with calves, are particularly vulnerable to disturbance and require additional protection. In areas where approaches are allowed:

- Exercise extreme caution with groups containing calves.
- Site-specific restrictions on length of encounter and distance of approach should be considered for groups with calves.

### SWIMMING AND DIVING WITH MARINE MAMMALS IN THE WILD

- 27. Swimming with marine mammals may increase the potential for disturbance and displacement and puts people at risk. The group acknowledges that there are existing swim with marine mammal programmes (commonly known as swim with programmes) but discourages the further development of these programmes. For those countries where swim-with activities are currently being undertaken, it is recommended that the following standards be applied to these operations (countries may also refer to the national examples and standards in Appendix 1):
  - Scientific studies should be initiated to assess: a) the associated risk to the safety of the people participating in swim-with activities; and b) the current and potential future impacts of these activities on the target cetacean species. Any accidents should be documented and reported to relevant authorities.
  - Particularly sensitive animals (e.g., mothers with calves) and habitats (e.g., calving and feeding grounds) should be provided additional protection (refer to Management Considerations)
  - No sub-surface swimming activities should be allowed, including the use of any underwater breathing apparatus and scooters.
  - Underwater flash photography or lighted filming should not be allowed.
  - An adaptive precautionary approach should be taken when reviewing swim-with operating procedures. Consideration should be given to:

- Regular review of operational standards as credible scientific information on the impacts of swim-with programmes becomes more available;
- All persons in the water with marine mammals should be accompanied by an appropriately trained local guide;
- Limiting the maximum number of vessels permitted to undertake swim-with activities in a region;
- Limiting the number of swimmers allowed in the water at any one time with a marine mammal or group of marine mammals;
- Limiting the maximum amount of in-water time allowed with a marine mammal or group of marine mammals per day, including maximum swim time for each interaction, time required between successive swims with each animal and maximum cumulative interaction time with each animal per day;
- Appropriate drop-off distance for swimmers and minimum swimmer distance from animals;
- Entering the water with marine mammals during behaviorally sensitive situations should be discouraged;
- Swimming with mothers and calves should be discouraged;
- Prohibit leapfrogging and limit the number of swimmers drop offs or attempts.

## **BIBLIOGRAPHY**

Carlson, C. 2011. A Review of Whale watching Guidelines and Regulations around the World. Website of the International Whaling Commission, pp. 142. http://iwcoffice.org/\_documents/conservation/WWREGSApril1207.pdf.

Pacific Islands Regional Guidelines for Whale and Dolphin Watching. 2008. Prepared by the South Pacific Regional Environment Programme (SPREP) and the International Fund for Animal Welfare (IFAW). 17pp.

UNEP-CEP. 2011. A Summary of Whale Watching Regulations, Codes, Guidelines and Decrees in The Wider Caribbean Region. Prepared for the UNEP Regional Workshop on Marine Mammal Watching in the Wider Caribbean Region in Panama City, Panama, 19 – 22 October 2011.

UNEP-CEP. 2011. The Development of Overarching Principles and Best Practice Guidelines for Marine Mammal Watching in the Wider Caribbean Region (WCR). Prepared for the UNEP Regional Workshop on Marine Mammal Watching in the Wider Caribbean Region in Panama City, Panama, 19 – 22 October 2011.