



Fifty Years of Peace and Science

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The IPY Aliens in Antarctica Project

The attached poster is a preliminary report on one aspect of this IPY project, submitted by Dutch scientists and relating to their particular contribution. It was prepared for the Dutch Polar Symposium to mark the ending of the IPY, and SCAR considered it to be helpful in giving some insights at this time into how the programme is developing. In addition it should be noted that eight countries make up the core researchers for IPY Aliens in Antarctica (Netherlands, Japan, UK, Belgium, France, South Africa, Poland, Australia); that three nations allowed access to their new stations (Germany, UK and Belgium) for the purposes of gathering data; that over 25 ATCM/COMNAP countries as well as most IAATO members agreed to participate in the project; and that surveys and/or investigations involved passengers, food and cargo as transport vectors. A working paper containing results and recommendations will be submitted for ATCM and CEP in 2010.



Aliens in Antarctica

Quantifying plant- and animal propagules inadvertently carried into the Antarctic

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The impact of alien (non-native, introduced) species poses a major threat to many of the ecosystems of the world. Several alien species (vascular plants, invertebrates) have already established themselves on the Antarctic, and a much larger number have invaded many of the subantarctic islands. Climate amelioration in the Antarctic will facilitate successful colonization by non-native species.



Poa pratensis, Antarctic Peninsula



Poa annua, Heard Island



Taraxacum officinale at Kerguelen

QUESTIONS

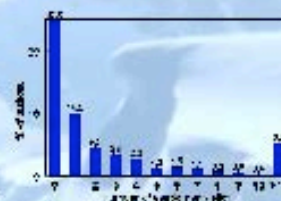
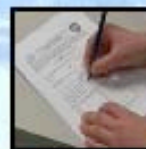
- How many propagules are transported by humans to the Antarctic?
- How many (and which) species are represented in this propagule load?
- How many visitors carry propagules?
- How many propagules per visitor?
- And is the propagules load and composition related to visitor characteristics?

METHODS

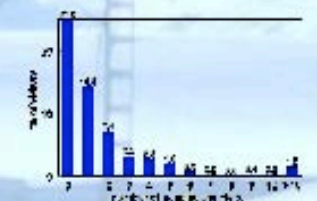
- Questionnaires (5600 responses)
- Samples: 800 people sampled, from 55 different voyages

RESULTS

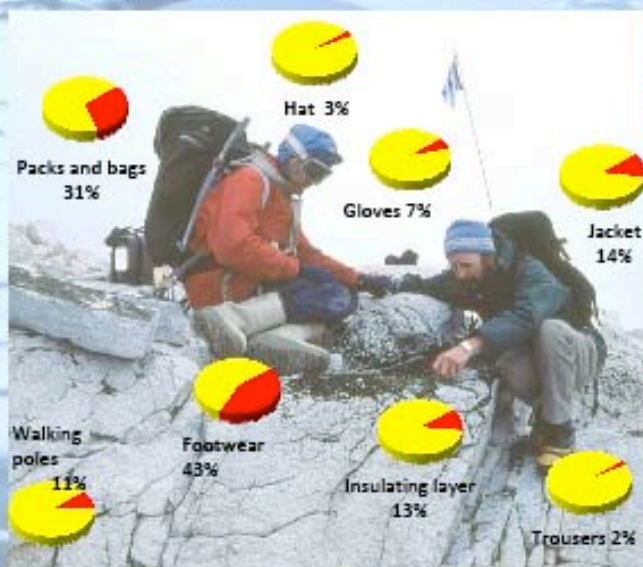
- 30% of sampled visitors had plant seeds with them
- These seeds belonged to over 250 species
- Camerabags, backpacks and footwear contain most seeds
- Tourists and ship's crew carry seeds less often than national program personnel



Plant seed number per visitor



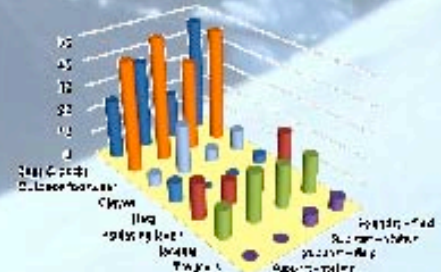
Species number in seedload per visitor



Overall percentage of clothing items containing plant seeds



Percentage of visitors carrying plant seeds



Percentage of items containing plant seeds for different visitor categories, based on used items only

We acknowledge the assistance of:

