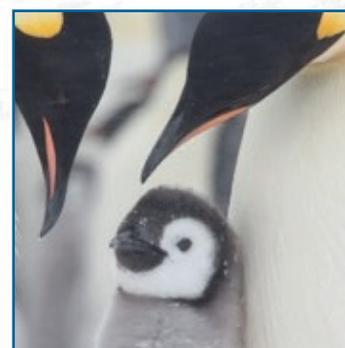


Emperor Penguin Colony Visitor Guidelines

1. Introduction

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. Be aware that some Emperor penguin colonies may be inside an Antarctic Specially Protected Area (ASPA) and may need a permit before the colony can be visited.

This guideline aims to minimize disturbance to Emperor Penguins and avoid harmful impacts on penguin populations by ensuring that the normal patterns of daily and seasonal activity are maintained in the short and long term.



2. Potential Impacts

There are currently no known impacts of well controlled visitation to Emperor penguin colonies, the possible impacts that need to be avoided include:

- Disturbance of wildlife, not only penguins, by visitors
- Aircraft landing or flight activities
- The introduction of non-native species.

3. Avoiding disturbance of wildlife

- There may be no more than 100 visitors ashore at any time, exclusive of expedition guides and leaders, with a maximum of 20 visitors for every guide. Where there are less than 20 visitors there should be at least 2 guides.
- When visiting a colony, walk slowly and carefully and maintain a precautionary distance of 5 metres from penguins. Increase distance from wildlife if any changes in behaviour are observed. Always give wildlife the right-of-way.
- Keep 15m away from areas adjacent to colonies facing the ice edge where the penguins commute to and from the ocean.
- Keep visitor pathways and penguin pathways separate where possible.
- If it is necessary to cross distinct areas where penguins are commuting, it is best that visitors stay in a tight group rather than being spread out.
- Visitors should stop moving when a commuting penguin is approximately 15m away to allow it to decide the direction it wants to follow.
- Be aware of Leopard seals (*Hydrurga leptonyx*) that may be seen at breathing holes and may chase visitors. Do not surround Weddell seals, go between adult and pup or between a seal and its breathing hole.

3.1 Guiding visitors at Emperor Penguin Colonies

3.1.1 Approaching Emperor penguin colonies

On approach to an Emperor penguin colony the following precautions should be taken:

- Establish a passenger stopping point within 25 to 30 meters of a colony of emperor penguins with chicks. All passengers and staff must stop at the established point for a minimum of 5 minutes assess penguin behaviour.
- If there are no nervous reactions from the chicks such as repeated or continual flipper flapping slowly move the group 10 to 15 meters closer to the colony.
- Repeat the assessment and approach every 5-10 minutes.
- Continually assess the behaviour of the penguins and retreat if there are any signs of disturbance. Never approach closer than 5 meters (15 feet).
- Do not circle an emperor penguin colony. Keep all passenger and staff activity to one side of the colony.

3.1.2 At the edge of ice when fledging chicks are present

- When at the water's edge, chicks that are preparing to fledge are initially much less nervous.
- Keep visitors all to one side of the group of chicks, and it is recommended that the visitors sit 15 meters from where the chicks are preparing to enter the water.
- Chicks often lose all inhibition when passengers remain seated.
- Visitors may find themselves surrounded by chicks as they move amongst the visitors. Remember to stay still and if you need to move, then move slowly.
- Adult penguins are also usually less concerned about human activity at this point.



3.1.3 Closed areas

- Guides may specify restricted areas to avoid hazards such as tide cracks, seal breathing holes, or weak sea ice, and penguin highways to access holes or tide cracks.

3.1.4 Guided walking areas

- The approach path to the colony should be flagged, allowing space for routine slow shifting of groups of penguins. Colonies consist of several groups of penguins, thus care needs to be taken to flag a suitable approach route to the colony. Limit flags around the colony, thus limiting disturbance of the markings on the penguins, but ensure visitors are well briefed. This route should be guided. Where small groups of visitors are camped for a few days while visiting a colony, it may only be necessary to guide them initially, so long as there is always a guide at the colony.

3.1.5 Free roaming areas

- Visitors may roam freely in the camp area (if camping) and near the penguin colony. Guides must be on site at all times with visitors, at a ratio of maximum 1:20. This area should be well flagged to ensure paths and moving groups of penguins are not disrupted.

4. Safety and disturbance mitigation measures for aircraft operations.

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.' In addition to these guidelines, the following mitigation and safety measures should be taken into consideration when landing close to colonies:

- Cross coastlines at right angles and above 2000ft (~610m) AGL on flight approach.
- Maintain a vertical separation distance of 2000ft (~610m) AGL and a horizontal separation of 0.25 nautical mile (~460m) from coastlines where possible.
- Do not over fly emperor penguin colony (including major traffic pathways of penguins), or seals. Observe tide cracks and nearest ice edge on approach to colony to estimate security of landing areas. Land a minimum of 0.75 nautical mile (~1km) from colony or seals.
- Select a landing site behind a prominent physical barrier (e.g. iceberg) and if possible downwind to minimise colony and seal disturbance.
- Make minimum number of passes to inspect and/or drag skiway consistent with safe landing operations.
- If there are helicopter operations, ensure the landing site is clear of wildlife and that it is consistent with safe landing operations.
- Check skiway is clear of wildlife before start-up and take-off

5. Safety Considerations

- It is important to have emergency equipment that allows the set up of an emergency base camp if weather changes, particularly when doing helicopter operations.
- The base camp area should be checked immediately following landing to check the sea ice is secure.
- Fast-changing weather may cause significant problems if visitor groups are spread over a wide area. Guides must monitor weather and sea ice conditions and be prepared to retreat to camp if conditions require.
- Sea ice may crack or change rapidly and caution should always be exercised. Particular care must be taken near tide cracks.

6. Biosecurity and waste management

The introduction of non-native species into Antarctica has been identified as a potential threat to the biodiversity of the continent, thus biosecurity measures and waste management is critically important. The following measures must be carried out when visiting Emperor colonies.

- Make biosecurity checks, i.e. cleaning boots and equipment, before the visit (Follow IAATO guidelines on biosecurity precautions)
- No uncooked poultry products to be taken to colony locations
- Set caches, emergency stores and camp a minimum of 0.75 nautical mile (~ 1km) from colony or basking seals. Secure all wastes and garbage from wildlife and remove all waste at end of trip.
- Establish grey-water pit and record location if overnighing.



Aerial view of emperor penguin colony



Emperor penguin colony in good weather



Emperor penguin colony in poor weather



Camp site near iceberg at emperor penguin colony



South polar skua overflying colony



Leopard seal at breathing hole