

# SC/69A/WW/04Rev1

## **Sub-committees/working group name:**

**Studying the behavioral impacts of commercial whale watch and swim-with-whale tours on humpback whales in Okinawa, Japan**

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# Studying the behavioral impacts of commercial whale watch and swim-with-whale tours on humpback whales in Okinawa, Japan.

*Report to the IWC Scientific Committee sub-committee on Whale Watching*

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## *Background*

Humpback whales in Okinawa, Japan are part of the Western North Pacific DPS, containing approximately 1,000 whales (Calambokidis *et al.*, 2008). High incidence of mortality and continued exposure to threats, as well as complexity of population structure, resulted in this population receiving an Endangered classification under the 2015 status review by the National Marine Fisheries Service for the Endangered Species Act (Bettridge *et al.*, 2015).

Whale watching in Japan started in 1988 in the Ogasawara Islands and expanded to Okinawa in 1989. Whale watch tourism in Japan is not a government regulated activity but is managed by regional whale watching associations made up of tour operators. These associations develop their own set of self-enforced regulations. The sole exception to this self-governance model is dolphin swim operations in one specific area of Japan where this activity is regulated by local government. Typical regulations for conducting whale watching tours in Japan include approach limits such as, “Boats must slow down when less than 300m from a whale, and boats must not approach closer than 100m” (see Appendix A).

Swim-with-whale tourism in Japan started on large scale in Amami Ōshima, Kagoshima (hereafter referred to as Amami) since 2016 and expanded to some parts of Okinawa in 2019. The number of operators is increasing year by year, with approximately 20 active tour operators in 2023, including both in Amami and Okinawa. As with boat-based whale watching, swim-with-whale tourism in Japan is not a government regulated activity but is managed by regional whale watching associations made up of tour operators. These associations develop their own set of self-enforced regulations. Typical regulations for conducting swim tours in Japan include rules such as “Do not touch the whales. Do not use scuba gear near the whales; only snorkeling is allowed. Tour participants must be holders of a diving C-card license or higher, or holders of a free-dive license, skin diving license, or equivalent certification.” Some operators are using 360-degree searchlight sonar to locate whales during the tours, and this is permitted under the current regulations. The full set of guidelines can be found at the end of this document (Appendix A).

## *Study information*

Data collection takes place in Okinawa, Japan (Figure 1) and fieldwork for this project is anticipated from 2022-2024. Methodology for the data collection follows Stack *et al.* (2021) from Hervey Bay, Australia. In the Stack *et al.* (2021) study, local regulations required that swimmers hold a mermaid line while in the water, or otherwise be tethered to the boat in some manner. In Japan, swimmers are allowed to swim

freely around whales while wearing snorkel gear. Therefore, in addition to the data collection described in Stack et al. (2021), two additional data points are being collected in Okinawa: (1) the distance between the whales and the swimmers (2) the swimmer's behavior during the tour.

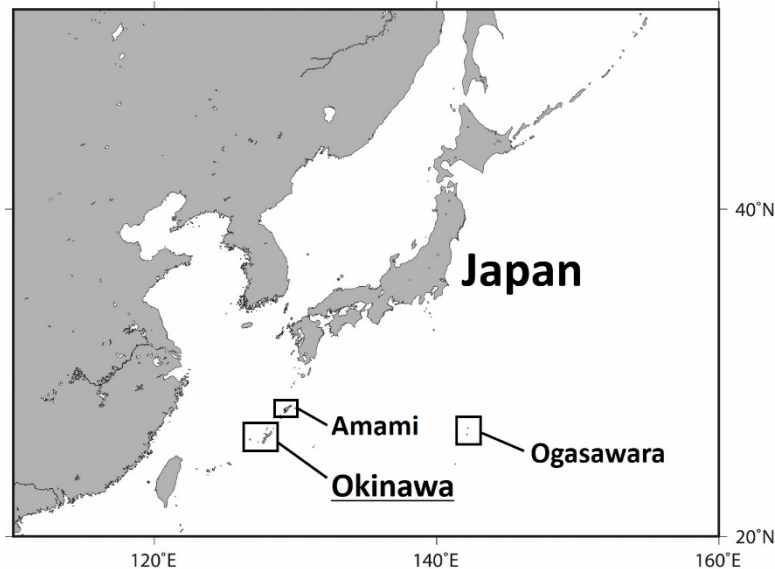


Figure 1. Map showing location of study site, Okinawa, in relation to other areas of Japan.

