



Antarctic tourists pass close to a flock of resting Gentoo Penguins. Inflatable craft provide convenient accessibility for tourist groups to coastal scenery.

Copyright Ralph Lee Hopkins, courtesy Lindblad Expeditions

The number of tourist trips to the Antarctic each year is increasing dramatically as popularity for the 'once in a lifetime' destination spreads and more operators establish routes to the frozen wilderness. While all involved want the same thing – the protection of a healthy Antarctic continent – no one can agree on how to make that happen. Can tourism's impacts in the pristine south land be reliably controlled, or will the heavy lure of profit overpower efforts to prevent cumulative human impacts on precisely what people are going to see? **Bette Flagler** reports.

Biologist Victoria Metcalf struggled with her response when a tourist asked what the pubs and nightclubs were like in Antarctica.

Metcalf, a researcher at New Zealand's University of Canterbury who specialises in Antarctic fish, was in South America for an Antarctic conference; the traveller was there midway through a global tour and figured he'd pop on down to the icy continent and check it out. On one hand, Metcalf says, she wanted to tell him how Antarctica is wonderful and amazing and how he'd be a different person after going; on the other, she wanted to tell him just to prop himself up at a nice pub in Rio and forget about it.

Not long ago, Victoria Metcalf would not have been faced with such a challenge. While visiting Antarctica

isn't a new idea – the first tourists headed down in 1966 – it wasn't until the late 1980s, after the Soviet Union broke up and ice-strengthened research ships were put into commercial use, that Antarctica became accessible to more than the most intrepid travellers.

Since then, the trajectory has been staggering: between 1990 and 1991, 4842 tourists set foot on Antarctica; by 2004–2005, that number was nearly 28 000 – a 578 per cent increase. In a paper prepared earlier this year¹, Stephen Powell, a senior policy officer for the Australian Antarctic Division, projected that if the current growth continues, 200 000 people will make the trip in 2021–2022.

1 Australian Antarctic Magazine 10: 6

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For a continent that is 14 million square kilometres in size, 200 000 annual visitors doesn't seem like a huge number; and it wouldn't be if the visitors were spread across the landmass. But most people want to see iconic Antarctica – icebergs, seals, penguins and whales – and most of them want to spend as little time as possible on the notoriously rough Southern Ocean. Consequently, 95 per cent of visits are to a small region at the northern end of the Antarctic Peninsula, a two- to three-day trip from accessible Ushuaia, Argentina.

The last place to be inhabited, Antarctica is described with superlatives: it is the coldest, windiest, driest, iciest and highest place on Earth. When it comes to governance and management, another descriptor could be added – the most internationally complicated.

In an effort to keep Antarctica free of conflict, politics and ownership, 12 nations (including Australia and New Zealand) signed the Antarctic Treaty in 1959. It was the height of the Cold War and most of the treaty's 14 main points address maintaining Antarctica for peaceful purposes, guaranteeing the freedom to conduct scientific research there, and granting access to any individual, organisation or government.

There was, in fact, no mention of commercial activities such as fishing or tourism and, consequently, there are no regulations covering where tourists may go, what size ships may be, or what passengers may do once they arrive.

There are no provisions, either, to prohibit the construction of hotels and, in the case of Metcalf's acquaintance, pubs.

But tourism companies based in Antarctic Treaty party countries must be certified to operate by their home country. While regulations and requirements vary from state to state, operators are subject to filing environmental impact assessments, and boats certified in New Zealand, for example, must carry a government observer on board.

In 1989 the *Bahai Paraiso*, an Argentine supply ship (which also carried passengers), ran aground and sank, leaving in its wake 170 000 gallons of fuel. Two years later, the Protocol on Environmental Protection was added to the Antarctic Treaty and covers the protection and management of the continent and its ecosystems.

