

Checklists



for supply chain managers of National Antarctic Programmes for the reduction in risk of transfer of non-native species



for **ships** travelling to Antarctica

Action	Importance	✓
Rat guards in place on mooring lines	★★	
Gang plank lifted at night or, if lowered, lit with flood lights	★★	
External doors and windows closed whenever possible	★★★★	
Insect traps in place in food storage areas	★★	
Old food removed from food storage areas at the end of each voyage	★★	
Hold fumigated	★	
Inside watercraft cleaned	★★	
Hulls of watercraft cleaned before loading	★	

for **aircraft** travelling to Antarctica

Action	Importance	✓
Inside aircraft clean	★★★★	
Landing wheels or skids clean	★★★★	
Doors closed whenever possible	★★	
Lighting minimised during night-time loading	★★★★	
Insecticide available in case insects etc. are discovered in flight	★★	

for stores supplying **cargo** to Antarctic destinations

Action	Importance	✓
Area surrounding stores free from weedy plants	★★★★	
Shipping containers washed inside and out	★★	
Loose and palletised cargo minimised	★★★★	
Wooden crates and pallets meet International Plant Protection Commission standards	★★★★	
Tracks and wheels of all vehicles clean	★★★★	
Warehouse doors closed where possible	★★	
Cargo stored inside where possible	★★	

for stores supplying **food** to Antarctic destinations

Action	Importance	✓
Designated clean area for packing food	★★	
Packing area is rodent-free, packaging is rodent-proof	★★★★	
Flying and crawling insect traps in place	★★	
Produce is free of soil	★★★★	
Quality checks on food to ensure no insect or fungal infestation before loading	★★★★	
Refrigerate fresh produce	★★	
Avoid sourcing out of season produce	★	

for **expeditioners' gear** sent to Antarctic destinations

Action	Importance	✓
Supply new clothing where possible	★★★★	
Supply clothing and footwear not previously used in polar or alpine climates	★★	
Ensure all clothing and footwear is washed to remove organic material	★★	
Visually check all bags, footwear and clothing (particularly socks and over trousers) and remove entrained seeds	★★	
Pay particular attention to items with Velcro®	★	

An information video outlining cleaning procedures can be found at: http://academic.sun.ac.za/cib/video/aliens_cleaning_video%202010.wmv

Background

Non-native species are one of several major threats to biodiversity globally. They have already profoundly transformed the biodiversity of many sub-Antarctic islands, and are increasing in their prevalence in the Antarctic. Indeed, the threat of non-native species introductions has been identified as a priority Antarctic conservation concern by the Committee for Environmental Protection (CEP) within the Antarctic Treaty System. The Scientific Committee on Antarctic Research (SCAR) and the Council of Managers of National Antarctic Programmes (COMNAP) are working with the CEP to reduce the threats posed by non-native introductions to the Antarctic region.

Globally, experience has shown that prevention of the introduction of non-native species is the most appropriate means of reducing the risks posed by them: if the species are not introduced they cannot go on to colonize an area and have an impact. Recent work, including that of the 'Aliens in Antarctica' project undertaken during the International Polar Year, has identified the key pathways and vectors of non-native species introduction into the region.

Based on this research, and operator experience and consideration of what immediate actions can be taken by operators to reduce the risk of transfer of non-native species to the Antarctic, the checklists set out here have been developed. This document suggests actions that for many operators, can readily be taken, outlines why the actions are recommended, and provides guidance on the relative importance of each action in terms of practicability and reduction of risk of non-native species transfer. The importance ranking, from one star being the lowest to three stars being the highest, is a general guide. Given the range of environments that exist in the Antarctic region, the high importance of an action may not necessarily apply to all areas of the Antarctic.

It does not address however, the specific reduction of risk of introduction of microbiota, nor the reduction in risk of transfer of diseases. As further information becomes available and as the practicability of procedures to reduce the risks of introduction of non-native species improves, so these checklists will evolve.