#### *Summary of data collected to date*

To date, 64 humpback whale groups were observed across both tour types. Whale groups ranged in size from one to 10 whales. Due to difficulties in obtaining “before” and “after” data aboard commercial whale-watch tours, a research vessel was used to mimic whale-watch tour behavior and collect supplemental data. In the 2022 and 2023 breeding seasons (Jan-March), data were recorded during 15 swim-with-whale tours and 12 whale-watch tours or simulated whale-watch tours on a research vessel. Data collection is ongoing and planned for at least one additional field season.

In February 2023, a humpback whale gave birth to a calf during a swim-with-whale tour in Amami (Oki *et al.*, in prep.). While this tour was not part of our data collection, it was reported in the local media that the swimmers approached the mother and then neonate calf multiple times at a close distance both during and after the event (*e.g.*, Kanda 2023). This example highlights why swim-with-whale tourism needs urgent management in Japan, as disturbance to calving and bonding could jeopardize reproductive success and population recovery.

#### *Intended Outcomes*

We will work with tour operators in provide trainings and discuss best practices for both swim-with-whale and whale-watch tours to reduce the potential impacts on endangered humpback whales. To this end, we have held tour operator workshops in Amami (December 2021) and Okinawa (December 2022) so that local tour operators are informed about this project and its goals.

We aim to establish government regulations for both swim-with-whale and whale-watch tours instead of having multiple whale watch associations develop and enforce their own rules, beginning in Okinawa and Amami and eventually establishing national government regulations to be implemented throughout Japan.

We welcome input from the Whale Watching sub-committee on this project.

#### Literature Cited

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Appendix A: Central and Southern Okinawa Whale Watching Association Guidelines. These guidelines are freely available to view online in Japanese at <https://diving-guma.com>.

#### **1. Purpose**

This guideline is intended for the conservation of cetaceans and the safety management of ships and passengers during whale watching and whale swimming in the central and southern sea areas of Okinawa Island (Kyan Cape - Maejima - Kuroshima - Zanpamisaki). From this point of view, business operators who hold whale watching and whale swims in the central and southern waters voluntarily establish these guidelines and use them as the voluntary guidelines of the Central and Southern Whale Association.

#### **2. Restrictions between Whale Watching/Swimming Vessels and Guidelines**

- (1) Members of the Association are obliged to comply with the following guidelines.
- (2) We request that vessels other than our members comply with the following guidelines.

### **3. Scope of application and applicable cetaceans**

- (1) Covers Cape Kyan – Maejima – Kuroshima – Cape Zanpa. (Whale watching)
- (2) The range is the east side of the north and south extension lines of the main island of Okinawa and Maejima. (Swim)
- (2) Applies to baleen whales and sperm whales.

### **4. Guideline for small vessels (less than 20 tons, including non-powered vessels such as yachts and canoes)**

- (1) "Prohibited water area"
  - A. Follows the rules shown in the attached sheet.
- (2) Approaching and leaving the target whale
  - A. Considering the undertow to other ships, slow down and approach from a distance.
  - B. When joining a convoy watching, join from the rear of the convoy and do not overtake.
  - C. When leaving the fleet, leave from behind and do not cross in front of the vessel being watched.
  - D. Do not cross the direction of travel of the target whale, either when joining or leaving the fleet.

#### **(3) Watching target whales**

- A. The vessel must not be maneuvered in such a way as to obstruct the direction of travel of target whales.
- B. During watching, try to approach at a slow speed, and do not start suddenly or turn.
- C. If the target whale approaches, immediately stop the ship.
- D. The first vessel to spot a target whale shall lead and subsequent vessels shall not overtake it. (Priority to first finder)
- E. Watching time is 1 hour for each ship.
- F. Members of the association should be considerate of other ships with a sense of mutual respect so that passengers can watch from each ship.
- G. The captain must pay attention to changes in the target whale's behavior and try to steer the vessel.
- H. If the captain is not confident in whale watching, follow the movements of the veteran captain.
- I. Each ship should consider cetaceans and other ships based on seamanship.