Also in 1991, the International Association of Antarctica Tour Operators (IAATO) was founded as a self-governing body to protect the Antarctic environment. Its original seven members established guidelines for sustainable tourism and created systems to coordinate visits.

IAATO established wildlife watching guidelines and landing procedures for over 200 sites on the Antarctic Peninsula and suggests coordinated itineraries so that only one ship is present at a location at a time. Its guidelines state, among other provisions, that no more than 100 passengers may be onshore at a time, that there is one expedition leader for at least every



The icebreaker *Endeavour*, run by Lindblad Expeditions, approaches ice-bound coastline while paying passengers enjoy their Antarctic moments from the bow.

Copyright Stewart Cohen, courtesy Lindblad Expeditions



Ushuaia, Argentina, the closest sea departure point for 95 per cent of current visits to the frozen continent. Copyright Stewart Cohen, courtesy Lindblad Expeditions



Clients from Lindblad Expeditions can kayak past Antarctica's imposing backdrops.

Lindblad Expeditions

20 tourists, that vessels carrying more than 500 passengers are not allowed shore excursions, and that ships carrying between 200 and 500 passengers can land passengers only at certain sites.

Denise Landau, the Executive Director of IAATO, explains the guidelines: 'It's our business to look after the place. We work really hard to put as many provisions in place as we can to make sure we're not creating any kind of significant disturbance to wildlife, plants or anything [else].'

Which is logical – operators don't want to destroy the things passengers are paying to experience.

John Shears, the head of the British Antarctic Survey's environmental office, is supportive. 'Certainly, there's been huge and sustained growth. But if a tourism operator messes up, it's not going to be able to get access and permits, so [the operators] work within the guidelines and IAATO has shown to be good at self-regulating. The impacts people have forecast haven't happened.'

In 1994, the treaty parties accepted IAATO's guidelines, but, because membership in IAATO is voluntary, those who are not members are not bound to the guidelines. Landau would like to see the partners more active and adopt a resolution that would require companies operating in Antarctica to follow the guidelines.

Discovery World Cruises chooses not to be a member of IAATO, and Mark Flager, Vice President of sales and marketing, is frank that a personality conflict from prior management affected the company's decision not to be involved. However, the company's ship *Discovery* has a maximum capacity of 600, and, while the company limits its Antarctic trips to 550 people, it carries 50 more passengers than the IAATO limit for making shore landings. Flager thinks 500 is an 'arbitrary' number and says all the other IAATO guidelines are followed.

Denise Landau disagrees, 'In effect, the only IAATO practice both *Discovery* and *Marco Polo* [another non-IAATO member] follow is presenting the IAATO passenger codes of conduct briefing before landing.'

Discovery expedition leader Peter Carey argues, 'As far as I understand IAATO's guidelines, we do [follow them]. Unless there are new rules that I don't know about, we're following everything they're doing. I think the way we're behaving onshore surpasses the environmental sensitivity that is used by the IAATO ships.'

Whether or not *Discovery* follows IAATO's guidelines is not really the issue; what this round of arguing illustrates is that without enforceable regulations, there is simply no reliable control over Antarctic tourism.

But the situation also illustrates a conundrum of size. Carey, a marine biologist, began his Antarctic career as a researcher at New Zealand's Scott Base and has been working as an expedition leader since 1991. He has worked on both small and large vessels. 'When I first started,' he says, 'I thought the *Marco Polo* [capacity 400] was too big. But I didn't know how the big ships worked.'

He explains that big ships have a more intensely monitored landing system that is, in his view, better for Antarctica. On a big ship, each group (of 100 or less) goes to shore for one hour and is confined to a designated space during which time passengers are supervised; but on the smaller ships, he says, each passenger might spend three or four hours onshore, is not restricted to location and is not continuously supervised.

'As an individual, you have more time onshore and more of a chance to have a bigger experience with Antarctica,' says Carey, 'and that's wonderful. But the more time you have increases your chance of having a negative impact.'

