Footsteps on the Ice:
Visitor Experiences in the Ross Sea Region, Antarctica

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Antarctica is one of the most beautiful and remote places on the planet. The moniker of being the highest, driest, coldest, iciest, windiest, most remote continent, surrounded by the stormiest ocean is well deserved, yet it also acts as quite a draw for visitors. Despite the fact that visitor numbers have been steadily rising for the past 15 years, very little is empirically known about the experience these visitors have, particularly outside of the Antarctic Peninsula region. This lack of understanding is particularly detrimental from the perspective of visitor management, as is being discovered by agencies worldwide.

As such, the aim of this thesis is to report on a study of visitor experiences in the Ross Sea region of Antarctica. Visitors are defined as those who come into physical contact with the continent, and whose primary activity and purpose is simply “being there.” Visitors are a wider population than just commercial tourists aboard cruise ships; visitors are not passengers on commercial overflights, the scientists or base and support staff. Experience is defined as a longitudinal period—looking at visitors well in advance of their visit, throughout their time on site, and following up back at their homes. The Ross Sea region is essentially equivalent to New Zealand’s Ross Dependency, a section of the Antarctic “pie” from the South Pole to 60°S, bounded by approximately 150°E and 150°W.

Using a three-phase methodology to examine the cycle of experience, the purpose of this study is to compare groups of visitors with four organisations through this cycle, and analyse for change or transition as a result of their visit. The visitors were participants, to varying degrees, in a number of data-gathering methods during the 2002–2003 or 2003–2004 seasons. Such methods included: self-administered surveys sent to the respondents’ home (up to three months in advance of the trip); personal narratives and journals while on the trip (regardless of trip length; 4–28 days); in-depth interviews held in Christchurch directly before and after the trip when possible; and email surveys (two to three months following the visit). In 2003–2004, a supplemental season of data was collected that included a researcher familiarisation visit, participant observation, and informal interviews at Scott Base. These supplemental data helped shape the researcher’s own thoughts and thus comments in the Discussion sections.

Results indicate both similarities and differences as compared to previous research; key findings include:

- scenery was a strong motivator and component of image;
- expectations were for a safe and professional learning;
- mood was positive throughout all phases;
- visitation was both acceptable and problematic;
- the environment was important, even in advance of the visit;
• education was an essential benefit of the visit;
• the Ross Sea region was an impressive and awe-inspiring locale;
• organisational differences were apparent when discussing people and the role of transportation to the continent;
• historic huts were uniformly amazing sites for the feelings they instil;
• expectations were virtually always exceeded;
• awareness changed over the experience;
• sharing of awareness and teaching from one’s learning had occurred;
• action may or may not have occurred on various specific issues, but the label of ambassador was respondent-perceived to be acceptable.

This study concludes with a number of implications for theory, methods, and logistics, which will hopefully lead to future research that is much wider in scope (geographically), but equally inclusive in terms of methods and ability to utilize and critique theories built outside of purely tourism research.
This may be just another routine flight for you, but for me it's the fulfillment of a lifelong dream.
On the value of exploring:

Simply to “increase . . . human knowledge is enough to justify expeditions.”—Dr. Lincoln Ellsworth (Little America Times #9, 1934, Monday, December 31, E2).

Antarctica has always attracted adventurers, romantics and dreamers in equal measure, for it is a place of imagination. It is a place of mystery, a corner of the Earth apart, untamed. In a world that seems grubby by comparison, it promises vastness, simplicity and unsullied grandeur. People from all walks of life are fascinated by it, though only a lucky few find the means to get there.—Mark Jones, Adventure Philosophy (Jones, 2004, p. 112).
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On the ground, none of this research would have been possible without the insight and cooperation of the actual visitors to the Ross Sea region (RSR). Thanks to all the participants, no matter how many phases you were involved in or how much information you gave. I cannot believe how much trust some of you put in me, providing truly intimate details about the way your visit affected you.

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- Gateway Antarctica (Bryan Storey, Michelle Rogan-Finnemore and Alan Hemmings).

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- Association of Canadian Universities for Northern Studies (ACUNS) (2003) for the 7th National Student Conference on Northern Studies in Edmonton, Canada;
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Glossary of Terms

AAT  Australian Antarctic Territory
AAD  Australian Antarctic Division
AHT  Antarctic Heritage Trust
ANAN  Antarctic Nongovernment Activity News (published through the AAD)
ANI  Adventure Network International
ANZ  Antarctica New Zealand
ASOC  Antarctic and Southern Ocean Coalition
ATCM  Antarctic Treaty Consultative Meeting
ATCP  Antarctic Treaty Consultative Party
ATS  Antarctic Treaty System
BAS  British Antarctic Survey
CCAMLR Convention for the Conservation of Marine Living Resources
CRAMRA Convention for the Regulation of Antarctic Mineral Resource Activity
CCAS Convention for the Conservation of Antarctic Seals
COMNAP Council of Managers of National Antarctic Programs
DOC  Department of Conservation (New Zealand)
DV  distinguished visitor
GA  Gateway Antarctica at the University of Canterbury
GCAS Graduate Certificate in Antarctic Studies (run through GA)
HE  Heritage Expeditions
IAATO  International Association of Antarctica Tour Operators
IGY  International Geophysical Year (1957–1958)
ICRW  International Convention for the Regulation of Whaling
IMO  International Marine Organisation
IUCN  World Conservation Union—International Union for Conservation of Nature and Natural Resources
MARPOL International Convention for the Prevention of Pollution from Ships
MCM  McMurdo Station—primary USAP base in the Ross Sea region
NSF  National Science Foundation (U.S.)
OPP  Office of Polar Programs (NSF)
QK  Quark Expeditions
RSR  Ross Sea region
SB  Scott Base—primary ANZ base in the Ross Sea region
SCAR  Scientific Committee on Antarctic Research
SCOR  Scientific Committee on Oceanic Research
TAE  Trans-Antarctic Expedition—undertaken during the IGY
UNEP  United Nations Environment Programme
USAP  United States Antarctic Program
WMO  World Meteorological Organisation
WTO  World Tourism Organisation
WWF  World Wide Fund for Nature
Chapter 1

Introduction

1.1 The Study: A General Overview

Initially, this study set out to explore the entire Antarctic continent geographically, in terms of everyone who went there, every aspect of their experiences, and all the potential benefits. Quite rightly, this proved to be far too large a project; in the end, this study aimed to examine the nature of visitor experiences in the Ross Sea region, Antarctica.

Visitors are defined as those who come into physical contact with the continent, and whose primary activity and purpose is simply “being there”—experiencing the continent or understanding why it is important that science occurs there. In the end, of prime importance for the reader is to understand that there is a wide selection of visitors to Antarctica, and in this case, to the Ross Sea region. Visitors are not only commercial tourists aboard cruise ships, as one might envision. Additionally, these visitors are not those who fly over the continent on commercial overflights, as they do not come into physical contact with the continent, nor the scientists or base and support staff, whose primary purpose on the continent is their work.

Experience was also a tricky subject to define, and became the theoretical focus of this research. In securing the place of the research, the theoretical focus is on examining the manner in which an experience is shaped over time, and the manner in which particular phases of the experience are linked and/or change. As defined by the Merriam-Webster Dictionary (1994, p. 265), experience is “observation of or participation in events resulting in or tending toward knowledge; knowledge, practice, or skill derived from observation or participation in events; or something encountered, undergone or lived through.” Thus for this study, experience explicitly encompasses the time period from when the visitor is anticipating that a visit to the Ross Sea region will occur, to the visit, to the period directly following the visit when this knowledge of the lived period is being synthesized. The term experience is further examined in the literature throughout Chapter 2, the end result being that experience has many facets, all intimately interwoven, and experience changes as a result of ongoing research endeavours. The use of the term experience in a temporal sense versus in the sense of “I am experienced” allowed the work of Clawson and Knetsch (1966) to serve as a starting point for the research, and by adding the works of Driver and Tocher (1979), Arnould and Price (1993), and Beedie and Hudson (2003), acted as a framework upon which to base this study.

The Ross Sea region (RSR) of Antarctica was chosen as the study area for a number of reasons. First of all, Antarctica appeared to be about as different from most people’s everyday life as possible and thus this “extraordinary” experience may give a greater sense of how experience works. As Shackleton (1986, p. 81) stated, the RSR is “a lot farther away from ‘civilization’ impart[ing] an all-pervading sense of solitude . . . [and] it is the heartland of that chapter of polar exploration remembered as the ‘heroic age.’” If one then considers the RSR as the frontier of Antarctica, perhaps it is as different and remote from most people’s everyday life as possible. Thus, the experience would potentially be extraordinary, or perhaps considered comprehensively by the
individual before going. Sir Peter Blake (2001) stated, “Antarctica is extreme and that is why it is such a good barometer of environmental change.” Perhaps this extremity as a frontier, a destination with unique and awe-inspiring potential, is also useful as a barometer for social change research, and is the case as demonstrated by several decades of psychological research (see Chapter 2). Combining these experiential and geographical ideas, renowned Australian mountaineer and now Antarctic tour operator, Greg Mortimer believes that the alien environment with so many things that are unfamiliar is a potent mix which enlightens people’s sensitivity to the environment; it is an emotional top-up; a powerful experience (personal communication, March 12, 2003).

Secondly, in this contextual sense, this research furthers the examination of visitor experience in remote regions by looking at the Ross Sea region, which is both a region not examined in other studies, but also an area beyond that typically covered even in Antarctic tourism research that focuses heavily on the Antarctic Peninsula. Over 95% of tourists go to the peninsula region, but as Waterhouse (2001) indicated, tourism information from one Antarctic location and situation should not necessarily be applied as a blanket, continent-wide. With New Zealand’s connection to the Ross Dependency, it appeared particularly important to understand the experience of those who visit this region, and as no other studies have done before, examine visitors who traditionally fall outside of the term “tourist.”

1.11 Specific research objectives

Under the aim of examining the nature of visitor experiences in the Ross Sea region, three specific objectives were helpful in focusing the research further. These objectives are as follows:

1. To understand the dimensions of the experiences gained by visitors to the RSR. This was done by focusing on the multi-phasic approaches promoted by Arnould and Price (1993), Beedie and Hudson (2003), Clawson and Knetsch (1966), and Driver and Tocher (1979), dividing experience into anticipation, on site, and recollection phases.

2. To analyse whether any possible links exist in the transitions between the phases. In researching across phases, and also combining phases, this objective sought to ensure that the nuances of the whole experience were not lost. Bauer (2001) and other Antarctic tourism researchers have looked at individual phases, but not the entire process of a holistic experience.

3. To examine the potential benefits derived from the experience. Much literature on tourism and recreation has justified such activities and visitation by claiming that the benefit of visitors becoming advocates or ambassadors for conservation occurs. Continuing along this line of research (see Beaumont, 2001; Orams, 1995 & 1997) it is hoped that in monitoring the entire “length” of the experience, some insight and clues may be revealed as to the validity of this argument.

1.12 My perspective on the research

As this thesis has been the result of nearly five years of my life, it is important to realise my perspective on, and interest in, the subject of visitor experience in the Ross Sea region of Antarctica; this section is purposefully written in first person. As this study is
an amalgamation of both positive and interpretive paradigms, the preceding sections have outlined the initial “nuts and bolts,” positivist aspects of the study, whereas this section hopes to reveal my reflexivity—or perhaps bias—therein. I believe it is important for you to hear my perspective on my research as it shapes my interpretation of the qualitative data presented in Chapters 4 to 6.

A friend and I once discussed just how fascinating experiences are—how is it that you can leave your everyday life and transform for a trip overseas, or a voyage into the wilderness? Equally as interesting is how you also do the same when you return. There are unique transitions between “real life” and being away, between being away and “real life,” but in both instances you have excitement for the other place and time: you are excited to go, experience, and come back. How does this work? As an instructor with Outward Bound, I had often seen this take place for my students, whether on a paddling trip or running behind a sled and a rowdy team of huskies. It was a passing interest; one I had not given a great deal of academic thought.

In 1999, I first travelled to Antarctica, the Antarctic Peninsula, aboard M/S Explorer. This was part of a field expedition with Lakehead University, and as I suspected, Antarctica left me awe-struck—but didn’t I know it would? I had done a tremendous amount of reading and spent the better part of a semester learning about the place and its history, yet I still was not prepared for what I saw once I got there. Twelve days later, I felt as if I truly knew Antarctica; however, I was then excited to go home. I was anticipating situations and people back in Canada, looking forward to and not being able to wait to get off the plane in Halifax and share what I had seen and felt. Where had my perceived “trip of a lifetime” gone?

Obviously the experience of Antarctica has affected me enough to want to dedicate years of study to it, but what was it about this “extraordinary experience” and its interlocking pieces that triggered the transitions? I had heard the discourse and debate about tourists to Antarctica becoming ambassadors, a debate that is found throughout tourism literature looking to justify impacts. I can see both sides of such argument; however, the rest of the experience must relate to this action somehow. What was the understanding of such connections between experience and “real life?” Why didn’t it appear to be documented?

This is where my thinking began, prior to arriving in New Zealand—not even knowing where my Ph.D. would take me. The study described through the next seven chapters is the exploration of experience in the Ross Sea region, Antarctica, and how the pieces of experience and transitions between phases come together. It may not fill all the gaps in current and historical research, but hopefully it provides insight into an area for further research. At the very least, it examines the visitors’ outlook, an aspect quite often lacking when there is tendency to treat the impacts and problems associated with visitation as occurring in a vacuum.

1.2 The Ross Sea Region

Glittering white, shining blue, raven black. In the light of the sun the land looked like a fairy tale. Pinnacle after pinnacle, peak after peak—crevassed, wild as any land on our globe, it lies unseen and untrodden. (Roald Amundsen’s 1911 journal, cited in Kramer & Beese, 1998)

This is a description recorded by Roald Amundsen when he discovered the Queen Maud Mountains in the RSR. Although not comprehensive, the following section outlines different aspects of the Ross Sea region, serving as background information for results.
provided in Chapters 4–6, and to differentiate the region from others such as the Antarctic Peninsula.

1.21 Physical environment

As described in numerous sources, Antarctica is the coldest, iciest, windiest, highest, and most remote continent, surrounded by the stormiest ocean. Explicitly, Antarctica is unique. The standard physical boundaries for the Ross Sea region of Antarctica, as defined in Waterhouse (2001) and shown in Fig. 1.1, are inclusive of the Siple, Shirase, and Saunders coasts in Marie Byrd Land, the Ross Ice Shelf, and the Transantarctic Mountains from the Amundsen Coast to the Pennell Coast in Oates Land. To simplify, this would be a section of a pie from the South Pole to 60°S, bounded by approximately 150°E and 150°W.

Figure 1.1 The Ross Sea region, Antarctica. (Source: Huston & Waterhouse, 2002, p. 2)
Today, much of the landscape of the region is unique, including the Transantarctic Mountains, the Ross Ice Shelf, ice-free ground (such as the McMurdo Dry Valleys), several active volcanoes (such as Mt. Erebus), ice-covered ocean, and over 4,000 km of coastline (see Fig. 1.2). The Transantarctic Mountains stretch in a continuous chain from Oates Land and the Pennell Coast across the region to the Queen Maud Range at the apex of the Ross Ice Shelf and then across the continent. They offer a backdrop to the few areas of ice-free terrain and to the Ross Ice Shelf, which itself is the size of France. Islands dot the Ross Sea, including Roosevelt Island, which is completely surrounded by the Ross Ice Shelf. On Ross Island lies Mt. Erebus, the world’s most southerly active volcano, and a familiar landmark and icon of the region. Mount Melbourne, also in the region, is one of few volcanoes on the Antarctic continent itself (Waterhouse, 2001).

The landscape of the RSR’s terrestrial environment is dominated by ice, which covers 95% of the land surface; however, half of Antarctica’s ice-free areas are in the RSR, including the 6,000 km² McMurdo Dry Valleys (Waterhouse, 2001). Within these areas live the largest terrestrial animals found in the region—2 mm-long springtails and mites (Waterhouse, 2001). Terrestrially, there are also aquatic habitats that are nearly completely dependent upon melt water.

The Southern Ocean and the manner in which it circulates back and forth into the Ross Sea dominates the marine landscape of the region. During the winter, there is considerable sea ice coverage, up to 85% of the Ross Sea in some years (Waterhouse, 2001). Large polynyas (areas of open water) play an important role, with the Ross Sea polynya containing the most productive and extensive phytoplankton bloom in the entire Southern Ocean.
The cold, dark conditions create an extremely stable benthic community, with a biodiversity that is very high compared to elsewhere in the world. As in other parts of the Southern Ocean, the higher-order predators include squid, whales, dolphins, sea birds, and seals. Penguins in the region include the Emperor (seven colonies), Adélie (35 colonies), and Chinstrap (one colony). The Emperor and Adélie colonies include the southern-most colonies recorded for these species, whilst the Chinstrap colony on the Balleny Islands is the only one recorded for that species on the RSR side of Antarctica (Waterhouse, 2001). RSR Emperors make up 30% of the world population, while RSR Adélies account for about 1 million breeding pairs, or one-third of the total Antarctic breeding population.

Five species of seal have been recorded in the region. Approximately 32,000 Weddell Seals, 204,000 Crabeater seals; 5,000 Ross seals, and 8,000 Leopard seals are believed to reside in the region. Southern Elephant seals visit occasionally, but the nearest colony is located on Australia’s Macquarie Island (Waterhouse, 2001). Approximately 20 species of marine mammals (cetaceans) migrate through the region on a regular basis. These include both baleen and toothed whales, all of whom are distributed between 60°S and 68°S; only fin, blue, Minke, humpback, sperm, Arnoux’s beaked, orca, and southern bottlenose whales venture south to 77°S.

1.22 Legal framework

Politically, Antarctica is also unique amongst other continents. Activities in the RSR are regulated through both the national structures of the states active in the region and international obligations that result from multilateral agreements. First and foremost is the Antarctic Treaty System (ATS), which is comprised of the following documents (all of which have entered into force internationally): the Antarctic Treaty of 1959, the Convention for the Conservation of Antarctic Seals (1972), the Convention for the Conservation of Antarctic Marine Living Resources (1980), and the Protocol on Environmental Protection to the Antarctic Treaty (Madrid Protocol) (1991).

The Antarctic Treaty System (see Fig. 1.3) establishes the guiding principles for all activity in Antarctica. It was established following the International Geophysical Year (IGY 1957–1958) by the United Nations. The Antarctic Treaty System provides legal status to all land and resources of the entire Antarctic continent (Hall & Johnston, 1995). As a management regime, the ATS allows Antarctica to be recognised as a shared resource for all humankind to promote peaceful and scientific purposes (Rubin, 2005). The ATS covers the area south of 60°S and states “that it is in the interests of all mankind that Antarctica shall continue forever to be used exclusively for peaceful purposes and shall not become the scene or object of international discord” (Antarctic Treaty, 2002, no page number). Furthermore, it stipulates that “the continuance of international harmony in Antarctica will further the purposes and principles embodied in the Charter of the United Nations” (ibid, no page number). Thus, the ATS prohibits military measures and establishes freedom of scientific investigation, cooperation, and access to all areas. It also prohibits nuclear explosions and disposal of radioactive waste in all of the area defined as Antarctica.

The Treaty does not recognise, dispute, or establish territorial claims, but no claims are to be asserted while the ATS is in force (Antarctic Treaty, 2002). Seven states (see Fig. 1.4) claim sovereignty over parts of the Antarctica continent, with three claims overlapping. The U.S. and Russia do not recognise any of these seven claims, and make no claims themselves, but reserve the basis to do so. Aside from four claimants who recognise each other’s claims, few other nations do so (Prosser, 1995). Comparing Figs.
1.1 against 1.4, the RSR is essentially the area of New Zealand’s claim, the Ross Dependency.

**Figure 1.3** Working diagram of the Antarctic Treaty System. (Source: Waterhouse, 2001, p. 2.8; Adapted from Harris & Meadows, 1992)

Together, the 45 nations in the ATS represent decisions made about the continent by two thirds of the world’s population. Prosser (1995) believed that the development of the ATS may have resulted from the simple fact that, during the 1950s and 1960s, nations involved saw little economic potential or otherwise for the continent and thus lacked foresight. However, as described by Davis (1992, p. 39), the Antarctic Treaty is today “one of the most successful international regimes of our time.”

Most nations who have signed the ATS and the Madrid Protocol also have a degree of country-specific law to regulate their citizens’ activities in Antarctica. Tourism is currently industry self-regulated by the operators themselves through the International Association of Antarctica Tour Operators (IAATO), founded in 1991. Beyond the industry-imposed regulation of IAATO, all official international regulation has fallen to the ATS because the small size (in terms of actual numbers) of Antarctic tourism appears to be of little interest to large tourism organisations and regulatory bodies. In turn, the ATS simply counts tourists in as “other visitors” (Herr, 1996). This situation lends further support for the definition of visitors adapted for this research. IAATO is quite proactive in their management of tourism, having addressed visitors guidelines for many years (see copy in Appendix A), which form the basis of the visitor guidelines in ATS documents. With guidelines for specific wildlife (see Appendix B), IAATO have much more practical and focused efforts than the multi-year debates the ATS has had regarding what they classify together as “Tourism and Nongovernmental Activities.”
In the end, Antarctica is again unique for its legal regimes, as a means and literally grounds for compromise in international relations—“If we cannot succeed in Antarctica we have little chance of succeeding elsewhere” (Mickleburgh, 1988, p. 7). As such, there are challenges for the future management of Antarctic tourism that are outside the scope of this thesis.

1.23 History/exploration

History and exploration of the RSR relates primarily to what is termed the Heroic Era (1895–1917) (Smith, 1993; Waterhouse, 2001). During this time, eight expeditions were active in the region, leaving some of the most important relics of humanity’s discovery of the continent. Tangible evidence of this exploration can be found throughout the region, as indicated by the 34 sites that have now been identified as historically significant (see Fig. 1.5). This large volume of “Heroic Era” remains are what distinguish it from other areas of the continent, and now provides a number of frequently visited attractions.
Figure 1.5 Historic sites in the Ross Sea region—related to Heroic Era. (Source: Waterhouse, 2001, p. 2.3; adapted from AHT, 1997)

### 1.24 Scientific research

Science, and the logistical support needed to support it, is the major past and present human activity in the RSR. The national programmes of Italy, New Zealand, and the United States share responsibility for organising and conducting science activities in the region, whilst Germany occasionally conducts activities in the region. New Zealand and the United States operate year-round facilities; Italy runs a summer-only station, and Germany runs a summer-only station occupied about every third summer (see Fig. 1.6).

In terms of longevity, McMurdo Station has operated continuously since early 1956, while Scott Base and Amundsen-Scott South Pole Station have operated since the end of the 1956–1957 season. Italy opened their summer-only permanent facility in 1987, in Terra Nova Bay (renamed Mario Zuchelli Station in 2004 after the late director of the Italian Antarctic Programme), and next door is Germany’s Gondwana Station, established in January 1983. Of the bases, Terra Nova Bay was the site most often visited by tourists during 1999–2000. McMurdo Station and Scott Base also see regular seasonal tourist traffic.
In comparison with tourist numbers, for science and support in 2000–2001, the following are estimates of personnel associated with each programme during the summer months: United States (1,700), New Zealand (340), Italy (200), and Germany (0). From national programme data (Beltramino, 1993; Waterhouse, 2001) an estimate would be that in the last 50 years, 70,000 people have been involved in science and associated logistics in the region. Unlike tourists (who are primarily transported in the region by ship, with small vessel and/or occasional helicopter support), national programmes in the RSR utilise a number of transportation options. To move personnel and equipment from New Zealand, a regular air link is serviced with 100 flights annually by large military aircraft (Waterhouse, 2001). Visitors categorised as artists and writers, educational
programme participants and distinguished visitors (DVs) are currently transported to the region via this joint U.S.–NZ programme of flights.

Once in Antarctica, programmes utilise helicopters and fixed-wing aircraft, in addition to a wide range of surface transport options. Around the Hut Point Peninsula (see Fig. 1.2), 14 km of road is maintained, so all manner of wheeled vehicles operate. Off the peninsula, tracked vehicles are used, as well as snowmobiles. Until the 1993/1994 ratification of the Madrid Protocol, dog teams had also been used from Scott Base.

1.3 Visitors

In order to provide a contextual understanding, this section discusses tourism in Antarctica and how the definition of visitor to be used in this research was constructed. The merits of many previous definitions were distilled down to the fact that technically everyone in Antarctica is a visitor, as there is no indigenous population. Even scientific expeditions have been limited to the last 150 years.

This research has chosen to use the term “visitor” for the purpose of examining experience and the potential of benefits arising from such experience. As expanded upon by Davis (1995 p. 3):

The use of the word ‘visitor’ rather than ‘tourist’ reflects [a] distinction . . . although tourists are included under the heading of visitors [in some definitions], the term ‘tourist’ is common in Antarctic literature. It is rejected here because it carries with it the economic implications of the tourist industry instead of the considerations of conservation.

The real concern for Davis (1995, p. 47) was “to ensure that visitors, tour operators, and staff understand and respect [Antarctica’s] wilderness values.” Visitor is the terminology used in the U.S. Wilderness Act (see Hendee, Stankey & Lucas, 1990), legislation that serves to manage in order to provide wilderness experiences: “Outstanding opportunities for solitude or a primitive and unconfined type of recreation” (The Wilderness Act, cited in Lucas, 1990). Using the arguments of Davis (1995) to further justify the use of the term visitor is done so because it is potentially more appropriate to place this thesis alongside research regarding wilderness management than the “business” of tourism. One may question this placement; however, the why is based on the context of Antarctic tourism being, in most cases, small-scale, environmentally focused, and operating in arguably the world’s greatest wilderness. The term visitor also includes the fact that not all those studied in this research paid to visit. Scott (2004) uses the term visitor in his study of the “Antarctic Effect,” and specifically differentiates the tourist as those who pay. While payment is not defined by Scott (2004), one may assume it is monetary payment, because although the remainder of visitors do not physically pay money, they may have paid with time on application processes, or time in terms of gaining qualifications to be eligible to be there as part of some program.

Thus, how does the term visitor overlap with definitions of the term tourist, and those used in previous research? Hall (1992, p. 4) defined Antarctic tourism as “all existing human activities other than those directly involved in scientific research and the normal operations of government bases,” while Enzenbacher (1993, p. 142) defined tourists as “visitors who are not affiliated in an official capacity with an established National Antarctic programme. They include both fare-paying passengers . . . and private expedition members and adventurers aboard seaborne vessels or aircraft.” In this latter definition, Enzenbacher (1993) did not include off-duty personnel, the crew and staff of tour operators, or overflight passengers.
Reich (1980, p. 205) classified tourists as including “tourist cruises; tourist flights, including small aircraft travel; non-scientific expeditions, including mountaineering, small craft and other nongovernmental efforts; goodwill/VIP visits; and off-duty visits,” a definition drawn upon by Ladd (1999, p. 79) to classify tourist activity as “tourist cruises, tourist flights, private expeditions, off-duty visits, DV visits, and science tourism.” Enzenbacher’s (1991) work does show that VIPs are essentially tourists (although they have been invited), and that base and scientific personnel indeed do engage in tourist activities when off-duty. She also mentions observers, but does not include them in the numbers as they visit sites for official purposes. Erize (1987, pp. 133, 134) discussed the other types of visits being used by a small number of tourists as including “visits of guests of the services providing the management or logistical support of the research stations.”

Phillips (1992) categorised journalists, media, environmental organisation expeditions (i.e., Greenpeace), VIPs, and recreation by off duty-personnel from national stations and ships as “nongovernmental activities.” The main point for Phillips (1992), in his role as a representative of the World Wide Fund for Nature (WWF), was that the WWF welcomed tourists returning home as enthusiasts, but did not welcome shiploads of tourists treating Antarctica as just another destination for cruising.

Arguments have been made that National Programme individuals, when on their free time, are tourists. It is important to realise that opportunities for walking, downhill and cross-country skiing do exist, mainly close to stations, but also at some field sites. By examining Table 1.1, one can see how important it may be to examine recreation pursuits, such as visits to the historic huts by American and New Zealand base personnel, versus those by tourists.

Table 1.1 Personnel and Tourist Visits to Historic Huts on Ross Island.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Hut Point</td>
<td>United States Antarctic Program (USAP)</td>
<td>712</td>
<td>586</td>
<td>683</td>
</tr>
<tr>
<td></td>
<td>Antarctica New Zealand (ANZ)</td>
<td>158</td>
<td>172</td>
<td>204</td>
</tr>
<tr>
<td></td>
<td>Tour ships</td>
<td>269</td>
<td>162</td>
<td>263</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>1139</strong></td>
<td><strong>920</strong></td>
<td><strong>1150</strong></td>
</tr>
<tr>
<td>Cape Evans</td>
<td>USAP</td>
<td>731</td>
<td>974</td>
<td>407</td>
</tr>
<tr>
<td></td>
<td>ANZ</td>
<td>153</td>
<td>191</td>
<td>205</td>
</tr>
<tr>
<td></td>
<td>Tour ships</td>
<td>713</td>
<td>854</td>
<td>311</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>1597</strong></td>
<td><strong>2019</strong></td>
<td><strong>923</strong></td>
</tr>
<tr>
<td>Cape Royds</td>
<td>USAP</td>
<td>975</td>
<td>514</td>
<td>284</td>
</tr>
<tr>
<td></td>
<td>ANZ</td>
<td>137</td>
<td>172</td>
<td>157</td>
</tr>
<tr>
<td></td>
<td>Tour ships</td>
<td>691</td>
<td>299</td>
<td>351</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>1803</strong></td>
<td><strong>985</strong></td>
<td><strong>792</strong></td>
</tr>
</tbody>
</table>

(Source: Waterhouse, 2001, p. 3.17)
Further differences over the definition of Antarctic visitors is revealed when comparing tourist numbers compiled by Enzenbacher (1991, 1992, 1992b, 1993) and Beltramino (1993). For example, by including the staff and crew of tour operators, Beltramino’s (1993) visitation numbers for 1974–1975 are more than 1,000 higher than those of Enzenbacher (1991, 1992a, 1992b, 1993). As early as 1960, reports labelled scientists, distinguished visitors, and media as tourists (see Stonehouse, 1965a; Thomson, 1977; Young 1960). Stonehouse (1965b, p. 274) indicated that “from 1956 Shackleton’s hut and the small group of Adélie penguins had become star attractions to congressmen, parliamentarians, journalists, diplomats, soldiers, sailors, and scientists visiting Antarctica as guests of the U.S. and NZ governments,” none of which are generally considered tourists. Stonehouse (1965a, pp. 450–451) also noted that “each fine day brought one, two, sometimes four or five helicopter-loads of visitors—journalists, politicians, and VIPs of all kinds, nations, and degrees of distinction.” It is therefore evident that different organisations and researchers often define the term tourist according to their own criteria and agenda (see McIntosh, Zygadlo & Matunga, 2004), hence the trouble with using the term for this research. The term visitor, while also problematic, reduces some of the concern over who should or should not be included, and gives some recognition of the relative “indigenousness” for scientific and permanent base personnel.

Explicitly, the term visitor excludes personnel carrying out nationally sponsored scientific research, or those providing logistical support for such research. Although summer base staff are colloquially known as tourists (Hince, 2000), using the World Tourism Organization (WTO) definitions (WTO, 1999) they can be excluded on the basis of their remuneration. It also excludes those individuals on overflights, a group typically deemed to be tourists, but who never touch down on the continent.

Visitors may be visiting for their own leisure motivations, as is the case with commercial tourists, or visiting for the greater society, as is the case with media and government officials. Visitors travelling to the Ross Sea region for the purposes of education or work not related to Antarctic science or logistics are considered to be an appropriate part of the population in the present study, following discussion presented by Enzenbacher, (1992a) and Stonehouse, (1992). Visitors include the categories described by Sections 1.21 through 1.26 of this chapter: commercial tourists, artists and writers, education programmes, DVs (including terms such as goodwill visitors, working visitors, and VIPs), yachts, and adventurers and mountaineers.

### 1.31 Commercial tourism

As is common on the Antarctic Peninsula, the main source of visitors to the RSR is through commercial tourism. To compare Antarctic tourism with tourism elsewhere makes it seem minuscule. In the 1990–1991 season, 4,842 tourists visited Antarctica; this was less than two thirds the number of all the visitors to Maria Island, the least-visited tourist destination in Tasmania, Australia’s smallest state (Herr, 1996).

Numbers recorded by the International Association of Antarctica Tour Operators (IAATO) indicate that from 1992–2003, over 110,000 tourists have visited the continent; in the 1999–2000 season alone, 14,762 tourists visited the Antarctic (IAATO, 2004a). Tourists made landings on sub-Antarctic Islands as early as 1882 in the Ross Dependency (Headland, 1992 & 2003); by 1933, most large sub-Antarctic Islands surrounding the continent had been visited (Headland, 1994). Specific to the RSR, the earliest reference to commercial tourism in Antarctica comes from the Christchurch newspaper, The Press, who on November 4, 1910, advertised a ship journey to McMurdo Sound with Thomas
Cook and Sons (Mussack, 1988). In 1957, an aircraft landing was made on Ross Island (Hall & Wouters, 1995; Headland, 1994 & 2003).

Tourists visiting Antarctica today are from a wide variety of nations, but are typically first-world citizens. In 1996–1997, 48% were from the U.S., 11% from Germany, 9% from Australia, 7% from Japan, and the remaining 25% from the rest of the world. Typically, these tourists are tertiary educated, well-travelled, have high disposable incomes, and were looking for a unique, nature-based experience (Kriwoken & Rootes, 2000). Visits to the continent are highly concentrated geographically, with less than 0.5% of the continental area visited, an area of only 56,000 km², or the size of Sri Lanka (Cessford, 1997 & 1998). Sites are dispersed around the continent, but the Antarctic Peninsula takes 90% of the tourist activity (Cessford, 1997 & 1998). To better understand Antarctic tourism development and history, the following brief explanations of the three typical subcategories [ship-borne, land-based, and airborne tourism (Hall & Johnston, 1995)] show the distinct presence each has on the continent and in the RSR.

1.311 Ship-borne

Lars-Eric Lindblad began large-scale ship-borne tourism to Antarctica in 1966. Eight years prior, there had been tourism to the South Shetland Islands and Antarctic Peninsula. Initially, Lindblad Travel began tourist voyages to the Antarctic Peninsula, in 1968 to the Ross Sea, and in 1970 built the *Lindblad Explorer*, the first polar tourism vessel built specifically for such a purpose (Benson, 1999 & 2000; Lindblad & Fuller, 1983). The two voyages of the *Magga Dan* in 1968 from New Zealand to the RSR visited sub-Antarctic Islands as well as Cape Adare, Cape Hallett, and Ross Island (Darby, 1970; Lindblad & Fuller, 1983), and in this instance, the *Magga Dan* was the first tourist vessel documented as having crossed the Antarctic Circle (Headland, 1994 & 2003; Lindblad & Fuller, 1983). Between 1968 and 1992, there were perhaps as few as 20 cruises by all companies into the RSR (Headland, 1992). In the following ten years there was only a minor increase in the number of cruises, with up to three companies operating in any given season (Headland, 2003).

Another important vessel in Antarctic ship-borne tourism history is the *Kapitan Khlebnikov*, a vessel quite active in the RSR. The *Kapitan Khlebnikov* was the first tourist vessel to circumnavigate Antarctica (Splettstoesser, Headland & Todd, 1997). Some growth of tourism in Antarctica in the early 1990s can be attributed to the commercial availability of such Russian ice-strengthened research vessels and icebreakers converted for tourism use (Cessford, 1997 & 1998). With the large amount of money tourists pay to travel on these cruise vessels, it is likely that circumnavigation of the continent (or at least partial circumnavigation) will increase in popularity, because such cruises allow visitors to see both the historic sites of the Ross Sea region and the wildlife of the Antarctic Peninsula (Mason & Legg, 1999). The *Kapitan Khlebnikov* was one of only two vessels active in the RSR during 2002–2003, when it completed a second circumnavigation of the continent (“Tour Ship Circumnavigation Approaches Deception Changeover,” 2003; “‘Khlebnikov’ Completes its Second Circumnavigation of Antarctica,” 2003). Specialty tours, such as the one offered by Quark Expeditions in 2003–2004 to view a solar eclipse, may also increase in popularity (“Solar Eclipse Target of 2003 East Antarctic Voyage,” 2001)

A typical ship-borne tourist itinerary in the Antarctic Peninsula (Kriwoken & Rootes, 2000) involves the following:

- flights from home to Ushuaia, Argentina;
- board a vessel and sail two days across the Drake Passage;
• spend a given amount of time exploring the South Shetland Islands and Antarctic Peninsula by Zodiac (small, inflatable out-board), with 2–3 landings per day;
• sail two days back across the Drake Passage and end in Ushuaia.

On the sailing to and from the Antarctic Peninsula, cruise staff provide lectures on topics related to wildlife, flora, history, and geology. Staff facilitate other entertainment as well; during rough weather when landings are not possible, they give additional lectures (Thomas, 1994). This type of general itinerary is quite similar to expeditionary cruises to the RSR (see Headland, 1993). However, with closer proximity and less time crossing the Southern Ocean, ship-borne tours to the Antarctic Peninsula are “friendlier” in terms of comfort than those from New Zealand or Australia to the Ross Sea Region (Hall & Wouters, 1995). From Ushuaia, the Antarctic Peninsula can be reached in as little as 48 hours, whereas a voyage to the Ross Sea region can take as long as ten days at sea each way to and from the continent (Hall, McArthur & Spoelder, 1992; Suter, 1991). Recently, the extent of the ice pack in the RSR has also been a considerable problem, limiting access for tour operators and national programmes alike (“Ross Sea Fast-Ice Situation Challenge for Ship Ops,” 2001; “Ross Sea Challenges Icebreaker’s Capabilities,” 2002; “Heavy’ Ice in Cape Adare Regions Forces Ship to Divert to George V Land,” 2002; “Erebus Group Thwarted by Heavy Ross Sea Ice,” 2003; “Giant Berg’s Movement Improves Late Season Ross Sea Access,” 2003).

The ease of transport logistics, shorter distance, and a milder marine climate has led scientists to refer to the peninsula as the “Banana Belt” (Campbell, 1993); then with the build-up of tourism, the peninsula had been dubbed the “Antarctic Riviera” (Hart, 1988). Today, this is leading operators to feel challenged in providing and maintaining a “wilderness” experience on the peninsula (“Operators May Face Challenge in Maintaining ‘Wilderness’ Experience,” 2002), which may lead to future development in the RSR. A wilderness experience is often seen as a “powerful reminder [with] infinite sources of wonder” (Duenkel, 1994, p. 41. Additionally, a tour to the peninsula is also the cheaper option. Not including airfare to Ushuaia, the total cost is anywhere between US$4,000 and US$20,000, depending on the number of days at sea (Bauer, 1996; Kriwoken & Rootes, 2000; Thomas, 1994). Heritage Expeditions (n.d.) offered voyages to the RSR in 2002–2003 for between US$10,000 and US$15,000.