### **5. Information sharing**

- (1) Create a group LINE with members of our association and share information on the following items.
  - A. Sharing information on departures and absences
  - B. Sharing information on whale sightings (number of whales, surfacing intervals, direction of travel)
  - C. Sharing locations of sightings outside of watching operations
  - D. Sharing latitude and longitude information at the time of sightings
  - E. Fleet In the case of the last departure of the target whale, share the final point information of the target whale
  - F. Share the tail image of the target whale if it can be photographed
- (2) Participation conditions for group LINE
  - A. Must be a member of the association.
  - B. Ports of Miegunuku, Kaigan, Red Lighthouse, and Chubu will be assigned port administrators, and only invitations from the administrators will be accepted.

### (3) Shared information

Shared information will be shared at the Churashima Foundation/Research Center, such as all discovery locations, discovery time, latitude and longitude, number of animals, parent and child information, finder, etc. It is converted into various data and used for research and is introduced along with the number of discoveries as a daily report during the season.

[http://churashima.okinawa/sp/ocrc/marine\\_organisms/humpback\\_whale/](http://churashima.okinawa/sp/ocrc/marine_organisms/humpback_whale/)

### **6. Precautions for drone photography**

When taking aerial photography such as drone photography, avoid shooting over other ships regardless of the altitude, and pay close attention not to fall. Also, avoid areas where drones are prohibited near Naha Airport.

### **7. Other Prohibited Matters**

(1) Do not emit cetacean sounds or simulated sounds in the sea.

(2) In addition to the above, do not emit artificial sounds that may disturb the behavior of cetaceans.

### **8. Special Provisions**

If the purpose is to conduct surveys, research, or interviews for non-commercial purposes, and if the target whales are to be approached regardless of the above guidelines, each vessel must be notified in advance.

### **9. Others**

(1) Other necessary matters, or if necessary matters arise, will be determined at the meeting or conference.

(2) Prioritize this guideline as much as possible over the passenger's satisfaction, and in some cases try to make the passenger understand the guideline content.

### **10. Whale swim**

Whale swim is a snorkeling activity that is observed from the surface of the water in order to observe the underwater behavior of whales.

### **11. Whale swim guidelines**

(1) The captain will determine whether swimming is possible depending on the sea conditions and the conditions of the target whale.

(2) Prohibition of actions such as changing the course of target.

(3) If a behavioral change such as an increase in swimming speed or a change in swimming direction is observed after the vessel has approached the target whale, keep a distance from the target whale to observe or leave.

(4) Be quiet when entering the water, do not chase or run alongside the target whale, and observe the target whale without swimming as much as possible.

(5) As a general rule, one swim in the same group shall be limited to 16 participants or less, and the maximum ratio of participants to leading guides shall be 6:1.

(6) In principle, no more than one vessel may swim in the same group, with exceptions. As an exception, when using multiple vessels, the captains will make adjustments according to safety and the conditions of the target whales. In such cases, the master who has priority shall be contacted without fail.

(7) Swim by snorkeling only, scuba diving and skin diving are prohibited.

