Extreme Environments

Resources:

Text pages 246 and 247

<http://pfgeography.pbworks.com/Extreme-Environments>

**Key questions:**

* What is an extreme environment?
* What are the attractions of an extreme environment as a tourist destination?
* Why is there increased demand for extreme holidays?

For an extreme environment you have studied in depth:

* What is the impact of tourism?
* How can the area be managed with ever increasing numbers of tourists wishing to visit?

What is the impact of tourism?

Antarctic tourist season runs from November into March, when temperatures range a balmy 25° to 40°F (-4° to 4°C), with 23 hours of daylight. 46,069 tourists in the 2007/2008 - tourist numbers were up 14% on the previous year and continuing to rise

ON LAND:

While tourists may only only spend a relatively small time on landings, it is by its nature relatively "high-impact" time - compared to a scientist or electrician say who probably spend most of their time on a permanent or semi-permanent base.

Tourists that set foot on Antarctica are concentrated in biologically rich sites, and historic or current sites of human activity. Tourism is focused on the [Antarctic Peninsula](http://www.discoveringantarctica.org.uk/multimedia/flash/7_footprints.html) at 20 or so sites known for fantastic wildlife and stunning scenery, such as Paradise Harbour and Bally Head. The impact of these routine tourism operations is not yet well known, despite industry claims that there has been no impact from several decades of tourism. There are concerns for the most popular landing sites as ships anchor off shore and tourists are taken onto Antarctica by inflatable boat.

Cruise-ship passengers take in vistas of glaciated mountains and lichen-covered islands, stopping to visit penguin colonies, seal beaches, and abandoned whaling stations. Most tour operators try to ensure their passengers leave no rubbish and don't walk on fragile areas, like moss beds that take a century to grow just a few inches.

However, fears of littering and tourist removing biologically significant items are very real. The potential for disturbance to animals and the spread of disease are also concerns. The clicking of cameras may be enough to disturb rare species such as the Adélie penguins. As numbers of visitors increase these animals are exposed to human interference for far longer periods.

At Whalers’ Bay, The buildings, structures and other artefacts on the shore date from the period 1906-1931 and represent the most significant whaling remains in the Antarctic. There has been graffiti on historic structures, removal of historic artefacts and erosion of footpaths en route to Neptunes Window.

AT SEA:

The great majority of all shipping activity in Antarctica is of tour ships. There have been accidents with ships being grounded on uncharted rocks and there have been oil-spills. With the best safe-guards in the world the more ships there are, the more accidents there will be.

In 1989 the Argentine navy resupply ship *Bahia Paraiso* stopped at the U.S. research base Palmer Station, near Torgersen, to allow tourists to visit. On departure the vessel struck an underwater rock. No one was seriously injured, but the ship later capsized, spreading an oil slick that fouled nearby penguin, cormorant, and seal colonies.

**The real potential** threat from tourists is the risk of the large cruise liners run by global companies that are now entering the Antarctic tourist trade, marking the beginning of mass tourism in Antarctica. Operating out of South American ports like Ushuaia, southern Argentina these vast, thin-skinned (non-ice-strengthened) vessels can carry up to a thousand passengers. The 936-passenger *Rotterdam* started the trend in 2000 with a three-day "drive-by". They also carry huge quantities of heavy oil, one of the worst marine pollutants. “The effects of one sinking or running aground would be disastrous”, says an environmentalist.

Irresponsible Behaviour

Another threat comes from smaller expeditions that are becoming increasingly common by individuals and small parties. Antarctica requires careful planning and a series of fail-safe rescue procedures if anyone gets into difficulty. These smaller expeditions often fail to do this adequately and resort to "humanitarian" requests for aid from shipping or nearby national bases when they get into difficulty. In recent years for example a small helicopter crashed into the sea off the Antarctic peninsula requiring rescue and an attempt to fly across Antarctica via the pole in a small aircraft ended by the aircraft crashing and the pilot being rescued by nearby base personnel.

There is no guarantee that derelict or crashed vehicles left by private expeditioners will be removed from Antarctica as they should be.

**Sources:**

<http://www.discoveringantarctica.org.uk/7_newspaper.php>

<http://news.nationalgeographic.com/news/2003/08/0822_030822_antarctictours.html>

<http://www.coolantarctica.com/Antarctica%20fact%20file/science/threats_tourism.htm>

**How is tourism managed?**

Tourism in Antarctica is at present self-regulated by the [International Association of Antarctic Tour Operators (IAATO)](http://www.iaato.org/). This is an organization that applies strict guidelines to its member tour operators and ships.

Such guidelines limit the size of the ships that can cruise Antarctic waters and also how many people can be landed at sites around Antarctica.

An example of some of the guidelines on their Visitor Guidelines Poster:

• Walk slowly, occasionally stopping to give wildlife the time and space they need.

• As a general principle, keep noise to a minimum and avoid approaching birds and animals any closer

than 5 meters / 15 feet; in some instances even this may be too close, so watch the birds’ and animals’

behaviour as you approach and stop, or retreat, if they show signs of disturbance.

• Be aware of your location relative to your fellow visitors – making sure you do not surround animals or

cut off their route to the sea.

• Heed the advice of your guides; they want you to gain as much as possible from your experience while

treading softly on this unique environment.

So far IAATO is perceived as being successful in its aims and in regulation for Antarctic protection - though there are always those who would have no tourism at all.