A total of 13,084 ship-borne tourists visited Antarctica in 2002–2003, with a further 2,424 travelling aboard larger vessels and never landing (IAATO, 2004b). The difference in numbers visiting the Ross Sea region and the Antarctic Peninsula is dramatic—as of these 13,084 ship-borne tourists, only 314 travelled on vessels to the Ross Sea region (IAATO, 2004b). Numbers for 2003–2004, provided by the National Science Foundation (NSF), showed preliminary ship-based totals of 19,142 landed passengers aboard large vessels, and a further 4,949 passengers having been in the Antarctic but making no landings (Nadene Kennedy, personal communication, April 26, 2004). These numbers fluctuate year to year, as it was estimated that nearly 300 tourists would visit the Australian Antarctic Territory (AAT) in 1991, an area even more remote than the RSR (Hall, McArthur & Spoelder, 1992). Tourist numbers in the millions was the pool of tourists estimated in 1998 for the year 2010 (Coughlan, 1998). The 800 visitors reported in the RSR for 1995–1996 (Huston & Waterhouse, 2002; Waterhouse, 2001) has fallen each year since, likely directly related to the number of government-regulated permits available in the management of the sub-Antarctic Islands of New Zealand and Australia (see Cessford & Dingwall, 1994; Hall & Wouters, 1994; Sanson, 1994; Wouters, 1993).
1.312 Land-based

In 1979–1980, the building of a 1,300-metre hard runway at the Chilean Tiente Rodolfo Marsh Station on King George Island signalled the ability for land-based and airborne tourism to be able to operate in the Antarctic (Benson, 1999 & 2000). From 1982 to 1992, Chile operated the Hotel Estrella Polar, a converted 80-bed military barracks at Marsh Station, serving as a rest spot for tourists between cruise ships and tourist flights to King George Island (Headland, 1994). Following the ceasing of Chile’s hotel operations, Argentina began flying tourists to its base on Seymour Island, but today all such accommodations have reverted back to official use. The claim of sovereignty to the Antarctic Peninsula by Chile, Argentina, and the UK have often led to bolstered tourism or population efforts by the first two nations (Hall & Johnston, 1995).

Closer to the RSR, in 1989 the Australian House of Representatives Standing Committee on Environment, Recreation, and the Arts (HRSCERA) heard a land-based tourism proposal. Project Oasis was submitted by Helmut Rohde and Partners and was a detailed plan to operate a facility near Davis Station in the Vestfold Hills of the Australian Antarctic Territory (HRSCERA, 1989). The project was to include an airport, visitor education and research centres, accommodation, hospital, search and rescue capabilities, and ATS administration facilities (HRSCERA, 1989). Estimates indicated that up to 16,000 people per year could use the facilities with two flights per week to Australia. Total on-site numbers at any time would be 344 tourists, 70 researchers, and 174 staff (HRSCERA, 1989). Project Oasis never proceeded past this proposal stage, but it gave insight into the possibilities and implications of future land-based tourism in Antarctica.

Today, land-based tourism in Antarctica centres around one particular company, Adventure Network International (ANI). ANI operates a tented summer camp at Patriot Hills in the Ellsworth Mountains that can accommodate 50 people at a time. In 1999–2000, ANI only carried 139 tourists to Antarctica; in 2002–2003, numbers only increased to 180 tourists (IAATO, 2004b). Apart from traverses, which generally end at the Pole or McMurdo Sound, this type of land-based tourism is quite limited in the RSR.

1.313 Airborne tourism

Airborne tourism essentially began with a tourist flight from Chile in December 1956; almost a year later, a Pan American aircraft with tourists aboard made a flight from Christchurch (New Zealand) to McMurdo (Headland, 1992; Slevich & Fal’kovich, 1987). In 1958, “a group of tour organisers from New Zealand and Australia arrived at McMurdo [by plane], but due to bad weather they were unable to leave the buildings and returned home disappointed as to the prospects of polar tours” (Slevich & Fal’kovich, 1987, p. 99).

Due to objections from Antarctic scientists, non-scientific flights to the Antarctic were discontinued until 1968 when, under the aegis of the Richard E. Byrd Polar Centre in Boston (U.S.), a flight with 75 passengers visited McMurdo and the South Pole (Slevich & Fal’kovich, 1987). The unavailability of a floating hotel to receive visitors is primarily the only issue that prevented initiation of regular tours from New Zealand to McMurdo at that time. By 1970–1971, five flights, whose passengers were not connected with Antarctic research, had landed at the “airport at McMurdo” (Slevich & Fal’kovich, 1987, pp. 99–100).

Today, airborne tourism focuses mainly on commercial overflights from New Zealand and Australia. Commercial overflights are not included in the term visitor used
in this research because of a lack of actual, on-the-ground visitation. These overflights view the continent as one might view Greenland while flying between Europe and Canada. Despite these flights offering a purposeful degree of sightseeing, their passengers never actually visit, and as per Bauer (1996) may not even be appropriately termed tourists, let alone visitors. However, commercial overflights and the experiences they provide for travellers is an important aspect for future research. Ship-borne use of airborne activities is today limited to those vessels equipped with helicopters such as the Kapitan Khlebnikov, where helicopters are being used to increase the range of sites available to visit (Bauer, 1996; Cessford, 1997 & 1998). ANI’s airborne tourism is primarily a means of transporting visitors and goods rather than offering sightseeing tours as found on overflights (Benson, 1999 & 2000).

1.32 Artists and writers

Various national Antarctic programmes offer artists and writers’ programmes as a means for visitation. Particular to the RSR, the programmes of the U.S. and New Zealand will each be examined briefly. The earliest date an American artist visited Antarctica under the auspices of the NSF was during the International Geophysical Year (IGY) (Fox, 2005). Currently, the USAP offers “opportunities for scholars in the humanities to work in Antarctica and the Southern Ocean...the purpose is to enable serious writing and the arts that increase understanding of the Antarctic and help document America’s Antarctic heritage” (National Science Foundation—Office of Polar Programs, 2004a, no page number). Since 1957, the NSF has sponsored an official Artists and Writers programme, with 65 individuals having worked continent-wide (National Science Foundation—Office of Polar Programs, 2004a). In 2002–2003, six artists and writers, plus three support personnel, were scheduled to visit with the NSF (National Science Foundation—Office of Polar Programs, 2004b).

Antarctica New Zealand’s “Artists and Writers to Antarctica” programme was established in 1996 with the aim of “encouraging artists in all disciplines to explore Antarctica in their work and thus increase understanding among New Zealanders of the value of Antarctica and its global importance” (Antarctica New Zealand, 2004a). Antarctica New Zealand have allowed for an eclectic approach, encouraging artists practising all forms. Between 1996 and 2001, 13 of ANZ’s Arts Fellows have visited the continent, with five others visiting between 1970 and 1996. As former chief executive Gillian Wratt pointed out, “With so little human impact on Antarctica, there is great scope for each visitor to have their own vision of it” (Webster, 2001, p. 36). Antarctica New Zealand’s media initiatives programme follows the same vision based on the belief that “providing opportunities for the various media disciplines to visit Antarctic will encourage participants to explore Antarctica in their work and thus increase understanding among New Zealanders of the value of Antarctica and its global importance” (Antarctica New Zealand, 2004b, no page number). Both programmes are open to a wide range of professionals, and the “successful applicants travel to Antarctica for up to two weeks and visit sites appropriate to their accepted proposal” (ibid, no page number).

1.33 Education programmes

Since 1998, Antarctica New Zealand has formalised its education programmes to include:

- the Education Initiatives in Antarctica Programme;
• the Education Familiarisation Programme;
• the Secondary Schools Initiative in Antarctica Programme; and
• the Graduate Certificate in Antarctic Studies through Gateway Antarctica.

The first three programmes run solely through Antarctica New Zealand, while the fourth is a joint venture with the University of Canterbury, Christchurch, New Zealand.

The Education Initiatives in Antarctica Programme is open to professional New Zealand educators who wish to visit Antarctica, and use such experience to develop and enhance education programmes within their organisation and within the wider community (Antarctica New Zealand, n.d. a). This programme lasts for two weeks, with visits designated to sites as appropriate to their proposal (ibid). For the USAP, all education programmes appear to be run similarly to the Education Initiatives programme. Based at Rice University, the Teachers Experiencing Antarctica and the Arctic (TEA) allows teachers to work alongside science projects for a given amount of time, with the ability to then share and grow from the experience (TEA, 2004a). Since 1992, TEA have sent approximately 66 teachers to various stations and field camps Antarctic-wide (TEA, 2004b). Most of these teachers travelled in the late 1990s or early 2000s, with only a few teachers involved prior to 1997. For 2002–2003, it was planned for six TEA participants to be involved in Antarctic activities (National Science Foundation—Office of Polar Programs, 2004b).

Antarctica New Zealand’s Education Familiarisation in Antarctica Programme offers the opportunity for education staff members of Antarctic-related organisations to visit Antarctica. Antarctica New Zealand believes that by allowing opportunities for education staff to “familiarise themselves first-hand with the Antarctic environment [it] will provide credibility when providing day-to-day Antarctic educational information” (Antarctica New Zealand, n.d. b). This programme is organisation-focused, with all New Zealand publicly accessible organisations with an Antarctic focus being able to put forward education staff members as applicants to visit Antarctica. In each of 2001–2002 and 2002–2003 there has been one joint familiarisation initiative with the Italian programme (the only other nation actively involved in the RSR every season), supporting an Italian educator.

The first group accepted to the Secondary Schools Education Initiative in Antarctica Programme travelled to Antarctica in the 2002–2003 season (Cadenhead, 2004). In 1999, Antarctica New Zealand received an exceptional proposal to take a small group of students to the ice to research and complete a project. This application was accepted under the Education Initiatives Programme, and was also used as a “guinea pig” for the development of a programme aimed at senior secondary school students (Cadenhead, 2004).

The fourth education programme run through Antarctica New Zealand is a joint venture with the University of Canterbury, and thus can be seen as a slightly separate entity. Gateway Antarctica (GA) at the University of Canterbury offers the Graduate Certificate in Antarctic Studies (GCAS) programme; the certificate is aimed at “students who have qualified for a degree and wish to broaden their understanding of Antarctic related matters” or “professionals who are working or plan to work in positions or organisations where their contribution would be enhanced from this programme” (Gateway Antarctica, 2003). As the course provides an on-site experience, working with and in Antarctic science situations first-hand, the GCAS students can be seen as visitors to the RSR. Extensive discussion of the field portion of the course can be read in...

### 1.34 Distinguished visitors (DVs)

The extent and degree of visitation by DVs, VIPs, and others such as invited or goodwill visits is difficult to gauge, although they represent a unique group of visitors who experience the Antarctic. As mentioned by several authors (see Stonehouse, 1965a, 1965b; Young, 1960), visits by DVs have occurred for many years. Splettstoesser and Folks (1994, p. 233) described DVs in the USAP as “government officials (congressmen or women, senators, agency employees, etc.),” but they also include in this group the media and the NSF’s Artists and Writers participants. This conglomeration of media and artists under the term DV is also used in the work of Mussack (1988) and Ladd (1999), and in some reporting by the NSF. To add further confusion to the terminology, in 2002–2003 the NSF supported 116 “working visitors” (112 civilian and 4 military) at McMurdo Station and five civilian “working visitors” at South Pole Station; these numbers did not include writers, artists, or educators with the TEA programme (National Science Foundation—Office of Polar Programs, 2004b). Whichever definition is used, invited guests are usually senior members of governmental organisations that interact with a national Antarctic programme, or high-ranking politicians, dignitaries, or industry leaders whose support of the programme is essential.

In 2003–2004, ten DVs (including the Governor General) visited through Antarctica New Zealand (Lou Sanson, personal communication, April 13, 2004). In the previous season, 2002–2003, 13 invited guests had been supported (Antarctica New Zealand, n.d. d), and in 2001–2002 three DV groups visited with a total of nine individuals (Antarctica New Zealand, n.d. c). According to Chaplin Bill Yates at McMurdo Station (personal communication, February 1, 2004), up until February of the 2003–2004 season, the U.S. programme had already hosted four sets of DVs, with anywhere from three to seven people in each set, made up of generals, senators and high-ranking Coast Guard representatives. American DVs generally go to Cape Royds, Cape Evans, and the Dry Valleys, and while according to some they “get pampered” (Johnson, 2005), they are extremely important to the continued funding of the programs.

### 1.35 Yachts

Private yacht tours are mainly only possible in the peninsular region of Antarctica, with 157 visitors estimated to have travelled aboard yachts in 2002–2003 (IAATO, 2004b). This is a tremendous increase from the total of 233 yachts to have visited sites on the Antarctic Peninsula and sub-Antarctic Islands (NZ and Australia) in the twenty-plus years between the 1975–1976 and 1997–1998 seasons (Headland, 1998 & 2003). For 2003–2004, preliminary NSF numbers were 185 sailing vessels or small boats, in addition to the 40 passengers landed from small vessels operated by IAATO members (Nadene Kennedy, personal communication, April 26, 2004).

1.36 Adventurers and mountaineers

Adventurers, such as those who traverse the continent, can also be considered as visitors to the RSR. The level of such visitation is infrequent, and some may only touch the RSR but go no further, insomuch as they reach the pole where various ‘claims’ to the continent meet. Since the IGY’s Commonwealth Trans-Antarctica Expedition (TAE) (Fuchs & Hillary, 1968), some notable expeditions to explore the wider region have included Sir Ranulph Fiennes’ Transglobe Expedition (Fiennes, 1983), the Ice Trek South Pole Expeditions (Hillary & Elder 2004; Philips, 2000), the Footsteps of Scott Expedition (Swan, 1987), Messner and Fuchs (Messner, 1991), and the attempted first all-women’s traverse expedition of Arneson and Bancroft (“Two Traverses Planned by Women,” 2000; “Women’s Traverse Aborted,” 2001).

Transport and rescue problems between adventurers and national programmes are what make adventure tourism the current “hot topic” of discussion between IAATO and Antarctic Treaty parties (Denise Landau, personal communication, April 22, 2004). In 2001–2002, only 23 people in six groups attempted long-distance traverses to the Pole (the lowest numbers in 10 years), and only 12 people were successful (“Polar Traverses,” 2002).

A final source of visitors to the RSR has been mountaineers, who belong to organisations such as the New Zealand Alpine Club. Traditionally, most governments have been against mountaineering in Antarctica for its own sake. However, in the past, for a small country such as New Zealand, these ascents provided valuable scientific observations and asserted sovereignty over the Ross Dependency when an under-funded research institute could not (Bob Headland, personal communication, September 4, 2003). Leniency towards limited mountaineering may have also drawn experienced mountaineers south to work as field and safety staff (Gildea, 1998). Within the vicinity of the RSR, well over 100 peaks have been climbed, just from the Pennell Coast to the Queen Maud range (Gildea, 1998). The earliest ascent was in 1899 to the high point of Cape Adare, then a number of U.S. expeditions to nearby Marie Byrd Land, starting in 1940. Since 1993, it appears that no new peaks in the RSR have been climbed (Gildea, 1998). Instead, the focus for mountaineering has shifted to the Ellsworth Range, which is south of the peninsula and contains Antarctica’s highest peak, Vinson Massif.

1.4 Conclusions and Transitions

Overall, not only is it important that you as the reader understand the subtleties of the Ross Sea region and its visitors, but also understand these factors as they may shape the visitors’ experience—the geographical region visitors will interact with on site, and the context and history in which each type of visitor travels.

The Ross Sea region is quite unique on a global scale. The amount of scientific research present and the amount of exploration heritage evident far outweighs that found elsewhere in Antarctica. These two factors likely account for some of the visitation that occurs, and shapes the experience of visitors accordingly. Conversely, although much wildlife is present in the region, numbers of such are not nearly as plentiful as on the temperate Antarctic Peninsula. Colonies of penguins and seals are generally difficult to access, and only if one includes the degree of a wildlife tourist’s encounter on New Zealand and Australian sub-Antarctic Islands during a voyage to the RSR, then perhaps this situation is rectified.

The types of visitors to the Ross Sea region are broad, and due to the development and logistics of each type of visitation, visitors may encounter widely different
experiences. Commercial tourists to the region travel across the Southern Ocean for upwards of eight days in each direction, and thus their on-site experiences have extended length and gradual transitions to and from the continent. Visitors such as artists and writers, education programmes, and DVs all fly to the region; their experience on site can be as short as five days, with only six hours between being on the ‘ice’ and being in Christchurch, New Zealand. Understanding these differences is important to understanding respondents’ replies. Yacht visitors and adventurers, while technically classified under the definition of visitor in this research, have not been included in this thesis any further due to overriding logistical difficulties in accessing them, such as unpublished routes and schedules, which may change at a moment’s notice.

Thus, with an introduction now in your mind, the remainder of this thesis is organised into six chapters. This first chapter is a focal point upon which the reader is able to refer to when discussion ranges from the theoretical, to the methodological, to the practical, from which the thesis is structured as follows.

The second chapter presents a further explanation of the term experience and how it is presented in related literature stretching across a number of disciplines. Specifically, what is meant by experience? How has experience been measured in the past? This chapter will provide a broad coverage of experience within disciplines such as psychology, sociology, and education. Additionally, it discusses how experience has been utilised in tourism, recreation and leisure settings of research, and in the context of wilderness and Antarctica.

In Chapter 3, the methods utilised in this research will be described and justified. This chapter addresses not only the use of both quantitative and qualitative approaches, but also the paradigms and epistemologies behind such approaches. In particular, an examination of an integrative approach will be presented, including both the data collection methods implemented (surveying, e-surveying, journaling, interviews, observation), and data analysis methods.

Chapter 4 presents the results and begins the discussion regarding the anticipation phase of the research. In doing so, this chapter compares the results of this research with past studies, and provides a baseline for the following two chapters. Chapter 5 continues sequentially from the previous chapter in that it presents results and discussion regarding the on-site phase of research. This chapter presents primarily a “story,” but also makes a comparison to the preceding chapter. Chapter 6 completes the presentation of results and discussion by summarising the findings for the recollection phase of research. The distinction and rationale for these three phases (anticipation, on-site, and recollection) will be clarified through Chapters 2 and 3.

In summarising the findings of this type of “longitudinal look” at experience, spread across eight months for some visitors, Chapter 7 offers an integration of discussion. By providing a summary of discussion and relating it back to the objectives and methodology of the research, this chapter provides the foundations for recommendations or implications—the “lessons learned.” Chapter 7 also concludes the thesis by summarising the contributions of the research to the academic community, and offering potential management applications and further study.
Chapter 2

Experience

Chapter 1 provided a general research introduction and an introduction to the context for an examination of visitor experience in the Ross Sea region. This chapter will present a detailed overview of the theoretical background for the research: examining experience from disciplinary perspectives such as psychology, sociology, anthropology, and education; areas of study such as recreation, leisure, and tourism; and geographical spaces such as within Antarctica and wilderness. By beginning with the endpoint, combined with the framework actually used (multi-phasic and extraordinary experience), this chapter will work backward to explain how such perspectives evolved. This chapter will also reiterate how theoretical points relate back to the research objectives and the context of the research, as well as relating forward in order to shape the methods, and inevitably the results and discussion, of this study.

2.1 What is Experience?

To revisit the introduction to this research, experience is a difficult subject to define, as it could be everything we do, and is used in terms of both “experiencing” something and of the amount of “experience” one has in a given situation. Again, as defined by the Merriam-Webster Dictionary (1994, p. 265), experience is “observation of or participation in events resulting in or tending toward knowledge; knowledge, practice, or skill derived from observation or participation in events; or something encountered, undergone or lived through.” Explicitly, experience encompasses the time period extending from when the visitor is anticipating that a visit to the Ross Sea region will occur, to the visit, to the period directly following the visit when this knowledge of the lived period is being synthesized. Furthermore, to have experienced is to have “found out, discovered or undergone” (ibid, p. 265). The Greenwich English Dictionary (1990, p. 137) stresses the trial aspect of such a definition by suggesting that to experience is “to try; to know by trial; or trial and knowledge from suffering or enjoyment.”

According to Knapp (1992), experience comes from the Latin word experiential, meaning to go through. In Middle English, experience meant to experiment, and so today’s modern translation could be to go through an experiment (Knapp, 1992). Turner (1986) discussed the word experience with regard to its Greek and Latin roots linked to fear and peril. From these roots, Knapp (1992, p. 24) said that “in one sense, all of our interactions with the environment are experiments. We can never completely know—or accurately predict—the outcomes of our actions.” Caine and Caine (1991, p. 104) contended that “life immerses us in some type of experience, every moment of our lives, much as water surrounds a fish.” Educationally, Knapp (1992) stated that experiences are a facet in the relationship of knowledge, from conditional to generative. Experience, combined with reflection, moves it beyond superficial understanding.

Characterising tourism as an experience, Prentice, Witt, and Hamer (1998) explained that experience and its production through recreation can be examined in five ways: hierarchical, flow, planned behaviour, typological, and insider-outsider. It is the first of these that encompasses the framework used for this study. The following section (2.2) will review the literature on this framework, while further sections will relate such a framework to the state of experiential study in Antarctica (tourism and otherwise), as well as relating experience to the four other ways noted by Prentice et al. (1998).
2.2 Multi-Phased Experience—Extraordinary Experience

Studies that have investigated the nature of visitors’ experiences have conceptualised the nature of visits to a variety of attractions and locations (see Beeho & Prentice, 1997; Borrie & Roggenbuck, 2001; Higham, 1996; Higham & Carr, 2002 & 2003; Masberg & Silverman, 1996; McIntosh & Prentice, 1999; Patterson et al., 1998), and for various activities (see Arnould & Price, 1993; Celsi, Rose & Leigh, 1993; Hull et al., 1996; McIntyre & Roggenbuck, 1998; Schanzel & McIntosh, 2000). On the whole, these studies have addressed the nature of tourism and leisure experiences holistically, but not in a remote location such as the Antarctic continent. Of the fore mentioned studies, those that examined wilderness or adventure experience, as well as the theoretical work of Beedie and Hudson (2003) have, to some degree, addressed experience in remote settings. However, many of them do not do so empirically, or do not provide a destination-specific focus. By non-empirical, what typically occurs is a mention of experience in the title or in one section, but then it is touched upon only tangentially, or as an aside. Destination focus is provided by the plethora of Antarctic tourism studies, but none examine experience holistically with reference to the experience being more than just the time on “the boat” at one moment in time (arrival and/or departure). Thus, in reference to this, the first research objective of this study became a clear gap in knowledge. Both Bauer (2001) and Grenier (2004) acknowledge phases of an Antarctic or polar experience, but neither do so with any reference to previous research, seemingly arriving at the notion anecdotally.

Many previous studies of the recreation, leisure, and tourism experience have argued that the experience should not be considered as one-dimensional, but as a multi-phase entity (see Borrie & Roggenbuck, 2001; Hammitt, 1980; McIntyre & Roggenbuck, 1998; Stewart, 1998). Specifically, that experience “on site” interacts with many pre-visit (anticipation) and post-visit (recollection) factors. Anticipation being the prior knowledge and inputs that contribute to a continuum of input beget behaviour on site, which begets outcome. As defined by early recreation theory (see Clawson & Knetsch, 1966), experience is thought to be defined by five sequential phases: 1) anticipation; 2) travel to site; 3) on-site activity; 4) return travel home; and 5) recollection. Despite this, the multi-phasic nature of the travel experience has received limited attention in previous research (Stewart, 1998). It has been argued that this is perhaps due to the theory’s predominant application in research directed at the economic outcomes and other benefits of recreation, rather than a focus on the dynamic nature of the links between each phase of the experience (Borrie & Roggenbuck, 2001). This dynamic nature of experience is well cited in psychology and experiential education, and quite rightly led to the adoption of the second research objective of this study.

Driver and Tocher (1979) conceptualised the recreational experience as a continuum, in which there are pre-recreation conditions leading to an individual seeking an experience, intervening conditions prior to and during the experience that lead to withdrawal or continuation, and post-experience conditions (such as recollection and memory) that become part of another pre-experience condition. Potentially advancing the work of Driver and Tocher (1979) as well as Clawson and Knetsch (1966), Beedie and Hudson’s (2003) model of adventure tourism in mountain locations conceptualised “extraordinary experience” (see Fig. 2.1).
This model describes a continuum of recreational experience based on how mountains may act as a “special place away from home” with a series of transitions to and from the mountains. Aspects of this model include the taking in of an urban “frame,” which would include worrying, preparation, and assessing the risk; and leaving with a mountain “frame,” one filled with celebration, reflection and relaxation, and consolidation. This leaving signals the potential benefits derived from the experience, as posited in this research by the third objective. Beedie and Hudson’s (2003) model is uniformly positive, whereas experiences in the mountains or Antarctica may not always be so. Abrahams (1986) also recognised that experiences, no matter how extraordinary, are in fact made up of a number of ordinary acts, and perhaps an anthropology of such needs to look at the way they coexist.

Arnould and Price (1993) also used the terminology “extraordinary experience” to describe a “newness” of perception and process gained from recreational experiences. In defining extraordinary experience, Arnould and Price (1993) suggested that the experience gained by a rafting participant must be triggered by unusual events, and does not necessarily have to imply superior levels of effort. This may also be true for visitor experiences in remote and extreme destinations such as the RSR. From a review of published literature, what is needed is a conceptualisation of visitor experiences to remote or extreme destinations that captures the subtleties of transition, as well as the key dimensions in the multi-phase nature of such experiences. Hence the focus of this study.
as outlined in its research objectives: filling existing gaps for a specific destination, as well as providing broader implications.

To specifically examine individual phases, the question becomes: how are these phases usually segmented? The anticipation phase provides important insights into the nature of the travel experience as first envisaged by travellers. This is important for remote destinations in terms of understanding the expectations and personal agendas that visitors bring with them to the remote or extreme location, and for understanding why new “frontier” destinations may become in demand for the remoteness and unusual experiences they are perceived to offer. On site, this anticipation shapes whether “the needs or desires to recreate are gratified” (Driver & Tocher, 1979, p. 95). Recall is potentially where such gratification sets in or becomes a part of an individual’s everyday knowledge. Arnould and Price (1993) discussed the sense of exhaustion with re-entry into one’s everyday world, where participants perhaps do not want to recall their experience, but rather leave it “on the river.” The conceptualisation of a recreational experience continuum may oversimplify aspects of human behaviour, but it does allow for the level of experience to vary. Driver and Tocher (1979, p. 95) stated that “some people may peak during anticipation, others at the point of goal attainment, and others during recall.”

Clawson and Knetsch (1966) have defined the anticipation of experience as the planning and thinking stage, whereby an experience is envisioned. If this phase results in a positive decision, the experience then likely ‘goes farther’. Driver and Tocher (1979) made special note of the antecedent conditions prior to the experience. These antecedent conditions (such as prior learning) give rise to motivations. As examined by Little (1993), these conditions combine with other individual/social factors prior to the activity. Little (1993) advocated, in particular, that individual factors such as past experience, motives, and emotions have an important influence on an individual’s anticipation of an experience. This is consistent with Abrahams’ (1986, p. 56) discussion of an economy of experiences, whereby experiences are “personal resources that may be used in interpersonal exchanges as a way of authenticating ourselves.” Individuals piece together their previous experience, cultural background, and general knowledge with images of a destination, in the hopes of a particular experience on-site (Fridgen, 1984). An individual will perceive and expect, and then behave (during the on-site activity) in accordance with what they have anticipated (Kirsch, 1999).

Anticipation, however, is not static. It can be affected by values produced in the recall phase of previous experiences of oneself or others (Chon, 1990). Such feedback, or “vicarious exploration” as it is termed by Fridgen (1984), allows emotional and cognitive factors to emerge alongside one another. The recollection could thus very well be the ‘goal’ of the anticipation phase (Parrinello, 1993). At the individual psychological level, cognitive elements determined by past experience give the background knowledge on which to act (Parrinello, 1993), and according to Mitchell (1983, p. 225), “Whatever we find in the mountains, we took there in the first place . . . the mountains do not care what experiences we make of them.”

Fridgen (1984) discussed on-site behaviour as the “bottom line,” where everything from previous recall and anticipation come together. As in Ryan’s (2003) model (shown in Fig. 2.3), ideas such as authenticity play an important role, but Fridgen (1984) also stressed the importance of environmental perceptions. Clawson and Knetsch (1966) simply discussed on-site experiences as the activities an individual may be involved with, whereas Beedie and Hudson (2003) stressed the setting—the worries or celebration are not present, just the mountains. While several authors have presented a five-phase model (Arnould & Price, 1993; Clawson & Knetsch, 1966; Fridgen, 1984), a three-phased model of before, during, and after the visit has been anecdotally derived at
by Bauer (2001). Bauer’s (2001) model is set in an Antarctic context, incorporating travel to and from the site with the on-site phase. Three phases would be congruent with Beedie and Hudson’s (2003) model; as Driver and Tocher’s (1979) research involved a continuum, any number of phases could be present. Grenier’s (2004) model of the polar cruise experience recognizes seven phases for excitement over a successful polar cruise (see Fig. 2.2).

With the third research objective being the potential for benefits through the experience, the most often cited benefit of an Antarctic experience is the anecdotal idea of ambassadorship. This concept is the product of many Antarctic writers and tour operators (Heritage Expeditions, 1997, Kershaw, 1998; Suter, 1991; Thomas, 1994). A benefit of tourism is “the promotion of environmental conservation deriving from the tourists’ enhanced appreciation of conservation values and regional conservation needs” (Dingwall, 1995, p. 90). Tour operators go to the Antarctic because they love the place, they love to share it, and they know that it has to be looked after (Wikander, 2002).

According to Antarctica New Zealand’s (1998) preparation video, “Antarctica is the last great wilderness and the world’s most pristine environment ... all who visit have a responsibility to help keep it this way ... [the] wilderness/aesthetic values” (see Summerson & Riddle, 2000). As stated by Landau (2002, p. 35), this is consistent with the philosophy of Antarctic tourism pioneer Lars-Eric Lindblad: “You can’t protect what you don’t know.” According to IAATO, they are “creating ambassadors to the last great continent” (Denise Landau, personal communication, April 29, 2004), and these are the type of benefits discussed by Marsh (2000) who mentions IAATO’s claim to creating a “corps” of ambassadors. Interestingly, Bauer (1997, p. 183) contends, “Tourists themselves do not see themselves as ambassadors, but that other groups, in particular tour operators, like to attach this label to them, perhaps to justify their own actions.” This quote is in direct opposition to some of Bauer’s earlier arguments (see Bauer & Diggins, 1994).

Figure 2.2 Excitement profile of a successful polar cruise experience. (Source: Grenier, 2004, p. 269)
More generally, Orams (1997) stated that educational psychology points toward the difficulties in changing human behaviour, especially over a short timeframe of the visit. However, Suedfeld (1987) stated that even a short exposure can provide change following an extreme experience. The extreme experience is usually confined to traumatic events inserted into an everyday environment, but there is reason to believe that extreme and unusual environments can have the same effects (Suedfeld, 1987). Extreme environments require advanced technology to survive, while unusual environments are grossly different from an individual’s normal environment (Suedfeld, 1987). Both may be pertinent to the RSR, however, given the comfort and normalcy that technology provides to visitors; perhaps the environment is closer to extreme, at least for the most part. That is not to say it is a usual environment, but again, technology allows for a degree of “usualness” with the comforts of home.

Under the auspices of the New Zealand Department of Conservation, Cessford (1995) looked at the benefits provided by allowing the public to visit New Zealand’s protected islands under the management of the DOC. Although the geographic area is not Antarctic, Cessford’s (1995) study on Little Barrier Island and Tiritiri Matangi Island provides insight into the benefits of change in conservation values, and as a comparison to sites that are similarly protected and isolated. Even without mentioning the multi-phased approaches examined earlier in this section, Fig. 2.3 offers a schematic diagram of Cessford’s (1995) research investigation.

![Diagram](image)

**Figure 2.3** A cycle of conservation benefits. (Source: Cessford, 1995, p. 10)

With questions related to current DOC practices, this study lacked the complexity and information beyond that specifically required by DOC, but did make some specific points as to the connections between a before, during, and after cycle of change, linked to knowledge increase, learning, and commitment. Interestingly, actual action beyond commitment or intention is not mentioned. Cessford’s (1995) study concluded that tourists do see a greater need for conservation and management post-visit, and tourists also become more involved with conservation groups after their experience.

Within the broader context of understanding Antarctic visitor experiences, Cessford and Dingwall (1996) expanded on Cessford’s (1995) benefits that work provided, and put conservation, experience, and values in a sub-Antarctic context, yet still through concepts important primarily to the DOC (current management and
interpretation). McIntosh’s (1999) study looked beyond the immediate benefits of the on-site experience [the outcome from Cessford’s (1995) work]. The conclusions of this research (McIntosh, 1999) were that the outcome of the heritage tourism experience was insightfulness, with longer-lasting benefits to the individual and society. Insightful (McIntosh, 1999) or mindful visitors (Moscardo, 1996) are perhaps in the three steps (conservation benefits) illustrated by Cessford (1995), but does this sense of heightened awareness act as a baseline to the action of ambassadorship? Stepath (2000, no page number) defined awareness as “realizing that a problem exists, not necessarily rectifying the problem.” As examined by Thapa and Graefe (2003), does this awareness account for intentions in areas such as political activism, education, changes in consumerism, and community activism, either in an Antarctic or more general sense? The role of enthusiastic ambassadors for the Antarctic is anecdotally expressed at best. In examining experience, is it the ultimate expression of a positive outcome?

2.3 Experience in Tourism and Antarctic Tourism Literature

While Prentice et al. (1998) have posited that tourism as an experience can be examined in five ways, the following section examines how tourism has utilized the hierarchical approach, which encompasses the multi-phased and extraordinary experience approach used in this study.

2.3.1 Tourism

Ryan (2003) has examined tourism experience through some of these approaches, ending with a model of expectations and satisfaction (shown in Fig. 2.4). Ryan’s work (1997, 2003) places the tourism experience between the constructs of expectation and satisfaction. Tourism experience is essentially an examination of time and an event in time with varying degrees of authenticity. The complexity of understanding experience is thus clearly dependent on the mixture of, or propensity to use, a single-study approach. The study of tourism tends to use one or many approaches “borrowed” from wider disciplines and thus lends itself to a multi-disciplinary understanding of experience. Yet, since the study of tourism borrows so much of its theory from other areas, it is sometimes seen as theoretically weak and unfocused. Ryan’s discussion of experience being between expectation and satisfactions gels with Cessford’s (1999) notion of recreation experience; recreation also being a broader discipline from which tourism borrows. Recreation experience encompasses the interactions of ‘why do it’ (motivations/expectations), with ‘what happened’ (process of experience), and ‘how it went’ (satisfactions). Recreation experience combines “the on-site perceptions of the social conditions, physical conditions, and expectation fulfilment that individual visitors have while engaging in an activity at some setting” (Cessford, 1999, p. 10).

“Hierarchical models” are derived mainly from studies conducted in North America to develop and assess specific management applications, such as the Recreation Opportunity Spectrum (ROS) (Prentice et al., 1998). The use of the term “hierarchy” refers to the fact that, as a result of the experience, there are first-order outcomes that may lead to subsequent outcomes, termed a “benefit chain of causality” in some cases (see Bruns, Driver, Lee, Anderson & Brown, 1994). Kelly (1981) grouped such benefits into three categories: personal, societal, and economic. Most studies that have attended to the tourist experience have adopted the hierarchical model (see McIntosh, 1999). Hierarchical models of experience offer a potential for benefit segmentation of tourists—an alternative to socio-demographic segmentation (Gitelson & Kerstetter, 1990).
regards to this research, hierarchical models cover all stages of time (before, during, and after the visit), allow for the identification of potential benefits, and allow segmentation with few a priori constraints.

**Figure 2.4** Experience—links between expectation and satisfaction. (Adapted from Ryan, 2003, p. 120)

In the overall context of experience (which includes motivations and values), a benefit chain of causality indicates that activities are undertaken to gain an experience that is beneficial to oneself or society (Manning, 1999). Benefits-based approaches, such as those outlined by Booth, Driver, Espiner, and Kappelle (2002) have been used in a number of tourism studies. For example, McIntosh (1999) used a benefits-based approach and thus a hierarchical model when looking at heritage tourism experiences. The specific model, the Recreation Demand Hierarchy (Driver, Brown & Peterson, 1991), was applied to understand value in heritage consumption from a consumer behaviour context.

Hall and Weiler (1992) claimed that for adventure tourism, the environment is simply a backdrop for the activity, whereas mountaineering studies (see Ewert, 1985; Maher, 1999) have found that appreciation of the mountains is likely a motivation that comes over time. Research such as Mitchell (2005), Mitchell, Hall, and McIntosh (2000), Moran (1999a, 1999b), and Pearce (1982) are examples of the few studies within tourism to examine experience longitudinally, based upon empirical evidence. Many tourism studies mention experience as a construct, but then gloss over its theoretical aspects. In one text explaining cruise experience that could relate to Antarctica (Douglas & Douglas, 2004), there is only one chapter on cruise passenger behaviour. Such work provides an account of the industry, its ships and divisions, and the author’s observation of their own cruises. The adventure or expedition cruise experience is mentioned for five pages, labelling such experiences as educational, flexible, and lacking many of the typical cruise amenities.
Obviously, this glossing-over of the concept is not wholly the case; as such, a number of studies have conceptualised the nature of experience to a variety of attractions and locations (see Beeho & Prentice, 1997; Borrie & Roggenbuck, 2001; Masberg & Silverman, 1996; McIntosh & Prentice, 1999; Patterson et al., 1998), and for various activities (see Arnould & Price, 1993; Celsi, Rose & Leigh, 1993; Hull et al., 1996; McIntyre & Roggenbuck, 1998; Schanzel & McIntosh, 2000). While these studies have addressed the nature of tourism and leisure experiences holistically, they have not done so in a remote location such as the Antarctic continent.

Leisure research by Phelps (2001) discussed visitors’ experience at heritage attractions, but in the sense of visiting places with “added value” as a pilgrimage. Phelps (2001, p. 134) recognised a journey for the “pilgrims”: “awakening,” a longing or call for departure; “ordeal,” the path to get there; “arrival,” finding oneself; and “return,” the reintegration with society. These steps on the journey reiterate the liminality of experience, and the respective extent shown toward the path and the destination (Turner & Turner, 1978). Phelps’ (2001) work also shows some of the interconnectedness of experience, which is similar to the discussion of self-connecting to objects and times examined by Turner (1986). Cousineau (1999, p. xxvii) stated, “Travellers cannot find deep meaning in their journey until they encounter what is truly sacred.” This places the pilgrimage and the journey in a context that may hold true for the RSR. It is the contemplation of the journey, which may be “value-added” for RSR visitors, as recognised by Edensor (1998) at the Taj Mahal, and in Urry’s (2001) “tourist gaze.”

In combining leisure with tourism, Pearce and Caltabiano (1983) transformed Maslow’s (1970) hierarchy of motivations into a travel career ladder (TCL). Maslow (1970) initially set up a hierarchy of needs which saw a person striving to fulfil physiological needs, then safety needs, love and belongingness, esteem and confidence, and finally self-actualisation. Self-actualisation could be of a different perspective and importance to each individual. Perhaps this self-actualisation is in line with pilgrimage as it involves “finding” or understanding one’s place in their environment (Maslow, 1970). At the physiological level, tourists may look for specific activities, food and drink, and relaxation. For self-esteem needs, tourists may be looking to develop themselves educationally (Pearce & Caltabiano, 1983).

