Non-native species in Antarctica

Non-native species are those species that do not naturally occur in an area and have been introduced either intentionally or unintentionally. A wide range of non-native species now occur in Antarctica and the sub-Antarctic islands. These introduced species include microbes, algae, fungi, vascular plants, invertebrates, fish, birds, and mammals.

Antarctica at risk

As human activity in Antarctica increases, so does the risks associated with such activity. Individuals are terrific vectors for non-native species. Transport of non-native species to Antarctica as well as transport of non-native species to different sites within the continent is a significant risk.

Traveling within Antarctica can introduce non-native species to other sites.

For more information:
Contact the Environmental staff of the United States Antarctic Program

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Don't Pack a Pest!

Help protect Antarctica's pristine environment from non-native species

Don't Pack a Pest Antarctica

USAP

United States Antarctic Program

Non-native species in Antarctica

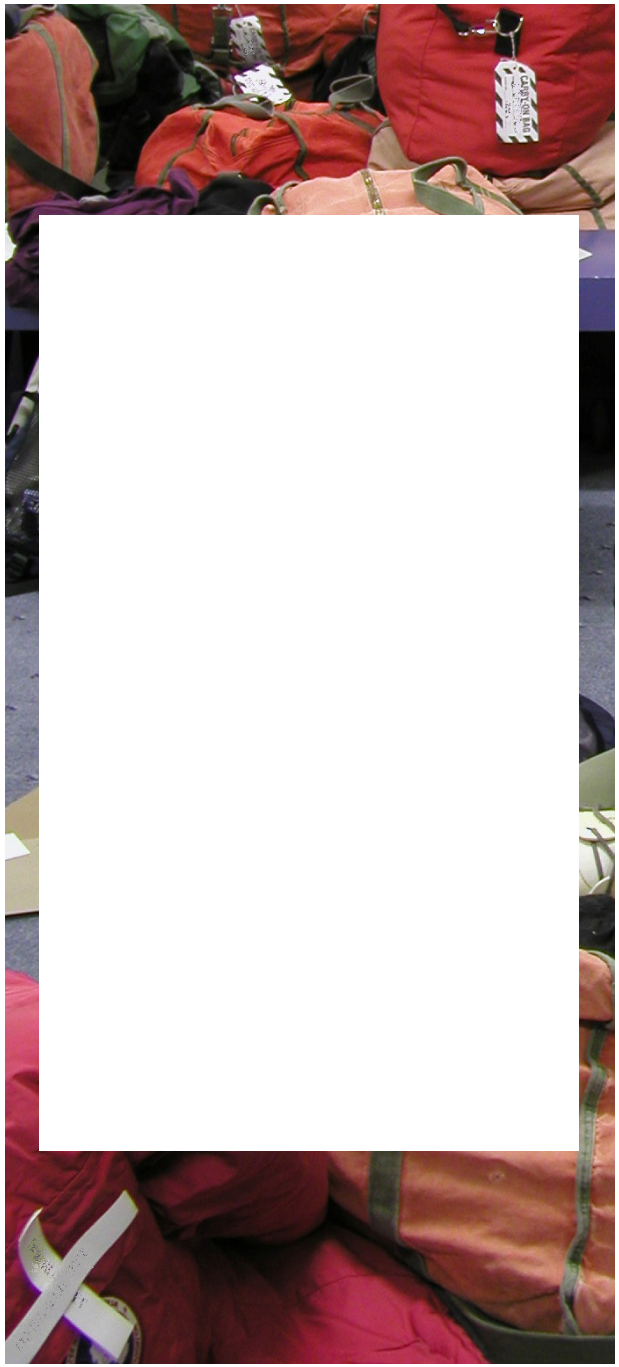
How might non-native species hitch a ride with you?

- Boots and shoes
- Pants cuffs
- Pockets
- Velcro® and polar fleece
- Backpacks
- Outdoor equipment
- Walking sticks, tripods

Still at home? How to help before you hit the Ice

1. **Clean and examine clothes thoroughly.** Examine all clothing, including pockets, seams, Velcro® fasteners, and boot soles for dirt and organic material. A thorough cleaning is recommended.

2. **Pack clean gear.** Make sure your gear and outdoor equipment is freshly cleaned and free of dirt and organic material. Even if your gear is still dirty from your last trip to the Ice, you could be transporting non-native species!



What types of non-native species have already arrived in Antarctica?

- seeds
- grasses
- algae
- fruit flies
- worms
- spiders
- midges
- microorganisms

Lessons for the Antarctic from the sub-Antarctic

Human activities on the sub-Antarctic islands have contributed to a large number of introductions of non-native species, both intentional (e.g. reindeer at South Georgia) and unintentional (e.g. cats, mice, worms, grasses). Approximately 200 non-native species exist on the islands (see table). These species have come to survive in – and in some cases dominate – terrestrial, freshwater, and marine habitats, often causing alterations to ecosystems through local extinction of other species and decreased native species.

Source: Frenot, Y et al. *Biological invasions in the Antarctic: extent, impacts and implications.* Biol. Rev. (2005), **80**, pp. 45-72.