



# Guidelines for Interactions with Cetaceans in Timor-Leste





## Acknowledgements:

These guidelines were prepared by Olive Andrews, Marine Programme Manager, Conservation International (CI) Pacific Islands, and Anselmo Amaral, Senior Marine Program Manager, Conservation International Timor-Leste. These guidelines are based on the Pacific Regional Guidelines for Whale and Dolphin Watching endorsed by the Secretariat of the Pacific Regional Environment Programme (SPREP), with support from the Margaret Ann Cargill Philanthropies, Swire Shipping, and the Global Environment Facility (GEF) through the Dugong & Seagrass Conservation project



## Overarching principles

The waters of Timor-Leste are important for a great number of cetaceans (whales and dolphins) and dugong. For some as a permanent habitat, for others, a breeding or feeding ground or a migration corridor. Currently, more than 21 species of whales and dolphins, and dugong, have been identified in this area in very high biomass and in mixed species pods. This is a unique occurrence that is not yet well understood.

The presence and diversity of cetaceans in our waters has led to the development of whale watching, both on a commercial and small-scale basis. Whale watching is defined as viewing activities in the natural environment, of any cetacean species from land, sea or air. If managed well, this activity can provide a sustainable income from whales, which can reduce damaging activities, such as the harvesting of pilot whales being carried out in Indonesia, close to Timor-Leste. Whale watching has the potential to generate many benefits to communities, contributing to sustainable development.

In order to ensure the conservation of whales, dolphins, and dugong in Timor-Leste, it is our responsibility to minimize the disturbance caused by our presence. Towards that goal, these best practice guidelines have been produced. Their purpose is to ensure the sustainable development of the whale watching industry by minimizing impacts and maximising education. They apply to all types of whale and dugong watching, including dedicated, seasonal and opportunistic commercial operators, and recreational vessels.

### **The overarching principles of these guidelines are:**

- **Ensuring the conservation of cetaceans and dugong, and their habitats in Timor-Leste.**
- **Ensuring a precautionary approach to the development and management of whale and dugong watching.**
- **Minimizing the impact of whale and dugong watching activities.**
- **Promoting and respecting cultural values of whales, dolphins, and dugong, and the marine environment to local peoples.**
- **Providing long-term economic benefits and opportunities to local communities.**



## **Management Considerations recommended by SPREP and CI**

**To minimize the risk of adverse impacts caused by whale, dolphin, and dugong watching, and to ensure the sustainable development of this industry, accurate management strategies need to be implemented. Several tools and approaches should be considered:**

- National licensing or permitting scheme to regulate the number and size of vessels, standards of operation and site-specific requirements;
- A special permit needed for research or commercial photography
- Management measures that include closed seasons, 'no go' areas, and 'no approach times' to provide additional protection to critical habitats, populations, and individuals;
- Further 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;
- Monitor the effectiveness of management provisions and modify them as required to reflect new information and circumstances;
- Establish an enforcement framework to ensure compliance with management provisions, including through customary marine tenure systems;
- Ongoing scientific research, socio-economic monitoring, assessment of potential impacts on cetaceans, and collection and sharing of information by all stakeholders;
- Disseminate these guidelines, best practice information and research outcomes to improve public awareness, including amongst recreational and commercial boat owners;
- Ongoing whale watching operator training and accreditation programs on the biology and behaviour of target species, best practice whale watching operations, and the management provisions in effect;
- Encourage, support and protect communities' participation and ownership of the whale watching industry;
- Mandate educational standards for the provision of accurate and informative material presented by local operators and guides to whale watch participants



# Disturbance

**Cetaceans and dugong, may be disturbed by the presence of people, vessels or aircrafts.**

Whale, dolphin, and dugong watching activities can potentially cause long-term disturbance to cetacean populations, which include:

- Disruption of behaviour (e.g. feeding, nursing, mating, migrating);
- Displacement from important habitat areas (e.g. resting, feeding, breeding and calving areas);
- Long term stress;
- Injury;
- Reduced breeding success;
- Increased mortality.

**Changes in the behaviour of whales, dolphins, and dugong, needs to be recognised and acknowledged as such, so that animals can be left undisturbed.** The following behaviours may indicate that a whale or dolphin is affected by our presence:

- Changes in swimming speed or direction (to avoid a boat);
- Changes in breathing/diving patterns;
- Stopping or changing activity patterns (e.g. vocalizing, feeding, nursing, socialising);
- Changes in group size and cohesion;
- Changes in acoustic behaviour; and
- Surface behaviours such as peduncle tail throws, and trumpet blows.