Pearce (1988) has since gone on to refine the travel career model to include self and other directed motivations for the first four stages. The fifth stage, self-actualisation, then becomes the point at which self and other categories meet. In the refined version of the TCL, tourists may interact between both the self and other directed sides of the model, but the principle behind Maslow’s hierarchy of not moving on until lower needs are met still holds true (Pearce, 1988). All of this is congruent with the work of Iso-Ahola and Allen (1982) when looking at leisure needs. The leisure needs are relative constructs, which cover a variety of human feelings and change over the duration of an activity (Iso-Ahola & Allen, 1982). Of the basic needs, three deal with interpersonal relationships (perhaps the love and belongingness level of the Maslow’s Hierarchy), two with competence (Maslow’s esteem and confidence) and two with escape (self-actualisation). Iso-Ahola and Allen’s (1982) divisions are clearly related to work specifically dealing with tourism.

### 2.32 Antarctic tourism

Mason and Legg (1999, p. 81) noted several topic areas that need to be addressed with regards to Antarctic tourism:

1. The motivations of tourists.
2. The quality of the tourist experience.
3. The nature and quality of the tourism resource.
4. The impacts of tourism on the tourism resource.
5. The effectiveness of current tourism regulations.
6. The relationship between scientific work and tourism.

The first two topics on Mason and Legg’s (1999) list are also echoed in the writing of other Antarctic tourism researchers (Davis, 1999; Stonehouse, 1994), yet any examination of experience has been limited. Hemmings and Roura (2003) stated recently that tourism is becoming a blurry subject as the product diversifies, and thus the experience is also becoming further diversified—but, what is meant by experience? Primarily, studies that have given attention to tourists’ experiences in Antarctica have generally reported their experience as a summary of motivations, image, or satisfaction while already on site, either at the beginning and/or end of the tourist’s voyage (see Bauer, 2001; Cessford & Dingwall, 1996; Marsh, 1991a, 1991b). However, Andersson (1999) did examine needs satisfaction and travel experience through the constructs of Pearce’s (1988) TCL. Like other Antarctic work, Andersson employed surveys while travellers were already aboard Antarctic tours. Previous studies have also focused on issues relating to visitor management or documentation (Davis, 1995, 1999; Enzenbacher, 1995; Hampson, 2002; Maher, 2006; Tracey, 2001), or have mentioned the possible relationship between regulations and experience (Johnston, 1997, 1998). Only two of these studies (Davis, 1995; Enzenbacher, 1995) have empirically examined the social psychological side of the tourist and their experience (although only as somewhat of a tangent), which leads to this research filling the gaps addressed in the first and second research objectives.

Codling (1982) provided a good examination of experience, but from a non-theoretical approach with a limited sample. From one voyage of the World Discoverer on the Antarctic Peninsula in 1980, Codling (1982; nee Reich) re-examined some of the secondary results she gathered through earlier work (Reich, 1979). Three questions arouse in the 1979 work, and were answered through Codling’s (1982) own Antarctic experience: 1) how long were tourists on land; 2) what were their activities; and 3) what were their responses to the visit? The first two questions have been examined through many academic and industry sources since 1980, but the third remains to be fully revealed. Regardless of how many studies have examined parts of the experience, none have fully conceptualised the visitors’ response in combination with how they envisioned the trip or behaved while there. Herr (1989) also mentioned experience, but as with most other Antarctic tourism research, theoretical discussion of experience is not furthered beyond a description of the tourism industry, current activities, and discussion of conservation/legislation.

Tracey (2001) mentioned the tourism experience, but as with other management-focused studies (Davis, 1995; Enzenbacher, 1995; Hampson, 2002; Maher 2006), this is only in passing. Although not expanded upon, Tracey (2001) divided experience into the categories of attractions and experience, education as part of experience, and other activities. Experience seems to be used in this instance as an opportunity to discuss what the activity of Antarctic tourism might include.

While specific sources are unlisted, a breakdown of Tracey’s (2001) table is the following (see Table 2.1): the resource area; reported motivations; attractions; and the range of opportunities offered by operators. Several other studies have placed attractions and experience in a clearer light. Splettstoesser and Folks (1994) discussed the attractions of Antarctic visits as wildlife, solitude and the pristine environment, wilderness, absence
of crowds, scenery, and status. Wace (1990) added historic and scientific aspects to his discussion. Stonehouse and Crosbie (1995) recognised the idea of a changing experience, while Hemmings and Roura (2003) noted that with more and larger vessels principles of the experience such as being intrepid, being on an expedition, and exploration are becoming harder to convince passengers of when marketing the experience.

Table 2.1 Elements of Commercial Tourism Experiences.

<table>
<thead>
<tr>
<th>Element</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wilderness factors</td>
<td>Remoteness, solitude, pristine nature, lack of infrastructure, uniqueness</td>
</tr>
<tr>
<td>Scenic grandeur/ aesthetics</td>
<td>Seascapes, icebergs, ice cap, glaciers, sea ice, mountains, extended daylight, scale</td>
</tr>
<tr>
<td>Climatic/physical</td>
<td>Extreme cold, extreme wind, ocean travel, presence of sea ice, peacefulness, solitude, uniqueness of landscape, ice-free areas, lakes and islands</td>
</tr>
<tr>
<td>Activity-oriented</td>
<td>Ship travel in sea ice, walking, photography, ice climbing, mountaineering, nature observation, IRB cruising, adventure, challenge, diving, kayaking, skiing</td>
</tr>
<tr>
<td>Biotic</td>
<td>Penguins, seals, whales, mosses, lichens and flowering plants, biology lectures, nature in action (breeding, feeding), environmental awareness, krill, plankton, aquatic species</td>
</tr>
<tr>
<td>Scientific/educational</td>
<td>Geologic features, biotic features and systems, science in ice-free areas, lakes, islands, climatologic features, glaciological features, lectures</td>
</tr>
<tr>
<td>Research/human living</td>
<td>Station visits, internationalism, interpretation of science activities, lectures, survival, challenge, hardship, achievement, adventure</td>
</tr>
<tr>
<td>Heroic/historic</td>
<td>Historic huts, sites, cairns and monuments, places of cultural significance, empathy with historical hardship</td>
</tr>
</tbody>
</table>

(Source: Tracey, 2001, p. 145)

Tracey’s (2001) discussion of the educational aspects of the tourism experience focused on what Stonehouse (1994) mentioned as the pattern of lectures and briefings used in Antarctic cruising since the 1960s. The variability of lecture quality and topics are well documented by past works (see Davis, 1995; Enzenbacher, 1992a; Rubin, 2005; Thomas 1994). Tracey’s (2001) other activities is again an example of listing unique activities offered by specific companies, which may alter the ‘typical’ Antarctic tourism experience.

With little theoretical depth beyond a description of experience, and having done no primary fieldwork with Antarctic tourism operations, Tracey’s (2001) work summed up the Antarctic tourism research situation. Despite earlier recommendations from
research in the early to mid-1990s, things seem to have stayed the same. Using the term “visitor,” Tracey (2001) stated,

The visitor must form a primary consideration in any system. Tourists represent an important group of the global public for whose good the resource is being managed, and, in the absence of direct mechanisms for public consultation in ATS matters, the rights and interests of tourism users should be taken into account. Ignoring the desires of tourists when developing a system could lead to provisions that are unrealistic or unworkable, and to a greater potential for noncompliance. Visitors also influence decision makers. A good understanding of the visitor experience and visitor motivations can provide an indication of demand, and help forecasting change. (p. 380)

2.4 Background Perspectives on Experience

In explaining the multi-phase/extraordinary framework used in this research, such a framework grew out of the hierarchical approach mentioned by Prentice et al. (1998). The other four ways experience was characterised will now be presented; first with relevance to the discipline they originate from, then with regards to a critique as to why they were not used explicitly in this research. The other four approaches mentioned by Prentice et al. (1998) were: flow, planned behaviour, typological, and insider-outsider.

2.41 Psychology

From the perspective of psychology, Gendlin (1962) stated that we are experiencing something “whenever we feel something, whenever we mean something, whenever we live in a situation, whenever we think, [thus] experiencing is obviously so ubiquitous . . . we must take it to be a very fundamental phenomenon” (p. 14). Furthermore, “every situation, behaviour, and concept . . . every meaning we have and every responsive event that occurs—involves and shapes (“symbolizes”) experiencing” (p. 18).

Reed (1996) believed that with the loss of primary experience, “we shelter in the pseudo and virtual realities created for us by others and take our own paths less and less frequently” (p. 5). Primary experience is defined as “the ability to experience the world around us accurately and use this experience to think carefully” (ibid, p. 158). In today’s world, it is as if experience must be, in a sense, an adventure. We are so accustomed to a bland, routine life that we cannot treat experience as the distillation of everyday life into wisdom, it is “a casualty of current trends in work, education, and everyday life” (ibid, p. 158). This kind of primary experience “is nothing fancy . . . [it] consists simply of what we can see, feel, taste, hear or smell for ourselves” (ibid, p. 158).

Regardless of the approaches used in recreation and tourism, most draw heavily on the discipline of psychology when attempting to understand human interaction and experience. Psychological literature has helped to define experience as used in this research, and has developed the approaches of flow and planned behaviour.

2.411 Flow

Experience, as a psychological construct, could be discussed in terms of the “flow” state. Flow, as described by Csikszentmihalyi (1975), is outside the parameters of worry and boredom. A consequence of a flow experience is the ultimate escape, and ‘self-forgetfulness’. Individuals seeking flow may strive for situations where one feels
control, as opposed to the apathy and alienisation of modern life (Csikszentmihalyi & Csikszentmihalyi, 1990). An underlying assumption of the theory of flow is that there “are ways for people to test the limits of their being, to transcend their former conception of self by extending skills and undergoing new experience” (Csikszentmihalyi, 1975, p. 26). Flow is a state of engagement, which ideally would be a result of pure involvement (Csikszentmihalyi & Csikszentmihalyi, 1990).

Within one’s process of visitation, they may be able to experience flow as a portion of their on-site behaviour and experience. In Fig. 2.5, Csikszentmihalyi (1975) charts opportunity and capabilities to express the relationship between anxiety, boredom/worry, and flow.

![Flow Diagram](source)

**Figure 2.5** A graphic representation of flow theory. (Source: Csikszentmihalyi, 1975, p. 49)

Flow, as an approach to understanding the visitor’s experience, describes a state of engagement at a particular moment in time. This state is associated with an optimal level of arousal in the human being, and thus has been most investigated in adventure, risk-taking, and similar forms of recreation and tourism. Flow is an excellent model for studying an instance in time, most often revealed by risk-taking or adventure activities. However, given that visitor experience in the RSR is generally an extended period of time (at least one week, but more likely 3+ weeks), flow theory may have only a partial applicability in that certain experiences or moments in time are felt as immediate occurrences that may reach “optimal arousal.” Optimal arousal is itself a relative state, and there may be short bursts of the flow within the days and weeks on a cruise ship, but even given that flow can be exhibited over a long time, it is unlikely visitors are in a state of optimal arousal for their entire visit. Mitchell (1983, p. 191) wrote of a state beyond flow, specifically with regard to mountaineering, “persons are both drawn to the mountains in search of flow and driven to that search by alienating circumstances in their occupations and other central role experience” or “perhaps the most important thing learned from a study of climbers is the potential of flow in daily life” (p. 225).
2.412 Planned behaviour

Can anticipation have an impact on later experience? This theoretical viewpoint is captured in the “expectancy-value” model. The expectancy-value model states that the expectancy or likelihood of an action creating a certain outcome, combined with the attractiveness of that outcome, come together to create the motivation to pursue such an outcome. With regards to a visitor’s experience, this model is most closely associated with Ajzen’s (1991a, 1991b) theory of planned behaviour (TPB). This theory suggests that behaviour may be predicted by one’s intentions, and these intentions are in turn influenced by one’s attitudes toward the behaviour, beliefs about social norms regarding the behaviour, and one’s belief about his or her ability to carry out the behaviour (Ajzen, 1991a, 1991b).

Looking at experience using planned behaviour methods seeks to predict goal-oriented behaviour (Prentice, Witt & Hamer, 1998). From a basis in consumer research, such experience is modelled by “expectancy value” approaches, with the potential to evaluate behavioural beliefs in terms of benefits sought (Bagozzi & Warshaw, 1990). Consumer research into behaviour has uncovered the following key areas: motivations, diverse activities, the process over which a consumer moves, variance in timing and complexity, differing roles, influence by external factors, and differing behaviour amongst individuals (Wilkie, 1994).

The theory of planned behaviour is a valid and useful model for many contexts. However, the TPB predicts for behaviour and unless one equates behaviour with experience, using it as a model for visitor experience goes beyond its intended use. Furthermore, the TPB approach would only investigate experience from a “before and during” perspective, and not investigating how an on-site experience translates to a recall of that experience and the considerable outcomes such on-site experience creates. One could argue that it could investigate the idea of ambassadorship, but that would only be the case if the individuals themselves sought that goal. As it stands anecdotally, it is the industry which seeks that goal. Overall, these points make the use of the TPB limited for the purposes of this study, as specifically shown by Research Objective 2.

2.413 Psychological research in Antarctica

Typically, studies of people in Antarctica have involved understanding the psychological state of base personnel. Such studies (see Steel, 2001; Suedfeld, 1987, 1991; Taylor, 1969, 1973, 1987) typically examined aspects such as mood, prediction of performance in Antarctica, the effects of isolation, and yearning for home. From Taylor’s earliest work (1969), Antarctic service motivations were grouped into three categories: 1) desire to save money; 2) desire to have an interesting experience; and 3) desire to increase knowledge, prestige, and experience. The last two of these motivations could have a direct cross-over to visitors, and while not tourism research, Taylor’s work (1969, 1987) was based around the New Zealand programme, and focused specifically on the RSR.

Many psychologists have equated the Antarctic experience with a confined experience, often treating it as an analogue for future human situations such as life in outer space (see Blair, 1991; Suedfeld, Steel & Palinkas, 1992). Perhaps those studies most related to visitors and their short-term experiences were ones that examined the notions of group dynamics or connections to place (see Steel 2000; Steel, Suedfeld & Palinkas, 1993). Suedfeld (1991) mentioned the psychology of polar explorations and expeditionary shipping, which may also have some overlap with visitor experiences.
Taylor (1990) summarised some of the earlier psychological studies in the RSR related to work, personnel selection, and the “call of the Antarctic,” but also weaved them together with the experiences of exploration in the RSR. In the end, Taylor (1990, p. 256) even related such experiences to the “seemingly inevitable tourist expansion.”

Cravalho (1996) focused on one aspect of experience from a psychological anthropology perspective. Using an ethnographic approach, Cravalho (1996) studied winter-over personnel at McMurdo Station for a period of ten weeks. The impetus for Cravalho’s (1996) work was previous psychology studies [such as Palinkas (1992)], which referred to the condition of “winter-over syndrome” (p. 654) in relation to base cultures. Although the sample group examined by Cravalho (1996) stayed much longer than visitors normally do, and during the winter, the study was conducted in the RSR and focused on the examination of the psychosocial adaptation to the experience, by both civilian and military personnel. Visitors are unlikely to experience the “toast” or burnout described by winter-over personnel, but Cravalho’s (1996) examination of lived experience through interviews and observation versus surveys and secondary exercises provided valuable methodological consideration, as did the exit interviews undertaken by Steel, Suedfeld, and Palinkas (1993, p. 341) for building “a more complete understanding of the polar experience.” This complete understanding is an important conceptual underpinning to the research in terms of Research Objectives 1 and 2. Psychological research in Antarctica also has important implications for choosing research methods, as discussed in Chapter 3.

2.42 Sociology

The final two approaches characterised by Prentice et al. (1998) are based on the discipline of sociology. Both the insider-outsider and typological approaches have a history of use in tourism (and recreation, as well). The insider-outsider approach can be categorised by its distinction between the experience of “insiders” (i.e., natives to a particular destination), and the experience of “outsiders,” who are nominally tourists. It is posited that there are differences in awareness and understanding, and that tourists attempt to develop insights or construct meanings comparable to those thought to be held by natives (Prentice et al., 1998). Antarctica has no indigenous or stable, long-term residential population; thus, the applicability of the insider-outsider approach is open to question. While applicable to a wide variety of destinations, it cannot be applied to an area that has no “natives” per se, using that term’s most narrow definition. However, one could argue that base personnel and other individuals (i.e., scientists) who have spent a long time on the continent could be seen as insiders by short-term tourists, inasmuch as these individuals have information that can help the tourist derive insight or construct meaning. This point is contentious: base personnel and scientists, not being indigenous or residents on the continent, could only be considered as more informed outsiders, and thus we are faced with a “more outsider–less outsider” model. Such a criticism has already been made in a non-Antarctic context, whereby with a decreased sense of place attached to areas of the western world, the degree of distance between insiders and outsiders is becoming much smaller (Urry, 1995). Moreover, an insideoutside approach may not capture dimensions of experience for an individual in that it attempts to relate experience to relative familiarity to a situation.

The typological approach to experience is an approach found in the repertoire of most social or behavioural sciences. It is the segmentation of individuals based on collecting information on particular variables, such as motivations for visiting or activities sought, to name only a few. Research in the Arctic, with some reference made
to the Antarctic, has attempted to create typologies for tourist visitors (see Grenier, 2000, 2003; Kaltenborn, 1991, 1992, 1996; Viken, 1995). These studies provided the most in-depth analysis of visitors’ experiences in remote destinations to date, despite generally only profiling the visitor and not examining the manner in which their experience has been shaped, an important distinction to be made in relation to the research objectives of this study.

Viken (1995) categorised tourists to Svalbard as “conquerors” who sought recognition for achievements as a result of their experience, “naturalists” who sought nature and beauty in their experience, and “scientists” who sought experiences with education and learning. Kaltenborn (1991, 1992, 1996) studied the Svalbard tourists’ perceptions and motivations toward the setting. Focusing primarily on naturalness, remoteness, and culture, Kaltenborn (1991, 1992, 1996) identified five typologies of tourists: the “traditionalist” looking for an experience of untrammelled wilderness, the “wildernist” who is highly aesthetic and seeking the romance of an experience in Svalbard, the “expeditionist” looking simply for a remote experience, the “contradictionist” desiring a bit of everything, and finally the “pragmatist” or “middle group” who are simply average in their desired experience. Grenier’s (2000) typologies suggested a number of different groups which may overlap, thus not being mutually exclusive. Grenier’s (2000) work was quite preliminary and based upon his subjective impressions of the situation, a common discourse in tourism research. However, his nine typologies included: the “conquerors,” looking to reach a destination; the “birdwatchers,” characterised by their interest in wildlife (birds in particular); the “photographers,” motivated to get the most out of their pictures; the “naturalists” who know a little about everything; the “experts of science” who appear to travel to get a degree; the “history lovers” who may not be interested in nature at all; the “lonely travellers” trying to escape apparent solitude; the “romance seekers” who are potentially the direct opposite of the lonely travellers in that they seek out interaction; and finally, the “cocooners,” elderly passengers looking for an adventurous image.

The typological approach to experience, although very useful in many contexts, may create more constraints than opportunities. Visitation to the RSR has a unique combination of activities, settings, and visitors. In very few other areas in the Polar Regions does one find what would typically be labelled “mass tourism transportation” (i.e., cruise ships) coupled with such extremity of conditions. This may lead to typologies not heretofore considered. Lengkeek (2001) critiqued typologies as each having different considerations, being incomparable, and thus being invalid in terms of one typology being proven or more preferred over another. Typologies in previous research (see Cohen, 1979; Smith, 1978) were set for a mass tourist experience, and even more specific eco-tourist typologies (see Duffus & Dearden, 1990) may be too general. Thus, using such typologies to encompass the visitor’s experience in the RSR may be a flawed procedure, even though experience and benefit segmentations have in the past drawn out useful subtleties in tourist behaviour.

2.43 Other perspectives on experience

Outside of the list presented by Prentice et al. (1998), there are also a number of other ways in which experience has been examined. Research in the disciplines of anthropology and education have examined experience in a number of instances, as have studies looking specifically at wilderness. All these areas give an added perspective on the three research objectives of this study.
2.431 Anthropology and education

In anthropology, experience is often examined in an ethnographic sense. Experience is of a specific time and place, generally involving the anthropologist’s interaction amongst a group. Bourguignon (1996) examined her experience in Vienna, the city where she was born. She questioned how her experience connects to historical factors, her emigration, and to her memory. Anthropology tends to focus on the “during” phase of an experience. Bruner’s (1995) examination of the tourist in Indonesia, for example, focused very much on the “during.” How do tourists become a close-knit group, travelling on a shared or common journey? How does learning occur? How is the tour guide involved? As an anthropologist conducting an ethnographic study, but also as a first-time guide, Bruner (1995) realised that tourism is inherently visual, and ethnography verbal. While quite useful as a perspective for this research, the logistical constraints of doing ethnographical research in person in the RSR were stifling. Although initially considered as a research method that would allow the research objectives to be examined, an alternative (journals and limited personal observation) was used (see Chapter 3). As a critique to the anthropological approach, the great depth of detail to the ‘during’ phase still anchors experience in a single timeframe.

From the discipline of education, the area of experiential education provides some valuable insight into how experience shapes learning through reflection, and as such, matches ideas from the multi-phasic nature of experience as well as learning in order to create changes in outcomes (Cessford, 1995). Dewey (1938) believed that education consisted of a continuity of developing experiences, with individuals (students) interacting with their environment and gaining insight and understanding from such experiences. Experiences were seen as interconnected rather than occurring in isolation, and thus there could be a process of transfer from one experience to the next. Dewey stated that, “When we experience something we act upon it, we do something with it; then we suffer or undergo the consequences” (1916, p. 163). Kurt Hahn, a key figure in the development of experiential education, was described as having a key interest in “putting students in motion . . . to come to grips with the healing powers of direct experience” (James, 1995, p. 37). Turner’s (1986) discussion of Dewey made further disciplinary connections for experience between anthropology and education.

Kolb’s (1984) experiential learning cycle (see Fig. 2.6) visually displays the learning-by-doing components of Dewey and Hahn’s work. Kolb’s (1984) work is inclusive of Hahn’s emphasis on the need to reflect on an experience to gain meaning, as well as Dewey’s emphasis that in order to impact upon future learning, experiences need connection (Frame, 2004). In relation to this, Henton (1996, p. 39) cited Aldous Huxley as saying, “Experience is not what happens to you; it is what you do with what happens to you.” In saying this, Huxley makes a point for examining experience beyond one temporal moment, as characterised by the multi-phase/extraordinary approach. This statement is a key to justifying why one must examine experience longitudinally across time, and is the point of both Research Objectives 1 and 2, and echoed in the methods of the study (see Chapter 3).

Within education, the areas of experiential education (see Warren, Sakofs & Hunt Jr., 1995) or transformative learning (see Mezirow, 1997) provide the greatest wealth of research related to the details of direct experience and reflection. Authors in experiential education also tend to bridge the gap to areas of study such as recreation (see Ewert, 1995), and spatial locations such as wilderness (see Miles, 1995). Turner (1986) discussed transformation as a result of experience, but also as formation prior to experience, bringing together the way in which learning is a spiral, whereby Cessford’s...
outcomes of learning from an experience effect a next experience. Categorically, learning is relevant to this research, as it plays such an important role (formally and informally) in the context of the visitor’s visit, and also directly relates to the ability to derive benefits from the experience (see Research Objective 3).

![Kolb’s Experiential Learning Cycle](image)

**Figure 2.6** Kolb’s Experiential Learning Cycle. (Adapted from Frame, 2004, p. 8)

### 2.432 Wilderness settings

Whereas Antarctic studies involving human beings have traditionally been based in the discipline of psychology (until recent studies of tourism occurred), wilderness studies have traditionally grown from a disciplinary perspective of recreation. The links between studying wilderness and wilderness values in Antarctica are well documented (see Cessford, 1997, 1998; Codling, 1998; Dingwall 1997, 1998a, 1998b; Summerson & Riddle, 2000). The wilderness experience and discussion of wilderness as a setting for recreational research began with the United States Wilderness Act of 1964 and the tales told by writers such as Leopold (1949), Oeschlaeger (1991), and Olson (1956, 1972). The language of this Act suggested that “wilderness is a special place, offering unique recreational opportunities” (Borrie & Birzell, 2001, p. 29). Taking the messages of early wilderness writers literally, McDonough and Braungart (2002, p. 34) believed “wild spaces are sacred, and even infrequent pilgrimages to see them can inspire a sense of wonder and a reverence for life.” Amy (2002, p. 167) continued by saying that “extreme landscape is able to flush out memories and then activate them within us to the point of letting them influence our experiences.”

Early research (see Driver, Brown, Stankey & Gregoire, 1987; Kaplan & Kaplan, 1989; Scherl, 1989) has also suggested that wilderness did indeed offer rare experiences and outcomes. For measuring wilderness experience, Borrie and Birzell (2001) indicated that wilderness studies should be broken into satisfaction approaches, benefits-based approaches, experience-based approaches, and meaning-based approaches. In critiquing the usefulness of a variety of approaches, some studies will be discussed in greater detail in Section 3.5 of this chapter.

Satisfaction approaches began with the observation that “the principle measure of quality in outdoor recreation has traditionally been visitor satisfaction” (Manning, 1999, p. 8). Satisfaction studies tended to adapt expectancy-value theories, as discussed in Section 2.412, comparing desired and actual outcomes, and based on an assumption that users of wilderness are rational decision-makers. Hence, such studies actually did little to document experience, but acted as many Antarctic tourism studies have, documenting
before and after situations from within the time on site. Satisfaction studies using
importance-to-performance measures were criticised, as the ‘average’ user does not tend
to exist. So, their use for evaluating management performance was that little could be
offered in terms of insight into the nature of wilderness experience (Borrie & Birzell,
2001).

Benefits-based approaches, as a precursor to many hierarchical studies, began
with Driver and Tocher (1979). The main differences between benefit-based and
satisfaction approaches are: 1) a focus on the psychological outcomes of the experience;
2) expansion of the notion of setting rather than just attributes; and 3) a focus on the
diversity of experience, not just on means evaluations. The Recreation Experience
Preferences (REP) scales (see Yuan & McEwan, 1989) are one tool to come from these
approaches, within the Recreation Opportunity Spectrum (ROS) framework. The
weaknesses of these approaches, as discussed by Borrie and Birzell (2001, p. 33) are that
“difficulties in establishing a consistent link between setting and recreation experience
preferences indicate that this may not be an adequate representation of the recreation
experience.”

Experience-based approaches grow from one of the most basic questions in
recreation: what is the nature of the experience, as it is experienced? The foundation
of this approach began with Clawson and Knetsch (1966) and will be discussed in greater
detail in Section 3.5 of this chapter. Clawson and Knetsch’s (1966) multi-phasic work
was widely accepted as true for many years, but was not empirically tested until Hammitt
(1980) showed the standard model to be fact. Present experience-based research has now
begun to examine the multi-phasic nature of individual phases of Clawson and Knetsch’s
(1966) work (see Borrie, 1995; Borrie & Roggenbuck, 2001; Hull, Michael, Walker &
Roggenbuck, 1996). Experience approaches have led to techniques such as the
Experiences Sampling Method (ESM) (Larson & Csikszentmihalyi, 1983) being
investigated and used (see Borrie, 1995; Stewart, 1998; Stewart & Hull, 1996). The
changing directions have furthered wilderness experience research—splitting research
between studies that have sought indicators (Borrie, 1995) from others that have sought
salient wilderness characteristics (Kaye, 1999, 2000).

Experience-based approaches have expanded the concept of visitor experience by
incorporating and interpreting various aspects throughout the course of the experience.
As Stewart and Cole (1999) have demonstrated, longitudinal conceptualisation may better
deal with the apparent connections between situational conditions and experience
dimensions. Apart from taking some of the mystery out of the experience, Borrie and
Birzell (2001) found very little weakness with experience-based approaches, apart from
the somewhat reductionist aspects, which continue to simplify what an experience is.

Meaning-based approaches generally seek to examine the wilderness experience
and place it within the constructs of a participant’s everyday life. Patterson, Watson,
Williams, and Roggenbuck (1998, p. 449) suggested that “what people are actually
seeking from their recreation experiences are stories which ultimately enrich their lives.”
This enrichment can take many forms, such as spiritual inspiration as studied by
Fredrickson and Anderson (1999). Research has often used a framework from benefits
and experience-based approaches, and sought meanings for specific aspects such as self-
affirmation or sense of place (see Arnould & Price, 1993; Duenkel, 1994; Hills, 2003;
Kaye, 1999, 2000; Potter, 1993; Williams, Patterson & Roggenbuck, 1992). Borrie and
Birzell (2001) suggested that meaning-based approaches can offer important insights, but
have limited management use and thus have yet to be widely accepted as an approach to
wilderness experience. However, in combination with other approaches there is provision
for a wealth of possibility. Thus, conclusions from 40 years of wilderness study indicate
that the best structure for understanding experience may include up to three of the approaches mentioned previously (Borrie & Birzell, 2001).

2.5 Summary

Perhaps it is now understandable why the following studies (Arnould & Price, 1993; Beedie & Hudson, 2003; Clawson & Knetsch, 1966; Driver & Tocher, 1979) were chosen as focal points for the research (see the end of Sections 2.3 and 2.4). All fall under one general multi-phase framework, but with slight differences. Clawson and Knetsch (1966) is the original study in this area, and while with limited study in the past, it provides a starting point. Beedie and Hudson’s (2003) is the most recent examination, and although non-empirical and with little reference to the other three studies, does provide a remote/extreme destination focus. Driver and Tocher (1979) provide the link with benefits-based approaches, while Arnould and Price (1993) provide a similar link, but delve more into meaning-based approaches. The combination of all is what give the framework to be used in this research its credibility. By combining approaches, the best of each may be realised to better understand experience, which is key to all the research objectives.

As a psychologist, Suedfeld (1991) indicated that in the context of remote or isolated environments, there is a need to understand the relationships between people and their environment in terms of how they behave and how they perceive the environment, as this can have important consequences regarding the resulting impacts on the environment. The experience (and the dimensions of such) are the relationships people have with both each other and the environment. The consequences (impacts) have a direct connection with the experience: learning, awareness, and action that visitors undertake.

The Ross Sea region is perhaps as far removed and different from most people’s everyday life as is possible. Thus, the anticipation would be of an “extraordinary” experience versus a “familiar” one, with extensive consideration by the individual before departure. Anticipation of visiting a remote and extreme destination is therefore likely to be very different from the nature of motivations toward experiences reported in research of more familiar locations, such as in river rafting activities (see Arnould and Price, 1993) or wildlife viewing in attraction settings (see Schanzel and McIntosh, 2000).

On site, an experience has been stated to be the subjective mental state that participants feel; that is, their occurring thoughts (Otto & Ritchie, 1996). Psychologically, how do antecedent conditions interact with this state? Within an adventure recreation context, constructs such as fear, anxiety, danger, challenge, and perceived risk combine with competence to produce the actual experience (Ewert & Hollenhorst, 1989; Priest, 1992). It is the individual’s cognition and feelings about an experience that matter most, but not wholly above sociological, anthropological, or educational factors (Dunn, Ross & Iso-Ahola, 1991). One cannot disregard the setting of the experience—wilderness, Antarctic, or otherwise. Motivations, combined with a positive educational experience (Orams, 1997) and positive vacation satisfaction may produce a post-vacation attitude change synonymous with the benefits of becoming aware (insightful and/or mindful), and thus possibly starting the action of ambassadorship. Orams (1997) suggested that in the short timeframe of a tourism experience, attitude change affecting worldview is likely not possible, but one factor that would influence this could be education. Kimmel (1999) elaborated on the use of education in wilderness settings by reviewing guidelines set out for purposeful wilderness learning and citing the importance of the tour leader “to enhance visitors’ appreciation and understanding of their surroundings within the conservation objectives for the area” (Weiler & Davis, 1993, p. 93). Tourists to the RSR
are exposed to a structured, environmentally oriented educational programme—would they then be more likely to adopt environmentally friendly practices and become more ‘green’, essentially making them into conservation ambassadors? GCAS students undergo a tremendous amount of formal learning, prior to and after their time in the RSR, and ANZ participants obviously have a great deal of passion for the region, seeking the opportunity to visit.

When creating positive outcomes or benefits, education (see Fisher & Price, 1991; Orams, 1997) and satisfaction (see Chon, 1990; Gomez-Jacinto, San Martin-Garcia & Bertiche-Haud’Huyze, 1999) seem to have a direct connection to the experience. Insightfulness (McIntosh, 1999), defined as an educated awareness, may be a necessary prerequisite to positive ‘ambassadorship’ in that awareness may begin a cycle of changing values and then behaviour (see Beaumont, 2001, Finkler & Higham, 2004; Higham & Carr, 2002 & 2003). Beeho and Prentice (1997), McIntosh (1999), and Li (2000), as well as the entire tradition of experiential education, indicate that the transition from on-site experience to benefit can be made via recollection. To that end, perhaps Sally Poncet (1992) summed it up best for the Antarctic:

We can only hope that the Antarctic will remain a continent with no political barriers; a place where the ordinary individual still has the right to see and experience; where all people, be they tourists, sailors or administrators, in comprehending the magnitude of the Antarctic, will continue to safeguard its wilderness. (no page numbers)
Chapter 3

Methodology

This chapter presents the theoretical basis of the research design, including specific details of the research methods, sampling, and data analysis chosen to address the research objectives. Specifically, this chapter will explain how the research was implemented in order to understand the experience and analyse links and transitions between phases, in turn examining potential positive outcomes of such experience.

3.1 Research Design

Any research must begin and end with its research objectives. To reiterate, the objectives of this research are the following:

1. To understand the dimensions of the experiences gained by visitors to the RSR.
2. To analyse whether any possible links exist in the transitions between the phases.
3. To examine the potential benefits derived from the experience.

From these objectives, formulating a methodology for this research involved trying to measure experience as a multi-phasic process. As discussed in Chapter 2, experience was detailed as having five phases; however, in this research the three primary phases to be researched are: 1) anticipation; 2) behaviour and experience on-site; and 3) recollection and reflection. Other studies that have examined some or all of these phases of experience include those in the areas of wilderness (Borrie, 1995; Borrie & Roggenbuck, 2001; Patterson, Watson, Williams & Roggenbuck, 1998); leisure and recreation (Hammitt, 1980; Hull, Stewart & Yi, 1992; Lee, Dattilo & Howard, 1994; Lee & Shafer, 2002; Madrigal, 2003; Stewart, 1998; Walker, Hull & Roggenbuck, 1998); and adventure activities (Arnould & Price, 1993; Beedie & Hudson, 2003; Celsi, 1992; Celsi, Rose & Leigh, 1993; McIntyre & Roggenbuck, 1998).

As mentioned in Chapter 2, Bauer (2001) alluded to a three-step (pre, during and after) process for commercial Antarctic tourists, indicating the interconnectedness of each phase, but he then only examines the anticipation phase. In this study, travel to and from RSR gateway ports was melded with the “during” stage, because as also explained by Bauer (2001), travel to and from “gateway” cities are minimal steps in the process. As noted in Chapter 2, there is a considerable research gap to study the “during” and “after” phases of visitor experience across Antarctica, which has led to the formulation of research Objectives 1 and 2. Previous studies (see Andersson, 1999; Bauer, 2001; Cessford & Dingwall, 1996; Davis, 1995; Enzenbacher, 1995; Marsh, 1991a, 1991b) have only examined aspects of the anticipation phase, generally as particular facets or moments during the visit, not as steps toward understanding the experience holistically.

In order to address the research objectives, a combination of positivist and interpretivist theoretical perspectives was deemed most appropriate. As a research assumption, positivism emerges from the traditional scientific method, which combines logic and empirical observation (Davidson & Tolich, 1999). The interpretative approach,
on the other hand, attempts to systematically analyse the socially meaningful action through interaction and observation in the setting involved, to understand and interpret how people create and maintain their social world (Neuman, 1997). As this research was posited on the basis of understanding and documenting the visitor experience in the RSR, it thus combined both paradigms to varying degrees. Amongst previous Antarctic studies, all have utilised survey research during the visit (usually at the beginning and end of the voyage) (see Andersson, 1999; Bauer, 2001; Cessford & Dingwall, 1996; Davis, 1995; Enzenbacher, 1995; Marsh, 1991a, 1991b). Whilst questionnaires are frequently used in recreation research (see Hammitt 1980; Walker, Hull & Roggenbuck, 1998) in combination with methods such as the Experience Sampling Method (see Borrie, 1995; Borrie & Roggenbuck, 2001; Hull, Stewart & Yi, 1992; Lee & Shafer, 2002; McIntyre & Roggenbuck, 1998), few studies have used qualitative methods such as interviews, or a combination of other ethnographic, phenomenological, or heuristic methodologies (see Arnould & Price, 1993; Celsi, 1992; Celsi, Rose & Leigh, 1993; Fredrickson & Anderson, 1999; Lee, Dattilo & Howard, 1994; Patterson, Watson, Williams & Roggenbuck, 1998). In the Antarctic context, Cravalho’s (1996) and Straker’s (2004) works are among the few exceptions to the overwhelming quantitative dominance. Straker’s (2004) work is unique in that it examines her own reflective journey as a way of understanding.

Associated with each theoretical perspective are a variety of methodologies and methods, concisely outlined by Crotty (1998). To provide a consistent measure of experience immediately before and after the visit, surveys were implemented in the anticipation and recollection phases, incorporating a structured approach. The longitudinal nature of the research and adaptation of questionnaires is clearly positivist survey research (Crotty, 1998), whereas qualitative methods (such as in-depth interviews, personal narrative and participant observation) were also used in the on-site phase and directly before and after it. These methods are inherently from an interpretivist perspective, and as Howe (1991), Otto and Ritchie (1996) and McIntosh (1998) showed, there is great potential in qualitatively looking at experiential phenomena. Hobson (2003) lamented the degree to which qualitative exploratory research has been all but forgotten in the formation of tourism as a research discipline.

For this research, it was proposed that using a mixed-method approach would be the most advantageous. A mixed-method approach has been shown to allow for confirmation or corroboration of the results of each method, examines a phenomenon using multiple perspectives, and compensates for single-method weaknesses by providing flexibility and validation of data (McIntosh, 1998; Richins, 1999). Furthermore, mixing methods adds a depth to the results and a comprehensive nature not possible with a single methodology (Richins, 1999). Qualitative data can provide insight from the visitors themselves, and provide reliable and valid data to complement the quantitative data (McIntosh, 1998). Patton (1980) explained that there is no magic to this as different methods provide a valuable and integrated whole, and although sometimes there is initial conflict, findings inevitably have better credibility. Brewer and Hunter (1989) have encouraged multi-method research for all fields of research, but looking specifically at experience, the work of Otto and Ritchie (1996) provides a basis for mixed-methods approaches, at least in tourism. Arnould and Price (1993) indicated the value of combining methods in the examination of the experience of river rafting. Arnould and Price (1993) utilised surveys, both pre- and post-trip, in-depth interviews, participant observation, and focus groups, which as Hobson (2003, p. 74) expressed, would allow for both “hypothetic-deductive generalizations . . . and holistically understand human experiences in context-specific settings.”
Overall, the research design grew out of gaps in previous research, and the need to examine experience holistically. As such, the following list gives a very concise summary of the research design and general mix of methods used (some deviation occurs between groups included):

- Contact made with operators and organisations in the RSR.
- Operators and organisations are prepared to participate and give access to their visitors in a number of different ways.
- Anticipation information sent out (consent form, hard-copy anticipation survey).
- On-site information sent out as appropriate, based on response from anticipation information (journal).
- For the GCAS programme, interviews took place within two weeks prior to departure.
- Visit occurs; in 2003–2004, some observations were made on Ross Island.
- For the GCAS programme, interviews took place within two weeks following their return.
- Recollection surveys sent out as email surveys (hard-copy surveys sent as required).

