

'Warm' species invading Antarctic

By Paul Rincon
Science reporter, BBC News

Scientists are calling for action to prevent foreign species from taking hold in Antarctica and wrecking the continent's unique ecosystems.

Despite Antarctica's inhospitable environment, non-native species introduced by tourists, scientists and explorers are gaining a foothold.

Species can hitch a ride on ships and planes carrying visitors and supplies.

A paper on the matter tabled at the Antarctic Treaty Consultative Meeting in Edinburgh met with "good agreement".

It costs thousands and sometimes millions of dollars to try and get rid of something... prevention is better than a cure

Neil Gilbert, Antarctica NZ

"Antarctica has long been considered as an isolated continent with a harsh environment. So the general perception has been that we don't need to worry about non-native species. We know better now," Dr Gilbert, environmental manager at Antarctica New Zealand, told BBC News.

Male and female North Atlantic spider crabs (*Hyas araneus*) have been found in waters off the Antarctic Peninsula. Neil Gilbert says the species could not have migrated such a great distance by its own accord.

In addition, a cosmopolitan species of grass, *Poa annua* , is surviving on King George Island, north of the Antarctic Peninsula.

According to Dr Gilbert, two principal factors are facilitating colonisation of Antarctic habitats by foreign species: the increased numbers of people travelling to the continent and climate change.

Visitor growth

"There are more and more people going to Antarctica and we know that people and ships and planes carry plant seeds and other non-native species," Dr Gilbert explained.

"The Antarctic Peninsula region is warming more quickly than anywhere else on the planet. Those species capable of surviving in polar climates are more likely to survive in a less harsh climate."

More than 26,000 international tourists visit Antarctica each year and numbers grow by the thousand each season.

Dr Gilbert said: "I think we can say with some confidence that the [treaty] meeting has recognised this as a really important issue, that there is a need for research.

"We don't know much about what species are in the marine environment around Antarctica. We've got to get a better handle on what is there, so that we know what is native and non-native.

"Secondly, we need to know what are the vectors by which all this material is being brought in."

Code of conduct

Those behind the motion presented at the meeting are to work on developing a code of conduct related to the introduction of foreign species - a set of minimum standards to which Antarctic visitors should abide.

However, there is still no consensus on what to do with non-native species that have already arrived and those that could arrive in future.

"It's a challenging question. In some cases, management - trying to contain them - may be the best option. The chances are that the North Atlantic spider crab is already established," Dr Gilbert said.

"It costs thousands and sometimes millions of dollars to try to get rid of something. One of the things we have been pressing at this meeting is that prevention is better than a cure."

Dr Gilbert said proposals would also need to cover the transfer of species between isolated - and often fragile - ecosystems within Antarctica.

The Antarctic Treaty's Committee for Environmental Protection has agreed to make the issue of invasive species a standing item on its agenda and to consider management options at its next meeting, which will be held in India in April 2007.

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