



IAATO MARINE WILDLIFE WATCHING GUIDELINES (WHALES, DOLPHINS, SEALS AND SEABIRDS) FOR VESSEL & ZODIAC OPERATIONS

INTRODUCTION

In 2002, the International Association of Antarctica Tour Operators (IAATO) initially developed Marine Wildlife Watching Guidelines to provide guidance to vessel operators while viewing cetaceans, seals, and birds in their marine environment.

These guidelines minimize potential environmental impacts to wildlife and suggest ways to comply with Annex II (Conservation of Antarctic Fauna and Flora) of the Protocol on Environmental Protection to the Antarctic Treaty. The guidelines do not replace any domestic governmental laws, but provide an additional code of conduct to help reduce potential disturbance to the marine environment. Some countries have guidelines or regulations stricter than these which may override IAATO's guidelines. Violation of national regulations may be punishable by fines, imprisonment and, in extreme cases, seizure of vessel. IAATO operators should be aware that compliance with the IAATO guidelines might be insufficient to prevent violation of, and penalties resulting from, national laws and regulations.

Compliance with the International Regulations for Preventing Collisions at Sea has priority over these guidelines at all times.

A. These Guidelines Provide Standard Operating Procedures which:

1. Are intended to be used by IAATO members operating:

- Any type of vessel (e.g. ship, sailboat, yacht, Zodiac, small boats, kayak, etc. Note: The use of jet-skis, surfboards or windsurfers should not occur in areas of known wildlife);
- By the officers, crew, expedition staff and visitors involved in navigating in wildlife-rich areas during viewing sessions; and

2. Aim to:

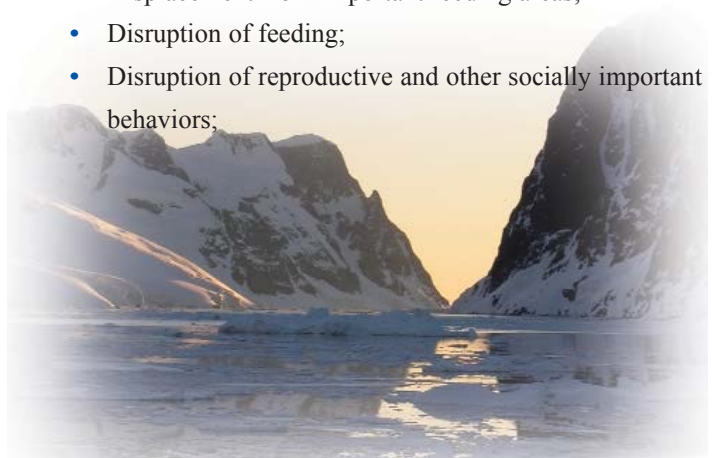
- Minimize wildlife disturbance;
- Protect cetaceans, seals and seabirds while ensuring a high quality wildlife-watching experience through responsible observation. (Many passengers are concerned about the welfare of wildlife and expect high standards of conduct by operators);
- Avoid harmful impacts on marine wildlife populations by ensuring that the normal patterns of daily and seasonal activity of the animals are maintained in the short and long term.

Competent, careful boat handling avoids harming wildlife and leads to better wildlife watching.

B. Possible Impacts from Vessels

Possible negative impacts from vessel operations include physical injury, interference with or disruption of normal behavior, stress, underwater noise and possibly increased exposure to predators. In addition, animals could be exposed to increased levels of environmental contaminants such as oil from leaking outboard engines and discharged bilges. The recommended guidelines will help minimize the level of potential disturbance and should prevent the following from occurring:

- Displacement from important feeding areas;
- Disruption of feeding;
- Disruption of reproductive and other socially important behaviors;



- Changes to regular migratory pathways to avoid human interaction zones;
- Stress from interaction;
- Injury;
- Increased mortality or decreased productivity/survivorship (and therefore population decline).

C. Approaching Marine Mammals and Seabirds

General Principles

The animals should dictate all encounters.

It is very important for vessel operators to be able to evaluate the animals' behavioral patterns. This can be difficult in practice and a good reason to have experienced ships officers and naturalists onboard.

The guidelines take into account the approach towards the animals, arrival at and departure from an optimal viewing area, and recommended distances from the animals. Sometimes an animal will approach a vessel. If a marine mammal wants to interact, it may remain with the vessel. The vessel can then drift passively. If the animal is moving away from the vessel, it is choosing not to interact with, or approach, the vessel.