In this research (see Sections 3.22–3.24), anticipation was examined through six pre-visit variables, namely motivation, image, expectation, mood, thoughts on visitation, and ecological worldview. The on-site phase focused on the on-site experience as it occurred, and documented behaviour and thoughts at that specific time. The recollection phase re-examined some variables from the anticipation phase (such as mood, expectations, and ecological worldview), but also explored satisfaction and sharing of the on-site experience, as well as the experiences gained and the potential for positive outcomes that may occur or are intended to occur as a result of the on-site experience. Thus, the phases of this research were implemented both in the respondents’ home or office (wherever that was worldwide), and also in the RSR.

3.2 Research Implementation

The following section will outline the implementation of the research process. First, it will offer information about the solicitation of support from Ross Sea region tour operators and organisations, and then deconstruct the methodology into the three specific phases, revealing the particular mixing of methods that was implemented and also justifying their use. Within each phase, sections will discuss sampling, instruments, and the collection and analysis of data. Information on additional inquiry is also presented for the anticipation and recollection phases of research. Issues such as confidentiality and anonymity were explained to participants in initial communications with them (see Appendix C), and all ethics in dealings with respondents were encompassed by the full research project having approval from the Lincoln University Human Ethics Committee.

3.21 Soliciting research support

As this research was initially instigated as an Antarctic-wide project focusing only on commercial tourists, 40 operators from IAATO’s membership database were initially contacted by email in April 2002 asking for their support in conducting the research (see Appendix D). Twenty-one operations responded to this email contact; from that point,
various degrees of discussion took place. Positive responses to the email were then sent a follow-up letter (see copy of letter in Appendix E). Some of the operators who gave positive replies were unable to support the study, as they were essentially ‘travel agents’ who bring in clients for trips run by other operations, or charter vessels directly through other operators. Such is the nature of Antarctic tourism, where many operators may combine efforts to make a particular voyage feasible. In order to focus the project to a manageable size, as well as focusing on a research gap away from the Antarctic Peninsula, it was fortuitous that both commercial operators in the RSR (Heritage Expeditions and Quark Expeditions) agreed to assist with the research. This allowed the geographical focus of the research to be narrowed to the RSR, and thus the project was then expanded to include visitors beyond commercial tourists. Hence, Antarctica New Zealand (ANZ) and Gateway Antarctica (GA) were also contacted in 2002.

A summary of each operation involved in the research is briefly presented here to elaborate on perspectives of the visitor experience; however, as ANZ and GA have been described in great detail in Chapter 1, most of the contextual and historical focus will be on the two commercial operators in the RSR. It is important to note that these four operations offer different (in some cases widely different) opportunities for individuals to visit the RSR. Two are commercial operations, while two are government and public organisations. As such, methodology across each phase could not be standardised due to commercial sensitivities and widely different practical logistics. Important differences are melded into the methodological discussion that follows in the sections describing each phase of research.

3.211 Antarctica New Zealand

Established in 1996, Antarctica New Zealand is the government institute whose mandate is to “develop, manage, and execute New Zealand’s activities in respect of the Antarctic and Southern Ocean, in particular the Ross Dependency” (Antarctica New Zealand, 2004a, no page number). Antarctica New Zealand’s vision is “Antarctica: Refreshing global ecosystems and the human spirit,” which in turn has lead to the development of programmes that “advance awareness, appreciation, and knowledge of Antarctica” (ibid, no page number).

During the 2002–2003 season, Antarctica New Zealand ran five visitor programmes. These were the Artists and Writers to Antarctica Programme, the Media Initiatives in Antarctica programme, the Education Initiatives in Antarctica Programme for professional educators, the Secondary Schools Education Initiatives in Antarctica Programme, and the Education Familiarisation in Antarctica Programme. All of these programmes were included in this research; however, the Secondary Schools Education Initiative in Antarctica was only included to a degree, and the teachers were included as per all other Antarctica New Zealand programmes, but students were not due to their age (15–18 years old).

3.212 Gateway Antarctica

Gateway Antarctica (GA), a research centre at the University of Canterbury, offered its GCAS programme in 2002–2003 whereby 20 individuals had the chance to complete in-depth studies and an Antarctic field trip in the vicinity of Scott Base. As the University of Canterbury is located in Christchurch, a discussion with the director of the programme allowed for the data collection to be fine-tuned to suit the programme. Thus, with the presence of the students in Christchurch for extended periods of time, additional
inquiry (interviews) were possible, beyond that implemented with other groups. This additional inquiry has implications both for the rapport the researcher had with participants, and in the degree of data available for this programme. By undertaking such inquiry, it was hoped that the process of the students’ experiences could be further monitored in the transitions from anticipation to on-site, and on-site to recollection, and thus providing valuable information for the betterment of the second research objective.

### 3.213 Heritage Expeditions

Heritage Expeditions was established in 1985 by former New Zealand Wildlife Officer Rodney Russ, as a means to coordinate an increasing number of guiding and lecturing assignments. The company is family owned and operated, and regularly organises and leads expeditions throughout New Zealand, the sub-Antarctic and Antarctic continent in the Ross Dependency, as well as throughout Asia and the Pacific, South Georgia, and the Antarctic Peninsula (Heritage Expeditions, 2004a). It has been at the forefront of developing ecologically responsible tourism and has been awarded the Air New Zealand Ecotourism Award, the New Zealand Tourism Board award for Best Natural History Operator, and was highly commended in the British Airways–Tourism for Tomorrow Awards (Heritage Expeditions, 2004a).

Heritage Expeditions is a full member of IAATO and operates expeditions aboard the former Soviet vessel, *Akademik Shokalskiy*. With a capacity of 46 passengers, the ship is under the command of Russian officers, with New Zealand and Australian hotel and expedition staff (Heritage Expeditions, 2004b). The *Akademik Shokalskiy* was built in 1983, measures 72 metres in length, and is fully ice-strengthened. Its facilities include twin-share cabins, bar, library, and lounge (Heritage Expeditions, 2004b). The bridge is open and passengers are encouraged to spend time witnessing the captain and officers in action. To facilitate shore landings, Heritage Expeditions uses semi-rigid inflatable Naiad craft, also known as zodiaks, and amphibious ARGO tractors (Heritage Expeditions, 2004b).

### 3.214 Quark Expeditions

Quark Expeditions has been a leader and innovator in polar expedition cruises since 1991. Operating five vessels, the company has been involved in a number of successful first-ever passenger voyages, including the first circumnavigation of Antarctica, the first “Far Side” of Antarctica voyage, and the first Weddell Sea voyage (Quark Expeditions, 2004a).

As a philosophy, Quark aims to “become known as the specialist in comfortable but adventurous expedition cruises by offering interesting itineraries to unique polar destinations in an environmentally responsible manner” (Quark Expeditions, 2004a). Quark also strives to have the most dedicated and experienced staff, a commitment to environmentally responsible practices, and a historical perspective (Quark Expeditions, 2004a).

The Ross Sea region is offered on Quark Expedition’s Ultimate Antarctica voyages, which also include visits to the Australian Antarctic Territory and circumnavigations. These voyages are completed aboard the icebreaker *Kapitan Khlebnikov* (*KK*), which was built in Finland in 1981 and carries a maximum of 112 passengers (Quark Expeditions, 2004b, 2004c). Named after Capitan Yuri Khlebnikov, a distinguished Russian ice mariner in the Arctic for 32 years (Burke, 2002), the *KK* provides passengers with 54 first-class outside cabins and suites, bar, lounge/library,
sauna, swimming pool, exercise room, and shop. As with Heritage Expeditions, a full lecture programme and landings are an important part of the voyage, and the KK’s bridge is also open most of the time (Quark Expeditions, 2004c). In 2002–2003, approximately 250 passengers were aboard on one full circumnavigation and one additional Ross Sea voyage (Erica Wikander, personal communication, November 23, 2002). In 2003–2004, Quark Expeditions offered one voyage to East Antarctica to view the total solar eclipse, while three voyages also travelled to the Ross Sea. The Ross Sea voyages generally begin and end in a combination of Hobart, Australia, and/or Lyttelton, New Zealand (Quark Expeditions, 2004d). These expeditions offer the chance to visit more remote, seldom-visited wilderness areas, heroic age sites, and modern research stations using helicopters and zodiacs to access landing sites (Quark Expeditions, 2004d).

3.22 Anticipation phase

3.22.1 Sampling

In general, this study was limited to visitors to the Ross Sea region of Antarctica, 18 years and older, travelling through the four operations described in Sections 3.211 through 3.214. These four operations provide nearly a census of all visitors to the region. Initially, only visitors for the 2002–2003 season were included; however, as one operation had no responses returned for that season, contact with their visitors was completed in the 2003–2004 season. For these four operators, visitors were contacted and invited to the study in a variety of manners, dependent on the requirements of the operator and the nature of the programme.

The anticipation phase of the research was undertaken primarily between September and December of 2002. Conducted for the most part as a mail-out survey, visitors were contacted through the operator with whom they chose to travel. Sampling used in this phase was purposive, based on the author’s understanding of the population (Babbie, 2001). Respondents used their discretion to choose the manner in which they visited, but the researcher chose the participating operators based on their support of the research and the geographical area in which they operate (the RSR). In the primary season of data collection (2002–2003), all visitors supported by the New Zealand government were included in the initial recruitment (all those travelling through ANZ and GA), as well as the only two commercial operators in the region (Heritage Expeditions and Quark Expeditions). Although included in the research’s definition of visitors, yachts and adventurers were not contacted, as their unpublished and variable schedules made them difficult to find, and numbers of these visitors are typically quite low. Visitor programmes through the USAP and Italian National Programmes, both of which have operations in the RSR, were not contacted. The Italian Programme’s sole educational visitor in 2002–2003 was covered by the ANZ sampling, as at the time a joint New Zealand/Italy programme was being run. Due to the length of approval time to get contact details, those regarded as “working visitors” in the USAP were deemed too difficult to sample.

For Antarctica New Zealand’s visitors, 25 copies of the initial survey package (see Appendices H, I, and J for copies of this package) were left with ANZ’s Communications and Marketing Manager (25 being the approximate number of anticipated visitors for the season). These surveys were to be distributed with other paperwork in ANZ’s information packages. The survey packages also included a personalised letter on Antarctica New Zealand letterhead, which further encouraged participation in the research (see Appendix F).
At GA, 20 initial survey packages (Appendices C, G, and H) were given to the institute’s director to be sent out with other GCAS information to all 20 students. As the GCAS course spends an extended period of time in Christchurch before and after their travel to the Ross Sea, collection of further anticipation information was possible through in-depth interviews conducted immediately prior to their visit. These interviews were voluntary, and scheduling of such was done via email (see Appendix I), once initial surveys had been returned. Dates, places, and times of the interviews were determined by the respondent, and interview respondents were again given an explanation of the research project (see Appendix J). Interviews generally followed the schedule in Appendix K.

Visitors with Heritage Expeditions were contacted slightly differently than those with ANZ and GA. As Heritage Expeditions is a commercial company, the owner did not feel that sending an unsolicited survey or releasing its visitors’ addresses without their consent was appropriate. Thus, 92 copies of a letter (see Appendix L), enough for two RSR voyages in 2002–2003, were left with the company’s office staff. Each time an information package was sent out, the recruitment letter accompanied it; positive replies sent back to HE then meant an individual’s contact details could be released to the researcher, and the initial survey package (see Appendices C, G and H) could be sent.

Quark was again unique to both the “standard” methodology of ANZ and GA, and that used with HE. Quark (QK) would not release any passenger data, and would not mail out an initial letter. In order to contact QK passengers, the survey had to be distributed by expedition staff aboard the KK, then mailed back to the researcher either at the end of a single voyage or the end of the season. These survey booklets (see Appendix M) were designed to encompass the data collected by both the initial survey and journal associated with the on-site phase of the research. These survey booklets were thus implemented more along the lines of documenting the experience as a single moment in time, in line with previous Antarctic studies (see Andersson, 1999; Bauer, 2001; Cessford & Dingwall, 1996; Davis, 1995; Enzenbacher, 1995; Marsh, 1991a, 1991b).

Initially, 250 A4-sized surveys were delivered to the KK in 2002. These surveys were given to the KK’s Expedition Leader, then there was no communication until early 2003. At this time, the Expedition Leader replied that although the surveys had been made available to visitors, due to the weather, none had been returned in any useable format. With this lack of response, it was decided that Quark would be re-sampled in 2003–2004. In December 2003, 160 booklets were delivered to the KK’s Port Agent. The Port Agent met the KK on December 28, 2003, and delivered the booklets to that season’s Expedition Leader for the remaining two Ross Sea Voyages. The KK had already completed one voyage south of Hobart Australia, but it had been determined that due to ice this voyage may not actually make it into the Ross Sea. These sorts of logistical challenges have implications both on the methods used (some being more flexible and user-friendly than others), and in the discussion (the depth of results collected as a result of such challenges).

In order to complete the on-site and recollection phases of the research, a postal address and/or email address was collected from each respondent. A prize draw was included in the project, as it was envisioned that it may encourage participation, which could offset the logistical challenges of soliciting participants. At the very least, it provided the opportunity for the researcher to thank at least one respondent. A prize of Antarctic-related literature (two books per winner) was given to one respondent of the pilot study, one respondent in 2002–2003 and one respondent in 2003–2004.
3.222 Instruments

Specific to the anticipation and recollection phases, aspects of the surveys used in each were pilot-tested on visitors to the International Antarctic Visitors Centre in 2002. Using such visitors with an interest in the Antarctic was purposeful, and in the end invaluable to wording the questions appropriately. These visitors were surveyed both before and after their actual visit through the centre as a means to test questions for both phases (see Maher, 2003a).

The sampling techniques adopted to meet the first objective of the research with regards to anticipation meant that postal surveys were the most appropriate instrument. This type of self-administered postal survey with voluntary participation has been found to provide excellent results, provided the survey has an ease of understanding and response (Babbie, 2001). The booklet used with the QK visitors was designed to be nearly identical to the initial survey used by other groups. However, in completing the survey on board, visitors may then have been influenced by other passengers and were also no longer really in the anticipation phase of their experience.

The letter accompanying the survey (see Appendix G) was written as an introduction to the research, asking respondents for their participation. This letter also outlined details of the procedures to be followed in the project, explained who was funding the project, and contained contact information for the researcher and supervisors. Appendix G is the letter sent to visitors with ANZ, which is almost identical to the one sent to the GCAS students. As pre-survey contact had already been made with HE visitors, their letters were personally addressed. The letter for QK visitors served as an extended explanation of the entire research booklet (see copy in Appendix M). Consent forms for the initial phase were identical across all groups (see Appendix H). However, as the QK visitor sampling combined the anticipation and on-site phases of research, their consent forms did not include an option to opt out of the on-site phase (see Appendix M).

The anticipation phase survey instrument included two sections. The first of these elicited the anticipation data, whilst the second collected socio-economic demographic information and details of previous travel. Appendix C outlines the survey format used with ANZ visitors; this was nearly identical to the surveys used with GCAS and HE, as well as that included in the booklet for QK visitors. Anticipation was measured across six dimensions; these dimensions being based in the research literature presented in Chapter 2 (see Bauer, 2001; Borrie & Roggenbuck, 2001; Fridgen, 1984; Hammitt, 1980; Higham & Carr, 2002, 2003; McIntyre & Roggenbuck, 1998). The remainder of this section outlines each question, and the sources of literature used to construct it.

In terms of anticipation, motivation was the first dimension to be examined. As previous Antarctic and Arctic studies had considered visitor motivation, the anticipation survey aimed to provide a basis for comparison rather than creating new questions. This type of comparative research should allow for strengthened conclusions, greater generalisability of results, and sought to evaluate experience as multi-phased. The first 12 motivation categories for this category were revised from the surveys of Bauer (2001) and Marsh (1991a). Additional categories were from the work of Fisher and Price (1991) and the author’s personal experience as a ship-borne visitor to the Antarctic Peninsula and several Sub-Antarctic islands. Also scrutinised (for their applicability) were the questions asked in a number of Arctic studies (see Kaltenborn, 1991; Marsh & Staple, 1995; Viken, 1995). In response to the list of motivation categories, respondents were asked to rank each category from a weak reason to a strong reason for them to visit. Respondents had the opportunity to indicate if a category was not applicable to them. In
order to check if the survey has missed categories that might be important for future work, an open-ended additional space for response was also provided.

Several studies have examined the importance of image as a dimension of anticipation relating to Clawson and Knetsch’s (1966) model (see Chon, 1990; Fridgen, 1984), their rationale being that a prior image is a critical piece of envisioning (anticipating) a visit. The feature categories or components of image in the survey were adapted from the work of Bauer (2001) and Marsh (1991a). By allowing for the categories to be ranked, it was hoped that not only which aspects form an image would be revealed, but how these aspects interact as well. Both Bauer (2001) and Marsh (1991a) examined image using an open-ended question, and displayed results as percentages of respondents. This research included an open-ended addition to the question, allowing for further categories to be revealed.

The third question on the survey sought to expose the dimension of expectations from respondents, both with regards to their operator and the activities/experience undertaken. The expectation categories (as shown in Appendix C) were developed by the author, and were altered slightly depending on the operator involved. Some examination of the expectations of Antarctic tourists has been done in the past by Bauer (2001). Specifically, the HE and QK respondents were presented with two additional categories: “Professional Attitude,” and “Luxury Accommodation and Cuisine.” It was decided that these two categories were not applicable for the ANZ and GA visitors because they participate in a very specific programme and stay at a scientific station or in the field. As with previous questions, respondents were asked to rank the categories from “not important” to “very important,” in order to solicit both the presence of category importance and how categories related. An “other” category again allowed for additional answers to be revealed.

The fourth question relates to the dimension of a visitor’s mood regarding the trip prior to departure. In past experiential research, mood has been a key dimension for investigating the existence of a multi-phasic nature of experience (see Hammitt, 1980; McIntyre & Roggenbuck, 1998) and has also been examined by Bauer (2001) for Antarctic tourists. Ryan (2003) believes the role of mood is quite important in shaping the perception of the tourist experience. Russell (1980) has shown that mood itself can be reliably described as having two dimensions. The first dimension is a continuum of activation from aroused to asleep (terminology changed to activated–deactivated by Russell, 2003). The second dimension measures the tone of the mood from pleasure to displeasure. Figure 3.1 is an example of Russell’s (1980, 2003) circumplex with the four continuum mood descriptors indicated, as well as their degrees on the circumplex.

This circumplex model of mood has previously been used in a tourism context by Pike and Ryan (2004) to locate moods associated with different destinations. In an Antarctic context, a circumplex of moods has been examined with winter-over base staff at Scott Base (see Steel, 2001). The two dimensions of the circumplex are plotted as two perpendicular lines with mood descriptors being arranged in a 360° circle around the circumplex. Russell’s (1980) model included 28 mood descriptors, each with its own distinct degree. From the hundreds of common adjectives used to show an affect toward a place, Russell, Ward, and Pratt (1981) reduced the 105 most expressed down to eight. These eight dimensions were positioned at 45° angles, between the four shown in Fig. 3.1.
The assumption is that a dimension is not independent, but also a combination of dimensions (e.g., “exciting” is a dimension in its own right, but also a combination of “arousing” and “pleasant”). In this study, visitors were given the choice of 16 descriptors. This revised list of descriptors, cut from the 28 provided in Russell (1980), allowed for ease of understanding by the respondents, but provided more choice than the eight used in other studies (see Pike & Ryan, 2004; Russell, Ward & Pratt, 1981). Sixteen descriptors were deemed to be comprehensive, whereby relatively similar or duplicated moods were removed based on the author’s interpretation of the descriptor names or the close proximity in degrees of similar descriptors. This list of 16 moods included four from each ninety-degree quadrant of the circumplex (see Table 3.1). Visitors were asked to choose three moods of the 16 and rank them in order of importance (first, second, or third) according to what they thought visiting Antarctica would be like. They were given the option of choosing an “other” category if the 16 descriptors listed did not cover their moods.

![Figure 3.1 Dimensions of a mood circumplex. (Source: Russell, 1980, 2003)](image)

Table 3.1 Full List of Mood Attributes and Corresponding Degrees (out of 360°).

<table>
<thead>
<tr>
<th>Degree (out of 360°)</th>
<th>Mood title</th>
</tr>
</thead>
<tbody>
<tr>
<td>25°</td>
<td>Delightful</td>
</tr>
<tr>
<td>49°</td>
<td>Exciting</td>
</tr>
<tr>
<td>70°</td>
<td>Astonishing</td>
</tr>
<tr>
<td>97°</td>
<td>Alarming</td>
</tr>
<tr>
<td>100°</td>
<td>Infuriating</td>
</tr>
<tr>
<td>112°</td>
<td>Frightening</td>
</tr>
<tr>
<td>140°</td>
<td>Frustrating</td>
</tr>
<tr>
<td>180°</td>
<td>Unpleasant</td>
</tr>
<tr>
<td>189°</td>
<td>Miserable</td>
</tr>
<tr>
<td>210°</td>
<td>Depressing</td>
</tr>
</tbody>
</table>
As a fifth dimension of anticipation, visitors were asked about visiting Antarctica and their attitudes or beliefs toward such a visit. Specifically, these questions dealt with “tourism,” as it is generally the most visible and recognised form of visitation in Antarctica. This dimension is closely related to the sixth dimension of anticipation, the measure of the respondent’s worldview. The general versus specific examination of visitation is in line with other studies that utilized multiple scales; differing only on the dependence of their context/content (see Dawson, 2003; Thapa & Graefe, 2000, 2003).

As discussed in Chapter 2, visitors are often lauded as ambassadors or advocates for the continent; this depiction is also common elsewhere in tourism literature (see Beaumont, 2001; Higham & Carr, 2002; Orams, 1997). However, unless a baseline of their worldview is provided prior to the experience and then re-measured post-visit, how can this statement be made? If a visitor is already conservation- and environment-oriented, then maybe the trip was not the catalyst, and [as Beaumont (2001) has said] we are preaching to the converted. It could be that as Ryan (2003, p. 327) indicated, “There exists neither a political will nor public willingness to change patterns of life . . . movements are simply commodifications wherein tourists justify their explorations in terms of assuaging guilt rather than a serious concern about environmental issues.” As visitors are on holiday or a unique situation, there is therefore really no desire to worry about everyday life, or take ideals away that will influence everyday life.

To provide an examination of this sixth dimension regarding how visitors view the world, the New Ecological Paradigm (NEPr) scale (Dunlap et al., 2000) was adopted for the present study. The NEPr scale is the revised version of the original New Environmental Paradigm (NEP) scale (Dunlap & Van Liere, 1978), which has been used in a variety of tourism studies (see Carr, 2004; Higham, Carr & Gale, 2001; Jurowski, Uysal, Williams & Noe, 1995; Lück, 2000; Luzar, Diagne, Gan & Henning, 1995; Uysal, Jurowski, Noe & McDonald, 1994), as well as with diverse populations (see Albrecht, Bultena, Hoiberg & Nowak, 1982; Arcury, Johnson & Scollay, 1986; Corral-Verdugo & Armendáriz, 2000; Gooch, 1995; Noe & Snow, 1990), and regarding wilderness, wildlife, and environmental activism (see Edgell & Nowell, 1989; Shanahan, Pelstring & McComas, 1999). Whilst there are other useful scales which measure subjects such as ecological behaviour (Kaiser, 1998), and motivation toward the environment (Pelletier, Dion, Tuson & Green-Demers, 1999; Pelletier, Tuson, Green-Demers, Noels & Beaton, 1998), these have generally been used in “one-off” situations. Although all may be valid measures, the NEP has been used extensively and as such, the NEPr Scale was the most appropriate measure of worldview for use due to the ability to provide a comparison with the context of the present study.

Despite originally being published in 1992, the revised NEP Scale (NEPr) has had limited application in a tourism, leisure, and recreation context (see Floyd, Jang & Noe, 1997; Luzar, Diagne, Gan & Henning, 1998; Thapa & Graefe, 2000, 2003). More often, modified versions of both the original and revised scales have been adapted to suite the particular research project (see Dawson, 2003; Lutz, Simpson-Housley & DeMan, 1999). The NEPr scale, which is argued to be based on the work of over a decade of researcher
use and constructive criticism, improves upon the original NEP scale in three areas: by providing more comprehensive coverage of ecological worldview; by avoiding a lack of balance found in original questions; and by removing outdated and sexist language (Dunlap et al., 2000). Stern, Dietz & Guagnano (1995), having looked at the NEPr Scale in a social-psychological context, provided an argument to suggest that it does in fact provide a valid measure of the worldview of human–environment relations. In terms of content validity, Kempton, Boster, and Hartley (1995) found nearly identical beliefs to those forming the original NEP scale through ethnographic interviews. Construct validity of the original NEP scale is a result of studies that theorized that the NEP forms a primary component of environmental belief systems and then proved this (see Stern et al., 1995). In examining the NEP scale for use in a tourism context, Lück (2003) also concluded it was a theoretically valid instrument.

For construct validity of the NEPr Scale, Dunlap et al. (2000) posit that due to the findings of Jones and Dunlap (1992), correlations over time with regards to age, education, and ideology provide a degree of construct validity for the NEPr scale, which thus far lacks the type of critique utilised by Stern et al. (1995) or the diverse use of the original scale. Using the NEPr scale in the proposed research project furthers a recommendation made by Dunlap et al. (2000)—that it be used to examine the effect of specific experiences on worldview, sampling the same individual over time rather than comparing individuals in separate groups. The NEPr scale instrument measures the “primitive beliefs” one has about the Earth and human relationships to it (Stern et al., 1995). Using a metaphor of the “spaceship earth,” the scale asks respondents to indicate their opinion towards 15 statements (see Table 3.2). A five-point response format is used, asking respondents to strongly agree, agree, indicate they are unsure, disagree, or strongly disagree.

The NEPr scale improves upon the original NEP scale in that it has five facets, each of which are assessed by three statements. The five facets of ecological worldview are: 1) reality of limits to growth (statements 1, 6, 11); 2) anti-anthropocentrism (statements 2, 7, 12); 3) the fragility of nature’s balance (statements 3, 8, 13); 4) rejection of exceptionalism (statements 4, 9, 14); and 5) the possibility of an eco-crisis (statements 5, 10, 15) (Dunlap et al., 2000). In an analysis of the data, total scores are determined by assigning a numerical score to a particular response in the five-point response format. For a pro-human development response, a score of 1 was given, whereas for a pro-environment response a score of 5 was given.
Table 3.2 Statements of the New Ecological Paradigm Scale.

1) We are approaching the limit of the number of people the earth can support.
2) Humans have the right to modify the natural environment to suit their needs.
3) When humans interfere with nature it often produces disastrous consequences.
4) Human ingenuity will insure that we DO NOT make the earth unliveable.
5) Humans are severely abusing the environment.
6) The earth has plenty of natural resources if we just learn how to develop them.
7) Plants and animals have as much right as humans to exist.
8) The balance of nature is strong enough to cope with the impacts of modern industrial nations.
9) Despite our special abilities, humans are still subject to the laws of nature.
10) The so-called “ecological crisis” facing humankind has been greatly exaggerated.
11) The earth is like a spaceship with very limited room and resources.
12) Humans were meant to rule over the rest of nature.
13) The balance of nature is very delicate and easily upset.
14) Humans will eventually learn enough about how nature works to be able to control it.
15) If things continue on their present course, we will soon experience a major ecological catastrophe.

(Source: Dunlap et al., 2000)

Other questions included in the survey gathered important demographic details and trip information. Respondents (apart from the GCAS students who all travel at the same time) were asked about the dates of their visit in order to determine if other factors (such as weather or logistics) may have created an overly positive or negative response to further phases. Trip dates allowed any anomalies in responses to be followed up with records held by the operator or organisation. Questions about the respondents’ travel history were with regards to cold or remote regions, and thus how familiar the surroundings of the Ross Sea region may be. A further question specifically asked about the previous Antarctic experience respondents had. These types of questions were based on those asked in previous studies (see Bauer, 2001; Marsh, 1991a) so that results could be compared. The link is posited that having a previous experience influences current behaviour, both positively and negatively, and is documented throughout leisure and recreation literature (see Hammit, Knauf & Noe, 1989; Hammit & McDonald, 1983; McFarlane, Boxall & Watson, 1998; Watson & Niccolucci, 1992).

In asking about conservation and environmental group membership, this question directly addressed whether or not visitors could be considered “ambassadors” following their visit. It provides a baseline for the recollection phase, in order to diagnose whether those who may already be “converted” go even further and become more active members, or whether their involvement stays the same. For those who were not already members of a conservation and environmental group, initiating membership might now be an indicator of ambassadorship. Specific wording of the question followed Cessford and Dingwall (1996); however, most other Antarctic tourist studies have asked a similar question. The final six questions of the survey instrument collected standard demographic
information in order to provide a profile of respondents specific to this study. Where applicable, these questions were asked in an open-ended manner to provide as much detail as possible.

### 3.223 Response and analysis

Response rates to the initial anticipation survey varied across sub-groups (organisation/operator), and it is also important to further understand the total numbers of visitors in the region when examining the final response percentages. For 2002–2003, there appear to be 121 working visitors through the USAP, as well as nine individuals associated with the U.S. Artists and Writers programme, and six with the TEA (National Science Foundation, 2004b). Twenty-five visitors travelled with ANZ, including the single Italian educator, and 20 more with the GCAS programme. Tourists accounted for 314 visitors (227 with QK and 87 with HE) (IAATO, 2004b), and there were an undefined (but likely negligible) number of yacht and adventure visitors. Thus, the total visitors to the RSR for 2002–2003 would be 480—perhaps rounding up to 500 including yacht or adventure visitors.

With regards to specific response rates, the following table outlines definitive numbers for the anticipation phase of the project.

#### Table 3.3 Survey Response.

<table>
<thead>
<tr>
<th>Operator or organisation</th>
<th>Surveys provided</th>
<th>Number returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antarctica New Zealand</td>
<td>25</td>
<td>14</td>
</tr>
<tr>
<td>GCAS</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td>Heritage Expeditions</td>
<td>36</td>
<td>29</td>
</tr>
<tr>
<td>Quark Expeditions (2002/2003)</td>
<td>250</td>
<td>0</td>
</tr>
<tr>
<td>Quark Expeditions (2003/2004)</td>
<td>160</td>
<td>32</td>
</tr>
</tbody>
</table>

Based on response rates from ANZ, GA, and HE (56%, 60% and 83%, respectively), the overall response rate was 69%. This includes the fact that for HE there were 87 reported visitors during the 2002–2003 season, but only 36 agreed to participate in the study and were thus sent anticipation surveys. If this fact is not taken into account, the HE response rate falls to 33%. As there were no replies from QK passengers in 2002–2003 and it is unclear how many were given the opportunity to reply, those 250 surveys and 227 visitors were discounted from the study. In 2003–2004, 160 surveys were given to the company, and although it is unclear how many of those were distributed, 32 were returned. If we assume that all 160 surveys were distributed, then the overall response rate for QK is 20%. From all operators who took part in the study, a total of 87 anticipation surveys were returned, or 37% of the total 241 that can be accurately accounted for.

Analysis of the data gained in the anticipation phase has been completed in two ways. Quantitative data have been subjected to tests using the Statistical Package for the Social Sciences (SPSS), specific tests and explanation of such will be explained in the results chapters. Such analysis is appropriate with the correlational/survey design of this
research where variables are collected simultaneously rather than being manipulated as in experimental designs (Bryman & Cramer, 2001).

The content of non-numerical, qualitative responses to open-ended questions in the surveys has been analysed for themes (both similar and different). Although somewhat limited in this particular phase due to the small volume of data, this type of inductive analysis of themes or patterns arising from the data (Patton, 1980) should supplement the statistical data to give a better holistic coverage of the anticipation phase. As identified by Potter (1996, p. 157), there are plenty of analytical methods available to qualitative researchers: “None of these methods is superior to the other . . . methods are tools, and they acquire their value according to how useful they are in helping the researcher move from evidence to conclusions.” It is thus hoped that not only the qualitative methods employed, but the mixture assists with a further understanding of experience as described by Research Objectives 1 and 2 as well.

3.2.24 Additional inquiry

As stated earlier in this chapter, because the GCAS group was based in Christchurch, it was determined that an understanding of the transitions to and from the on-site phase could be undertaken, and would be a useful addition to the examining of the research objectives. GCAS students who responded to the anticipation survey indicated whether they would be interested in participating in these in-depth interviews prior to and after their visit. They were asked to provide their email address and were emailed during their stay in Christchurch to set up a time and place to meet (see Appendix I). Once an interview time and place had been set, the researcher met the participant and reiterated participant information they had previously received regarding the overall project (see Appendix J). As this was the first time the researcher had met the participant, it was important to create a comfortable, secure rapport. Quite often these interviews took place over coffee or in a location where the participant was able to relax and just “chat.”

Inducing this conversational approach to an interview, it was hoped that a participant would share their personal experience and observation of particular phenomena (see Li, 2000; Patton, 1980). In this case, the phenomenon was their anticipated experience in the Ross Sea region, as well as their views on the GCAS programme and integration into that group. Some of the principles of laddering, commonly used in marketing research (Reynolds & Gutman, 1988), were used in the interview process. Laddering uses a series of directed probes related to a specific question in order to understand the subject’s meaningful associations or linkages, creating a network or ladder toward the underlying values (Reynolds & Gutman, 1988). Despite the conversational interview approach, a schedule of questions was prepared, giving the interviews a degree of structure (see Appendix K). In many instances, further questions arose from a participant’s response, and sometimes these particular questions did not follow the line of thought the question was originally intended to address. Questions sought to extend from the anticipation survey and understand how the experience or particular dimensions may be changing.

Typically, interviews lasted between 30 and 40 minutes, with the longest being just over an hour. Interviews were taped and then transcribed within a week of the interview. Of the 20 students in the GCAS programme, eight volunteered to take part in interviews. However, only five pre-visit interviews were completed due to time constraints on the part of the respondents. These interviews took place in early December 2002, with the GCAS students travelling to Antarctica on December 19, 2002. Data collected using this method is only able to be applied against the GCAS experience,
giving a more complete picture of what transpires between the anticipation and on-site phases of experience for that particular group.

3.23 On-site phase

3.231 Sampling

Respondents in the anticipation phase of the research were invited to take part in the on-site phase of the research. As such, for the on-sites phase, the sample was composed of those individuals who volunteered during the elicitation for the anticipation phase. Overall, 41 individuals from ANZ, GCAS, and HE agreed to take part in the on-site phase of the research. As the anticipation and on-site phases were run simultaneously for QK in 2003–2004, a further 32 participants also took part. The consequences of these differences in response rate, and the actual differences in terms of how the on-site phase ran for different groups, is twofold: 1) there were a greater percentage of QK respondents, so more individual’s thoughts have been recorded; 2) the depth of response for QK respondents is less, in that those with ANZ, GCAS, and HE had already been involved in the research, and perhaps only the most dedicated respondents took part in this phase. Whether as a consequence of the second point, visitors with ANZ, GCAS, and HE did write much more in terms of volume. Both of these points have implications for the results and discussion found in Chapter 5.

Visitors with ANZ, GA, and HE stayed anywhere from 5–27 days throughout the 2002–2003 summer season. Thus, sampling from when the first collection was initiated to when the final collection was complete occurred from November 2002 through to April 2003. With QK in 2003–2004, their on-site phase took place between December 2003 and February 2004, with all booklets being received from the Expedition Leader in mid-March 2004.

3.232 Instruments

Initially, in-depth interviews and participant observation had been discussed as appropriate methods to understand the intricacies of the on-site phase of the research. However, due to financial and logistical barriers, the researcher was unable to travel with each operator on each voyage and record visitor experiences throughout the duration of their visit to the RSR. Thus, a type of personal narrative or journal was used to elicit responses regarding the on-site experience during the on-site phase while actually in the Ross Sea region. Survey methods, as used in previous Antarctic studies (see Andersson, 1999; Bauer, 2001; Cessford & Dingwall, 1996; Davis, 1995; Enzenbacher, 1995; Marsh, 1991a, 1991b) were discussed; however, in order to collect the depth of information deemed necessary to understand the experience holistically, such methods were rejected.

Particularly in the discipline of experiential education, journals have not only been used to document, but also to even enhance an outdoor or expeditionary experience (see Bennion & Olson, 2002; O’Connell & Dymet, 2003; Raffan & Barrett, 1989). The journal assists with the participant’s ability to not only reflect, but remember and apply, an important component of experiential education, as discussed by Kolb (1984). Narratives have also been used in research areas such as recreation (Tsang, 2000) and in the exploration of environmental attitude and behaviour (Shanahan, Pelstring & McComas, 1999), while personal diaries have been used in both wilderness and tourism studies to a limited extent (Fredrickson & Anderson, 1999; Markwell & Basche, 1998). Thomas (2003) stated that experience narratives provide an individual’s unique outlook
on a specific experience, which in this case is visiting the Ross Sea region. As such, although they do not provide the ability for generalisation to a population, when used comparatively, they allow a reader to understand the nuances of thoughts and emotions that occur during such experience (Thomas, 2003). The qualitative nature of the data collected by the narrative method provides depth and detail with respect to holistically understanding the nature of visitor experiences in the RSR (Research Objectives 1 and 2). This again provides definitive justification for this study to fill the gaps left by previous Antarctic works (see Andersson, 1999; Bauer, 2001; Cessford & Dingwall, 1996; Davis, 1995; Enzenbacher, 1995; Marsh, 1991a, 1991b).

While few studies have utilised journals, none have provided examples of such in the associated publications. Thus, the design of the journal for this study combined known aspects that were successful in previous research (see Fredrickson & Anderson, 1999; O’Connell & Dyment, 2003; Raffan & Barrett, 1989), the author’s understanding of the context in which the visitor’s would be filling out the journal (i.e., logistics, weather situations), and general common sense. Journals were mailed to participants at the address they provided in response to elicitation to the anticipation survey. A copy of the format of the journal is provided in Appendix N. The journal was B5 in size, with a plastic cover on the front, stiff card back, and spiral binding. This format was chosen so that the journal could withstand rough handling during the trip to Antarctica, yet also be easily mailed to and from the respondent. A return-post envelope was included with each, as was a Lincoln University pen. Specific sections of the journal were colour-coded to allow for ease in explaining when to complete specific sections, as outlined in the first page (cover letter) of the journal (see Appendix N). The second page of the journal asked the respondent to include a few photographs for a pictorial record of their on-site activities, which between different operators and organisations may have been quite unique. With regards to photographs, some respondents included a few hard-copy photographs when the journals were mailed back to the researcher, but more prevalent was that the respondent later emailed the researcher and sent digital photographs en masse. There was no specific instruction as to the types of photographs required or numbers, so those received are primarily only useful for illustrating aspects that respondents discussed.