Populations, and individual cetaceans and dugong, may react differently depending on the species, their age, sex, and if accompanied by a calf. Always give more respect and distance if there is a calf present.



# Guidelines for interactions with cetaceans

## **Persons shall always:**

- **Operate vessels, and aircrafts so as not to disrupt the normal movement or behaviour of whales, dolphins, and dugong.**
- **Stop any interactions with a cetacean or dugong, at any sign of the animal becoming disturbed or alarmed.**
- **Allow cetaceans and dugong to determine the nature and duration of 'interactions'.**

## **Therefore, the following recommendations need to be considered:**

- Do not touch a cetacean.
- Do not feed a cetacean.
- Do not make any loud or sudden noises.
- Do not make sudden or repeated changes in direction or speed.
- Dedicated observer(s) should be on duty, in addition to the captain of the vessel.
- Do not place a vessel up wind of, or in a position where it will drift into, the no-approach zone.

## **When vessels are within the caution zone of whales or dolphins:**

- Approach cetaceans slowly and cautiously;
- Observe cetaceans at a speed not exceeding the speed of the animals.
- No more than 3 vessels should be in the caution zone of a whale or a dolphin at a time.
- Leave boat engine on and in idle when watching cetaceans.
- Do not disperse or separate a group of cetacean.
- A vessel should not chase, encircle, block the direction of travel of cetaceans, or position itself in the middle of a pod.
- If cetaceans approach a vessel, slow down gradually and put engines in idle.
- If cetaceans approach a vessel to bow-ride, maintain a slow and steady speed and avoid sudden changes in course.
- When departing from watching cetaceans, determine where the animals are relative to the vessel to avoid collisions or coming too close to the animals, and increase speed gradually while exiting the caution zone.



# Vessels

## **Prohibited vessels**

Certain vessels should not be used for whale, dolphin, and dugong watching. These include all personal motorized watercraft (e.g. jet skis and similar crafts, and underwater vessels), parasail, remotely operated craft, wing-in-ground effect craft, hovercraft, windsurfers, kite surfers.

## **Allowable vessels**

Vessels recommended for use in whale, dolphin, and dugong watching, include all other motorized and/or sail craft (e.g. motorboats, yachts, inflatable craft), as well as aircrafts and helicopters.

# Angles and distances of approach

The most appropriate method for approaching a whale, dolphin, or dugong is from the side and slightly to the rear of the animal. Avoid approaches from head on or directly from behind.

## Caution zone

- The caution zone is the area within 100m - 300m from a whale and 50m – 300m from a dolphin.

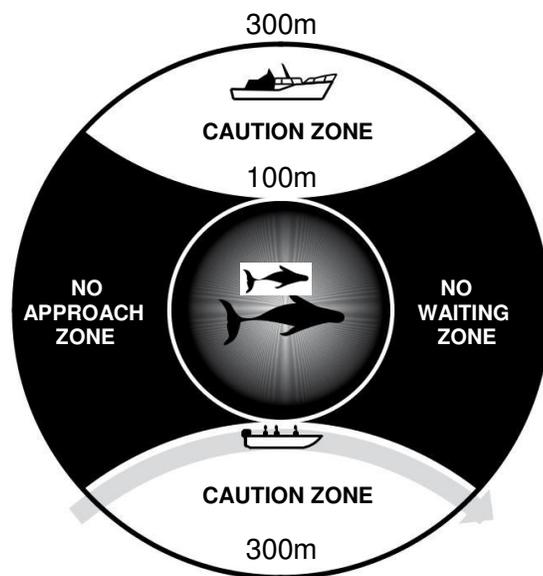


Figure 1: Approach distances for whales.

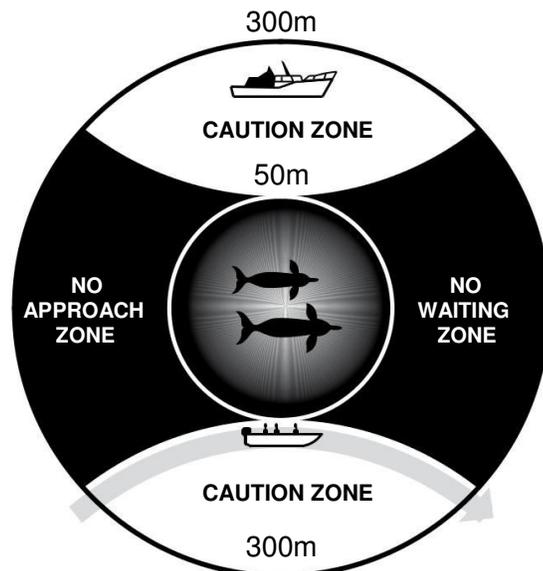


Figure 2: Approach distances for dolphins.