It is, in fact, the expedition leader who shoulders the responsibility for passenger behaviour. Tom Ritchie is a senior expedition leader at Lindblad Expeditions – the first tour company to offer trips to Antarctica. He says that in his experience, the people running the trips are naturalists and scientists and are all dedicated to



Tourists follow a tottering Gentoo Penguin. Shirlee Cunningham

Antarctica, its preservation and its wildlife. ‘They’re there because they love it. There are easier jobs to do and no one is an Antarctic guide for the money.’

Even so, there is no enforceable accreditation scheme for expedition leaders.

If there’s one thing that does draw consensus, it’s that the iceberg strewn Antarctic waters are no place for cruise ships that aren’t ice strengthened. It was only in 2000 that the first ‘sail-by’ passenger cruise was offered on the 1200-berth ship *Rotterdam*. Now, the roster includes four ships, each with a capacity above 700.

The presence of large ships not only presents environmental and humanitarian risks of a *Titanic* nature, but signals a significant structural transformation in Antarctic tourism.

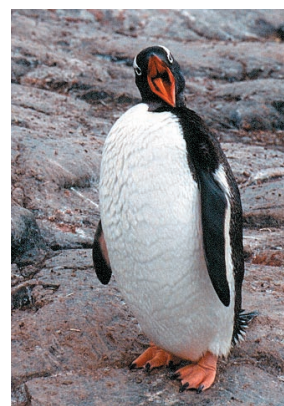
Alan Hemmings of the Antarctic and Southern Oceans Coalition (ASOC), a global association of non-governmental organisations with the continent’s natural interests at heart, says the first tour companies were run by people who were owner-operators and ‘deeply fond of the Antarctic’. As the industry grows and becomes more competitive, he says, the ownership patterns are changing, and there is an increase in larger organisations where decisions are made at managerial levels where the prime duties are to [share]holders. ‘The nature of the beast is altering,’ he says, ‘and that poses questions as to how well the Antarctic Treaty system can manage it.’

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It would appear that the treaty system isn’t managing it at all, and when it tries, it stumbles. Site-specific guidelines for four frequently visited areas on the Antarctic Peninsula were adopted by the Antarctic Treaty Parties in 2005. Antarctica New Zealand’s Environmental Manager, Neil Gilbert, points out the irony: ‘These are guidelines for the tour operators. But it’s interesting, because even though they’ve been developed and adopted by the treaty partners, they’ve been given back to the tour operators to implement.’

The guidelines, which describe the wildlife, features and sensitivity of each site, include such suggestions as visitor numbers and daily time limits. The first drafts were based on IAATO guidelines, but had additions that were laughably erroneous, including listings of nesting colonies that didn’t exist and references to lichen as ‘fauna’. This suggests some concerning looseness in the only system that currently exists to protect the continent’s sensitive areas.

But, Christchurch-based Heritage Expeditions owner Rodney Russ recommends letting IAATO develop the guidelines. ‘With no disrespect to the treaty partners, the tour operators spend far more time in Antarctica; they know the sites and they know the beast that they’re dealing with. The treaty system members are diplomats.’



However, even if appropriate site guidelines were in place, they miss the main game, says the ASOC’s Alan Hemmings. ‘We can have site rules and accreditation schemes, those things are worthy, but they don’t tackle the fundamental issue of the continuing increase in the number of tourists going to Antarctica,’ he says. ‘It’s a classic dilemma. The maximum number of tourists Antarctica can handle may only be realised after the figure has been reached.’

Determining the carrying capacity of the continent won’t be easy. Nor will encouraging treaty partners to accept universal tourism regulations. While the Antarctic Treaty is an incredible example of international cooperation, inevitably not all parties see eye to eye. New Zealand, for instance, pushes for more tourism regulation. Chile, however, uses its ships to transport fare-paying passengers and houses tourists at its national base.