As respondents’ journeys lasted varying amounts of time, their journals also varied in depth and length. The explanation that follows regarding the actual content of the journals, relates to the version provided in Appendix N. Generally, journals were made such that for each day the visitor was in Antarctica (or the sub-Antarctic), there were 1–2 pages available for them to write on. These pages were lined on one side; however, it was stressed that they should write as much as they felt necessary and should feel free to write on both sides of the pages. A number of respondents in this study indicated that they would be keeping their own journal during the trip; so in some cases, this was substituted for the standard journal sent out by the researcher. Such substitute journals generally had comments more focused on documenting the voyage, and less so on the respondent’s feelings. The implications of this are that there may be some variance in the type of response, but it was envisioned that some response (even if structured differently), was better than no response. Some individuals completed the standard journal, but then also sent the researcher their own extended journal. This situation likely provided the ideal examination of the on-site experience, as such responses contained a tremendous amount of detail on activities, but also contained extended data regarding feelings. Overall, there appeared little hesitation to write in the provided journals or in personal journal substitutions. As with any voluntary study, there are still limits as to the generalisation that can be made from the responses to the journals; that is, who did not
choose to participate or respond after initially saying they would? Why? What may or may not have been reported in each type of journal? How does this impact the findings?

The journal also contained an arrival survey (this was not included in the QK booklet) as a means to examine the transition to the on-site phase of experience (compare Appendices M and N). This arrival survey was designed to be completed by respondents in the first few days of the trip. The key variable to be examined was mood, as it was posited that if there were differences between anticipation and on-site, to on-site and recollection phases, surely it would be revealed in mood, as mood had previously been utilised as an indicator that a multi-phased experience exists (Hammitt, 1980). Rather than seeking three ranked responses, this mood question only sought one response. Other aspects of the arrival survey sought further clarification of how they had become aware of Antarctica in the past and how accurate such awareness had been, based on the experience as it was transpiring thus far. These questions related to the understanding of whether anticipation and on-site phases are linked, and what the role of information and education is in such links.

The final two questions of the arrival survey again sought to examine phase linkages by asking for further open-ended replies as to the respondents’ motivations for visiting. Besides such phase linkages, asking about motivation again on-site could provide some understanding of possible differences between the anticipation data gathered in this research, and that of other Antarctica studies (see Andersson, 1999; Bauer, 2001; Cessford & Dingwall, 1996; Davis, 1995; Enzenbacher, 1995; Marsh, 1991a, 1991b) which surveyed exclusively on-site, yet sought to examine anticipation-related variables. The final arrival question dealt with benefits sought, and how such benefits may be extend beyond just for themselves as the respondent, and beyond their actual experience in the RSR. This question also linked directly forward to responses that were sought in the recollection phase of the research.

The bulk of the journal sought the respondent’s story, the personal tale of what happened to them and, perhaps, their companions, while in the Ross Sea region as described in their own words. This would hopefully give comparable results to what other experience studies have found by employing in-depth interviews (Arnould & Price, 1993; Celsi, 1992; Celsi, Rose & Leigh, 1993; Lee, Dattilo & Howard, 1994; Patterson, Watson, Williams & Roggenbuck, 1998). As the ship-borne visitors first had to traverse the sub-Antarctic, this aspect of their story was included as the experience in the Ross Sea region. Questions to prompt the individual’s thoughts were offered (see Appendix N); however, these were simply to trigger the respondents to write, and full leeway was given as to whether they wrote about these questions or not. This “full leeway” approach was important so that data collected was what the respondent chose to share, as much as it was prompted as needed. Bennion and Olson (2002) promoted this open-ended, yet focused journaling. However, O’Connell and Dyment (2003), and Markwell and Basche (1998) used completely open journals. Markwell and Basche (1998) in fact used the respondents’ own personal diaries and so no prompting could be made.

At the end of the journal, a colour-coded departure survey was included to be completed during the respondent’s final few days in Antarctica (see Appendix N). This again included a single response mood question, and then a number of opinion questions that examined what they may have learned were posed. The first of these questions dealt with the competing demands of science, preservation, and business, and how their opinion may now be shaped by their on-site experience. This question related not only to the subject matter, but also to how their on-site experience links to their recollection, which was followed up on in the next phase of the research. The next question intended to gather further information about how the visitor saw geopolitics in the region based on
experience, and perhaps further reveal the place of tourism and visitation, as they had responded about in the anticipation phase. Two further questions explored key points of the experience—relating it to what was sought in the anticipation phase, and further explored in the recollection phase of research. The final two questions sought to understand the notion of benefit, just as the experience on-site was ending. Essentially, the impetus for such questions was to examine if the visitor could conceive that others would benefit, and if so, why. Again, this prompting was searching for further meaning in responses to create a web overarching the need to understand experience holistically, with phase transitions explored, and benefits examined, as per the theories discussed in Chapter 2, and all three research objectives of the study.

For QK’s visitors, the on-site phase was measured differently because it was limited to the initial survey, designed to replace the advance anticipation survey used by other response groups, and the on-site journal was more of an extended departure survey (see Appendix M). The same themes were measured throughout, and some degree of comparative analysis is possible. QK’s survey booklet offered the exact same departure survey at the end, preceded by space for an extended personal narrative or summary of the full expedition.

3.2.233 Response and analysis

The journals were well completed and many were returned with writing on each page, front and back, with occasionally a few extra pages stuffed in as well. With so few studies using journals, a comparison of response rates may not be valid because of the small number for comparison, and given the unique circumstances of each study. However, in other studies that utilised journals, Tsang (2000) only used herself in the study and thus response was guaranteed at 100%, whereas for Markwell and Basche (1998), only six of 20 students participated. In O’Connell and Dyment’s (2003) work, 62 students participated, but no indication of initial numbers is reported. For Fredrickson and Anderson (1999), 12 journals were issued, and it appears that all 12 individuals responded. Sixty-one completed journals were returned in this research—all 32 from QK (as there was no option to opt out of their cross-phase implementation) and a further 29 from visitors with ANZ, GCAS, and HE. Of the 41 journals initially send out to ANZ, GCAS, and HE visitors, seven of nine were returned by ANZ visitors, six of eight returned by GCAS visitors, and 16 of 29 by HE visitors.

Analysis methods for this phase varied only slightly. Data from the mood questions was added to that from the anticipation phase which underwent quantitative analysis using SPSS, while all the journals and observation underwent latent content analysis. As described by Dunn (2000), this involves searching the documents for themes, not only on the surface, but also amongst the meanings of statements. This type of thematic analysis involves coding what has been uncovered amongst respondents, and meshing it into a sort of ‘story’, with appropriately cited quotes. Computer programmes such as NUD*IST and its subsequent version NVivo (neural network software) were considered to code the data, but it was felt that such programmes did little for the analysis and to truly “understand” the material; coding and analysing by hand was more useful. This also allowed the researcher to become immersed in the details. The use of neural network software can manage data to track thinking, compare data and relationships, and identify key phrases (Ryan, 2000), but is not entirely necessary with a small qualitative sample.

With this hands-on analysis and the use of personal observation, and personal familiarisation with the context, one important concept to also account for was
reflexivity. Reflexivity, as defined by Hay (2000, p. 195) is a “self-critical introspection and a self-conscious scrutiny of oneself as a researcher.” As with qualitative research, each journal is from a unique individual and may simply represent only one experience; however, as I (purposeful switch to first person) weave them together, I create my own understanding based on my own experience, which is outlined in Chapter 1. What is discovered may be biased by that fact, but the key is that it is recognised and as such, documentation and observation of my own opinion has taken place in an on-going research diary. My position as a researcher influences my research as a whole. With any qualitative research, it is important to recognise bias may play a role, but the discussion of reflexivity and cross-checking data hopes to minimise such a dilemma. As Babbie (2001) recognised, we all have biases, we may all come to hasty conclusions or represent one position among alternatives. Regardless, Scott (1990) noted that personal documents have a social situation, which may make analysing them difficult as they were not completed specifically for the purposes of analysis. On the other hand, with researcher-prompted journals, although the purpose of them is clear, there is a specific type of person who may agree to complete them (Lee, 2000; Scott, 1990).

3.234 Additional inquiry

During the 2003–2004 season, the researcher had the opportunity to spend time at Scott Base, and further on-site data were gained from QK’s passengers. As indicated previously, in the ideal situation for the on-site phase, it would have included participant observation as the optimal corroboration of the verbal message through non-verbal behaviours (Howe, 1988). Observation of QK passengers was done from afar, allowing for the subjects to interact as they normally would. Although rendering an abundance of information, observation can also lack detail as to purpose and meaning (Hartmann, 1988).

These observations are presented as the author’s comments in any results discussion regarding the on-site phase. Just as photographs were collected for the other groups, this observation served to document the on-site experience as best as possible. By visiting Scott Base, the author was also able to familiarise himself with how ANZ and GCAS programs run and allowed for a similar experience to be had, despite being out of context in a temporal timeframe. Having experienced the flight down, previously travelling with HE to the Ross Sea Sub-Antarctic in 2001, and then meeting the KK and observing QK visitors, there are now many ways the author can cross-reference statements and details from the actual journal content in the on-site phase. There are ethical issues with any behavioural observations, but this research attempted to minimise such ethical issues by collecting information of an aggregate nature; that is, observation of an individual’s behaviour was recorded, but it is the aggregate results of the entire tour that are the focus.

3.24 Recollection phase

3.241 Sampling

Again, the basis of sampling for the recollection phase was based on the respondent volunteering to participate in sampling for the anticipation survey. Of the 87 respondents who took part in the anticipation phase, 75 agreed to take part in the recollection phase. Sixty individuals were contacted by email, while the other 15 indicated they did not have email access and were contacted by mail. As the dates of visit
varied amongst groups and individuals, this recollection phase took place at least two months after an individual ended their visit to the RSR. The recollection phase took place between April and June 3, 2003, thus some individuals were contacted up to five months after their visit, while others were involved just over two months following their trip. The implications of such are that perhaps some visitors could better remember their visit and were thus better prepared or more likely to respond. However, given the logistics of not knowing the visitors’ full or actual schedules beforehand, in some instance the recollection phase was dependant on when respondents’ completed their on-site journals and returned them. With specific groups, such as GCAS and the HE voyages, emails were sent out to all visitors in that group on the same day. ANZ visitors visited any time from October through February and so they are the group with the widest variety of length until recollection phase implementation. For QK visitors in 2003–2004, recollection data collection began on either March 22, 2004, or April 12, 2004, depending on which of two QK voyages the respondent travelled aboard (exactly two months following their visit).

3.2.42 Instruments

The recollection phase of the research involved recalling the experience at a later point in time. This reflection or recollection of the visit, and any longer-term benefits have implications for and how the visitor or environment may benefit from the interaction (see Beaumont, 2001; Cessford, 1995; Kuo, 2002). As a recollection phase, this portion of the project is relying on the visitor’s memories and assuming that what is remembered is meaningful to the respondent (Masberg & Silverman, 1996). Regardless of whether meaningful or not, episodic memory refers to something that occurs once at a specific time and place (Nelson, 1993). Tulving (1983) suggested that such memories are temporally dated, and as people remember both meaningful and meaningless events, both are stored based on perceptible properties. There is much debate in psychology regarding the properties of memory, so to make any certain claims on how long memories last or their fallibility would be unwarranted in the context of this research. The timeframe used in this study was deemed to be appropriate given discussion with Antarctic experts, the operators involved, and the confines of Ph.D. study. Regardless, the accuracy of memory is not directly linked to the ability for of the potential benefits (e.g., ambassadorship) to present themselves.

The methodology for this phase utilised email correspondence following the visit. ‘E-surveying’ as was set out by Schaefer and Dilman (1998) and Litvin and Hwai Kar (2001) is an extension of traditional data collection methods, which on a mass scale is able to reach respondents in a potentially efficient and cost-effective manner. Litvin and Hwai Kar (2001) stated that before e-surveying can be considered a data collection method on its own, much more research in many locales is needed, but it would be usefully incorporated as a supplement to primary methods. If a respondent did not have access to email, the data collection reverted to traditional means of collection; that is, a mail-back, self-administered survey as used in the anticipation phase. The communication of e-surveying was quite similar to that of the self-administered questionnaire used in the anticipation phase (see copies of the email and hard copy in Appendices O and P). By using personal emails to respondents rather than carbon copies or distribution lists, the confidentiality of the data was better ensured. Although virtually no research has been done to substantiate this fact, two months following the visit was determined to be a minimum recollection timeframe under which to begin identifying potential lasting effects of an experience or potential benefits.
As the basis for this recollection phase, it is important to remember the context in which the visitor’s experience and its benefits are held. In much of the literature on ecotourism, terms such as advocacy or ambassadorship are often used as justification for such activities. Nature-based tourism justifies itself by saying that through their experience, tourists adopt more environmentally responsible attitudes (Russell, 1994). In the Antarctic context, Thomas (1994) believed that tourists can be ambassadors for the conservation of Antarctica, but offered no proof by way of empirical research results.

Beeho and Prentice (1997), McIntosh (1999), Li (2000), as well as most of the benefits-based literature (see Booth et al., 2002; Bruns et al., 1994; Driver et al., 1991) suggest that the transition from experience to benefits can be made via recollection, thus potentially indicating longer-lasting benefits. Recollection is the memory of an experience or place, divorced from the actual site and time of that experience. This phase of the research thus sought to expand upon what may have occurred since the anticipation phase, furthering all three research objectives. The accuracy of such information is not vital, as the entire experience is conceptual to the person, and so it is important to understand it how they ‘see’ it versus what may or may not have actually occurred.

In following up on the anticipation phase of the research, some of the questions asked in the recollection phase were identical. Unlike Internet questionnaires described by Frazer and Lawley (2000), which were set up on a Web site and written in HTML, the survey used in this research (see Appendix O) was cut and pasted into the body of an email. This made it simple to respond to, and did not require the respondent to connect to additional Web sites to respond, which in some cases may have cost them downloading and connection fees. Each email was personalised to the specific respondent.

As sharing the experience appears to be a first step to recognising benefits for the individual or others (see Stepath, 2000), the first question in the recollection survey asked about whether the respondent had shared their experience with others. If the respondent had shared their experience, a further two sub-questions asked the respondent to explain the nature of their sharing, and to whom they had shared the experience with. As also employed by Bauer (2001), two questions were designed to understand the visit in terms of the respondent’s expectations, and how enjoyable or un-enjoyable it may have been. If specific factors had contributed to make this an enjoyable or un-enjoyable experience, space was provided for further explanation.

Changes in membership to conservation or environmental groups was inquired about, and regardless of the answer, further sub-sections clarified whether a change in action may have occurred, even if none had occurred with membership. These sub-sections were significant in examining whether even the “converted” visitors may become more involved. The dimension of mood was again tracked, reverting to the response format in the anticipation phase where individuals had the opportunity to provide three ranked responses. Further questions in the recollection phase sought a response to what the respondent had learned, as the educational component of visits may provide the direct link to changes in thinking or action, and then (as in the anticipation phase) a question sought to understand the respondent’s thoughts on visitation. Differences from the baseline in the anticipation phase would be examined with such responses as a means to understand the experience as it transpired, and specifically its onsite influence. The problem with many previous Antarctic and other studies that relate to ideas such as conservation benefits and ambassadorship is that they do not examine where an individual starts prior to their visit; thus, how can they accurately discuss benefits? The third research objective of this research would be undetectable (i.e., benefits derived from the experience) if the baseline beforehand could not be shown.
Although academics or tour operators may label visitors as ambassadors, how does this label fit with them and, concurrently, is there a measured change in their awareness or worldview as a result of their having visited the RSR? The use of the NEPr scale in this instance provided scores with which to compare against the anticipation phase results. Finally, as a means to examine the objective of the research regarding an experience transitioning to benefits, respondents were asked to evaluate whether the experience would lead to any behaviour change. Due to the proximity to the experience, this question was asked as an intention to undertake the stated behaviours because of the experience. Both general behaviours and Antarctic-specific behaviours were stated, with the respondent given the ability to rank how likely or unlikely they were to do the following based on their Ross Sea experience. Behaviour statements were similar to those found in previous studies (see Dawson, 2003; Finkler, 2001; Higham et al., 2001; Thapa & Graefe, 2000, 2003; Theodori, Luloff & Willits, 1998). As in Thapa and Graefe (2003), they accounted for categories such as political activism, education, consumerism, and community activism, both in the Antarctic and in a general sense. Specific statements of behaviour were drawn from the author’s knowledge of the context, and on what the general proverbial understanding of ‘advocacy-type’ behaviours might be. Three final open-ended questions sought clarification of the two previous scaled questions, and as a last measure of the real power of the experience, inquired as to what the most rewarding aspect of the visit was, followed by any final comments.

3.2.4.3 Response and analysis

Response rates to the recollection e-survey varied across groups, but overall, 53 of the 75 individuals responded, resulting in a 67% response rate. Mail-back responses numbered 14, while the remainder were by email. It should be noted that there were a few anomalies where an individual had the survey emailed to them, but they then mailed it back, preferring to print the survey and respond by hand. Across the four groups of visitors, eight responded from ANZ, seven responded from GCAS, 20 responded from HE, and 18 responded from QK.

Analysis of the data found in the recollection phase was treated in the same manner as that in the anticipation phase. Quantitative data, when combined with that of the entire project, was subjected to tests using the SPSS, while the content of non-numerical responses was analysed inductively. Overall, data analysis techniques for the recollection phase emphasised a focus on not just the recollection data, but also comparing or dissecting factors and comparing to the results of the previous two phases.

3.2.4.4 Additional inquiry

As in the anticipation phase, because the GCAS group was based in Christchurch it was determined that interviews during such time would provide purposeful data in a further understanding of the transitions to and from the on-site phase. Following their visit, some members of this group again participated in interviews. As in the pre-visit interviews, GCAS students had responded to the initial anticipation survey indicating whether they would be interested in participating in such interviews. The remainder of the sampling process and interview process was identical to that held pre-visit. In most cases, students were now well aware of the project and researcher, but it was still important to create a comfortable rapport and interview space. The interview design was similar to that of the pre-visit interviews, and again focused on achieving Research Objective 2, given the accessibility of the GCAS group.
The interview approach (see schedule in Appendix Q) was adapted to suit a post-visit interview, and dealt more with ‘what next’ scenarios, as a means to connect their on-site experience with the recollections and transition to being back ‘home’. Again, interviews lasted typically between 30 and 40 minutes and were taped, then transcribed. From the eight students who had volunteered to take part in this interview process, six completed post-visit interviews. Of these six, four had completed the pre-visit interview, whereas two were of the three unable to be interviewed in the pre-visit instance. The GCAS students returned from the Ross Sea region in the first week of January, and interviews took place between late January and mid February 2003.

3.3 Integration of Phases: Conclusions

As alluded to earlier, the integration of methods in this research is an attempt to better understand the visitor experience holistically. By designing a research project that specifically examined experience versus examining it as a tangent, this study is the first to do so in a context related to Antarctic tourism. Additionally, as a visitor study, the research moved beyond just the realm of tourism, and as such, some methodological challenges presented themselves in dealing with both public and private agencies, with differences in both their concern for participant confidentiality, and in terms of flexibility, needed to accommodate all groups.

By using a multi-phasic approach, this research sought to analyse whether links exist in transitions. Primarily utilizing the three stages posited by Bauer (2001), this research also sought to stay connected with the wider multi-phasic literature explained with five phases. While Bauer (2001) realised the logistical context of the Antarctic, he does not mention any of the depth of literature such as Arnould and Price (1993), Clawson and Knetsch (1966), or Driver and Tocher (1979). Thus, in working through the first and second objectives of this research, methods have been used that can accurately meld the logistics of working in the Ross Sea region with the theories of multi-phasic experience.

This chapter outlined the operations involved in the research and complexity of the research design. The mixture of approaches (quantitative and qualitative methods) was revealed, including sampling, instrument used, and response and analysis. The narrative comes from the qualitative data, whereas the facts upon which to compose it came from the quantitative data. The key approaches of this research were the combination of survey data (with the journals used on-site) and the variety of additional inquiry tools. Each method has been justified in its own right, and hopefully the reader understands why such a mixed-methods approach is useful (but particularly valuable in the context of experience and also Antarctic research). Previous Antarctic studies have not regularly examined experience beyond anticipation and recollection while already on-site, and have not utilised methods beyond surveys. Thus, in order to conceptualise experience holistically within the RSR, it was decided to draw from lessons learned in other experience research (see Arnould & Price, 1993; Beedie & Hudson, 2003; Clawson & Knetsch, 1966; Driver & Tocher, 1979), and specifically expand upon the type of mixed-method understanding found in Arnould and Price (1993).

Within the whole thesis, this chapter served to build upon the situational context of Chapter 1, the theoretical basis of Chapter 2, and complete the methodological understanding necessary for the reader to interpret the results presented in Chapters 4 through 6. In reading through the results and discussion chapters, it is particularly important to remember the methods used for each particular phase of research. For
example, results found in Chapter 5 (on-site) will be of a much more descriptive nature than the chapters prior to and following.
Chapter 4
Anticipation Phase: Results and Discussion

This chapter reveals the results and offers discussion for data collected in the anticipation phase of this research project. Following the theoretical discussion in Chapter 2, this phase is one part of understanding experience holistically. Specific to the research objectives, the results found here will serve to lay the groundwork for all three objectives by being the results and discussion for the anticipation phase as mentioned in Objective 1, offering links to the on-site phase as per Objective 2, and act as results for a baseline to determine the potential benefits derived from the experience as stated in Objective 3. In discussing the anticipation phase results, this chapter will treat all data collected prior to and at departure as belonging to this phase. As such, it includes all anticipation survey data from Antarctica New Zealand (ANZ), the Graduate Certificate in Antarctic Studies Programme (GCAS), and Heritage Expeditions’ (HE) visitors, plus interviews with GCAS students pre-trip, and initial data collected from the booklets provided by Quark Expeditions’ (QK) visitors. In the discussion, this chapter will compare the results with similar studies—both in an Antarctic context and those with a broader focus.

4.1 Demographic Profile

To begin, a demographic profile of respondents for this phase will be presented and discussed. Although this aspect came at the end of the anticipation survey (see Appendix C), it is important to understand who the respondents were before further examining their opinions and experience. While summarised in this chapter, further demographic information for this phase of the study can be seen in Appendix R.

Of the 87 respondents to the anticipation phase survey, 32 travelled with QK, 29 with HE, and 26 between ANZ and GCAS. The average age of respondents was 54; however, this age is differentially affected by the different groups of visitors. The average age for the GCAS students was 30 years, for ANZ visitors the average age was 42 years, whereas for HE visitors the average age of respondents was 60 years and for QK visitors, 62 years.

In comparison with other Antarctic studies, Davis’ (1995) research showed only 12% of respondents below 44 years, and 36% were in the 65–74 age bracket. Similar results were also found by Enzenbacher (1995)—39.3% between 65 and 74, and only 3.4% under the age of 34 years. Respondents in this study were grouped as follows: 22% below the age of 40, 30% between the ages of 40 and 60, and 48% over the age of 60. As reported by Cessford and Dingwall (1998), with regards to tourists travelling through New Zealand’s sub-Antarctic islands (and thus perhaps more similar to this study) only 13% were aged below 40, whereas 49% were over the age of 60. The gender of respondents in this study was split nearly 50:50. Cessford and Dingwall (1998) also reported a 50:50 gender split, whereas both Enzenbacher (1995) and Davis (1995) reported 44% males and 56% females.

As expected, amongst the mainly student population of the GCAS there was a lower income, and the retired or professional group of Heritage Expeditions and Quark Expeditions had a higher income. The Antarctica New Zealand group mainly filled the
Professional (N= 27) and management (N=13) occupations were the most prevalent occupations, as was retirement (N=30). While there was a variety in the previous occupation of those who indicated they were retired (e.g., toy shop owner, local politician, engineer, teacher), there was a large number of ex-professionals. Bulbeck’s (1999) study showed 65% of respondents as professional, with only 20% managerial. Interestingly, only four of the 12 respondents from the GCAS group classified themselves as students. Due to the nature of the GCAS programme, this could be expected, as ‘students’ in GCAS often have other full-time occupations, and take this programme during their holidays. Davis (1995) and Enzenbacher (1995) also showed a high degree of retired or professional occupations amongst commercial tourists; that is, the type of visitor travelling with Heritage and Quark Expeditions.

As the respondents reported their income in a variety of currencies, their income was converted into NZ dollars, and the mean income of the respondents was NZ$116,447. Income ranged from NZ$20,000 to NZ$850,000 and was double modal at NZ$60,000 and NZ$200,000. Until recently, no previous studies have presented a mean income spread, but it may be (and often is) assumed that because of the costs associated with travelling to Antarctica, respondent’s income must be high. Tisdell, Wilson, and Kriwoken (2004) presented results from two voyages on the Antarctic Peninsula, which show family income levels per annum at 20% in the AUSS25,001– AUSS50,000 range, 20% in the AUSS100,001– AUSS125,000 range and 17.5% above the AUSS$225,001 level. Further explanation by Tisdell et al. (2004) also indicated that of those with an annual family income below AUSS50,000, 90% were Swedish and 44% were retirees; in this latter case, their level of savings likely allowed them to undertake the expensive voyage.

In the case of visiting the Ross Sea region, which is even more expensive from a commercial sense than the Antarctic Peninsula region, visiting is expensive, either in time or money. Primarily, those with more money were commercial tourists and so they incurred greater financial expense, whereas those travelling through GCAS or ANZ may not have high incomes, but incurred greater expense in terms of the time involved in their programmes (application time, study time, follow-up time). An interesting note was made by Ledingham (1993), where he indicated that although the bulk of passengers he encountered as a guide had demographic profiles similar to those outlined by previous studies (see Bauer, 2001; Cessford & Dingwall, 1998; Davis, 1995; Enzenbacher, 1995), there were, however, a small category of generally younger and less wealthy who had a strong desire to visit the Antarctic and had to save for a long time to afford the fare. From 1993 to today, perhaps these are now the people who have more choices and visit through programmes such as those offered by GCAS and ANZ. When mean incomes are compared for each of the separate groups, results were as follows: GCAS—NZ$49,805; ANZ—NZ$66,538; HE—NZ$126,246; QK—NZ$161,450.

The number of days to be spent in the RSR may play a role in the experience. With a longer stay than is the norm on the Antarctic Peninsula, a higher level of commitment is necessary, but perhaps a longer stay means that the on-site experience becomes routine. Table 4.1 illustrates the length of stay for respondents, inclusive of travel once leaving New Zealand or Australia.
Table 4.1 Length of Stay in the Ross Sea Region (based upon respondents given start and end dates).

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of respondents (N=87)</th>
<th>% of overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length of stay:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 days or less</td>
<td>5</td>
<td>5.9</td>
</tr>
<tr>
<td>10–20 days</td>
<td>19</td>
<td>22.4</td>
</tr>
<tr>
<td>21+ days</td>
<td>61</td>
<td>71.8</td>
</tr>
<tr>
<td>Incomplete data</td>
<td>2</td>
<td>-----</td>
</tr>
</tbody>
</table>

Those with a length of stay longer than 21 days are typically commercial tourists with HE or QK; however, there was at least one ANZ visitor with a stay in excess of three weeks, due to poor weather creating logistical problems for a return flight. The GCAS students account for the bulk of those in the 10–20 day range, while anyone staying less than 10 days is a land-based visitor in some capacity with ANZ.

As indicated in Chapter 3, previous Antarctic experience may provide clues as to how visitors envisioned their visit. In this case only, experience relates to the other sense of the word; that is, how experienced they were. Beyond their upcoming stays in the RSR, how accustomed were visitors to the type of environment they would encounter? Table 4.2 outlines respondents’ previous Antarctic experience.

Table 4.2 Previous Antarctic Experience.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of respondents (N=89)</th>
<th>% of overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous Antarctic experience:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>65</td>
<td>73.0</td>
</tr>
<tr>
<td>Commercial ship-borne tourist</td>
<td>11</td>
<td>12.4</td>
</tr>
<tr>
<td>Overflight</td>
<td>3</td>
<td>3.4</td>
</tr>
<tr>
<td>Visited an Antarctic attraction</td>
<td>9</td>
<td>10.1</td>
</tr>
<tr>
<td>Educational programme</td>
<td>1</td>
<td>1.1</td>
</tr>
</tbody>
</table>

\(^1\) N=89, due to the allowance for multiple responses

One respondent of the nine who had visited an Antarctic attraction had actually worked at an Antarctic attraction, whilst the educational programme mentioned was the Enderby Trust’s scholarship programme, which through Heritage Expeditions offers young people the ability to experience an Antarctic or sub-Antarctic voyage. Again, as a measure of how comfortable visitors may be with the environment of the RSR, they were asked about their experience (again, used in the other sense) with other remote or cold regions (see Table 4.3).
Table 4.3 Experience in Other Remote or Cold Regions.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of respondents (N=166)</th>
<th>% of overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visits to other remote/cold regions:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>33</td>
<td>19.9</td>
</tr>
<tr>
<td>Arctic Europe</td>
<td>20</td>
<td>12.0</td>
</tr>
<tr>
<td>Andes</td>
<td>15</td>
<td>9.0</td>
</tr>
<tr>
<td>Himalayas</td>
<td>17</td>
<td>10.2</td>
</tr>
<tr>
<td>Arctic Canada</td>
<td>8</td>
<td>4.8</td>
</tr>
<tr>
<td>Greenland</td>
<td>5</td>
<td>3.0</td>
</tr>
<tr>
<td>Arctic Russia</td>
<td>5</td>
<td>3.0</td>
</tr>
<tr>
<td>Alaska</td>
<td>14</td>
<td>8.4</td>
</tr>
<tr>
<td>Svalbard</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>Central Asia</td>
<td>10</td>
<td>6.0</td>
</tr>
<tr>
<td>Galapagos</td>
<td>10</td>
<td>6.0</td>
</tr>
<tr>
<td>Easter Island</td>
<td>7</td>
<td>4.2</td>
</tr>
<tr>
<td>Other²</td>
<td>20</td>
<td>12.0</td>
</tr>
</tbody>
</table>

1 N=166, due to the allowance for multiple responses
2 All responses to other locations can be seen in Appendix S.

While Bauer (2001) did not provide a “none” option in his research, of 237 responses (with allowance for multiple response): 21% had previously visited sub-Arctic Alaska, 16% Arctic Europe, 15% the Andes, 12% the Himalayas, and 10% Arctic Canada. Greenland, Arctic Russia, Arctic Alaska, and Svalbard were also listed, but with percentages between 5% and 8%. Cessford and Dingwall (1998) simply asked about previous polar visits, with approximate equal levels of 30% having visited and 70% having not visited, over three field seasons.

With regards to membership in conservation or environmental groups, the findings of this study (see Table 4.4) differ somewhat from the results of other Antarctic Peninsula and sub-Antarctic studies. For instance, in previous studies conservation and environmental group membership was respectively higher—approximately 50% (Bauer, 2001), 59% (Bulbeck, 1999), and 59% (Cessford & Dingwall, 1996) of respondents. In a study by Marsh (1991a), 27.5% of those sampled were members of a nature conservation group (reported as 28% in Marsh, 1991b), and a similarly low 36% were members as reported for 1994–1995 as reported in Cessford and Dingwall (1998). Marsh (1991a) explained this finding in his study, saying that European and American respondents had much higher percentages of membership, while respondents from the Southern hemisphere lowered the overall percentages. In terms of profile, visitors to the Ross Sea region may potentially represent a slightly different segment of travellers than those reported for other areas of the Antarctic continent, given their membership in conservation or environmental groups. This membership question is relevant due to the continued discussion amongst tour operators that they produce ambassadors, but if this
anticipation result is any indication, visitors may already be the converted, as is discussed in other ecotourism literature (see Beaumont, 2001).

**Table 4.4** Membership in Conservation or Environmental Groups.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of respondents (N=87)</th>
<th>% of overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conservation or environmental membership¹:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>21</td>
<td>24.4</td>
</tr>
<tr>
<td>No</td>
<td>65</td>
<td>75.6</td>
</tr>
<tr>
<td>Not stated</td>
<td>1</td>
<td>-----</td>
</tr>
</tbody>
</table>

¹ For yes answers, all groups mentioned can be seen in Appendix T

One notable response to why one respondent was not a member: *No, because the office bearers do not represent the views of the rank/file members.*

### 4.2 Anticipation Variables and Opinions

As discussed in Chapter 3, a number of motivation categories have been used in previous investigations of motivations to travel to Antarctica (see Bauer 2001; Cessford & Dingwall, 1996; Marsh, 1991a). While termed motivations in such literature, these may in fact be affordances, or what the environment “offers . . . provides, or furnishes, either for good or ill” (Gibson, 1979, p. 127). To be consistent with these studies, the term motivation in both its push and pull sense will be used. These previous studies offer a measure of comparison, and as such visitors were asked to indicate the level of importance of each category in relation to their motives to visit Antarctica as a destination. A rating of “1” indicated that a feature was a strong motivator, whereas “5” indicated it to be a weak reason; respondents could also leave the category blank or answer that it was “not applicable.” The responses were reverse-coded when data were analysed; results are displayed in Fig. 4.1. The box indicates respondents’ mean score, with the standard deviation indicated by the whiskers.

In contrast to the work of Bauer (2001) and Marsh (1991a, 1991b), wildlife appears to be ranked as a lower motivating factor by the respondents of this research, whereas in each of these previous studies, it was reported as the number-one motivator. Scenery was the strongest motivator in the present research, whereas only 24 (of 91) respondents in Marsh’s (1991a) study mentioned it, and only 7% mentioned it in Bauer’s (2001) work. Again, this difference may be explained by the region. The RSR has vast views of sea, ice, glaciers, and the Transantarctic Mountains, whereas most trips to the Antarctic Peninsula spend many days at sea, interspersed with landings on small islands, and very few operators go far enough south to see this type of scenery on the peninsula.
Figure 4.1 Motivational factors for visiting the Ross Sea region.

Perceived challenge also scored relatively high in strength, whereas it was not considered a category in either Marsh’s (1991a) or Bauer’s (2001) studies. The trip being a lifelong dream also scored quite highly, while in Bauer’s (2001) research it was only mentioned by 2% of respondents. Potentially, these differences can be attributed to geographical differences between the Antarctic Peninsula and Ross Sea region. The lifelong dream to visit is likely associated with the heroic age of Antarctic exploration; the majority of the well-known historic sites of Antarctic exploration are located in the Ross Sea region. From a perceived challenge perspective, the Antarctic Peninsula is no longer the frontier destination it once was, so perhaps respondents felt that a visit to the Ross Sea region was more of a challenge.

For those travelling with Antarctica New Zealand, once they had reported their motivations in the categories provided, there was the tendency to use the additional space to reiterate their work motivations. This may seem obvious, as for all of them it was in a professional context that they had the chance to visit the RSR. Some examples are:

- The sole purpose of this trip was for work, to learn about Antarctica and the role the RNZAF plays there.
- I have new responsibilities (work) in tertiary education funding allocation.

For the GCAS students, there seemed quite a dichotomy in comments, again between personal reasons and the professional motivations that the visit held for their career. While among the commercial tourists there was again the motivation of an opportunity sought throughout their life, there was also the sense that the pending experience would bring alive what they had read in books:

- I have had a lifelong interest in Antarctica since I was at Grammar School. I have also collected most of the classic books published on Antarctic exploration.
The success of my trip to the sub-Antarctic islands was the prime reason for wanting to do this trip. These 'once-in-a-lifetime' experiences are treasures in our memory.

Among the HE and QK groups, work was seldom mentioned as a motivations apart from one visitor whose work was writing. These two groups did, however, provide a few other interesting thoughts in terms of motivation:

- **Persuasion by other people.** Trip was sponsored by my parents and I was offered a place when one member of their party became ill and unable to come.

- **Besides collecting continents, I'm collecting important latitudes and longitudes, and the Antarctic Circle was one of them.**

Echtner and Ritchie (1991) indicated that image is constructed by piecing together aspects of the information gained about a destination. The significance of features in the respondents’ image of Antarctica (not specifically the Ross Sea region) is indicated in Fig. 4.2. The respondents were asked to rank the significance of a given feature (e.g., scenery) on a scale from the most significant to the least significant. These features are shown with the mean level of significance as the box, and with whiskers indicating the standard deviation. As discussed in Chapter 3, these features (components of image) were adapted from the work of Bauer (2001) and Marsh (1991a) to provide a basis for comparison.

In terms of response, respondents tended to answer the image question incorrectly more than 50% of the time. Respondents did not use each rank (1–5) only once, but rather allowed for tied rankings. Ties occurred in 50.6% of responses versus the 49.4% responses completed as outlined on the survey. Interestingly, this problem did not occur in pilot-testing of this question (Maher, 2003a). When comparing the predetermined components in the respondent’s image, the significance of scenery was higher than that of all other features.

It was clear that scenery is the most significant feature of the respondents’ image. There was a significant difference between this factor and all others (tested using a paired sample t test). When comparing wildlife to science, there was also a significant difference. Similar to the results noted in the other responses, there appears to be justification for the interpretation that environmental factors are much more significant in a respondent’s image of the RSR than human or built ones. In Bauer’s (2001) research, respondents were asked to elicit attributes that contributed to their image of Antarctica prior to arrival. Wildlife was mentioned in 37% of responses, whereas scenery was only mentioned in 9% of responses. Tisdell and Wilson (2004) specifically asked tourists to the peninsula about their interest in Antarctic wildlife, and 94.6% expressed an interest, with 86.5% stating that it was important or very important for their journey.
Environmental attributes, which included climate, accounted for 16% of Bauer’s (2001) responses. Historic attributes were hardly mentioned by Bauer’s (2001) respondents (3%), whereas science was not mentioned at all. A contrast in these findings may be borne out of the difference between what is expected from a visit to the Antarctic Peninsula as compared to the Ross Sea region. Although science was the least significant feature in image amongst respondents of this study, the Ross Sea region is particularly known for the scientific research undertaken at McMurdo station, the American base in the Ross Sea region. Yet, this is a likely reason for why it was not even mentioned in Bauer’s (2001) results from the Antarctic Peninsula. Media portrayal of the different regions may also play a role in the features significant or prevalent in a respondent’s image of the destination. In the media, the Ross Sea region focuses much more about the vastness, snow, ice, and rock (i.e., all aspects of the scenery and physical landscape). Media and advertising depicting the Antarctic Peninsula, in contrast, usually portray wildlife as the dominant feature. The respondents’ perceptions of media portrayal will be further discussed in Chapter 5. Although limited results were reported, Smith’s (1994) study showed similar mixing of images (political, historical, scenery) for RSR visitors in 1991.

To elaborate on their image of Antarctica, a number of additional categories were mentioned by respondents in the open-ended section of the question. Primarily, responses could be placed in the categories of spirituality, space, primitiveness, remoteness, and timelessness. There was some mention of Antarctica’s geopolitics, universal cooperation, and lack of economic activity, but generally other aspects of image focused on a sense of wonder, and the unspoiled vistas, air, and light.

While Bauer (2001) mentioned tourist expectations, his work is related to image expectations (as discussed with regards to Fig. 4.2), or expectations regarding atmosphere and mood. Expectations questions in this study relate more to the operator and the categories they can affect. Figure 4.3 reveals those categories, and their significance to
respondents. The highest-ranked expectations were safety, professional attitude, and education—safety being a relatively obvious choice, with education and attitude being indications of the type and quality of experience desired.