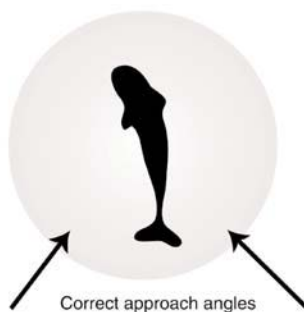
Take all care to avoid collisions. This may include stopping, slowing down, and/or steering away from the animals. Do not chase or pursue animals.

The following principles address vessels in general:

1. Cetaceans (Whales, Dolphins, Porpoises)

Cetaceans should never be approached head-on. Ideally, they should be approached from slightly to the side and rear of the animal (see Figure 1). Once traveling with the animals, travel parallel with it/them.

Figure 1.



1a. Vessels, Officers, Crew, Expedition Staff:

- Keep a good lookout forward (and ideally on the sides and from the stern) where cetaceans may be present.
- Always give the animals the benefit of the doubt.
- Avoid sudden change in speed and direction (including putting vessel in reverse).
- Avoid loud noises, including conversation, whistling, etc.
- Keep radios on a low volume setting.
- Should a vessel get closer than the recommended minimum distance, withdraw at a constant, slow, no-wake speed, to at least the recommended minimum distance.
- If animals approach the vessel, put engines in neutral and do not re-engage propulsion until they are observed well clear of your vessel. If the animals remain in a local area, and if it is safe to do so, you may shut off the vessel's engine. Some whales will approach a silent, stationary vessel.

(Note: Allowing a vessel to drift within accepted recommended distances could constitute an intentional approach.)

1b. Awareness of the animals' behavioral patterns:

Use your best judgment. Animals may alter their behavior if they are disturbed by your activities. When in doubt, err on the side of caution, and give animals time and space. If the cetacean is agitated or no longer interested in staying near the vessel, the following behavioral changes may be observed:

- Changes in traveling direction.
- Regular changes in direction, or speed, of swimming.
- Moving away from the area.
- Apparent general agitation.
- Hasty dives.



- Changes in respiration patterns.
- Increased time spent diving compared to time spent at the surface.
- Changes in acoustic behavior.
- Certain surface behaviors such as tail or pectoral fin slapping or trumpet blows.

1c. General code of conduct around marine mammals:

- Do not stay with the animals too long, with a suggested maximum time of one hour. If signs of disturbance or change in behavior occur at any time during the stay with the animals, retreat slowly and quietly.
- Never herd (circle), separate, scatter, or pursue a group of marine mammals, particularly mothers and young.
- If a cetacean approaches a vessel to bow-ride, maintain a relatively constant course and speed. Do not enter a group of dolphins to encourage them to bow-ride.
- If a cetacean surfaces in the vicinity of your vessel, take all necessary precautions to avoid collisions, while avoiding sudden changes in speed or direction. This may include, slowing down, slowly coming to a stop, and/or steering away from the animal.
- If a cetacean comes close to shore or your boat, remain quiet.
- Avoid sudden movements that might startle the cetacean.
- In line with ATCM Recommendation XVIII-1 and IAATO general codes of conduct, never attempt to touch or feed animals.
- Playback of underwater sound of any kind should not occur. This includes recorded whale or dolphin sounds. If hydrophones are used from small boats to listen to the underwater sounds it is preferable to have the engines of the small boats shut down. The sounds can be listened to with headphones or mini speakers and can also be recorded. There are a number of sites on the internet that offer hydrophones and recording equipment for sale.



1d. Recommended minimum approach distances:

- No intentional approach within:
 - 30 meters or 100 feet for small boats (including kayaks);
 - 100 meters or 300 feet for small boats (including kayaks) if cetaceans communally feeding;
 - 100 meters or 300 feet for ships;
 - 150 meters/500 feet if ship over 20,000 tons;
 - 200 meters/600 feet if two ships present.
- Helicopters or any aircraft should not approach closer than 300 meters or 1000 feet vertical distance. *Aircraft should cease contact if the animals repeatedly dive or increase speed.*

1e. When whales are sighted:

Approximately 1500 to 3000 meters / one to two miles away

- Reduce speed to less than 10 knots.
- Post a dedicated lookout to assist the vessel operator in monitoring the location of all marine mammals.

1500 to 750 meters / one to one-half mile away

- Reduce speed to 5 knots.

Approximately 750 meters / half a mile or closer

- Reduce speed to less than 5 knots.
- Maneuver vessel to avoid a head-on approach.
- Avoid sudden gear changes (e.g. into reverse).