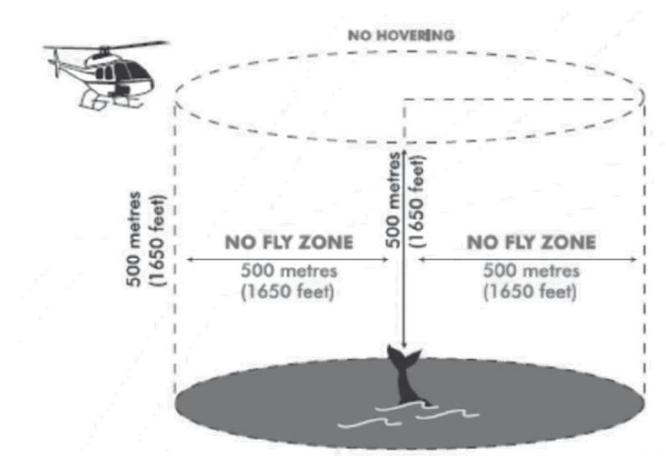


Figure 3: Approach distances for helicopters

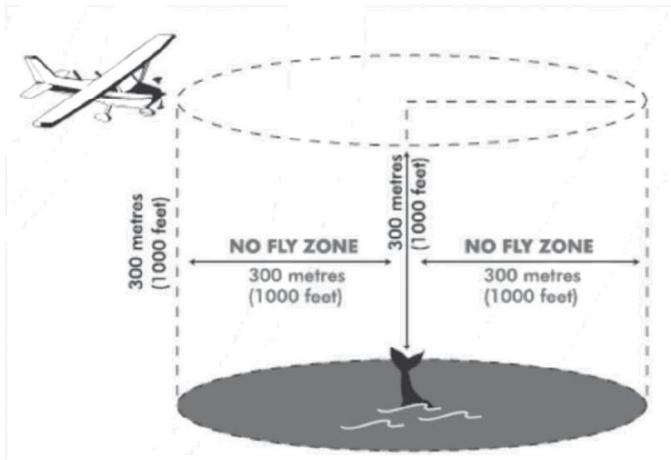


Figure 4: Approach distances for aircraft



### **No approach zone**

- For a vessel, the no approach zone is 100m from a whale and 50m from a dolphin and dugong, including the area directly in front and behind a pod.
- Prohibited vessels should not enter the caution zone.
- If a vessel accidentally approaches cetaceans closer than the recommended distance, it must move away from the no-approach zone at slow speed.
- Helicopters or large gyrocopters must not get closer (in height or distance) than 500m to a whale, dolphin, or dugong.
- Other planes must not get closer (in height or distance) than 300m to a whale, dolphin, or dugong.
- Drones for personal and scientific use must not get closer than 30m (in height or distance) unless under special permit for research or photography.

### **Approaches of mother and calf pairs**

**Pods of cetaceans containing calves are particularly vulnerable to disturbance and require additional protection.**

- Exercise extreme caution with pods containing calves.
- Specific restrictions on length of encounter and distance of approach should be considered for pods of species of conservation concern such as blue whales with calves.



# Swimming with cetaceans

Swimming with whales, dolphins, or dugongs, may place both people and animals at risk. Risks to humans may include injury and possible death from interactions with large, wild animals, especially pilot and false killer whales, both of which have been recorded pulling swimmers by the leg to depths. Risks to whales, dolphins, and dugong, may include physical damage from collisions with vessels and people, and ecological impacts caused by changes in normal behaviour of the animals.

At present there is little scientific information available on the potential short and long-term impacts of swimming with whales, dolphins, and dugong. It is therefore recommended that Timor-Leste does not currently undertake commercial *swim-with whale* operations until more information is available. All *in-water encounters* should only occur for scientific, research, or commercial photography purposes, under special permit.