Figure 4.3 Significance of expectation categories.

Other expectations:

*Hopefully not a once in a lifetime experience. But having an enjoyable time is good. This I think will come from everything being new and exciting and alien, i.e. the novelty value.*

Among HE respondents, “leadership” was a prevalent answer as an “other” expectation. Two Quark passengers indicated the importance they placed on interaction within the group:

*Being able to be my eccentric self.*

*Being accepted, though different.*

Mood descriptors, as chosen by respondents, have been approximated on the diagrams that follow (Figs. 4.4, 4.5, and 4.6). Each band of the circumplex (bulls eye) represents five responses (irrespective of visitor group). Moods chosen have been labelled as to their title and degree when shown on a particular circumplex. Thus, the longer the line, the greater the number of respondents who chose it; the particular quadrant of the circumplex that the line falls in indicates a group of related moods (see Fig. 3.1 and Table 3.1).

As the top-ranked mood regarding their forthcoming visit to the RSR, respondents displayed results as shown in Fig. 4.4 (N=74). Also included in this total were six “other”
moods, mentioned following Fig. 4.6. One respondent left this question blank, while a further 12 gave responses which could not be interpreted to be in any given ranking.

Figure 4.5 displays results of the second-ranked mood (N=73). In this instance, “other” was the given response on three occasions. Two respondents left this question blank, and 12 gave responses that could not be interpreted. Third-ranked moods were much more spread across the possible responses (as displayed in Fig. 4.6). Seventy-four responses were gathered in this instance, with seven ‘other’ responses. Two responses were left blank, while a further 11 could not be interpreted.

![Graph showing moods](image)

**Figure 4.4** Multiple moods of visitors; prior to visit (1st rank).
**Figure 4.5** Multiple moods of visitors; prior to visit (2nd rank).

**Figure 4.6** Multiple moods of visitors; prior to visit (3rd rank).
For all ranked moods in the anticipation phase, the “other” moods mentioned generally fit into three themes: awe, spirituality, and clarification of a listed mood. In the theme “awe” of the visit, responses included: unreal; inspiring; awesome; surreal; satisfying, but more so; and awe-inspiring. “Spirituality” was mentioned as enlightening, reaffirming; clarification in responses included:

\textit{A fine misery though.}

\textit{Uncomfortable—e.g. taking me out of my comfort zone as a challenge.}

\textit{Uncomfortable, only if the flight has to turn back, webbing seats don't sound that great.}

To summarize all three ranked moods, astonishing and exciting were the overwhelmingly most expected moods, it was not until the 3rd ranking that there was much diversity. Satisfying also had significant responses as the third most popular option for the 1st and 2nd ranks, and a strong option as a 3rd rank. With additional diversity on the 3rd ranking, moods such as alarming, miserable, and calm were finally presented.

Bauer’s (2001) research showed the single expected atmosphere/mood to be “exciting” (22% of responses), “awe” (21%), and “peace” (17%). In contrast, if one considers only the first-ranked mood in this study, “exciting” would account for 45% of the total responses. As such, the experiences anticipated by visitors in the Ross Sea region can be seen to be based on the moods of excitement, astonishment, satisfaction, and serenity—potentially representative of the anticipation of visiting a frontier, yet remote and extreme, destination. It is the understanding that visitors understand the possibility for an unpleasant or miserable experience, but above all visitors are looking forward to being astonished and excited, with operators having the ability to shift anything unpleasant to pleasant or satisfying; and given some degree of calm, visitors do not expect a tremendous amount of fright or frustration.

Visitors’ acceptance of the activity they are about to undertake is an important facet of their experience. How they place the activity on a spectrum of acceptability may explain why they are either positive or negative about other visitors’ activities. While they did not utilize the same categories Tisdell and Wilson (2004) and Tisdell et al. (2004), both asked questions regarding whether their respondents were in favour of increased tourism, whether Antarctica should be preserved, and the management option of a World Park. Table 4.5 reveals visitors’ acceptance towards varying types of visitation, perhaps an indication of how they see their own experience within a certain visitor type.
Table 4.5 Acceptable Types of Visitation.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of respondents (N=211)</th>
<th>% of overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptable types of visitation¹:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>5</td>
<td>2.4</td>
</tr>
<tr>
<td>Overflights</td>
<td>45</td>
<td>21.3</td>
</tr>
<tr>
<td>Ship-based—no landings</td>
<td>25</td>
<td>11.8</td>
</tr>
<tr>
<td>Ship-based—limited landings</td>
<td>75</td>
<td>35.5</td>
</tr>
<tr>
<td>Ship-based—unlimited landings</td>
<td>14</td>
<td>6.6</td>
</tr>
<tr>
<td>Summer land-based</td>
<td>36</td>
<td>17.1</td>
</tr>
<tr>
<td>Year-round land-based</td>
<td>7</td>
<td>3.3</td>
</tr>
<tr>
<td>Permanent land-based</td>
<td>4</td>
<td>1.9</td>
</tr>
</tbody>
</table>

¹ Due to the allowance for multiple responses

Table 4.6 examines whether visitors believe such visitation supports or harms the continent, and then perhaps gives some clarity to whether they are relatively conflicted as to their own visit.

Table 4.6 Beliefs on Whether Visitation Harms or Supports the Continent.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of respondents (N=87)</th>
<th>% of overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visitation—does it harm or support?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harms</td>
<td>5</td>
<td>5.7</td>
</tr>
<tr>
<td>Supports</td>
<td>19</td>
<td>21.8</td>
</tr>
<tr>
<td>Both</td>
<td>63</td>
<td>72.4</td>
</tr>
<tr>
<td>If both, do benefits outweigh impacts?¹</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>36</td>
<td>64.3</td>
</tr>
<tr>
<td>No</td>
<td>20</td>
<td>35.7</td>
</tr>
<tr>
<td>Not stated</td>
<td>7</td>
<td>---</td>
</tr>
</tbody>
</table>

¹ N=63, due to those not answering both, not having to respond to this sub-question

In clarifying their answers, two GCAS students mentioned:

*Don’t want to answer until I have a better understanding of the impact of tourism.*

*Landings dependent on behaviour of tourist and tourism operator.*
Specifically from ANZ visitors, there appear to be a number of perspectives (positive, negative, and on-the-fence); the following is positive:

*If personnel (tourists) are adequately educated prior and during their trip to Antarctica (re: conservation, how to act around wildlife etc). Tourism can be very beneficial and promotes important issues re: Antarctica and conservation.*

. . . basically I support the principle of supervised (Antarctic Programme supervision) eco-tourism. Tourism with minimised impact!

*Probably. Increasing people's awareness through personal experience is an effective way to promote knowledge and enhance people's conservation values.*

*Tourism will be supportive if education makes people more aware of how fragile such environments are and they influence policy once back home.*

*Tourism and the exposure it gives to the Antarctic helps highlight the risks that humans in general pose to that environment and the world in general.*

Some negative remarks:

*I believe tourism creates ambassadors for the Antarctic; however, any human impact will necessarily be negative as the ecosystem can look after itself.*

*Unfortunately, in my experience the average tourist is by and large one of the most destructive animals on the planet.*

A remark that didn’t state a clear position (on the fence):

*I believe that research and tourism have to counter-balance each other. Unrestrained research can be just as damaging as tourism. Equally tourism to Antarctica could reduce the impact on other areas of the world simply because of the size of Antarctica.*

From the results to the related questions, visitors in the studies by Tisdell and Wilson (2004) and Tisdell et al. (2004) seem to be much more polarized. Prior to their visit, respondents were 50% against increased tourism versus 40.4% in favour; 92.3% of respondents were not in favour of exploiting Antarctica’s resources, and similarly 92.3% of respondents were in favour of keeping Antarctica in a pristine state.

As discussed in Section 3.222, the NEPr scale is used extensively, but not in the scope of Antarctica, or as a before-and-after instrument. Thus, the results presented in Fig. 4.7 will be presented against other recreation and tourism studies (Table 4.8), utilizing their “one-off” sampling with the scale.
Figure 4.7 shows the total NEPr scale scores for respondents in the anticipation phase of this research. The mean score equated to 56.59—much closer to the end-of-spectrum pro-environmental score (75) than to the end-of-spectrum pro-human development score (15). The mode score was also closer to the pro-environment end of the spectrum at 65. This means that on a scale such as this, visitors to Antarctica begin with relatively high level of environmental concern. Table 4.7 shows mean scores for each NEPr scale statement, whereby data entered has been coded so that the closer to 5 a mean is, the closer it is to the pro-environment end of the spectrum.

**Table 4.7 NEPr Scale Statements and Means.**

<table>
<thead>
<tr>
<th>NEPr scale statement</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) We are approaching the limit of the number of people the earth can support</td>
<td>3.71</td>
</tr>
<tr>
<td>2) Humans have the right to modify the natural environment to suit their needs</td>
<td>3.04</td>
</tr>
<tr>
<td>3) When humans interfere with nature it often produces disastrous consequences</td>
<td>4.12</td>
</tr>
<tr>
<td>4) Human ingenuity will insure that we DO NOT make the earth unliveable</td>
<td>3.11</td>
</tr>
<tr>
<td>5) Humans are severely abusing the environment</td>
<td>4.05</td>
</tr>
<tr>
<td>6) The earth has plenty of natural resources if we just learn how to develop them</td>
<td>2.87</td>
</tr>
<tr>
<td>7) Plants and animals have as much right as humans to exist</td>
<td>4.41</td>
</tr>
<tr>
<td>8) The balance of nature is strong enough to cope with the impacts of modern industrial nations</td>
<td>4.01</td>
</tr>
<tr>
<td>9) Despite our special abilities, humans are still subject to the laws of nature</td>
<td>4.41</td>
</tr>
</tbody>
</table>
10) The so-called “ecological crisis” facing humankind has been greatly exaggerated 3.62
11) The earth is like a spaceship with very limited room and resources 3.61
12)Humans were meant to rule over the rest of nature 4.09
13) The balance of nature is very delicate and easily upset 4.19
14) Humans will eventually learn enough about how nature works to be able to control it 3.80
15) If things continue on their present course, we will soon experience a major ecological catastrophe 3.54

The overall mean score was 3.772, again on the pro-environment end of the spectrum, but not particularly higher than the centre point of 3 (labelled as “Unsure” on the survey). Based on Lück’s (2003) comparison for NEP scale scores, this is, however, notably higher than other tourist studies, and in line with the highest mean score given, which was 3.7 from Dunlap and Van Liere’s (1978) study of members of environmental organizations (see Table 4.8).

**Table 4.8 NEP Scale Means (Comparison with Other Studies).**

<table>
<thead>
<tr>
<th>Study</th>
<th>Mean score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dunlap and Van Liere (1978): General public (WA-USA)</td>
<td>3.0</td>
</tr>
<tr>
<td>Environmental organization member (WA-USA)</td>
<td>3.7</td>
</tr>
<tr>
<td>Albrecht et al. (1982): Farmers (IA-USA)</td>
<td>2.9</td>
</tr>
<tr>
<td>Urban (IA-USA)</td>
<td>3.2</td>
</tr>
<tr>
<td>Lück (2000): Tourists in New Zealand</td>
<td>3.4</td>
</tr>
<tr>
<td>Higham et al. (2001): Ecotourists in New Zealand</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Adapted from Lück (2003, p. 235)

### 4.3 Pre-Visit GCAS Interviews

As discussed in Chapter 3, the students enrolled in the GCAS programme provided a purposeful opportunity to further explore experience directly before and after their visit to the RSR. Data collected via these interviews allows for an even more detailed examination of the transitions of experience with the GCAS sample. However, comparison with the other groups of respondents may not be possible or valid. The following section weaves the thoughts of the various respondents together into a collective narrative. This narrative sometimes further investigates themes revealed in the preceding anticipation survey, but also exposes some unique attributes as a result of being closer (temporally) to their visit. Respondents have been identified by their response number so that the reader can distinguish between opposing thoughts and join together quotations for single respondents. When asked about their reasons for visiting Antarctica, respondents expressed a number of responses, with key themes being a degree of lifelong fascination, professional goals, personal goals, and outside influences.

*I don’t know; I’ve wanted to go since I started reading about it a couple of years ago. Just the fact that it’s so big and it’s so beautiful and it’s so empty and there’d...*
be so much space there. I don’t know if you ever feel the need to have space in your head . . . so you can think about things . . . . I think it would be one of those really good places for that. And I’m fascinated by all the wildlife there, like the way they survive and then I started reading about all the heroic stuff and I thought that was pretty cool to, and I wanted to go see where they did all that. So basically just because it’s such an extreme place, so unlike anything I’ve ever experienced before.—\textit{Respondent #26}

Probably it’s more like my reasons for doing the course and through that [Antarctica]. A really good friend of mine did the course two years ago and just absolutely raved about it and what he learnt. I mean obviously looking at his photos and hearing about his time down there, it just sparked the interest . . . I think that’s really my reason for doing the course, and therefore my reason for going down.—\textit{Respondent #33}

I mean it’s not an obsession, some people are like just that’s all they’ve ever wanted to do is go there, but I have to say that I’ve been more than interested for quite some time.—\textit{Respondent #35}

For some, the motivations and the mixture of professional and personal seem blurred:
\textit{Science first of all; a step in the door.}\textit{—Respondent #27}

It’s important to me personally, for the same reasons: scientific. Hopefully do science there in the future, engineering type stuff, stuff to do with NASA and meteorites.—\textit{Respondent #27}

I’ve thought quite carefully about that because obviously a lot of people have said to me about the course, and doing it just for the trip, and I guess in many ways I was doing it for the trip, but now that I’ve started the course even if we weren’t going down there I’d be so stoked with everything I’ve learnt about it anyway. So yeh, I guess it is personal interest, I don’t feel like I’m doing it for anyone else, but obviously I’m stoked with the decision—\textit{Respondent #33}

The outside influences of parents or family and friends seem to have a limited push upon motivations:
\textit{I don’t know, I mean most people I tell they’re like “oh my God that’s so cool, I’m so happy for you,” which is good, but they’d say that whatever I was doing. It’s not specific.}\textit{—Respondent #34}

No, ‘cause I don’t know anyone really that’s gone or has wanted to go or . . . I mean like I’ve never been overseas before and my family’s certainly never travelled very far from NZ, so yeh, probably couldn’t say that was any sort of influence from that direction.—\textit{Respondent #35}

The expectation of the visit also seems a bit vague, but for some that’s what they like about it, or any experience for that matter:
\textit{I always try not to expect too many things because then nothing ever is what you expect it to be.}\textit{—Respondent #26}
Don’t expect too much, really just going down there to have a look around, as I said before it’s a stepping stone to actually doing science down there in the future.—Respondent #27

Everybody says “oh it’ll change your life,” so yeh I’m kind of wondering what to expect at the moment, but I don’t know I mean I think it’ll be quite good in the sense of challenging yourself personally like being in that environment and being isolated and something that’s different and trying to cope. Yeh I suppose for me not having been overseas before it’s probably a bit of a big thing that I’ll have to see how I go ‘cause it’ll be a bit different. Yeh.—Respondent #35

With such varied motivations and limited expectations, what is it that “strikes” these individuals about Antarctica, and how has the course changed their attitudes?

I’ve seen too many slides . . . . It’s just too damn beautiful.—Respondent #26

Well, it has changed my image/attitude in that I see that these politics are there now, and I didn’t even realise that they existed. So it’s shown me that. It’s a little bit more than just this pristine scientific laboratory, as I expected.—Respondent #27

I guess there’s heaps, like I mean even silly things. I didn’t realise how high the continent was, although we’re going to be at sea level, and unfortunately, it must be incredible to be at the South Pole and be 3 kilometres high on ice. Yeh learning about I guess some of the wildlife, like obviously seals and penguins are everyone’s favourite, but we had some great lectures on just like the fauna and the aspects of the algae and the mosses and what kind of life actually exists where you think it’s impossible. So that’s been pretty interesting. Oh God everything’s interesting. I especially like learning about more and more of the historical and political stuff like the treaty stuff and that’s probably really, really interesting to me.—Respondent #33

Definitely . . . I think it’s just getting such a good understanding about the science, but for me the tourism especially. I think my attitudes have changed, especially about the tourism. I thought it was quite a negative thing before I started the course, but the more I’m learning the more I think that the tourist might be more like the police if you like towards the scientists, because our eyes are being opened to some stuff that science has done that perhaps hasn’t been so environmentally friendly and stuff. That’s been pretty interesting . . . . I had no idea about the treaty system and so it gets fascinating to learn about these 27 consultative nations, all working together and how that’s worked for the last 30 or 40 years. I mean that’s just hugely interesting in a global sense.—Respondent #33

Again, as a means to put their own visit into some context, the GCAS students were asked during their interviews to examine their thoughts on pertinent scenarios for Antarctica: tourism, science, and the preservation/conservation of the continent and its heritage. This stood to further examine the varying opinions found in the anticipation survey they may have completed four months earlier, and thus determine how the transition between phases occurs, and also examine some pertinent topics that may be
written about during the on-site and recollection phases. As well, perhaps this will also
determine whether the course was having any impact on their experience.

Regarding tourism, respondents overall revealed much more positive and/or
balanced, thoughtful comments:

*I think it’s a good thing if it’s well managed because it’ll, more people that see
form what I’ve heard it has an incredible impact on people, and then they’re more
likely to want to try to protect it, and to actually protect the Antarctica you end up
having to pretty much protect the whole world. So in that kind of way I think it’s
really good. But unless it is managed carefully then it could cause a lot of trouble
. . . .*—Respondent #26

*I don’t necessarily think it’s a bad thing, it’s important for people to go there and
see it; it just needs to be limited. I mean there are lots of impacts of science and
tourism, so just monitoring those. Tourism in Antarctica is again, who are the
tourists, are we tourists as the GCAS? We’re going down there for a visit
basically, but we just have a lot more educational component before and after.*—
Respondent #27

. . . I guess every time I hear the numbers of who’s gone down there every year I
kind of don’t know whether it’s envy that I feel for all these people that can
actually get down there, but I mean I think, part of me thinks it’s a hell of a lot of
people and I guess a lot . . . and actually the tourists being the ones who go home
and write letters to the government and actually make the changes that really
need to be made or cleaned up sites that had been made into huge messes. So, yeh
I think tourism could be quite positive, but I think it has to be controlled.*—
Respondent #33

For this respondent, clarification was also sought from her personal experience.
From being on a tourist ship in the past, what did she think of this type of tourism?
*I thought it was pretty cool; because I really enjoyed it and also on that cruise; as
you know everyone was just fully into it, into conservation stuff. I found that was
one of the best things about it, that everyone was, they were there for a reason, it
wasn’t just because they had the money to do it. They actually really wanted to be
there, so I found that quite good. The thing is if you go down to the ice, if you have
all that money you’re not going to waste it on something like that if you don’t
want to. So I think the people who do go down there, are more conservation-
minded than other people.*—Respondent #34

When reporting on Antarctica as a scientific realm, respondents discussed a
number of facets:
*I think when we talk about money, we do talk about money a lot to everyone
’cause we’re really interested in what people are spending, that kind of blows me
away a bit, the kind of costs that are going into doing science down there. Yeh,
we’ve been talking a lot about how science and politics, although we’d like to
think that they don’t go together, they do go together . . . but it is political, they
need a base to be in the treaty, to be part of the game.*—Respondent #33
Of course there’s plenty of scientists that go down there and piss in the snow and don’t take their rubbish out with them and dig a wee hole and do all this sort of thing that’s probably not acceptable, but . . . Yeh, especially as it’s so linked to the global system, there’s so much that goes on with weather and ocean currents and things like that that it’s linked to Antarctica. I definitely think understanding Antarctica is going to help understand the rest of the climate and the rest of the globe, so yeh I can definitely see a place for it, I’m just a bit sceptical about what they’re doing.—Respondent #35

. . . well I guess I know there is quite a bit of it down there, and it is basically countries all have to do there own EIAs to go down there which is all good, under the protocol and stuff, but what I didn’t realise is that they don’t really allow for things like cumulative impacts in an area . . . I don’t think scientists have taken into account enough, or actually I’d like to see more of that. Individually I think what they do is good, but controlling impacts and stuff added up it does add up.—Respondent #34

When further pushed for examination of her response, Respondent #34 was asked about cumulative impacts, especially between NZ and U.S. scientists:

Yeah, especially if it’s in the same sort of area, like all those people who go to the Dry Valleys and do stuff, do they actually consider what they do in a cumulative sense? . . . exactly, so yeah individually I think what they do is good, but I’m kind of worried about the cumulative impacts of it.—Respondent #34

Regarding conservation and preservation of heritage, some responses for a particularly topical point in 2002–2003 given the AHT’s fundraising drive for restoration were:

. . . I think it’s important to conserve Antarctica, and that ties in with science and ties in with tourism. Just don’t really care for it that much, it’s important but I’m not in awe of it. The huts and things like that, but I think it’s important that they’re there.—Respondent #27

It’s definitely important, it goes back to that how many people are down there and where are they going and that sort of thing. Yeh, I think that it’s good now that NZ is in charge of the historic huts and that they’re sort of regulating the amount of people that can go in there at once, and having it locked up with a key, because if you just let anyone go in there it won’t be here in a few centuries’ time and I think it is really important because it’s not really anywhere else in the world that it’s preserved like that. So I think conservation and heritage is really important. Yeh . . . I mean they talked about making it a World Park which I can’t see many negatives about as long as it’s allowing science to still continue and things like that. Then is goes back to who polices it and who’s in charge of making sure that people are sticking to the rules, so yeh I can definitely see the advantages for making it a World Park.—Respondent #35

Respondent #35 also summarises key points about visitation in that as long as everybody “does their bit” and limits their impacts, then Antarctica can be a place for everyone. As the GCAS students are conceivably a highly cohesive group before leaving,
I felt it was necessary to understand perceptions of that particular group and the course in relation to the RSR visit. When asked how they felt about the group, responses included:

> I like them, like I said, I guess you know how you usually when you hang out with people you just tend to hang out with people who have the same kind of ideas, but I’d forgotten that there are just so many other people out there, with so many conflicting totally good ideas. I’ve been taken aback a few times with other people stating opinions that I would never have considered possible. But I’ve been enjoying that as well and yeh, there’s a good mix of people, I think.—**Respondent #26**

The overall group is good, I mean because there’s such a diversity of people it always makes it interesting. The group’s functioning well and there’s some tension in some of the smaller syndicate group, but that’s mainly because people come from different backgrounds, stuff like that. Overall it’ll be interesting living and working with them in Antarctica, no different than any other group dynamic situation.—**Respondent #27**

And when asked about the challenges of working and living with people so intimately for so long:

> . . . we probably won’t be able to stand each other I guess. No, but we should all be a lot closer when we’re done.—**Respondent #26**

> . . . it’s probably like Survivor, you find out who’s good at what, who can do what, who can delegate, who can cook this, and who can build that, kind of thing.—**Respondent #34**

> I reckon because they’re the sorts of people that sort of understand what you went through, and you’ll probably be talking to them about it for months to come I’d say.—**Respondent #35**

As a driver to the trip, respondents were asked about how the GCAS programme had been so far, and the new knowledge it provided. All responses were positive about both the learning and the group, as expanded upon by Respondent #33:

> Unbelievable I’ve kind of already saying, “Well it’s definitely the best education I’ve ever had, or the most enjoyable education.” You do wake up and look forward to going to class and it’s just so professional, so well run, just so impressed with every aspect of it, the tutors, the lecturers that come in. I think it’s a really good balance in the programme of . . . I can’t speak highly enough about it, I can already see how I’ll learn from this as just being an incredible. If the course ended tomorrow, I’d already think that. It’s amazing.—**Respondent #33**

> . . . couldn’t really speak more highly of the people. It just feels so, I just feel so fortunate to do, and it’s just such an amazing group of people. Every single person has got a really unique background and definitely the majority of people are just so interesting and have so much, I guess it’s the whole teaching, we are teaching each other a lot.—**Respondent #33**

As an end to their about-to-go-to-the-ice interview, respondents were questioned about the possibility that the visit will change their way of thinking. Responses were mixed:
Probably make me heaps more passionate about it.—Respondent #26

It’s really hard, of course everyone says it’ll change your life blah blah blah, and I think none of us want to go down there putting that expectation on ourselves, but I do believe it. I can’t see how it wouldn’t be a really special experience. Yeh.—Respondent #33

I would say so. I can just see myself going once and getting involved with some job that allows me to go again probably. Yeh, a lot of people have said it’ll change your life and it changes everybody’s life who goes down there, and I can see how that happens. It’s probably that sort of place. You sort of get attached to it for some unknown reason, yeh I think it’ll change the way that I think of it.—Respondent #35

My lecturer . . . just went down . . . and he said the worst thing is you come back and you’re so excited and you want to tell your wife and you want to tell your kids and your family all about it, but they don’t know because they haven’t been and you’re so “and this was so great and this was so great, and they’re like “Oh what’s that?” It’s really quite frustrating because you’re just so pumped about it and they just don’t understand. So he said that’s probably the most frustrating thing you’ll find when you come back.—Respondent #35

4.4 Conclusions

To summarize, the results of the anticipation phase begins with the demographic profile. On that note alone, there are some considerable differences to previous studies such as Bauer (2001), Cessford and Dingwall (1998), Davis (1995), Enzenbacher (1995), and Marsh (1991). Respondents in this study were generally younger, not as many were retired, and they had a wider variability in their incomes, although for most previous studies income was not fully disclosed but rather anecdotally commented on.

Given the nature of the visitor programs involved, and the nature of the physical cruising distance to reach the RSR, visitors in this study had longer lengths of stay than found in previous studies. Commercial tourists stayed more than 20 days (generally), and it was only those with GCAS or ANZ that stayed 10–20 days, a length similar to commercial tourists on the Antarctic Peninsula. Overall, respondents had a limited previous experience in Antarctica and thus they had not moved over to the RSR following a visit to the Peninsula as posited by Bauer (2001). Respondents also had a variable level of experience in visiting other remote or cold regions of the globe.

With anticipation factors, scenery was both the strongest motivator and the highest-ranked component of image. Again, this was dissimilar to previous studies. The most significant expectations were safety, professional attitude, and expert education—detailing that visitors sought learning, but safe learning, that was done in a high-quality, professional manner. This is not unexpected given the price of the visit and people’s general concerns for safety, especially post 9/11.

Moods in the anticipation phase were highly positive, but when pushed for more than just a single mood, visitors were quite reflective in examining what else the on-site experience might bring. Prior to their visit, respondents had given some thought to the acceptability of visitation, and were “across the board” in their thoughts, with no single overriding opinion.
With higher than the mean NEPr scale scores, respondents indicate a predisposition towards pro-environment thinking. Even more so than previous studies, visitors to the RSR seem to value the environment over human development. They may thus already be ambassadors in a broad environmental sense before even visiting the "ice."

As with so much of this study, the GCAS comments from transitional interviews provide valuable exploratory data. While thoughts do not necessarily progress in a linear fashion, it is clear that GCAS respondents were in a period of transition whereby their thinking had morphed from where it was only 3–4 months prior. GCAS interviews provide, at least for those respondents, a valuable extra depth to the information collected in the anticipation survey, and serve to further the understanding of a spectrum to their on-site comments.

Moving to the next chapter, Chapter 5 will provide in-depth qualitative information for all four visitor groups, separating their narratives in order to examine similarities and differences. Chapter 6 is perhaps the best comparison to results from Chapter 4, as so many of the variables overlap and give rise to a before and after perspective, with the “during” portion heavily informed by results in Chapter 5.
Chapter 5

On-Site Phase: Results and Discussion

Chapter 4 presented results and subsequent discussion regarding visitors’ anticipation of their on-site experience in the RSR. Primarily, there were descriptive quantitative results, similar to those in previous studies by Bauer (2001) and Grenier (2004). This was given some depth with the addition of in-depth interview comments from the GCAS students. Chapter 5 will present the results and discussion from the on-site phase of the project, utilising information recorded in visitors’ journals, combined with the author’s personal observations and experiences. This then strengthens this study’s ability to address Research Objective 1: understanding the dimensions of the experiences, but also being the baseline or setup for Objective 3 addressing the potential benefits.

First, quantitative information regarding mood and short-answer information from the arrival survey of the journals (see Appendix N) will be examined. Following this will be the bulk of the results from the journals. As no previous Antarctic studies have provided this type of in-depth information, there are no data upon which to base comparison in discussion. This type of qualitative data provides individuals’ personal stories, so it is very much unique to the context it was collected from. Narratives in this section are presented in a method similar to the work of Bricker (1998), Potter (1993), and Raffan (1992), insomuch as a complete story is woven together from various responses. This style allows the respondents to tell their story, with only occasional input from the author. Again, in relation to the research objectives, this format is an attempt to better understand the nuances of the experience, transitions and all.

Many other pieces of qualitative data presented in this work have thus far not been attributed to single respondents, as they have been either short answers or an entire section related to a single group with respondent noted (the exception being Section 4.3). It was deemed important to attribute responses in many places throughout this chapter in order to differentiate between visitor groups, and thus differentiate between the unique programs that may influence their responses. Respondents 1–20 travelled through Antarctica New Zealand, 21–44 with GCAS, 45–328 with Heritage Expeditions (the first seasons Quark surveys were numbered in the middle of this sequence), and any marked with a Q travelled with Quark Expeditions. It is also important to note the generic itineraries for the various organisations are (shown in Appendix U) so that the differences and similarities can be understood by the reader. Visitors with Quark also travelled in the 2003–2004 season, whereas the others travelled the previous season (2002–2003). This note is important to make, as each Antarctic season is generally unique in terms of many factors that may impact the visitor—factors such as weather, political climate/access, and physical access.

5.1 Arrival Survey

Upon beginning their journey in the Ross Sea region (whether it be their first few days aboard the ship or the first few days after they arrived by plane at Ross Island), visitors were asked five questions (see Appendix N). Quark’s passengers were not subjected to this arrival survey, as they were in fact just completing their anticipation survey on-site shortly after boarding the KK, due to the nature of their sampling booklet.
When asked about their mood upon arriving in the RSR or shortly thereafter, visitors (N=28) from the other three groups (ANZ, GCAS, and HE) provided the following results as found in Fig. 5.1. Once again, each band of the circumplex (bulls eye) represents five responses (irrespective of visitor group). Moods chosen have been labelled as to their title and degree when shown on a particular circumplex. Thus, the longer the line, the greater the number of respondents who chose it; the particular quadrant of the circumplex that the line falls in indicates a group of related moods (see Fig. 3.1 and Table 3.1). “Exciting” was the most common mood response, with other responses being much more spread around the circumplex than in the first-ranked anticipation questions (see Fig. 4.4).

Five responses were in the “other” category, including comments of “overwhelmed” and “elated.” For individuals travelling with HE aboard the Akademik Shokalskiy, there was frequent mention of “sick” as a mood, or clarification that it may have been enjoyable but they were too sick to enjoy. One GCAS student mentioned their mood as “irritable” due to the long flight. Thus already, one can see some differences appearing between the segmented groups.

![Figure 5.1 Mood upon arrival in the RSR.](image_url)

The manner in which visitors gathered information prior to their visit was enquired about. How did they learn about what the trip on-site would be like? Responses varied in terms of the depth of information gathered and sheer number of sources used, but in all cases, traditional means such as books and various film mediums were prevalent. Very few respondents used the Internet, which was surprising given the expense of the voyage and education of the respondents (both wealth and education being...
typical corroboratory factors to Internet use), and only a few had personal contact through friends who had visited previously, public lectures, or staff of the organisation they were travelling with. Thus, there was very little personal contact related to the on-site visit before it occurred.

This type of beforehand information leads to some interesting comments:

*Media I’ve seen not really concerned with life at base.*

*Media hasn't covered "at sea."*

Why has the media seemingly only portrayed the good? On the other hand:

*Yes, but nothing can prepare you for the astonishing vastness, and the beauty has to be seen to be fully appreciated.*

*Absolutely amazing—like 10 times better than what has been portrayed.*

And in this regard, there is still some conflict of opinions:

*The media portrays a pristine environment. When driving through McMurdo you see a very industrial, dirty type image.*

Respondents’ motivations to visit came from the manner in which they had received information about Antarctica and particularly the RSR. Although previous studies such as Bauer (2001), Cessford and Dingwall (1996), Davis (1995), Enzenbacher (1995), and Marsh (1991a, 1991b) had examined motivation while on-site using the categories described in Chapter 4, the motivations recorded here serve to back up that type of categorised quantitative examination of motivation. As such, respondents were motivated to undertake an on-site experience by a variety of factors, summarised across the ANZ group as:

*Firstly, this is fulfilling a personal lifelong dream. Secondly, I want to enthuse other people through my experiences.*

*To get ideas for artworks. Part of the business of getting an Antarctic arts fellowship.*

*... reason for visit is to develop education materials for trainee teachers, my personal reasons are the challenge and adventure of going to a remote place.*

*Work related—to gain credibility and experience for creating programmes, resource kits for education programmes. Credibility is extremely important when talking to the public because they listen more to what you say knowing it is not something read in a book or hearsay.*

With each of these ANZ respondents, there is an aspect of dichotomy between personal and professional motivations. This dichotomy does not appear to be present with the other groups, perhaps either because they are at the beginning of their career as a GCAS student, or perhaps this trip is seen purely as vacation (as is the likely case for HE respondents). As such, respondents were motivated by many of the points made in Chapter 4, points such as lifelong fascinations, education, history, or adventure, but not scenery:
Really it is some place really unique to travel to—i.e., somewhere very few people have been to. The few that I know that have come here have raved about it.

Having an interest in the continent since a very young age has been my main motivation to get here, and hearing about it from others. These reasons are important because it has been something I have always wanted to do.

Lifelong fascination with Antarctica—the remoteness, history, wildlife. Excited to be able to see and experience the place for myself.

Adventure; to see and touch a part of history.

Educational because we owe it to the next generation—our guardianship may be rewarded in long term positive ways, i.e., ecologically wise decisions.

Making the most of a unique opportunity to travel to a remote continent, and learn more particularly of the birds and aquatic animals of the region.

This journey is to interpret what I have read. Also to experience the beauty and the wildlife.

To experience Antarctica after reading about it. I want to see Historic Sites, one place I have not seen. May be my last tour (now aged 71 years).

As discussed throughout Chapters 2 and 3, respondents were asked to consider the benefits of their visit. By examining this aspect prior to much of the on-site visit, it was hoped that a progression could be seen from arrival to departure and then on to recollection. Benefits listed by respondents could generally all be placed into the single theme of education—either for others, both directly and indirectly, or for oneself. Education directly for others:

. . . to learn more about the science associated with Antarctica is important and I'll be able to pass lots of this knowledge on to school children that I am writing resources for.

To gain a greater appreciation of Antarctica, to improve my teaching on Antarctica, to inspire students about Antarctica and the heroic age of exploration, to achieve a personal goal of having been there—the peace, refreshing of mind.

Benefits from this trip will be in the programmes and kits developed, and these when done will definitely extend beyond myself to my education team, the museum, schools, teachers, children and adults.

Learning more and gaining first hand experiences in Antarctica. Antarctica has always been a personal goal and I'm hoping to share some of my experience with my friends, family and work associates through my photographic and video records. I will be giving some brief presentations at work.

Education indirectly to others:
Personal experience of science in field to incorporate into artwork. People who see the artworks will get a feel for the complexities and importance of science in Antarctica with the rest of the world.

I will return to tell others of the wonders I've seen and maybe this will encourage others to care about Antarctica too.

Purely for personal education:
I'm looking to experience a bit of reality (i.e., with our camping in harsh weather). I'm keen to get as many different places as possible and try to live the moment as much as possible by making the most of everyday. Sleeping less and enjoying making moments!

I really just want to experience this place (in a greater sense than "been there done that"). I want to better understand the heroic explorers and to explore human impact issues and to experience the wildlife and extreme environment.

A mixture of the above:
The benefits of my experience are challenging myself to do something that will take me out of my comfort zone and make me a stronger person. I think these benefits will extend into my career as a secondary school teacher and I will hopefully be able to teach others and enthuse others about Antarctica.

5.2 Journals

For ease of understanding, the following narratives examine the experience through the journals of all respondents within each particular visitor group. This separation of groups served to provide room for comparison, but also for the fact that between the land-based and ship-based visitors there are huge differences in their access to sites, length of time in the region, and many other factors, all of which make full combination of the narratives impossible.

With the quotes and stories provided in this section being longer and more individually specific, respondents will have their quotes attributed to them personally. As was mentioned earlier, Respondents 1–25 travelled under the auspices of Antarctica New Zealand. Although GCAS students also travelled through Antarctica New Zealand, their experiences on site will be separated as they are a distinct, uniform group (Respondents 26–45). HE respondents are those numbered anywhere from 46 to 328. Two-hundred-and-fifty Quark journals from the 2002–2003 season also fall in this range; but as explained earlier, there was no response from such group, and so the numbers are a bit inflated in this instance. All Quark responses from the 2003–2004 season were numbered to begin again at one, so Quark respondents are clearly identified with the letter Q prior to their respondent identification number.