1f. Close approach procedure for vessels and/or Zodiacs:

Approximately 200 meters/600 feet or closer:

- Approach at no faster than no-wake speed or at idle, whichever is slower.
- Approach the animals from parallel to and slightly to the rear (at 4 or 8 o'clock to whales heading 12 o'clock, see Figure 1).
- Never attempt an approach head-on or from directly behind.
- Stay well clear of feeding baleen whales.
- Try to position the vessel downwind of the animals to avoid engine fumes drifting over them.
- Establish communication between vessels, small boats or Zodiacs in multi-vessel approaches to coordinate viewing and to ensure that there is no disturbance or harassment of the animals.
- Radio volume should be kept to the minimum necessary for needed communication.
- Do not 'box-in' cetaceans, create a 'tunnel' of Zodiacs or kayaks, or cut off their travel or exit routes. This is particularly important when more than one vessel is present.
- If multiple vessels are watching the animals at one time, it is suggested that a *maximum* of two ships or four small craft, should position themselves adjacent to



each other to ensure the cetaceans have large open avenues to depart through.

- Be aware of local geography – never 'trap' animals between the vessel and shore. Assess the presence of obstacles such as other vessels, structures, natural features, rocks and shoreline.
- Avoid sudden or repeated changes in direction, speed or changing gears when close to marine mammals.

1g. Close approach zone:

(Note: Ideally this should be no more than one vessel at a time)

Approximately 30 meters/100 feet for Zodiacs/100 meters/300 feet for ships.



- When stopping to watch cetaceans, put your engines in neutral and allow the motor to idle without turning off; or allow the motor to idle for several minutes before turning off. This prevents abrupt changes in noise that can startle the animals and allows them to become aware of your presence and current location.
- Avoid excess engine use, gear changes, maneuvering or backing up to the animals. These produce sudden, large changes in underwater noise levels, which may startle, agitate or disturb the animals.
- Avoid the use of bow or stern lateral thrusters to maintain position. Thrusters can produce high-pitched acoustics as well as intensive cavitations (air bubble implosion) underwater.
- Be aware that whales may surface in unexpected locations.
- Breaching, tail-lobbing or flipper slapping whales may be socializing and may not be aware of boats. Keep your distance.

- Feeding humpback whales often emit sub-surface bubbles before rising to feed at the surface. Avoid these light green bubble patches.
- Emitting periodic noise may help to let whales know your location and avoid whale and boat collisions. For example, if the small boat or Zodiac engine is not running, occasionally tap on the engine casing with a hard object (not your radio!).
- If cetaceans approach within 30 meters or 100 feet of your vessel, put engines in neutral and do not re-engage propulsion until they are observed clear of the vessel. On rare occasions, whales have been known to use ships as ‘backscratchers’; if so, remain drifting as long as safety is not compromised.
- Stay quiet, turn radios down, and restrict passenger movement in small boats or Zodiacs during close encounters.
- Enjoy the experience.



1h. Departure procedures:

- Move off at a slow no-wake speed to the minimum distance of the close approach zone. Avoid engaging propellers within the minimum approach distance, if possible.
- Always move away from the animals to their rear, *i.e.*, not in front of them.
- Do not chase or pursue ‘departing’ animals.



2. Seals

2a General guidelines for viewing hauled-out seals:

- Seals hauled out on land, rock or ice are sensitive to boats and human presence. Noises, smells and sights may elicit a reaction. Be aware of seal behavior that

indicates a seal has been disturbed. Such behaviors include, but are not limited to:

- an increase in alert or vigilance,
- head turning,
- change in posture from lying to erect,
- hurriedly moving away from the approaching vessel,
- open mouth threat displays (e.g. such as in leopard seals on ice, or elephant seals on land),
- aggressive displays or bluff charges in your direction.
- When viewing seals do not surround or separate them, especially mothers and pups. Stay on the side where they can see you.
- On beaches, avoid getting between seals and the sea, walk ‘above’ them.
- Try not to break their horizon or tower over hauled-out seals – stay low.
- Similar with all Antarctic species, do not attempt to touch or feed seals.
- Pups are often left alone when the mother is feeding. They are not abandoned and should be left alone and not touched.
- Keep commentary, conversation and engine noise to a minimum and be aware of your radio volume.

- Any seal response other than a raised head should be avoided.
- If an individual or a herd moves towards the water or there is a hurried entry into the water by many individuals, you should retreat slowly and carefully.
- Be aware that fur seals and sea lions are highly mobile on land and might charge (and potentially bite) you if approached too closely.
- Be aware of animals in tussock grass areas. Ideally, staff member should lead, carrying walking stick or equivalent.
- Suggested minimum distances ashore are 5-10 meters/ 16-33 feet (25 meters/82 feet from jousting bulls).