‘I think that somehow complicates the issue,’ says Neil Gilbert, referring to Chile’s operations. ‘They are no longer neutral.’ He feels Chile’s operators have a bias based on financial gain.

It seems the only stakeholders who aren’t worked up by tourism are its original inhabitants. Research conducted by Oceanites, a non-profit organisation based in the US, supports the view that tourism has had little or no negative effect on animal or plant life – yet. In 2005, Stephen Powell from the Australian Antarctic Division was one of a team of five treaty representatives that examined visitor impacts and potential visitor impacts at 11 frequently visited sites on the Antarctic Peninsula. Powell says three sites, at most, showed minor environmental impact specifically arising from tourist visits: noticeable footpaths through scree (gravel).

The conclusion from that trip, says Powell, is that the *potential* rather than the actual impact is the worry. ‘The big concern is about cumulative [impacts]. If

Clockwise from top left: An Elephant Seal makes its territory known.

An angry Gentoo Penguin reacts to the photographer.

A colony of King Penguins – males are carrying and protecting eggs, shown by the obvious bulges at ground level.

King Penguins groom each other.

Shirlee Cunningham



King Penguins march their regular route along coastal rock and scree with the *MV Discovery* at anchor off shore. A member of *Discovery's* scientific team stands by to keep tourists at a distance.

Copyright Stewart Cohen, courtesy Lindblad Expeditions

you talk about one visit, it might pose no particular concerns, but if you multiply that by a hundred groups in a season, is that going to change the environment or the behaviour of the animals? That's why we're all calling for more monitoring of the sites.'

Greg Mortimer, the Chairman of IAATO's executive committee and founder of Australian-based Aurora Expeditions, agrees. 'Tourism at present has a less than minor or transitory impact on Antarctica, and, at current levels, is sustainable. But it is increasing quite steadily and we're at the point where great care needs to be taken. We now need close scrutiny on those places where we're visiting.'

But with all its potential troubles, tourism still has



Lindblad Expeditions tourists, braving the Antarctic elements, head toward shore. Copyright Ralph Lee Hopkins, courtesy Lindblad Expeditions

merits. Last year, tourist ships transported in excess of 100 scientists and staff and are often used to transport supplies. And it was, in fact, exposure to tourists that inspired the national programs to clean up their previously 'untidy' bases and operate in more environmentally responsible ways.

Adventurer and expedition leader Peter Hillary believes tourism in Antarctica must be sustainable – and that tourists ultimately want that too. 'Out of site, out of mind has been a great danger for Antarctica,' he says. 'If you look at the whaling and sealing industry – hunting happened to the most appalling levels in the Southern Ocean because no one was there to witness it. I freely admit that I'm involved with the tourism industry so I have a vested interest, but you only have to come back from a trip to realise people are bubbling with enthusiasm for the places they've been and the things they've seen. I think that sort of popular advocacy is an important part of conservation.'

As biologist Victoria Metcalf was tempted to tell the pub-loving traveller, about to set off from South America, a trip to Antarctica is a unique life-altering experience of nature – not a standard holiday. It's one that increasing numbers of people are willing to pay many thousands of dollars to have. So far, in the absence of government initiatives, IAATO has proven to be rigorous and proactive, and has successfully managed this commercial surge of tourism to Antarctica.

But, with the burgeoning tourism numbers, non-member operators and discord among the treaty partners, it seems that management of Antarctic tourism is at a critical point and that the treaty partners need to find an acceptable way to manage what has the potential to grow into a very large industry.

IAATO's Landau believes tourism in Antarctica is sustainable if there is good cooperation. 'It is not sustainable,' she says, 'if we have operators who won't cooperate. It will depend on governments working closely with us and us working closely with them.'

More information:

Protocol on Environmental Protection to the Antarctic Treaty: www.antarctica.ac.uk/About_Antarctica/Treaty/protocol.html

IAATO: www.iaato.org

ASOC: www.asoc.org

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