5.21 Antarctica New Zealand

For those visiting through Antarctica New Zealand, the on-site experience began with a flight; not your average commercial flight, though, as it was with the U.S. or NZ Air Force:
The 5 ½ hours of flight went quiet slowly... then finally we were told to prepare for landing. That was the longest 'approach' I’ve ever endured and with no
windows, it was the biggest tease, as we had no idea when we’d actually touch down . . . it finally happened and before long we were out of the aircraft and onto the continent itself. Yeehaah!!! The hour drive from Pegasus landing field to Scott Base went by in the flash of an eye and then the next few hours of orientation were a whirlwind of information.—Respondent #1

Gradually we began to see little bits of sea-ice. Then a while later, big chunks of it, then pack ice with leads—looking just like in the Scott-Shackleton photos, etc., and then white as far as the eye could see, with the tops of the Transantarctic mountains visible after Cape Adare. An absolutely vast land, even at the edges. So white it was almost glowing in the end.—Respondent #6

First impressions seemed to focus around how impressive the sight was, or how different it seemed:

. . . we stepped out. Not too cold. Bright. Vast. A lot of immediate space, but this initial areas was surrounded by vehicles, buildings, equipment, planes (5 others similar sized to Herc and a couple of smaller at least!). And then beyond this ring of obstacles to the view were Mt. Erebus, instantly recognisable, with her cloud of steam or cloud of cloud drifting above; and white and black islands, and observation Hill and McMurdo. Quite odd in combination, and in many ways it seems a travesty to be here at all . . . .—Respondent #6

Very interesting group at Scott Base, Air Force, divers, scientists, photo journalist . . . etc. Air Force group knows each other well—makes it a bit awkward making initial contact, but everyone ‘warms’ up as they talk etc.—Respondent #8

Scale is striking . . . . Stunning view as stepped out of plane—huge expanse of ice, blue sky, Mt. Erebus, Transantarctic Mts . . . . Amazing to have such an ‘aesthetic’ experience after being cooped up in the Starlifter for 5+ hours.—Respondent #8

My first impression of Antarctica—wonder, awe. So much beauty and so clear—a magic day. Unbelievable . . . . The thing that struck me was the silence and beauty—the stillness, plus I kept expecting it to get dark!—Respondent #9

Antarctica . . . its vastness, the first experience of troop-plane transport . . . . Stepping out of the Hercules onto the ice runway was unforgettable. One could spend the rest of my life trying to reproduce that feeling. The vastness was astonishing, and everything (except that place over the hill) is beautiful. I had an immediate feeling of elation and delight.—Respondent #11

This is why people return—to get that feeling I had when I stepped onto the ice and looked around—to get another fix of that . . . . Scott Base has the atmosphere of a ski hut.—Respondent #11

. . . landing—the awesome size, colour, magnitude of the place—the incredible beauty and sharp cold.—Respondent #9

But this amazement is also somewhat tinted by the feeling of rush:
Early morning start. 5-hour plane trip. Landed on sea ice runway—didn’t have much time to get bearings before being whisked to Scott Base. Good weather with moderately low cloud. Immediately given lecture about base housekeeping—feeling very tired, headachy and assaulted by faces and rules. Dinner in common room with D. Mawsoni, which tasted good. Lecture about AFT starting next day regarding plan and helicopter rules—emailed friends and family and went to bed early, after missing out on opportunity to photograph Mt. Erebus without clouds.—**Respondent #7**

After the initial landing and a period of catching one’s bearings, the majority of ANZ visitors undertook Antarctic Field Training (AFT):

Then it was off to the icefall for some cramponing and ice axe techniques. Twas marvellous to be wandering around up there amongst the seracs and crevasses! The weather was calmer in the icefall, but high cloud had obscured views of Erebus by this stage. There are definitely some people in our group that are like babes in the wood in this environment and need help with basics like tying their mukluks up! I hope they’re not ‘unsupported’ in the field. I’m still definitely getting used to this all-night sun—it does seem odd!—**Respondent #1**

AFT was fantastic, in all. Exhausting and learnt so much. It began yesterday after breakfast with our ECWs wrapping us up and all into the Hagglunds. Hagglunds are pretty fun—amphibious? vehicles. Tried to describe what they were in an email to Pa, and I think I failed without a diagram . . . . The bodies were primarily fibreglass so they can float if they break through sea ice. Their speed is about 30ish kph.—**Respondent #6**

In general, there are just tremendous feelings of gratitude:

Gratitude for the opportunity to be here—all other flights seem to be cancelled @ present due to deteriorating weather . . . . Staring into the great white vastness, it’s easy to get a bit of a feel for how it must have seemed for those early explorers—only they didn’t have a cosy base to return to at the end of their walk.—**Respondent #1**

But reality does set in:

So the wander, then back to SB, and then a drink at the bar, before transporting back to McM for the auction (fundraising) of SB staff ‘expertise’—and the prices were phenomenal. The two trips to Cape Royds went for US$750 and US$700 respectively!! The U.S. staff don’t get access to the sites that the kiwis do—however this was astounding. Has made the boys open their eyes a little more to the value people put on chances like they have.—**Respondent #6**

Antarctica is an amazing place, so peaceful not a sound at night, and the crunch of feet when you walk. Heard the shelf ice crack, makes you remember where you are. It can be easy to think of it as a big ski field otherwise. This is real . . . . Need to get more out of base to get the real feel of the place—can’t wait to see animal life.—**Respondent #10**

This new sense of reality can still be awkward without all the social comforts of home:

Felt rather overwrought and sat outside for a while, met a guy in stores that showed me around (sewing machine, etc) and swapped art-making stories . . . .
Still feeling a bit emotional at start of 4th day but was able to start talking to scientists and making pictures and notes and felt much better by lunch. As I am not part of a group I get to join other people’s activities, as they are possible—slowly getting a better overview. Helpful guy in workshop building stand for mannequin. Weather went to Condition 1 on afternoon of day 4.—Respondent #7

First few days see one bombarded with new routines/regulations/expectations—nervous of doing the wrong thing; have to learn a whole new set of ways of operating.—Respondent #8

As the huts are a very tangible symbol of Antarctica (and particularly the RSR), they invoke themselves into respondents’ experience and narratives almost immediately: It almost feels like a shrine to those that have gone before. Once more, I just stood ‘absorbing’ something of the feel of the place. I seem to find myself doing a bit of standing and absorbing! After shooting about a roll of film I left in the company of two Americans who were also looking around. They’re wintering over at Pole and were just back for a week of R&R. We had coffee together in their galley, which rather resembles a restaurant in a large underground city mall!! Everything at McMurdo is on such a bigger scale than Scott Base.—Respondent #1

We went through to the hut, glad to have taken outdoor photos yesterday as the weather was cold and cloudy and windy this morning. Inside it was noticeably busier, especially with the hulking great TV cameras! . . . quite lovely, even inspirational with everyone drawing or writing . . . the boys were interviewed and mic-ed variously . . . part of this also was because [he] happened to mention that this trip had changed his life! Awesome. He said it made him determined to try harder, after beginning to realise what these men had done.—Respondent #6

In the afternoon I had my first visit to Discovery Hut . . . . It was the most amazing feeling—like stepping back in time. The smells of seal blubber, the cold and dark. Trousers still hung up, blubber stoves with evidence of soot everywhere. A unique experience for me—it gave me some understanding of the hardships Scott, Shackleton and the Ross Sea party sent through especially once the wind came up!—Respondent #9

Why didn’t the historic huts (despite my interest in Scott’s and Shackleton’s expeditions) and the penguin colony move or interest me more? I guess it was because the landscape is so overwhelmingly attention-grabbing and I wanted to spend as much time as possible experiencing that.—Respondent #11

With each new day, however, there is a new “best” experience ever: The highlight of my trip so far though was this evening when we went skiing! What a buzz that was! Although it was overcast and the light was a bit flat, the experience was truly awesome and I felt extremely privileged to be there. There were 2 people in the group who had never skied before so to see them skiing for the first time in Antarctica was also a big buzz! The ride home on the skidoo was almost as exhilarating but skiing would have to be up in the top 10 things I’ve ever done in my life!—Respondent #1

And days later:
I’m sure I’ve said it already 10 times in this journal, but this was the best day here yet! . . . summit attempt of Mt. Falconer!—Respondent #1

Under the auspices of a specific ANZ educational program, Respondent #1 was also able to get to Dry Valleys, an experience most of the ANZ visitors do not experience. As far as other visitors’ access to this area, neither GCAS students or visitors with HE go, and QK visitors only visit for a short time due to the availability of helicopters on the KK.

WOW! CANADA GLACIER TAYLOR VALLEY . . . . This has to be the most incredible day—I never want it to end—it’s 1.45 a.m. on 25/1 actually but it’s hard to down tools and sleep whilst there’s such an amazing vista outside. We had to wait all day to get here though, didn’t actually fly in till about 5 p.m. Still the last 8 hours has been full, wonderful and indescribably awesome! This glacier is absolutely massive and so unlike anything we have in NZ. It feels truly prehistoric. In fact, the whole area feels prehistoric—the rocks are beyond belief—I want to get down and crawl around on my hands and knees for a better view!—Respondent #1

Another ANZ respondent’s view of the Dry Valleys:

Intensely wonderful trip to Dry Valleys and Lake Vanda. Mesmerised by lake ice. Went with Base Staff and was surprised by how little they get to go out on this sort of trip. Feeling a bit guilty that I’m getting such good treatment . . . . The trip to the Dry Valleys was the peak experience of my life so far—partly because of the extensive helicopter ride and partly because of the place. Could have spent hours, unaware of the time, looking at bubbles in Lake Vanda. Just the idea of sitting on a frozen lake is thrilling.—Respondent #7

The social side of Antarctica is also not lost on respondents. Respondent #8 pays particular attention to this facet of the experience:

Really a reinforcement of earlier idea rather than a new notion—the way the community/society is based—so many procedures and routines to know and follow (all very important and for safety). Undoubtedly they become very familiar, but at the beginning there seems to be so much to get to know.—Respondent #8

I’ve become very aware of the need for people to have places to retreat to and personal space—a great irony that in a continent with so much space that ‘space’ is at a premium.—Respondent #8

The fascinating social dynamics within Scott Base (From different events, Scott Bas Staff) and cultural differences between Scott Base and McMurdo. NZers tend to look on McMurdo as a less pleasant place—less convivial, less physically attractive, money to burn with little to show for it (of NZ effort) and brash. Within Scott Base—takes a little bit to get known and trusted—a week?? The longer I’ve been here the more comfortable I feel and the more accepted by base staff and scientists. Very important to talk to get opportunities to talk to different people to foster a relationship. My experience is that this has happened in the bar, usually when smaller, more intimate groups are hanging around later in the evening.—Respondent #8

But again, the reality of the situation fades in:
I can’t believe how ‘at home’ I feel here. For all its so-called hostility I’m completely happy and relaxed and enjoying every moment. Oh how sad I will be to leave—and how hard I’ll work to get back!—Respondent #1

Everyone I have met has been extremely generous and accommodating. No problem to boil up a brew in nasty weather or share the tight accommodations in the field. Most have been interested and sometimes amused by what I am doing as it is so far removed from their science or general base activities. Have made many new friends and will feel very sad leaving.—Respondent #7

Feelings from today are: work-wise there is so much potential here for progs[programs] and teaching and this trip is only touching the surface. Me—really ready to go home, as not getting out and seeing the scenery it feels too much like work and a have to do thing.—Respondent #10

And at the end of the day:

My trip to Antarctica has been the experience of a lifetime, especially doing this by myself. I have seen wonderful historic and natural sights that only a few will ever get to see. The planning of this trip was great in the respect that I got to be a ‘tourist’ and get a feel for the place and have a couple of days to get started on work related activities at the end—but only the tip of iceberg stuff . . . . What an astoundingly beautiful place! Yet we heard all the time—a harsh continent.—Respondent #10

Feel like this visit is a unique chunk out of/not part of my usual life—a little unreal/bizarre . . . . Scale of the place . . . . Clarity of atmosphere and ‘big sky’—wonderful clouds . . . . Isolation (not necessarily physical)—e.g., Missing out on some of the ‘fun’ activity seal sitting because I volunteered to watch a seal early and therefore missed the later action . . . . Highs and lows; pleasure and fun in social interaction/jest etc. at bar.—Respondent #8

It has been an incredible privilege to be able to visit this place. I hope to return.—Respondent #9

The emotions of the final day:

A bit tired and emotional. The whole experience, which has been very short, seems surreal.—Respondent #8

Upon reflection, the most memorable experiences were:

Looking around after stepping onto the ice runway . . . . The ice-fall walk . . . . The landscape/icescape at Cape Royds, on top of the peninsula near Castle Rock, the sea ice in front of the base in the evening . . . . Operating in a tight group of former strangers. Giving up much of one's independence.—Respondent #11

5.22 GCAS

As with other visitors travelling through Antarctica New Zealand, GCAS students dealt with flights to get to the ice. Their thoughts reflect a range of emotions:
Tired from flight. Feeling really dissociated from reality. Antarctica looks pretty dull, all dirt. Mt Erebus is spectacular from airfield, it never looked so impressive in photos . . .—Respondent #26

As soon as we could view sea ice outside the window, we were “SO EXCITED” going crazy with cameras trying to see out of every window in the plane . . . The NZ Air Force guys were super friendly and after 7 hours we had landed @ McMurdo/Scott Base. The group seemed almost silent stepping off the plane. The view was just incredible.—Respondent #33

It has been a huge day. It is now after 10.30 pm, and I was up at 5 a.m. this morning. We left Christchurch in a NZ Air Force Hercules at 9 a.m. this morning, and got to McMurdo Sound around 4.30 p.m. It was a horrible flight, stinking hot, with no way to escape the heat and congestion of so many passengers. I couldn’t sleep or read, so spent most of the time sitting and looking at my watch, hoping the time would go quicker. It felt so good when we passed the point where you turn back if the weather is bad, and we started to see mountains and breaking up sea ice out of the portholes.—Respondent #35

Arriving in Antarctica, I am jumping up and down with excitement.—Respondent #44

But in a sense, had the mystique worn off already for some?
. . . my most emotional time was when I picked up my clothing 2 days before departure.—Respondent #28

Socially, the GCAS group arrived as much more of a cohesive unit. They knew each other, they had had many weeks of preparation together, but group dynamics still appear to fluctuate:

Everyone OK, some people annoying I just avoid and try to be more patient. Got a little sick of being organised by other people so much, but understand.—Respondent #26

It’s funny that different people grate different people in different ways, i.e., one person may piss off another, but be fine to a different person. I guess we’re all different . . . Life is an effort in Antarctica, Some people are lazy and inconsiderate, some people just don’t think sometimes, it’s amazing how people can cope under extreme conditions.—Respondent #28

The focus on people is not always directed at those actually on-site. There is a sense of people a home, which lasts throughout the experience, and also a thought for those outside the group:

I felt a bit sad to be leaving but looking forward to my comfortable bed and partner!—Respondent #28

Again, as with ANZ visitors, there appears a sense of mystique surrounding the historic huts:

Privilege to be here—how lucky we are, how much gear we have compared to the early explorers. How the early explorers all passed by here, and the hardships they suffered. The contrast between their equipment/communications and ours . . .
a real treat to be able to see them. To stand where past heroes lived and overwintered.—Respondent #44

In general, the on-site experience in the Ross Sea region invoked a lot of interesting thoughts, and due to the nature of the GCAS course they cover many subjects from the views, the activities, the place, and more:

Today Antarctica didn’t strike me too much. Everything just kind of was. Was tired and grumpy after lunch, don’t think I was drinking enough water and was really tired from not sleeping. Thought—getting a little irritated, but trying to figure out why and how to best deal with it—I’m pretty tired.—Respondent #26

Today we were supposed to go to our field camp. The day began as last night was, very windy (40 knots) and snowing. Temp. still about –4°C. I was quite disappointed in many ways that we could not go to camp, as I was looking forward to getting there and building things from snow. I was also happy because Scott Base is beginning to be quite fun. It would be a life that would be very easy to get used to, and very difficult to leave. Everyone here is very friendly, which is great.—Respondent #35

In the afternoon, packed and prepared our camping equipment. It all had to be checked and accounted for. After dinner—so much food! Walked up to observation hill with the operations manager. Great view Scott’s party’s memorial cross. Just about got blown off the top of the hill though. What strikes me most today is how quickly the wind can pick up and how long it takes to get ready to go outside. It was amazing to wander ‘round the base at 1 a.m. (avoiding the drunkards) looking out the windows at the howling snowdrift winds—

Respondent #28

Basically the whole day felt rushed and by 6–7 p.m. everything was complete. It would have been so much better if we had been told “this is what you need to achieve today, go to it” and we could have spent a few more hours enjoying the experience. The day was exhausting with lots of digging and we had to sleep in our snow caves. Four of us in all—very squashed but fun.—Respondent #33

Once all the seals had been read (i.e., their tags) we headed back across the sea ice, this time in crampons, and collapsed in the Hagglunds. Back at camp the weather was mild and I spent the whole evening 6–12 p.m. outside talking to peoples, hanging out in the camp kitchen and enjoying our camp concert which began with a black adder play, some juggling and then a return to childhood games like trains and stations, tying ourselves into knots, action songs and the limbo. It was probably my best day on the ice so far. The right combination of work and play.—Respondent #33

That evening the weather was just stunning—wind dropped down that evening and the sky was blue and we finally saw Mt. Erebus in all its glory. Everyone was outside enjoying the weather and our last night out. I decided to build a trench to sleep in that night so was occupied digging a lot of the evening. I also made lots of letters out of snow and took photos of names. I also managed to walk away from camp a little and listen to Bach CD while looking at Erebus, which was fairly incredible. There was such a good vibe in the camp, you couldn’t help but
wish we had a few more days with good weather. I had a great night sleeping in my trench and we were up the next morning at 7-ish to pack up camp.—

Respondent #33

Today was a free day and absolute bliss for the class—we were all so excited about having the whole day to ourselves. I spent the morning doing the sea ice loop walk in front of Scott Base looking at seals and pressure ridges and then after lunch the mission began.—

Respondent #33

The beauty—we still cannot see Erebus for clouds, but everything is so nice in the snow. The quietness—I sit up until after midnight—no noise from anywhere.—

Respondent #44

How lucky I am to be in Antarctica viewing seals. Cannot believe the good fortune that is happening to little old me.—

Respondent #44

At the end of it all, the beginnings of a reflection process shape an overview of what the experience consisted of:

. . . Antarctica strikes me as not much different than anywhere we live. It’s up to you to get out and experience it. Life is pretty limited (due to safety) and seems quite easy in terms of people cleaning up after you and cooking for you. The people at Mactown seem to forget the outside world is there at all. We’re not so bad I hope. I like the way time spends itself here, and you never get as tired as would if you were at a place that gets dark and has dirty air. I like the way it’s all screwy.—

Respondent #26

Most memorable experience? Probably visiting the historic huts and just the whiteness everywhere . . . . The visit has been amazing. Really full-on and 2 weeks have seemed much longer yet we only arrived just the other day.—

Respondent #28

On reflection, I can honestly say that my 17 days there have been perhaps the most enjoyable of my life. I loved the aspect of Scott Base the most. I had such a great time socially there—both in the pub in the evenings, but also just spending quality time with small groups of people. I enjoyed the camping, but didn’t love it. I was really happy to get back to ‘civilisation’ as such. I loved getting to know people/staff at Scott Base, I also loved the freedom we had there with our free time. I think if the experience has changed me in any way it has given me a more ‘just do it’ attitude especially in regards to the outdoors. I can see myself getting into my tramping, surfing, etc. heaps more.—

Respondent #33

Today we were supposed to leave but due to bad weather our flight’s delayed. So we watched DVDs instead. Kind of a weird feeling when you’re hyped up to go and you say good-bye to everyone and then it doesn’t happen. But it’s cool that we got to stay another day.—

Respondent #34

The things that strike me most about Antarctica are the amazing size of the continent. I never realised the scale of just how huge it is. When you are here and look across the Ross Ice shelf and then look on a map at the tiny dot that you can actually see, you realise just how huge the place really is. Another thing that
strikes me is how much you do not see when you see photos of this place. There is a lot of stuff that happens everyday, that people who have not been here do not realise. For example, the scale of McMurdo and the rubbish on Crater Hill . . . . Overall though, I have felt pretty humble over the past few days as I realise just how lucky I am to be here and see this continent. I can see why some people come back year after year to work here and almost call it their home. I can see that leaving here will be pretty sad, but also I wish that we had the opportunities to go further into the field to the Dry Valleys or to the Antarctic Peninsula or the South Pole or Vostok. Now that I am here, I want to see everything that I have seen photos of before coming.—Respondent #35

Very privileged to be able to visit Antarctica. Enjoyed our camping, but felt we were ‘playing’ at camping—only a stone’s throw from Scott Base. Hut visits and science projects were a highlight. Did not find Antarctica to be as isolated as I had expected. Evidence of man’s presence, e.g., A-frames, airfields in every direction except when the mist was down and visibility reduce. Radio communication farther reduced any feeling of isolation. Felt a little restricted by safety rules, e.g., must have 2 people and a radio to go anywhere, travel only on flagged routes, etc. Although I found Scott Base to be stifling, the staff were all very friendly and helpful. Would love to revisit the continent, although what as and when I’m not sure. Private expedition/adventure trip? I’ll be keeping my eyes and ears open.—Respondent #44

5.23 Heritage Expeditions

As the first of two sections on the typical, commercial tourist, one will notice a few differences between this section and those directly preceding. Both Heritage and Quark Expeditions offer an experience which is at least 24 days in length. This extended length of the trip, on the surface, simply generated more data, but also meant that there was a much different transition from New Zealand (or Australia) to the Ross Sea region. The longer multi-day journey at sea is simply not comparable to the multi-hour journey by plane. Respondents generally do not know each other (apart from perhaps a spouse or close friend) and so may be similar to visitors with ANZ; however, there were a few large groups of friends involved in this project. Thoughts from the voyage through the sub-Antarctic Islands have been included in the results to emphasise the voyage to and from the ultimate destination.

Getting started, regardless of whether in Bluff or Hobart, begins with fresh ideas and an influx of information. Information to frontload the trip, and cover vital ideas such as safety:

Six p.m. taken to Southland Museum to view sub-Antarctic exhibit, which was worthwhile. 8 p.m. dinner and chance to meet a few other trip members. Half Kiwis, rest mainly British. 42 in total. We were given a letter . . . that explained the last trip met unusual ice conditions and didn’t make it to McMurdo/Scott Base. However, iceberg C19 had now rotated and recent satellite images looked hopeful for us. I’m sure we’ll have a great trip whatever happens.—Respondent #52

Awoke to howling, whistling wind—a sign of things to come! . . . . After breakfast received a message from the Expedition Leader, telling us that our ship just returned from the previous trip. They could not go to McMurdo Sound. Unusual
ice conditions caused by the Delaware-sized iceberg, which calved off the Ross Ice Shelf a year or so ago, prevented the pack ice from drifting north and melting. The berg turned sideways and blocked the exit of the pack ice. There were also gale-force winds. The ship tried for 3 days to find an open channel but could not. Rather, it nearly got stuck in the ice and the safety of the ship was threatened. They only got to 74 degrees south.—Respondent #46

We had been told at the dock that the boat would be leaving at 3 pm and that our tour would be back at Macquarie Dock by then. This was important to me as my Brother and two little nephews were coming into town from their farm, to wave us off. (My Husband and Father are on the trip with me!) . . . During the afternoon, while we visited the Antarctic Division (CSIRO in Kingston), it became evident that plans had changed and unfortunately we had no way to contact my brother. Along with the stress levels increasing, tears flowed, but the whole time I was more than aware that this whole trip needs flexibility to deal with the impact of weather and in this case availability of re-fuelling wharf.—Respondent #326

Several of us joined the “expedition leader” on the bridge for some bird watching. It was surprising to see how many birds there were to be seen out here hundreds of miles from land. Perhaps they are curious, or hopeful for handouts, and come to us making the number we see non-representative of the ocean as a whole. The open bridge policy really is a plus, especially in bad weather. I remembered too how interesting it had been last night to observe the pilot get us under the bridge and out of Hobart.—Respondent #61

After leaving the safety of harbour, the first impressions in either direction tend to be of the rough days at sea:
Pretty rough sea (for us) and it was difficult to do anything without being thrown against the opposite wall. I got bruised many times.—Respondent #46

The night was one to remember! The space above the upper bunk was too low for me to get into without help. So, not wanting to wake up Mal when I needed to get down during the night, he wanted to sleep on the floor with the mattress from the upper bunk. Neither of us could sleep. We were rolling from side to side, for hours.—Respondent #46

Lecture room is not nice to be in—no contact with outside world (windows blacked out for films) so can’t anticipate ship movements—I get dizzy very quickly (this went away in a day or two).—Respondent #48

Swell soon picked up once we were clear of Stewart Island. I wasn’t feeling too bad, but . . . half the passengers got seasick, so despite the boat turning downward for a couple of hours for dinner, only half the passengers felt like eating, and that didn’t include me!—Respondent #52

Water became rougher as we headed south. I was quite queasy in spite of taking anti-emetic. Then frankly seasick . . . [Got] a scopaderm patch. However was sick anyway. Wretched night in heavy seas! Had laryngeal spasm after taking sugeron (R. Navy use it)! Very frightening! . . . After dinner, went to bed. Really tired!—Respondent #53
Another rock and roll night, so there were still a fair number who did not make breakfast, or any of the other meals for that matter. Our meals are simple and not too much, which is just as well considering the ships movement. Evidently a crew member admitted to one of the passengers that the degree of rolling we are experiencing is common to all trips. The “expedition leader’s” optimism must be an effort to cheer us up.—**Respondent #61**

A quiet day on board for everyone to settle in—reading and sleeping is the order of the day—many seasick. Went to the evening film . . . . Difficult sleeping at night as my body weight shifted, first to the head of my bunk, then down to the foot and back again in my athwart-ships bunk, and my knee were hurting. Later I discovered how to scrunch myself in so I didn’t move up and down all night.—**Respondent #318**

Made it though to dinner and then back to bed . . . I think we are getting the “Southern Ocean Experience.”—**Respondent #326**

One respondent even wrote a poem about their sea-sickness medicine:

**SCOPADERM**

Pink patches shine around the room  
Faces smiling  
Meals eaten and enjoyed  
Earlier memories fade  
**BUT**—the swell grows . . .  
Shokalskiy lurches,  
Wind from the west gusting  
Boys launching buoys in danger  
We shiver  
and clutch our hats  
The pink patches shine . . .  
Shokalskiy shudders  
Westerly gales blowing  
We lose balance and fall  
The lecturer shuffles  
**BUT**—the pink patches shine . . .  
We are safe.  

—**Respondent #53**

Although not in the Ross Sea region proper, the sub-Antarctic Islands leave their own impressions, one of which is the importance of a stop from the rough seas, a break from the storm:

**Most of us took a hike up the mountain to overlook the harbour our ship was in, as well as the rest of Campbell Island to the South. It was a lovely day to enjoy this spectacular view.**—**Respondent #46**

**Weather was great—a couple of stinging sleety showers and a driving SW wind, otherwise fine and clear. Did shorter walk. The island looks boldly winter-like despite the patches of colours, rocks, and minislips. The comparatively uniform**
height of vegetation, unrelieved by trees is deceptive. The botanical wealth of adapted flora is sheer delight, although most flowering is over. Royal albatross were sitting on scattered nests, sublimely indifferent to us. They waddle uphill to take off! From saddle we climbed to near Col Peak, enjoying spectacular views. Felt guilty with every step beyond the boardwalk!—Respondent #49

There were a lot of happy, smiling faces at dinner and everyone appeared to be buzzing as much as I after their particular experiences of the day. I’m sure most of us would have loved to spend another night and day there, especially when the rumour went round that we were heading for Force 8 conditions to the south.—Respondent #52

We spent the morning sitting watching penguins (king, royal, and gentoo), elephant seals, skuas, giant petrel. So many birds, so many photos but what a wonderful place . . . . Oh, the smells!! I’m now thanking the rain and mist as this would be overpowering if the sun came out! . . . . The penguins were moulting and the seals were also moulting so we had to take care not to disturb them as they were somewhat cranky!—Respondent #326

FANTASTIC MORNING—WORTH ALL THAT ROCKY SEA!—Respondent #326

The sub-Antarctic Islands also provide dimensions for an experience similar to that found off the Antarctic Peninsula. New Zealand and Australia’s sub-Antarctic Islands are home to a wealth of wildlife (penguins and albatross, in particular) not seen further south in the RSR, but seen throughout the Falkland and South Shetland Islands.

The sentiment of education and the need for learning runs throughout respondents’ journals, as does attention to each detail. Many give quite impressive lists of birds seen, vegetation, and history. Respondent #318 also gave excellent GPS references and positions for each day of the trip: “Day 7—6/02/03; Noon Position 64° 10’S, 170° 13’E, Distance 287.”

Onwards from the sub-Antarctic Islands, the experience reverted back to the rough-and-tumble nature of the Southern Ocean:

The ship is pitching and rolling so much. At the end of the journey, we will all be well trained in acrobatics! Every part of the body is getting a work-out—or at least a big bruise.—Respondent #46

Another day of rock and roll—apparently we are rolling so much because there is an unusually persistent westerly 30K, where there is usually a southerly. No sun today—very grey and no birds with the ship. I really enjoy it up on the bridge. Had a “spot the iceberg” competition but I was days out in my guess. The excellent lecture, video and movie programme continues.—Respondent #54

Crashing into a southerly has slowed the vessel down. The circle-crossing party on lower deck (Naiads deck) and the shopping spree in the lecture room (also lower deck 1 Level) both postponed. Yesterday was like a mill pond and would have been fine for these events, but today is a very different story.—Respondent #318
It is too dangerous to go out on deck. Some passengers getting bored, but I have used the time to read up on the Antarctic and its explorers. This fore-and-aft motion is a vast improvement on the corkscrewing and rolling we had previously! Unfortunately the food had not improved and the wait between courses gets longer. Still, knowing from experience what it is like to cook in rough seas, I mustn’t be too critical—better than me!—Respondent #318

As we spent the night steaming south it was very rough weather and I didn’t sleep much . . . . We saw few bergs and spent a long day wondering why I was here. Watched the film ‘Power of One’ which didn’t do anything to lift one’s spirits.—Respondent #322

At sea—and damned hard one too! Heavy rolling seas caused cancellation of the planned get together, but a least lecture on the extremes of Antarctica went ahead. Quite a few people sea sick again!—Respondent #321

While difficult to ‘stomach’ sometimes, this period of travel through the Southern Ocean allowed for periods of reflection, time to simply think:
The main objective for my visit is to visit the historic sights at Ross Island. When you read the accounts of the explorers nearly 100 years ago it is impossible to visualise how they got onto the ice barrier, apart from surviving in the Antarctic.—Respondent #322

Hope to be able to get around more and chat with others on this trip. I enjoy talking with others and learning about their adventures and where they are from. The doctor gave us the ear patch and some medication for our sickness.—Respondent #328

Did some laundry since the ship was still. We then mingled with other in the lounge. Went to bridge to watch bringing up anchor and getting under way. The waves and swells seem huge to me. However, it seems to be the norm in this part of the ocean. The ship is rocking and rolling so much that we cannot stand at times.—Respondent #328

Once properly in the RSR, sights and sounds abound, and the sense of dread from the voyage quickly disperses:
Enjoying the smooth cruise and sunny weather with great visibility. From our window I see the Trans-Antarctic Mountains in the distance to the west, and also the belt of sea ice . . . . It is sunny and 28F. We are heading south again to make another attempt on Cape Royds (Shackleton) or Cape Evans (Scott), on Ross Island. The top of 13,280 ft. Mt. Erebus glistens in the sunshine above a band of haze. Spectacular!!!—Respondent #46

An absolutely magic day. Cloudless sky, no wind, sea glassy, temp –1.5C at 0430, rose to max 11C after lunch. Blinding white ice and snow, a couple of Minke whales this morning and penguins most of the day—who wants to go back to ‘civilization’?—Respondent #48

Great excitement—woke to see Antarctic on the starboard horizon. Calm sea, fine and clouds. Sleety ice on deck, bar patches on inside of bow from yesterdays 30’
waves, which flexed the metal enough to crack the paint and bend metal! Scary! Huge flat bergs now we are in their birthing area (‘Tabular’, actually beyond it). They are held against the bare cliffs by wind and sea ice. Clouds gone, sunny and calm. Steaming down Adare Peninsula, Adélie’s a delight, a few Minke whales (cannot easily land at Cape). Very surprised to see bare cliffs. Churned through sea ice among bergs, closer to Possession Island. Fantastic photography opportunities.—**Respondent #49**

What a superb day! . . . We had the most perfect day imaginable wandering in and out of the sea ice, spotting penguins, seals and whales and taking heaps of photos of the breathtaking scenery. As someone said, it’s the one place on earth that the photos and film footage you see don’t do justice to the beauty of the place. And it didn’t matter that the ice was too dense to permit landings at Cape Adare or Possession Island. We were all absolutely awe-struck the whole day and couldn’t believe our good fortune with weather.—**Respondent #52**

A TRULY MAGICAL DAY . . . After yesterdays gale it was unbelievable to wake to calm seas and blue skies, and it got better. We were among enormous flat-topped icebergs and for most of the day travelled among sea ice. For me this is more interesting than birds or animals or any explorer’s hut . . . said the conditions were extremely rare for this place and there was not a breath of wind either. Shokalskiy was hand steered through the day. I was very impressed with the skill of all the helmsmen to get us through the ice and find gaps that I didn’t even see. We were in ice all day in perfect conditions; saw briefly whales, penguins and seals. We ended the day with mulled wine on the deck. Really feel I am in the Antarctic when the sun was still shining at 11:30 pm. About 71S at bedtime, I think.—**Respondent #54**

This could be described as a spectacular day—clear skies—mountains of 12,000’ so many miles away were crisply visible. Cracking through the ice which was so white with contrast of dark blue flat sea was a unique experience. Large chunks of pavlovas floating around the boat and huge white ‘container’ flat topped icebergs which had broken off the ends of glaciers made a magnificent scene. Still sunny at 11.00 pm . . . 4 sightings of whales—Minke.—**Respondent #314**

. . . the huge iceberg is officially known as C19. It can be seen to port stretching across for miles and miles. The previous expedition ran up and down it looking for a way through, in vain. Since then it has turned and access through to McMurdo is now possible. Some say it is half the size of Wales and others say it is the whole size of Wales—in other words it’s bloody big! Fortunately it is a long way away from us at present. We seem to be approaching pack ice again; time for a visit to the bridge.—**Respondent #318**

There is quite a spectacular glacier coming down onto the beach from Mt. Bird and extending into the sea. We were surprised at the speed of the passing icebergs—they move very swiftly northwards with the current. Shokalskiy went right over one so the “camera brigade” could get some shots.—**Respondent #318**

The good thing is that the southerly wind should have cleared ice from most of the Ross Sea (I had not mentioned that last month’s trip didn’t get into the Ross Sea
at all because it has been blocked by massive icebergs—this must have been a terrible disappointment).—**Respondent #321**

Still cruising N after waking up; had been moored/parked overnight, but could not get down to Hut Point because of a combination of what seemed to be the stubborn-mindedness of the staff at the U.S. base and a cold S wind coupled with a temperature of –9°C which made the planned fast ice trip with the Argos out of the question. A bitter disappointment to all, but the reasons (at least the weather) understood.—**Respondent #321**

Quark Expeditions cruise ship had pulled up on the ice near to us. I felt as if my personal space had been invaded.—**Respondent #322**

Woke to see Mt Erebus on the starboard bow. Mt Terror came into view, but I can’t estimate the distance. The pack ice is subtly different here, it is not so fractured. Adélie penguins around and seals and Minke whales now and then.—**Respondent #322**

New experiences of the Antarctic are continuous and one accepts them—that is why we are here.—**Respondent #322**

Amazing sites! We are so lucky to be here . . . I’m disappointed that this time I might not get to see the historic huts and the bases of Terra Nova, Scott and McMurdo—but I look at the experiences we have had so far and the sights we have seen and I’m glad we are here and everything else is a bonus—maybe even an excuse to come back some day.—**Respondent #326**

I did not realise that it would take as long as it is taking to get to the Ross Sea area. I am feeling much better today—almost back to normal. However, the rolling of the ship is still severe much of the time!—**Respondent #328**

As mentioned previously by respondents, there are times when reality sets in, and one realises that the weather, the political situation, and the social structure of the journey do not always match:

**Intended stop at Franklin Island, but sea ice prohibits. At 7 p.m. we turn north to Drygalski Ice Tongue, to reach it in early a.m.—or if need be—Inexpressible Island and Terra Nova Bay (Italy’s domain—said they can accommodate us. Plans after that are to return to McMurdo Sound later in the week—ice permitting. Last month’s trip could not go there at all because of sea ice. Hope we can, but need to be sure of ability to get back out of the ice.—**Respondent #46**

At this point we feel some disappointment about spending so much time at sea and not being able to get off and see the huts of the early explorers. However, the ice can come in and go out at any time, so there is hope. In fact, at 9 p.m. we watched it freeze all around our ship when we were momentarily stopped to deal with getting a stubborn ice floe out of the way.—**Respondent #46**

They call our trip ‘In the Steps of Scott and Shackleton’ . . . seems to me that we’re not the right people to be ‘in their steps’, with our air-conditioning,
stabilisers, GPS . . . and complaining about so much. We don’t know we’re alive!—**Respondent #48**

By suppertime we had just about got to the point furthest South that we had got to yesterday. This could be easily seen on the electronic chart and course plotter which John had learned to operate. On the way we saw several animals much as we had the day before. The weather remained glorious . . . the ship stopped and over the PA it was announced that we were giving up, permanently, our quest to find a way further south . . . . Losing all hope of reaching Ross Island, the ice shelf and the Ross expedition huts was a very great disappointment to everyone on board. There were some quite bitter comments made by those whose major interest was the historical huts of Scott and Shackleton.—**Respondent #61**

The real thing at last! Woke up to sight of Cape Adare in front of us—plus much pack ice. This prevented landing at Cape Adare or Possession Islands, but after a bit of maneuvring about to the east we were able to find a good course basically southwards—the decision having been made—sensibly—to go straight to Ross Island and try the others on the way back. Could only reflect, in glorious admiration, on the courage and skill of the initial explorers in wooden ships.—**Respondent #321**

Dead stop in fast ice. A U.S. Coastguard ice breaker is working up and down trying to clear a channel for the oil tanker with its winter supply of oil for McMurdo Base, and also for ourselves and Khlebnikov. Out taking photos of our “ice parking lot,” we are in a vast expanse of solid pack ice. Eerie and beautiful.—**Respondent #318**

All day on course to McMurdo . . . . Nothing to do but read. Icebergs, etc. . . . Winter splash. Five members and crew dived into sea. Water temp 1 or 0 C. Ship left Ross shelf for McMurdo at 6:20 travelling all day. Arrive McMurdo but closed by ice.—**Respondent #323**

Despite its isolation, people in the RSR do appear to play an important role in respondents’ experiences—people both on the HE vessel and off. The nationalities of passengers serve as an illustration for the official IAATO numbers (mentioned in Chapter 2):

Passengers seem to mix well and talk to each other easily. There are some very wealthy people, many have travelled extensively and quite a few have already done an Antarctic and or Heritage trip before. 10 p.m., 2–3C outside.—**Respondent #49**

Yes, there were a few negatives to do with certain of my fellow passengers, some of whom I felt the trip/Antarctic experience was wasted on, others had unrealistic expectations. However, the kindred spirits amongst us had found each other by the end of the trip and had a lot of fun in each other’s company. I would like to think lasting friendships were made.—**Respondent #52**

Sad for older persons attempting [a] journey that seems likely to be beyond them. Hope that those overtaken by sickness soon appear at table—balance and keep busy if possible.—**Respondent #59**
Nine nationalities on board—NZ, AUS, England, USA, Canada, German, FR, Italian and Russian.—Respondent #59

The passenger list is multinational, with ages from a young Japanese couple, to an American couple who are over 80. There are 49 people (excluding the Russian crew of 24), 7 of which are our staff plus one New Zealand government observer. As many of the areas we land are in the New Zealand sector and are unmanned, there has to be a monitor to see we keep to the Antarctic environmental treaty.—Respondent #61

Meeting all the passengers—42 of them—hard to remember names, but we are all wearing name tags, which helps . . . . I did an assessment and found we had 1 Canadian, 9 Americans, 2 Australians, 1 Netherlander, 16 New Zealanders, 2 Scottish, 9 English and 2 half and half—they were originally from NZ, but had lived in England for 25 years or so . . . . We have an interesting group here, but a much bigger group than the trip we were all on together, so it’s harder to get to know everyone—time will probably fix that though.—Respondent #318

Today should be very interesting as we have several films and lectures, plus seeing icebergs! We have quite a few nationalities aboard—British, one Canadian, many New Zealanders, Australians and just a few Americans. It is interesting talking with others and seeing differences and similarities.—Respondent #328

Known for the huts of the historic era, how do these attractions in the RSR truly affect visitors? What thoughts or revelations do they evoke? The following quotes examine how those with HE experienced the huts and what feelings they were left with:

We walked up some hills and then down onto snow and rocks until, in a bowl-shaped little valley stood Shackleton’s “hut.” It was awesome! . . . and that is an understatement. Left as it was 95 years ago. Only the roof had been replaced and secured with crossed cables to protect it from the fierce winds. In this very dry climate, nothing deteriorates. Outside was the stable and some dog houses, as well as many, many crates which were still holding canned foods. All around the hut were cans and jars containing foods, some of which had rusted open and we could see dried beans and peas in them.—Respondent #46