- Approach or depart a landing site or colony slowly to minimize any disturbance.
- Staff/crew should assess the best landing point – ideally as far from the birds as possible. This is particularly important if birds are moulting near the shore.
- Avoid boat operations in waters where birds enter and exit, are bathing, or are feeding close to colonies.
- Be aware of birds in the water; slow down and/or alter course to avoid collision.
- There may be occasions when swimming penguins find themselves in a Zodiac when they ‘porpoise’, landing on the deck. Occupants should remain quiet and wait for the penguin to find its own way over the side and return to the water, normally by jumping onto the anchor box. It is normally not necessary to assist.

2b. Viewing seals that are in the water

When observing seals in water, please apply similar principles as outlined for cetaceans (Section 1).

3. Seabirds

3a. Vessel and Zodiac operations near birds:

Sometimes spectacular concentrations of seabirds may be found out at sea – rafts of birds either feeding on the surface, diving from it, or simply resting and bathing. Many of these birds may have flown hundreds or thousands of miles, often to find food for their young.

- Stay on the fringes of these concentrations. Ships should stay 100 meters/328 feet and small boats or Zodiacs 30 meters/98 feet away.
- Birds such as penguins may be subject to disturbance by Zodiac operations close to landing sites or colonies.

The same advice applies to ‘feeding frenzies’, which may involve species diving from the air into and under the surface of the sea. Some seabirds may be attracted to drifting vessels.

- Under no circumstances should ‘chumming’ (depositing fish guts or oil) occur to attract birds south of 60°.
- Never feed wild birds.



3b. Viewing birds ashore:

- Walk slowly and encourage passengers to simply sit and watch the animals.
- Avoid blocking ‘walkways’ in colonies and water entry and exit points.
- If parent birds are blocked from returning to their nests, increased predation of eggs and chicks may occur by skuas and gulls. In addition, parent birds will waste precious energy by avoiding human obstacles on their way to their nests or being displaced from the shortest

access route. Take care in tussock grass where birds may be nesting, including in burrows under bare earth.

- If skuas (jaegers) or terns start dive-bombing,, they are protecting young or nests. Retreat in the direction you approached from. Be aware that eggs and young are well camouflaged and might be hidden from your view.
- Recommended approach distances:

- In general, keep 5-10 meters/16-33 feet from nesting seabirds.
- Keep 10 meters/16 feet from nesting, and 25 meters/82 feet from displaying albatrosses on South Georgia.
- Southern Giant Petrels seem particularly prone to disturbance whilst nesting; stay 25-50 meters/82-164 feet away, if possible.
- Aircraft (including helicopters) should follow the guidelines laid out in Antarctic Treaty Resolution 2 (2004) ‘*Guidelines for the Operation of Aircraft near Concentrations of Birds in Antarctica.*’

4. Entanglement and strandings

- Any animals entangled in fishing equipment etc., should be assisted where possible. Please only use experienced staff/crew for these situations and take the necessary precautions such as protective clothing – seal bites are particularly prone to disease.
- Photographs of the entanglement should be taken. Please complete a report and send it to IAATO.
- Should you not be able to assist, please record details including geographic position (expressed as coordinates

