

Boot, Clothing and Equipment Decontamination Procedures for Small Boat Operations

International Association of Antarctica Tour Operators (IAATO)

Introduction:

Aware of the potential for visitors, including tourists, to be vectors either for disease or introduction of non-native species into the unique Antarctic ecosystem IAATO Members developed these procedures in 1999/2000.

Regularly reviewed and updated, these procedures have become a recognized cornerstone of IAATO Member's actions to advocate and promote the practice of safe and environmentally responsible private-sector travel to the Antarctic. The procedures are similar to the decontamination practices of those countries which protect themselves against the introduction of external diseases or alien organisms, and are mandatory on all IAATO member operations. We ask you to be fully familiar with these procedures and take strict steps ensure they are followed. We strongly encourage you to have passengers, crew and staff sign a declaration, similar to the sample below.

Please note: the term 'visitors' refers to all ship's crew, boat drivers, staff, guides and lecturers as well as to passengers. For the purposes of this information small boat is defined as a Zodiac, RIB, Naiad, Avon, Polarcircle or similar small landing craft.

Pre- Voyage Information

- Visitors are advised that Antarctica is an isolated continent and believed to be largely free of introduced diseases and non-native species. We must ensure that it remains so.
- Visitors are advised that all boots and clothing must be clean before joining the ship. Those who go trekking, tramping, backpacking, or farm visiting prior to the voyage must clean their boots, clothing and equipment thoroughly to remove all foreign material. Tripod feet and backpacks can also collect mud and seeds and should be checked thoroughly before joining the ship. Velcro attachments attract seeds and must be thoroughly checked and cleaned before departure to Antarctica.

Pre- Landing Briefing

- Visitors need to be reminded that they must have clean boots, clothing and equipment before proceeding ashore. A vacuum cleaner will be provided to clean backpacks, bags and pockets, and facilities, known as the boot-washing station, will be available on deck for them to clean their equipment and their clothing. Equipment will be checked thoroughly, preferably by a member of the ship's staff or crew, prior to their first landing.
- In particular, checks of pockets, seams, turn-ups in trousers, hoods of jackets and Velcro fastenings should be made to ensure that no soil, seeds or any other organic material remain. Daypacks and bags should be brushed out and vacuumed to remove all such material prior to arrival in the Antarctic.
- Any outer clothing or equipment that might be used ashore should be thoroughly decontaminated.

Boot-Washing Station

- This is a facility on the deck, at the head of the gangway, or close to where passengers board the ship. It requires:
 - running water and a hose – preferably high pressure to ensure complete removal of debris;
 - drainage of water off the ship;
 - scrubbing brush and/or coarse mat and shallow tray in which all debris can be scrubbed from boots and clothing;
 - a second tray of water with disinfectant such as Virkon S¹;
 - a member of staff or crew to assist visitors to inspect their boots and clothing for complete decontamination.
- Before and after each landing all visitors going ashore must walk through the boot-washing station and ensure that boots are free of debris and disinfected.
- Boat crews may board via a different route to their passengers and should ensure they also complete the decontamination process.
- Take care to also ensure that small boats and the gangway are clean.

¹ As detailed in the IAATO *Introduction and Detection of Diseases in Antarctic Wildlife* and the paper *Identification of an Agent Suitable for Disinfecting Boots of Visitors*, it is recommended that a disinfectant be used at the boot washing station. To date, the disinfectant **Virkon S** is perceived as being the most effective. Be aware that careful handling of Virkon S is essential and instructions for use should be adhered to.



Landings

- Where possible, avoid walking in concentrations of organic material such as guano, seal placenta, or seal faeces, in order to avoid moving this material around the landing site.
- Before boarding the small boat to return to the ship, debris especially organic matter such as guano – should be washed off boots and clothing as much as is possible. A simple brush scrubber at the landing site should be used to clean boots before entering the Zodiac (or other small boat landing craft) at the end of the landing period. Do not forget to clean the debris off the brushes before returning to the ship. Ensure that whatever touched the ground (backpacks in particular), boot cuffs, or exposed velcro are inspected, and cleaned before leaving the landing site. Seeds and other vegetation in the Sub- Antarctic islands can easily be transported if all visitors are not vigilant.
- Where appropriate, clothing pockets can be turned out for vacuuming by staff on the ship as a precaution against transport of seeds.
- On returning to the ship, boots, clothing and equipment must be cleaned thoroughly and disinfected at the boot-washing station. The disinfectant should not be rinsed off, but allowed to dry thoroughly on the article between landings.
- At the end of each landing, small boats should be inspected, and when necessary cleaned, to ensure that no foreign material is transported between sites.

Between Landings

- Every effort must be made to ensure that boots and clothing dry out completely between landings. (Desiccation is an important mode of controlling some micro-organisms.) Visitors should be reminded in subsequent pre-landing briefings to inspect their boots and clothing to ensure that they are clean and no foreign material is present.