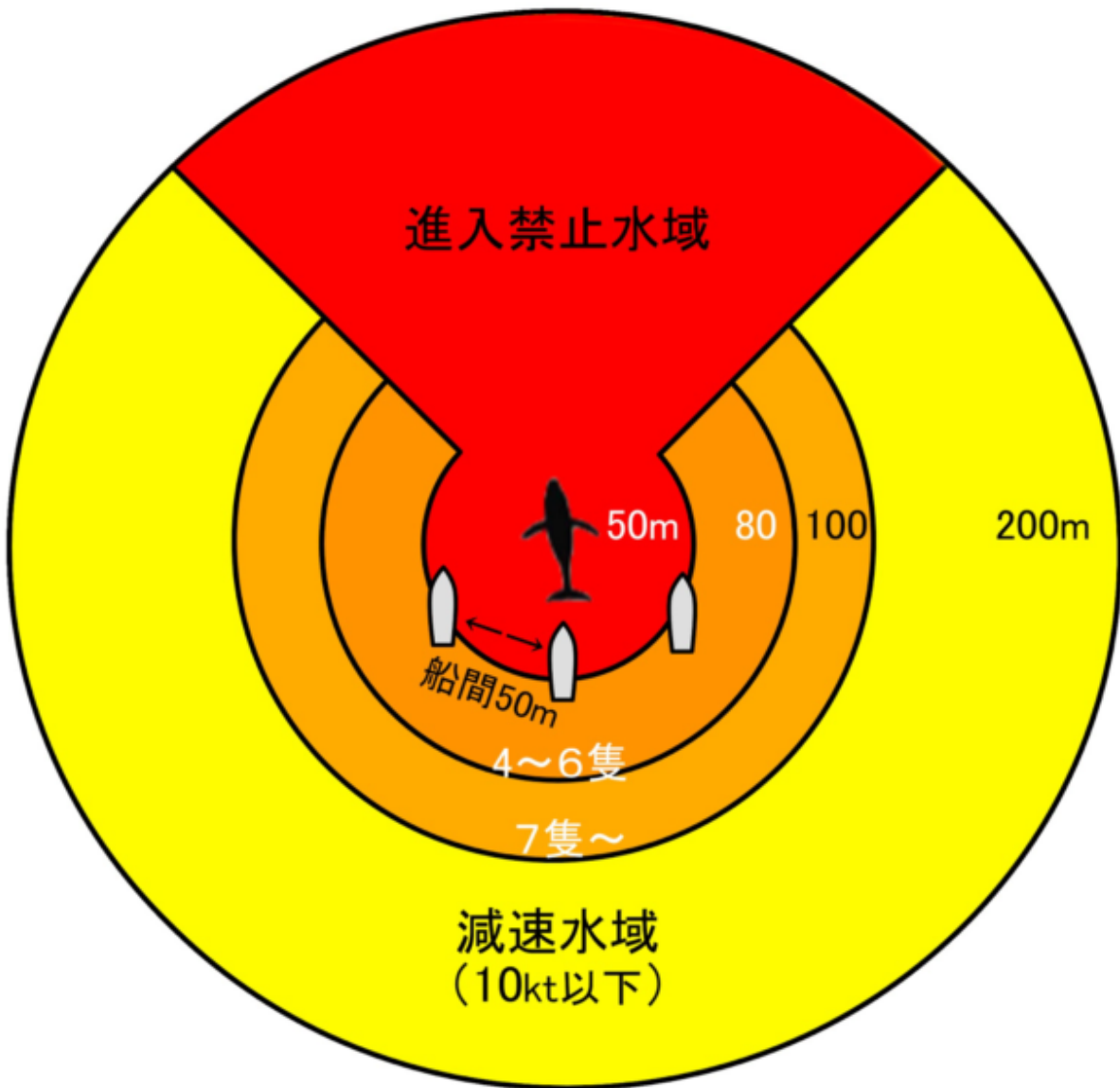
- (8) Swim participants must have a Diving C-card license or higher, a free diver's license, a skin diving license, or equivalent qualifications.
- (9) The use of luminous objects such as underwater lights and photography strobes is prohibited.
- (10) Prohibition of feeding and attracting whales.
- (11) Do not touch whales.
- (12) Take evasive action if there is a possibility that a whale may come towards you and come into contact with you.
- (13) Entering the water is prohibited when whales are beating the surface of the water, such as breaching or tail slaps.
- (15) If there is a possibility that the water entry point will be in the direction of another vessel underway, do not enter the water until safety is confirmed. (Only the application of prohibited areas is excluded.)
- (16) Other ship handling rules, etc. are in accordance with the Watching Guidelines.

## **12. Ship flag**

- (1) Members shall fly a yellow ship flag during whale watching and a red ship flag during whale swimming.

## **13. Priority time zone for watching and swimming**

- (1) The member shall set a priority time zone for each of the watching and swimming operators for their mutual business, safety, and avoidance of troubles.
- (2) Since the priority time zone is just a guideline, it is necessary to communicate with the captain on site.



	8:00	9:00	10:00	11:00	12:00	13:30	14:30	15:30	16:30
スイム	出港								
ウォッチング		午前出港				午後出港			
	スイム優先時間帯・・・8:00~10:00 12:00~14:30								
	ウォッチング優先時間帯・・・10:00~12:00 14:30~16:30								