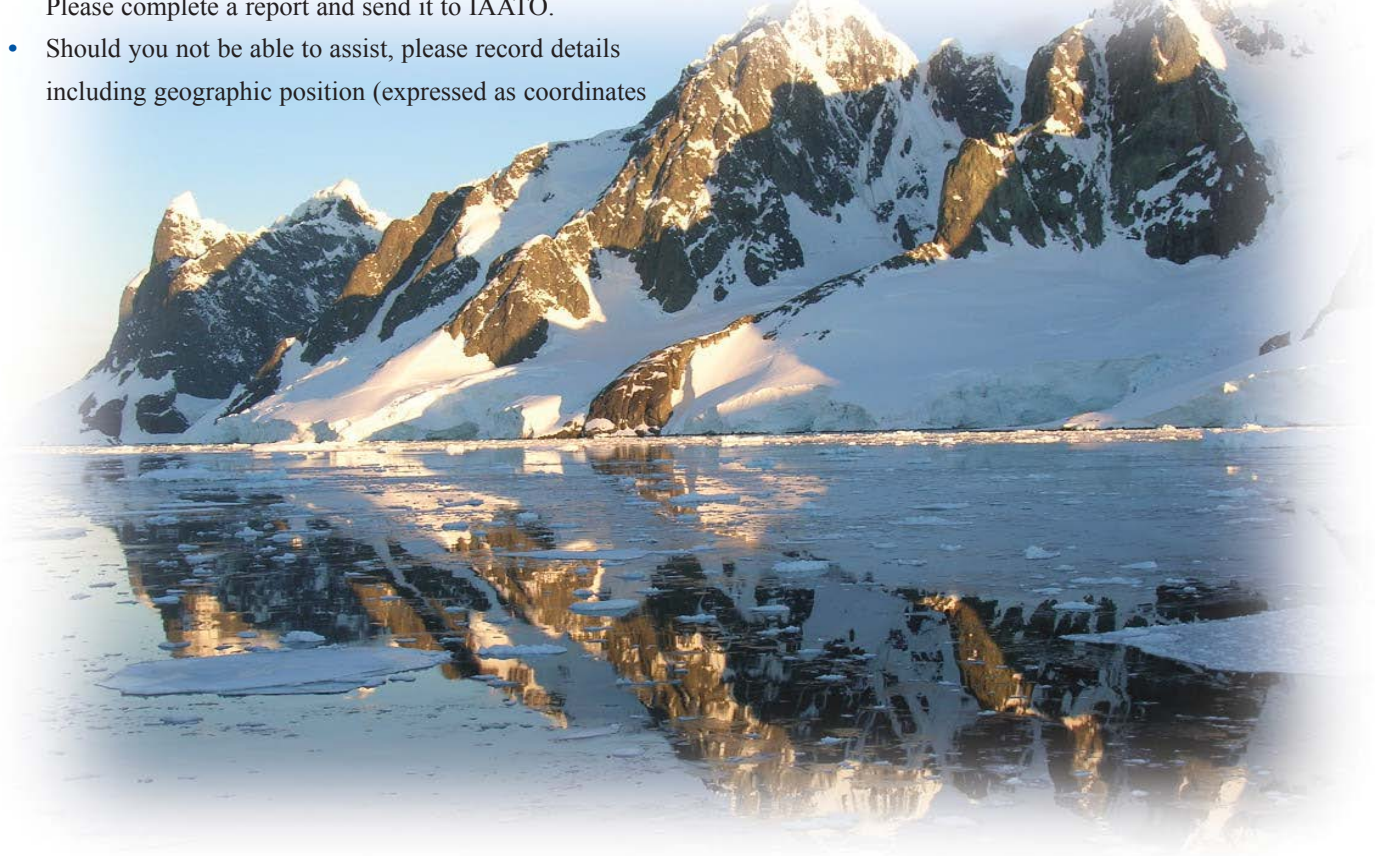
in latitude and longitude), species, and type of entanglement. Please report the event as soon as possible, so assistance may be sought from other vessels with experienced staff onboard.



- Details of dead (floating) animals and ‘strandings’ (beached) cetaceans should be recorded and reported to IAATO. Where possible, please take photographs recording the front and side of the head of the animal (for species identification). Please include a scale of measurement (e.g., a ruler or Zodiac paddle) in the photographs. If the state of decomposition of the animal allows, please also take photographs of the fluke (tail) and the dorsal fin (if present) to allow recognition of potentially known individuals (i.e. using photo-identification).

5. Identification and data collection

Identifying and, in many cases, recording species for the voyage log purposes is part of most onboard naturalists’ remit. Logs, which include these records coupled with latitude and longitude of sightings, species identification, and any additional information such as identification photographs, are of immense value. Please send copies to IAATO at iaato@iaato.org



Helpful Hints!

- Reduce pollution from engines – In all close wildlife encounters, please ensure you are using ‘clean running’ engines, especially on small boats or Zodiacs, and are creating minimum air and water pollution.
- Polarizing sunglasses can considerably enhance viewing of submerged/partially-submerged marine animals and birds.
- Encourage the use of binoculars for viewing marine mammals and seabirds.

Recommended Field Guides:

- *Whales, Dolphins and Other Marine Mammals of the World* by Shirihai and Jarrett 2006
- *Birds of Chile, Antarctica and Southern Argentina* by Jaramillo, Burke and Beadle 2003
- *A Complete Guide to Antarctic Wildlife* by Shirihai and Jarrett 2002
- *National Audubon Guide to Marine Mammals of the World* by Folkiens et al. 2002
- *Cetaceans: Whales, Dolphins and Porpoises* by Carwardine & Camm 1995
- *Seabirds: A Photographic Guide* by Peter Harrison, 1987



The Sea Mammal Research Unit, Getty Marine Laboratory, University of St. Andrews has endorsed these Guidelines.

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