**For special permit *in-water encounters* with cetaceans it is recommended that the following standards be applied to these operations.**

- Particularly sensitive animals (eg mothers with calves) and critical habitats (eg calving grounds) should not be targeted for *in-water encounters*
- Swimming with the use of any underwater breathing apparatus is not allowed. Rebreather or free diving only.
- Underwater flash photography or lighted filming is not allowed.
- All persons in the water with whales, dolphins, or dugong, should be accompanied by an appropriately trained local guide;
- Maximum 5 swimmers allowed in the water at any one time with a cetacean pod, a maximum of 3 swimmers for dugong;
- Maximum interaction time of 1 hour with a pod/population per day
- 50m drop-off distance for boats facilitating swimmers and minimum swimmer distance from animals of 30m;
- Swimmers should not be allowed in the water with surface-active large whales;
- Placing the vessel in the line of travel of the pod is prohibited during *in-water encounters* and the number of swimmer drop off's or attempts is limited to 3 in 1 hour.



# Glossary

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## **Calves**

Calves are young whales, dolphins or dugong, approximately half the size or less of adult individuals for their species. They usually travel in close proximity to their mother. Calves are particularly vulnerable as they rely on their mother's care and proximity for survival.

## **Caution zone**

The caution zone is the area within 100 – 300m of a whale, or 50 – 300m for a dolphin or dugong, and within which all vessels should behave according to the guidelines and/or regulations in effect in order to minimize the impact on the animals being approached or watched.

## **Commercial operator**

A commercial operation means an operation carried out for any form of hire or reward, in which persons are transported, conveyed, conducted, or guided where a purpose is to view or come into contact with cetaceans.

## **Cetaceans**

Cetaceans include all species of whales, dolphins and porpoises.

## **Dedicated observer**

A dedicated observer refers to any crewmember or passenger onboard a commercial or recreational whale-watching vessel available to keep a watch for cetaceans. The observer's role is to assist the skipper of the vessel in localizing the animals and keeping track of their movements and behaviours.

## **Dugong**

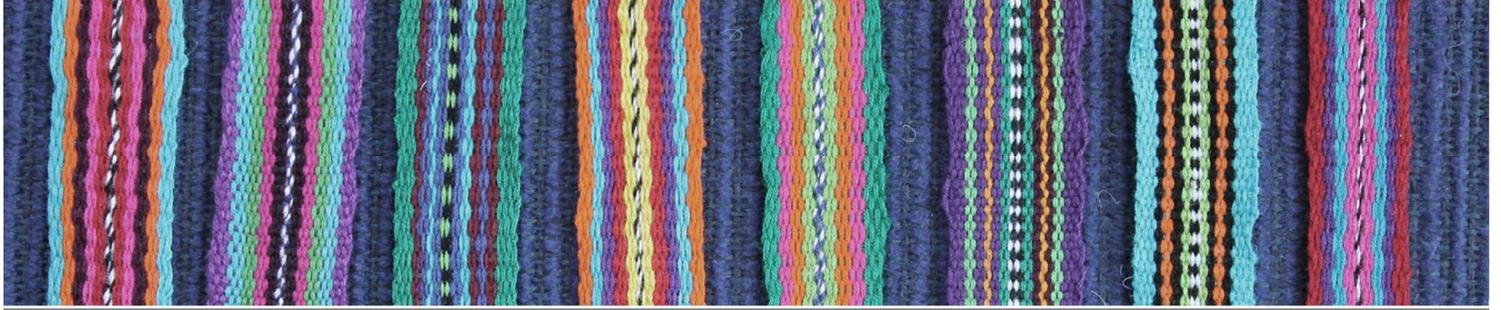
Dugong (*Dugong dugon*) is a medium-sized marine mammal. It is one of four living species of the order Sirenia, which also includes three species of manatees.

## **Herd**

More than one dugong together is called a herd

## **Leap frogging**

Leap frogging is the maneuver that consists in placing a vessel in the path of a cetacean in order to achieve a closest approach to whales or dolphins. This kind of approach is known to be more disruptive for the animals.



### **No approach zone**

The no approach zone is within 100m from a whale and 50m from a dolphin including the area directly in front of or behind a pod. Vessels should not enter the no approach zone and should not wait in front of the direction of travel of a pod.

### **Pod**

A pod is an individual or a group of more than one cetacean.

### **Recreational vessel**

A recreational vessel refers to any vessel observing whales and dolphins for leisure without implying any form of hire or reward by the transported persons.

### **Whale watching**

Whale watching refers to viewing activities of any cetacean species, both whales and dolphins, from land, sea or air.

### **Wing-in-ground effect craft**

A wing-in-ground effect craft is a boat with wings that cruises just above the water surface. It floats on a cushion of relatively high-pressure air created by aerodynamic interaction between the wings and the water surface.