Scott’s hut was well worth the visit and leaves one rather awestruck. Light snow this morning, fine but too cold on the Argos.—Respondent #48

Achievement—walking on fast ice and Antarctica. Appreciation and respect etc. for the explorers. Sheer total exhilaration over the whole thing! Everyone’s spirit soared.—Respondent #49

Having absorbed the atmosphere of the hut’s location and surrounds, I duly cleaned my boots and entered it, and like everyone else from the ship was totally blown away by the treasure trove inside. I reckon you could spend all day in there and still find new things to marvel at. We are just so lucky to have the chance to see these wondrous places.—Respondent #52
Now feel we are in Antarctica—plough through ice, then clear water, then more ice. Finally found clear water and after a couple hours came close to Cape Royds. . . . After dinner all went for a walk to Cape Royds Hut—Shackleton’s base. Fascinating to see how well much of the material had survived. Boxes of tinned food still labelled—some showing contents . . . . Lights amazing at midnight and colours on the sea quite fantastic.—**Respondent #314**

The hut really looks as if the residents have gone off for an expedition and will be back shortly. Many of the supplies could be bought today at home and the suppliers are still in business . . . . Again entering Scott’s Hut gives you a strong emotional feeling. Looking at photographs is no substitute, and in the future any reading will be now much more vivid.—**Respondent #322**

With the huts seen, the scenery and wildlife visited, the return trip back to New Zealand and Australia begins. Already there is an air of reflection about what has happened:

*It was very sad to say goodbye to Antarctica. So many dreams and hopes smashed by the weather. Most of us will not be back here again. The pristineness of the area is overwhelming. Interesting to note that none of the research stations will give any help to a private enterprise, only in emergency.*—**Respondent #62**

Despite warnings of the ‘rocking and rolling’ to come, there is hope in leaving this beautiful region:

*Was an amazing day really, with the ice, wind change and performance of the seals. Full of admiration for the captain and staff getting out of the pack ice. I think the danger was limited, but the storm was bad! Very poor visibility . . . . The phases of weather here are very interesting and challenging. Can only have the highest regard for early explorers in their small boats. Must have been great seamen.*—**Respondent #53**

We left Antarctica without setting foot on the continent—ice conditions were too severe—perhaps 2 large icebergs C19 and B15, restricted ice floes, perhaps a lack of storms to disperse ice—visiting various huts was interesting, but not my main reason for the journey—I wanted to get to the continent and have a look, so feel disappointed that I spent a lot of time and money and did not have that experience of being truly in Antarctica. Having said that, it has been a memorable experience overall as a visit to an alien and at times vaguely scary place, and I certainly am now aware that the conditions control man, not the other way around. The selection of photos are trying to convey the different moods of my Antarctic experience.—**Respondent #54**

Leaving the protection of the pack ice, the voyage to the RSR begins again:

*Spent much of the rest of the day reading in the lounge and having hot drinks. The sea is not rough, but the swells are huge and we ROLL. Saw black-browed albatrosses, white-chin (giant) petrel, and sooty shearwater. Had glass of wine and dinner and then returned to lounge for cup of tea. Still rolling! . . . I hate rolling!!*—**Respondent #53**

*Very heavy seas rocking side to side—nothing much to see.*—**Respondent #314**
We woke up to rough seas. I felt rather queasy by the time breakfast was over, so got on ear patch from the nurse. I spent most of the morning in bed—really not feeling well . . . I just felt better lying down most of the day.—Respondent #328

However, just as on the way to the RSR, the breaks at sub-Antarctic islands provide a welcome respite from the Southern Ocean:

A beautiful day and noisy fun evening. We could almost be cruising! . . . . The coprosma found on the SW Cape Walk may be an unidentified species . . . . The leaf was apple green, maximum length 2.5 cm . . . see if he can get a specimen for identification on the next trip. Debate was had on whether the NZ government should restore the accommodation block at Tagua Bay—what for and for whom? I agree with leaving it to disintegrate.—Respondent #53

After lunch we were separated into 2 groups and taken on a zodiac cruise along the North East Coast of the Snares . . . FANTASTIC . . . . We viewed Albatross, crested penguins, sea lions, terns, gulls, tomtits, fern birds as well as cruised into sea caves and through rock arches. The weather today was 12 degrees and windy but changed from showers to sun and back fairly often . . . . Yet another great day and we headed off to Stewart Island during dinner.—Respondent #326

We arrived at Stewart Island in the evening of 29 Jan 03, so had a fairly calm night—good sleep . . . . Today we spent time packing up, sorting out our bills and then did a cruise along the coast of Stewart Island, as we couldn’t land as we hadn’t passed through customs yet.—Respondent #326

To end the voyage, back in the clutches of civilisation, there are many thoughts already surfacing:

When our bus is ready to leave, the Shokalskiy gives one long blast of the horn and the crew stands on deck and waves good-bye to us. It is a touching farewell to the greatest of trips. In total, we travelled 5,069 miles by ship.—Respondent #46

It was a fantastic experience to see so many new things and the group seems to have mixed well without any jarring personalities. I can’t pick a most memorable—I enjoyed the Naiad jaunts, the Argos pulling us over fast ice was a special triumph of technology, the smattering of geology was interesting, the flora distinctive, the animals fascinating and entertaining and their jaunts to feeding grounds and back make human exploits puny . . . . In a nutshell, having had time to consider—the utter unreliability of the weather, and the power of water in its different forms are the most impressive aspect of Antarctica—and puts attempts at human control in contempt!—Respondent #49

The trip has been the fulfilment of a long and dearly held dream. I chose this trip because I wanted the complete experience and adventure of crossing the Southern Ocean, despite being concerned about whether I’d be seasick or not. I also hoped to reach Scott Base where a number of my friends had worked. The reality was all I had hoped for and much, much more. It was packed with excitement, beauty and wonderful wildlife experiences . . . . Overall, the disappointment of not making Scott Base was more than outweighed by all the bonus experienced caused by the unusually heavy ice year. It was a fantastic trip, packed with memorable
moments—the trip of a lifetime and probably a life-changing event for me.

**Respondent #52**

Unique among continents, picturesque, white wilderness. Eastern sun reflected in ocean an inverted view. Aesthetically pleasing Antarctica = Jewel in the crown of God’s handiwork.—**Respondent #59**

How do I feel about the whole experience?! . . . It has been a wonderful 4 weeks. Experiences that are not captured on film and will be hard to describe. However, on this trip we nearly all feel nature has cheated us of our main goal, that being of course the trip down to McMurdo Sound. Because of this, something is definitely missing of our total experience.—**Respondent #62**

All in all, we had a great trip. Very interesting and I really feel life I got to Antarctica—even though we never got to McMurdo and Scott bases (this was my biggest disappointment!). However I did see and understand why we simply could not get there. Part of the thrill and excitement of the trip was experiencing the dangerous (to me) conditions of the sea and ice! Again, we had a great trip!—**Respondent #328**

Very pleased to be home . . . . Although I went through some rough times, the tour was excellent and a tour to Antarctica as a privilege, and without peer.—**Respondent #323**

What a wonderful place! . . . . Breakfast came all too fast! As did the “goodbyes”—GREAT TRIP!!—**Respondent #326**

### 5.24 Quark Expeditions

Similar in length to the experiences had by HE passengers, the primary differences between the two groups of commercial tourists could be assumed to be examined as two aspects: logistics and season. First of all, Quark Expeditions has more ability to access sites logistically. Having the icebreaker *Kapitan Khlebnikov*, Quark is sometimes able to push further south than the ice-strengthened *Akademik Shokalskiy* can. Also logistically, Quark Expeditions utilises helicopters, and so can access inland sites such as the Dry Valleys, can reach huts easier when the ice surrounding Ross Island is a problem, and can provide opportunities such as flight-seeing over Mt. Erebus. The second non-logistical difference between the two groups is that Quark’s passengers reporting in this research were from the 2003–2004 season, and thus weather and ice conditions were not the same as those encountered the previous season by HE. The Quark passengers mentioned by HE respondents were those who did not respond in any capacity the previous (2002–2003) season.

Another difference, which affected the degree to which Quark passengers wrote, is the fact that they were contacted and solicited to participate differently, and thus much of their recollection regarding the beginning of the trip is encompassed in their anticipation surveys. This type of methodological issue is described and justified in both the literature review, which discusses measuring experience and previous studies (Chapter 3), and in the methods chapter (4).

While in the RSR, which is where most Quark passengers began their journals, thoughts abound on a number of different subjects initially:
Most of this trip I have been freezing, sick, frightened, or some combination. I got off to a bad start with my scopamine patch, which gave me the rare side effect of agitation, psychosis and memory fading in and out. A part of me that remained detached and sane told my husband to pull off the patch. My next encounter with illness was 2,000 miles away from civilization (I had joked that since I had a bad health history, I’d get sick in the middle of nowhere). My temperature rose to 40.5°C and my blood pressure decreased to 84/49. I knew that the doctor felt helpless with no IV, but I hunkered down the 36 hours it took to recover. These 2 health problems made me think about every possible bad scenario, and I actually passed by 3 side trips. I believe they were not very educational. I was also very upset by all the abrasions, bruises and head lumps I acquired from falling, mostly on the ship. However, I fell 3 times off a boardwalk and once was blown off it (I only weigh 51 kilos). I was shocked at being so inept, as at home I lift weights and take ballet class. Hiking requires more than fitness: Experience.—Respondent Q76

The lot of flights was amazing and very beautiful (about 25? Separate flights, counting the bit Erebus trip ad the others, to all kind of destination, flight to and flight back). The Dry Valleys visit was again a very lucky experience, good weather, good flight, very interesting explanation.—Respondent Q19

What strikes me most in Antarctica is the endless greatness, vastness, the mountain ranges, the huge ice wall of the Ross Shelf and icebergs. The fantastic forms of ice during the icebreaking of the Khlebnikov, the cracking in the front area, the whole tumbling of thick ice rocks along the sides of the Khlebnikov.—Respondent Q19

Our group, I believe, will be known as the lucky group. Our weather was fabulous, which enabled us to do so many things. The night we arrived at our first Antarctica landfall, Cape Adare, the golden ocean and land, the landing from the zodiacs, the Adélie penguins and the Borchgrevink Hut all set the scene for treats to come.—Respondent Q28

Our trip fell into three sections; a week travelling to Cape Adare via the NZ sub-Antarctic islands; a little over a week in the Ross Sea area; and a week travelling home via Macquarie Island. The outward journey passé din a flash, as the whole experience was new, our fellow travellers were becoming acquainted, and our expeditions leaders gave fascinating educational lectures and trained us in the skills we would need. The trip home was a little more tedious, as we did not have the expectancy that comes with journeying into the unknown.—Respondent Q32

The opportunity to take a helicopter flight up to and over Mt. Erebus was wonderful, given the height. The other really special thing for me was the penguins. I loved them. I have spent time in Canada’s north in winter so the expanse of ice was not amazing to me.—Respondent Q36

Compared to the peninsula which is more varied and photogenic . . . . Unique is not the right word, one of a kind, spectacular scenery.—Respondent Q59
We were incredibly lucky with the weather—apart from the last two days in Antarctic waters, we experienced generally fine, sunny, clear weather—while the temperatures were cold, they were not extremely so and warmer than expected. I guess the absence of any serious wind (and therefore high chill factor) was a principal reason for this. —Respondent Q61

The vastness, emptiness of a huge continent. It was a shocking thought to realise that we were touching on only a very tiny part of the continent . . . the huge influence it has on the world’s weather: watching the icebreaker work its way through the pack ice and fast ice and pondering on the similarities between the different slabs of ice, riding over of chopping under other slabs—replicating in miniature the tectonic forces at work in shaping planet Earth. —Respondent Q61

I began this trip with very little knowledge of our destination. I had prepared clothing-wise and read Lonely Planet and the material provided by Quark. The 1st day out we hit some rough weather and I thought it would be a tough trip, but it flattened out and our weather was superb till the last 4 days. Understanding the ship; why it’s built the way it is and what its mission was helped to understand the ‘rock and roll’ turbulence. —Respondent Q91

I was awed by the wildlife, the flora on the sub-Antarctic islands, the climate and geography. Surprised by the amount of science going and most people know nothing of it. Also I realised that although Antarctica is a very special place, it is also just one piece in the global puzzle, and every place on Earth is special in some way, and should be treated much better than we humans are treating it. Having time to observe details of the landscape and animals was very special. —Respondent Q98

The vastness of Antarctica was to me a new concept. To read this over and over is one thing, but to experience it is another. When it takes 6 days to get to a place—that’s a long way away. —Respondent Q91

Thoughts of amazement seem to prevail, but there is less chronological consistency or transition mentioned, which perhaps can also be attributed to the different methodology. Again, a trip to the RSR does not seem complete without mention of the people involved. Quark passengers tended to mention the quality of staff/lecturers more so than the other groups did:

_The great attention, hard work, kindness and the formidable ships crew, stewardesses, people of the kitchen, very helpful explanations from officers and captain on the bridge. The great sights the zodiac pilots gave us to many places, beaches with lots of penguins, seal, birds, huts and full surprise: the round-trip at Balleny Islands, the unique chance to see this overwhelming wild volcanic place, a big extra. The helicopter pilots did perfect work to show fabulous places, landscapes, a thrilling experience I should like to do hundreds of times wherever possible._ —Respondent Q19

The first surprise was the standard of care on the Kapitan Khlebnikov. Accommodation, food, facilities and an amazingly professional and helpful staff made the trip run efficiently and joyously and their professionalism at every level couldn’t be bettered . . . . Their awareness and dedication regarding the fragility
of Antarctica is one of the many things that has made it an experience I can pass on to many people who are wary of tourism in Antarctica.—**Respondent Q35**

I have enjoyed travelling with all of the people on our tour. All of us have shared an enthusiasm for learning about the wildlife and environmental aspects of Antarctica. I have experienced many new things: zodiac cruising, seals and penguins, icebergs, sea ice, helicopter rides and many more things. I have been awestruck by the beauty of the landscape, its pristine nature, the harsh environment in which wildlife survive. The enthusiasm of our lecture staff has been really infectious and I know I will be interested in Antarctic for the rest of my life.—**Respondent Q49**

All groups when people are thrown together can have their abrasive characters and this group was no exception (e.g., the odd person who was so intent on securing his/her ‘champion’ photos and who did not consider others who may be also taking photos in any way—e.g., walking in front of them without consideration of other). However, as a group, members were generally very interested in the lectures/talks organised and given by expedition staff (incl. videos and films). I guess that I was very lucky to be a member of a party of 20, most of whom knew one another before the trip began.—**Respondent Q61**

The group of fellow passengers I found extremely interesting as I love conversation, and the varied occupations with different nationalities added spice to this wonderful group.—**Respondent Q96**

My great disappointment is that Antarctica is almost exclusively the preserve of the affluent and retired. At 61, I have the time and money to enjoy the continent. At 51, I had the money, but not the time. At 21, 31, and 41, I had insufficient of either.—**Respondent Q119**

What we got to do was amazing—but more so because we had 7 straight days of sun and mostly little wind! Our staff was so incredibly competent that we made all our scheduled landings and extras. Capable ship, capable crew. Major emphasis on ‘taking care of the environment’—treading lightly, not disturbing animals, respect critical areas. We visited all 4 huts, 2 stations, Dry Valleys, ice tongues, etc.—**Respondent Q127**

First off: the ship and crew were fabulous. The vessel we travelled in was perfect for the place and type of trip we were on. The people generally shared a similar view of the environment, the educational sessions and the overall impression I received was that many of them are well travelled.—**Respondent Q128**

As with all others, the huts provide a myriad of reflections, but respondents also have questions for the future:

* I was impressed to visit all of the pioneer explorers’ huts and to feel their very palpable presence amongst their hastily discarded stores and other gear. I was also appalled at the conservation problems, which they present, if other travellers are to be able to enjoy them. The huts and their surroundings must inevitably deteriorate, however careful visitors may be. Accepting that, it would seem ideal if they could be re-created elsewhere, perhaps at the Antarctic Museum in...
Christchurch, as they now exist. To excessively repair and renovate them in the original locations would seem to risk creating an Antarctic Disneyland.—

**Respondent Q32**

One of the most emotional times was to stand in Scott’s Hut at Cape Evans and relive the story and really for the first time appreciate the trials the environment causes in everyday processes. To realise that once the journey started, not only did these explorers have to make ground, but at the end of the day they had to pitch a tent and cook a meal while still topped up in layers of clothes. I hope that in some way these huts can be preserved not only for the historic past but for the future and the understanding that future generations can hold.—**Respondent Q28**

My most emotional moment was at Scott’s hut at Cape Evans—to see and feel this, with the historical knowledge that I had learned over my lifetime was overpowering. I regard my Antarctic experience as a life-changing experience—one which I expect to live with me forever, and which will encourage me to impress upon my friends the value of its preservation.—**Respondent Q63**

Emotional effect of explorers’ huts . . . . Wonderment that man had such an insatiable thirst to explore such a dangerous, cold environment.—**Respondent Q67**

My most unique and emotional feeling was to visit the huts to see how close famous men lived and how different history would have been if they had the beautiful weather we experienced.—**Respondent Q96**

At the end of it all, Quark’s respondents seemed to reflect just as other respondents had:

I did not want to leave Antarctica. Beautiful place.—**Respondent Q16**

In all kind of different corners in the world I hear from tour leaders that the journey was better than ever, and I feel very proud to be there in the right time and place: it is a bit magical and mysterious to have the extra experiences . . . . This Antarctic journey had the most calm weather; everything on program was excellent possible, landings almost everywhere very good, lots of amazing helicopter flights, all historical huts open to visit to experience the magic of history of what these men had to come through.—**Respondent Q19**

I am glad we were bold enough to forget about the physical environment on board [the] ship. To have experienced this mighty land and all the challenges it presented is to hold forever a truly magnificent and privileged understanding within our minds. Antarctica is pristine; let’s keep it that way.—**Respondent Q28**

This journey has always been my dream—felt it would be the best trip I ever did, and it has lived up to and surpassed every expectation . . . . Every single moment felt unique and spectacular; from the first wandering albatross behind the ship to the first iceberg to the last little piece of ice. I knew it would be breathtakingly beautiful, but no one could be prepared for the absolute totality of beauty—260-degree views, so wherever you looked it was perfect.—**Respondent Q35**
I was an emotional see-saw the whole time, swinging from despair and fury at Man in general and some individuals in particular, to elation I could hardly bear at the beauty I was experiencing. And I’m known as a down-to-earth, sensible person. I, who never cry (not even when a child though’ life was grim enough), wept at having to return. The only other times I’ve experienced place so intensely were in the Himalaya and on the St. Elias ice field in the Southern Yukon. And, or course, in my ‘heartland’ of the Main Range, Kosciusko National Park, where I lived for many a year.—Respondent Q44

Overall the visit to Antarctica has exceeded my expectations by leaps and bounds. I have come to quite an understanding of how fragile the environment is at Antarctica and how it must be preserved for the benefit of the planet. I do not think mass tourism should be permitted in such an environment, but I do think that the type of tour which we went on which is relatively expensive and so inaccessible to many people is a good thing, as I think the type of people we had on tour all appreciate the need for great care to be taken of this unique environment. All tours of Antarctica should be undertaken with highly educated lecturers to develop their clients’ understanding of the area.—Respondent Q49

The visit as a whole has been a totally rewarding experience, which I feel privileged to have experienced. I am more knowledgeable and more committed to Antarctica’s preservation and responsible management for future generations.—Respondent Q63

Certainly I feel privileged to have come here, and emotionally I don’t know if I could expect the same reward. The wildlife surpassed my expectations. From the gregarious penguins to the lazy, cute Weddell Seal.—Respondent Q128

The Antarctic is so different from anywhere else I have lived or visited for any length of time. For me snow is a novelty, let alone all that ice! . . . . Also the silence . . . .—Respondent Q69

I can’t wait to share this with my family and our children’s friends, but it truly will be hard to communicate the FEEL of the place to people who haven’t been.—Respondent Q98

This was the very best experience I could imagine. The staff went above and beyond the call of duty to make the journey the best. Being on an icebreaker we were able to get right into McMurdo Sound and having the helicopters meant we could access places that otherwise would have been impossible to get to. I don’t think any other vessel would be appropriate for such a journey . . . . Although initially it seems like an enormous amount of money, I believe its been worth every penny—the food has been the best restaurant quality, the zodiac rides to shore and the unlimited helicopter rides have been great value. They used the choppers like mini-buses. (I even was taken back to the ship at one stage for a toilet stop! The most expensive toilet run I’ve ever done). We had perfect weather which really helped of course, because it meant all the plans we had and places we wished to visit were fulfilled.—Respondent Q118
5.3 Departure Survey

As with the arrival survey in the journal, upon ending their journey in the Ross Sea region (whether it was their last few days aboard the ship or the last few days before they departed Ross Island), visitors were asked five questions (see Appendix N). In the departure survey, Quark’s passengers were subject to this instrument, unlike in the arrival survey.

All respondents (now all groups; N=55) were asked for their mood again. Three respondents left this blank, while a further two returned data where the single mood was able to be interpreted. Figure 5.2 displays the moods of respondents at the end of their journal or survey booklet.

![Mood upon departure from the RSR.](image)

The six “other” moods mentioned included: disconnected, sad, and humbled. For one HE passenger, the mood of frustration required clarification:

*Because we did not complete the journey, otherwise delighted with the part that we did.*

And once again, the common themes of spirituality and hardship came out:

*Blessed.*

*Seasick, still too far from help. If I'd known in advance the hardships, I wouldn't have gone, but I don't want to leave.*

As was done in preceding phases of the research, visitors were asked to relate their visit to tourism, science, and preservation of the continent. From those with ANZ:
A place for nature and preservation because it is the last relatively untouched environment, and we've already mucked up the rest, combined with science. They relate. Business—no, dangerous. Makes it more susceptible to greed and selfishness. Science—yes, but not unlimited and not without other dimensions of human life.

I suppose I see it as a place of business in that I wish more people could experience it for themselves, which means tourism. I suspect the scientists are motivated by their love of the place more than the true value of their work in the scheme of things. Certainly Antarctica needs to be preserved, but I see its value in inspiration and revitalisation of the people that come here.

Actually, for me personally I would describe it as a place of aesthetics . . . I see it as a place of science because this is the main activity that takes place, not because I think this should necessarily be its primary function/use, but it is the reason for many events, the rationale behind the est. of permanent bases (even if there are broader political motivations). Science and preservation are linked; much of the science is ostensibly to help with preservation/protection.

I see Antarctica as a place for nature and preservation—why? It seems to be the last relatively 'untouched' continent and so magnificent. Business—seems tacky and demeaning. Science—maybe? We have so much to learn.

I believe Antarctica is still a place of nature and preservation because it is so untouched by man and should remain that way. But science has such a huge part to play in what people are here and using this science to see the impact of humans on this continent is important, also the human activity off the continent which affects it.

From GCAS students:
I think of it as a combo of all 3. There is no escape from business in today's world, wherever you go everything has to make $. The Antarctic offers amazing opportunities for learning as well as a unique environment that should be preserved as much as possible.

Science—all the policy and logistical support is for the understanding of science (and other strategic reasons). The other two—preservation—too much science and modification to really call the continent a world park for nature—although it's much better managed environmentally than other places for sure. Place of business—yes, for the by products of science and logistical staff.

I guess as a place of science ultimately, because everything down here is geared logistically towards supporting science. Whether all the science is necessary is another question. I don't think business, but I do think politics. I do agree with nature and preservation, but when you are around Scott Base and McMurdo I think you can't help but think of science. I had more thoughts of nature and preservation when at seal colonies and the huts.

I see Antarctica as a place for nature and preservation. I understand the importance of science in Antarctica, and realise that business and commercial
activities (tourism) are going to be present, but ultimately it should be a place for nature and preservation.

A place for nature and preservation. It is the only continent where man's presence is not yet overpowering. Science is fine, as long as its effects are minimal.

Those with HE and QK were greatly in favour of leaving the region to nature and preservation, and there was a surprising anti-business sense—interesting, given they are the ones (as commercial tourists) most perceived to be closely linked to business:

A place for nature and preservation. This is a very unique part of the world and the natural habitat for many species and a very beautiful and unique landscape. In the rest of the world much of this uniqueness has been destroyed. I would hate to see this happen in the Antarctica. However, I do believe that scientific research has a place here. We must not stop the search for answers about our world. We are enjoying a 'business' enterprise. How else do we see it? Tourists should be restricted, but hopefully not always to those who can afford it.

Antarctica is a place where we have an opportunity to largely preserve it in its natural state. However, it is also a laboratory that will enable mankind to better understand the world we inhabit. These scientific studies are important, provided there is minimal degradation to the environment and controlled tourism—such as this journey—are important in the development of greater understanding of the area. Exploitation (business??) should be prevented, but I guess that this is very much a political question.

Nature and preservation. It cannot just be regarded as for science alone. The more people who see the Antarctic, the more likely nature and preservation will prevail. I would like the Antarctic Treaty amended to enable preservation to be legally enforced.

Perhaps more so in favour of leaving the region to nature and preservation:

Delete "business." This can contaminate and destroy the place, and there are few enough clean areas left. The other two options can, I believe, coexist if those involved wish it, and I believe this should be the ultimate aim.

Business has no place in Antarctica. Science does as long as it is for the good of the entire globe and not just for selfish, nationalistic reasons. I have come to the view (although I know it is an impossible idealistic one) that humanity has no business in these remote areas (I include the sub-Antarctic Islands). The fewer humans go to these places, the more chance they have to remain natural sanctuaries. I believe in the extermination of introduced predators, but they should remain as reminders of what Earth was like before humankind arrived.

Upon reflection, through ANZ the most rewarding aspects of the visit seemed to be:

Walking in the hills in the Dry Valleys. I felt completely at ease and had the most amazing time fossicking around amongst the rock forms. Spectacular! I felt confident, capable and privileged to be here.
Being in this landscape—the momentous, vast, majestic nature of it does good things to my soul! Makes me feel very privileged to have been here, and very small.

Being out in the wilderness/outdoors, e.g., on the sea ice (away from base), seal sitting; visiting camps on sea ice; rewarding for aesthetic and spiritual experiences (very personal), and feelings: awe, peace.

Just being able to be here, standing amongst the majesty, cleanness, the purity and size of it all—makes man pale into insignificance.

This was likewise for those with HE and QK; it seems that just being there was the key to the experience, along with a spattering of history and introspection: "Seeing" new things for myself. I am interested in geology, fauna, flora and history, so travel provides so much to place and stimulate. A very different environment, approaching the pristine. I feel privileged.

The unique nature of landscape and wildlife. This must not be changed. I feel privileged to have experienced it.

Being able to see the wildlife so undisturbed and to follow in the footsteps of those explorers and scientists was fantastic. The fact that we couldn't reach our goal due to the nature is somewhat "grounding," if not disappointing.

Adventure, sense of achievement. Fulfilling. Spectacular in every respect.

The land/seascape. It was more vast and captivating than I could ever have imagined. The light was wonderful. The pale blues, the whites and the vastness of the setting. The Dry Valleys gave another rewarding landscape. The settings were so many. Fast ice, pack ice, glaciers, dry valleys, mountains, broad vistas, sunlight 24 hrs. This made me feel very privileged and humble that I could be in this place and experience so much.

The whole experience was just one huge fabulous perfect reward for the rest of my life. I'll be able to cast my mind back to a thousand tiny incidents and smile and feel completely happy.

Seeing the vast expanse and power of nature. It gives me hope that the world might survive the abuse we throw at it.

The sheer unaltered beauty. It made me feel awe-struck.

For GCAS students, people played a much larger role in the experience:

Probably the camaraderie at camp and base. I like hanging out with people all day, every day. But I also found the largeness and emptiness pretty darn cool. It made me feel . . . real. It's good to get perspective on things sometimes.

Definitely the opportunity to experience Antarctica with my classmates, and ultimately become close to them thru it. Also surviving the camping reasonably comfortably.
Visit to historic huts. There was a strong feeling of history about the huts. The trials and tribulations of the great explorers was tangible. I feel very privileged to visit the huts before they become too 'restored'.

At this stage, ANZ respondents had mixed feeling about their expectations:

Yes and no. The awe/magnificence was expected. I thought the scale and beauty would be mind-blowing. Little things surprised me—voice of seals; that the weather actually isn't that bad (not to be afraid of, but to be careful of).

It has seemed a bit 'unreal' to be here. I didn't expect Ross Island to be so volcanic.

Exceeded my expectation! I felt very at home there.

Beyond imaginings. Every aspect has been perfect.

Actually I expected to be bowled over by the landscape, but had prepared well for that.

Didn't realise it was so science-oriented.

Had not expected to have to deal with so many people, safety, rules and new patterns of organising life.

The social and cultural dynamics of the place fascinate me—I expected them to be different, but the way they became so prominent in my experience is unexpected.

Yays and nays per se from GCAS as well regarding their feelings about their expectations, but:

I guess we were rather bombarded with images and I didn't get to see King/Emperor penguins and giant icebergs up close. Also the Dry Valleys look amazing, but we only ventured not even out of sight of Scott Base.

On the whole, yes, it has been a dream come true. We were lucky to participate in many projects/visits. I did expect to feel the isolation of the continent more than we did. All the radio schedules and visible signs of human presence, e.g. huts, flags, airfields, removed the feeling of a hug, white, unexplored continent.

HE and QK respondents had their expectations met or exceeded:

I had not really appreciated how far away it is, not how quickly conditions can change. We hit a cold spell in which the sea was freezing over almost as we watched, and had to cut our visit short by a day to avoid being trapped. We were actually icebound for about 4 hours.

Yes, it has been what I expected, and so much more besides. I knew it would be an adventure and it was certainly that! I knew it would be beautiful, but it was so breathtaking it hurt. I knew I would love the wildlife, but I didn't expect so many great wildlife encounters . . . .
Better than expected, helicopters made all the difference

I really didn't know what to expect, so the whole experience was a learning one. The continent is even more remote than I expected.

I didn't expect the view to be just as perfect from every single angle. I didn't expect the wildlife to be so inquisitive and unafraid.

This visit has far exceeded what I had expected. Books and photos don't really do justice to this unique world. I did not expect the light to be so wonderful or the landscape so vast. I didn't expect the lectures to be so well presented and informative. The whole expedition was geared to us experiencing everything possible and more.

No. I expected to be cold and miserable on the trip. I did not realise the scenery would be so spectacular and wildlife so fascinating. This is probably because I had seen photos of ugly bases like McMurdo and Scott Base prior to my visit.

Antarctica appears to have begun a series of appreciation, leading to the realisation that life can be put into perspective, and then perhaps growth can occur. Specifically from ANZ respondents:

Through discussions, debates, thinking, talking, reading and sharing a multitude of experiences, I feel I have had my horizons extended in so many ways! Quite a life-changing experience.

Personally, re-opened my eyes to importance of the continent and the importance of preserving it as . . . ‘pure’? New things to wonder at, heaps of new stuff learnt. Important because hopefully I'll be able to pass it on to others, especially my kids at school.

I have many new experiences to draw on over the rest of my life for inspiration in my art. The time out from normal life has allowed me to be more continuously creative.

Personal growth: feel I've overcome a fear (and ignorance) of coping in a harsh environment; I respect it but would love now to go and spend time in a remote camp. Professional benefits: gathered information to use to produce resources for use in teacher education (as per proposal) which will enable me to contribute to teaching programme with original material. Materials also to be available for teachers, dissemination to schools, gets me known/creates a higher profile with the administrators and managers of my institution.

GCAS students expressed the following:

I think I have been given a baseline with which to measure the chaos and vibrancy of NZ. It's good to have a baseline for comparison.

I guess there have been countless benefits. A lot of self-confidence gained, friends made, new opportunities, want to learn more about particular aspects of Antarctica.
It was wonderful to see and experience the historic features and geographical features of Ross Island that I have been reading and learning about. It gives me a visual picture of 'Castle Rock, Cone Hill, Arrival Heights', etc., and makes them 'real' places.

Goes beyond Antarctic focus.

It has already given me a new lease on life, sparked some ideas for new dreams. The long-term benefits to me personally are incalculable.

I have learned to accept more fully that one can't always get what one wants or what one feels one has adequately planned for. Also that some others do not accept this. As for the Antarctic itself, I have a better feeling of its vastness, its power, and its fragility. Also the comfort we enjoy by isolating ourselves from our environment.

Life-changing

After a break of 5 years I've begun writing again. I need to be creative to live fully. I've got it all stored in the memory bank. As I have chronic lymphatic leukaemia, this will be important to me when I become ill and near death.

I have benefited immensely from my visit. My mind is refreshed by the beauty and wonder I have experienced, and I am sure I have experienced a trip of a lifetime which I will never forget. Also I value the many new friends I have made on the trip and I will probably meet up with some again.

Yes—a much better understanding of a part of the planet Earth that is a closed book to the overwhelming majority of the world's peoples.

Awakening of environmental consciousness

I have learned another aspect of life in this world of ours. The experience gives a better basis for attitudes to global warming, conservation and other issues.

For all groups, there appeared to be a hope for the benefits to others—whether it is sharing with children, friends, and/or family. Again, in relation to the objectives of this research, the connections and phase transitions seem obvious:

All people will benefit from visiting Antarctica. The unusual and unique nature of the place and living here stimulate new thoughts and provide a perspective on ordinary life.

Friends/family will get to experience my Antarctica 2nd-hand, but maybe interested in exploring further or to think about action which would improve the environment in NZ. I'm not sure that it is important that they benefit, but it's useful.

Yes, the benefits for my family, friends, and future students will be huge, I hope! Now that I have been here I have so much to teach others about. I hope to teach Antarctica in Year 12 Geography in a topic called natural landscapes, so it is very
important that I have been to Antarctica, and I can transfer my enthusiasm for the place onto others through my teaching.

Antarctica fires everyone's imagination, and we will be asked to give free talks to a number of groups. It may mean good publicity for conservation and preservation, etc. We are unlikely to influence young people. I consider education beneficial but do not expect that we shall be able to make people feel anything beneficial in listening to us.

Organisations that I belong to, family and friends are interested, pupils at school can be encouraged to move outside their normal realm. Not necessarily, but in cost–benefit analysis it seems important to share outcomes.

Yes—I will talk about my experiences to my children and workmates, and banish negative stereotypes that they have about the place. I am also going to join organisation to preserve the historic huts, and this will benefit from another funded member. Another benefit for me as a tourist operator is to make me more aware of the negative environmental impact of mass tourism, and I am inspired to make my business more educational and environmentally friendly in the future.

I think that it is important for people to have some understanding of the continent other than that projected by 'English heroism'. The Antarctic is far more than journeys into the unknown by small groups of men at the height and hype of the British Empire. I fully expect to be asked to talk to various groups over the next year or so, and had this in the back of my mind when I travelled armed with a video camera and 3 still cameras. I hope that my photographic efforts will measure up to the reality that is the Antarctic continent.

I am doing a presentation to an elementary school and I feel very passionate about the topic, to instil a bit of wonder about outdoor, revitalisation—environment.

I give lectures to various community groups—they will enjoy the scenery and they will learn about the kinds of science done here—hopefully to support our country’s efforts.

5.4 Conclusions

Overall, given the lack of comparative studies and the nature of qualitative, exploratory research, conclusions made regarding the on-site results are focused specifically to this study in the timeframe it was undertaken November 2002–March 2004. From the arrival survey of the journals, mood was similarly positive to that found in anticipation results. Referring to media and the collection of information prior to departure, it seems that the media’s portrayal of the RSR is lacking some aspects, or rather paints the picture of Antarctica broadly across the entire continent.

The most striking difference in the phase results relates to motivation, where scenery now seems to be missing entirely. Consistent with expectations regarding education, education is now seen to be the most conclusive benefit that will come from the on-site experience. From the journals, there are some differences between visitor groups’ responses, but some generalizations can also be made. There was a sense of
impressiveness and amazement at some point in every respondent’s journal. For ANZ visitors, this appeared to happen right at arrival, despite the rush to get through all the processes and mandatory events such as AFT. GCAS visitors had mixed emotions upon arrival, but had the group to draw strength from. HE visitors had lots of information to take in at first (safety briefings, etc.), and then they had a “rocking and rolling” voyage through the Southern Ocean. This dread at travelling then disperses once in the RSR proper, and turns to amazement like all the other visitors. QK visitors do not mention the trip south, which can be attributed to the methods used to access them for journal data. More so than the other groups, QK and GCAS groups mention people in their journals. Every group seems mystified by the huts; that, combined with the simple amazement, are the two primary aspects upon which all the groups come together. GCAS students had a much wider variety of experiences in the field, in the bases, and such, but miss out on the wildlife as experienced by QK and HE visitors. ANZ visitors spend more time in-base, and so seem to have a greater appreciation for the dynamics of politics and base staff interaction. Neither ANZ nor GCAS visitors have the same sense of transition to and from the RSR (based on flying south), but even the QK visitors do not mention it much.

In the departure survey, it is evident that the primary take-away value is the importance of just being there. For GCAS students, the human aspect (people on course, in base, etc.) is again prevalent. In the departure survey are again glimpses at experience in transition to the recollection phase. The benefits of education are mentioned, and the notion of just being there takes off from high NEPr scale scores, and adds a personal touch and increased awareness to the mix of becoming an ambassador. Chapter 6 will examine recollection of the on-site experience, weaving together a discussion of baseline data from the anticipation phase with the specific narratives of this chapter, in the hopes of conceptualising how the theories of experience integrate with practice.
Chapter 6
Recollection Phase: Results and Discussion

As the final stage of an experience, recollection can also be that first step toward ambassadorship, a concept described in Chapter 3. Perhaps the most pertinent body of literature on this process is that of experiential education. Kolb (1984) discussed experiential learning in four steps: Step one is the concrete experience, whereby an individual has done something, such as completing a task; step two is when the individual reflects on what has occurred; step three is where an individual generalises or thinks about the possibility of a number of outcomes from the experience; and finally, step four is testing those outcomes. This model again advances some of the material discussed in Chapter 3 regarding the work of Dewey (1916, 1938). Within this research, the respondents have brought their previous behaviour and knowledge into the experience; so in essence, any experience in the RSR involves the fourth step of Kolb’s model, but from a previous cycle. Dewey (1938) in fact outlined experiences and education as three-stepped: observing surrounding conditions, obtaining knowledge from recollection of past experienced, and gaining judgement from these observations and experiences. Step one of Kolb’s (1984) process is outlined in all of Chapter 5, and thus the end of Chapter 6 begins to focus on reflection, leading to this chapter, which will focus on steps two and three of Kolb’s (1984) model. As discussed by Sugerman, Doherty, Garvey, and Gass (2000), any change resulting from experiences requires various stratified review and reflection. It was Dewey’s (1916, p. 170) view that “to discover specific connections between something which we do and the consequence which results . . . the two [be]come continuous.”

6.1 Post-Visit GCAS Interviews

Shortly after returning from the RSR, GCAS students who had agreed to be involved in the interview process as described in Chapter 4 were contacted for a post-visit interview. Similar to the outcomes of Section 4.3, these interviews gauged students’ thoughts at an intermediate phase between on-site and recollection of the experience some months later.

When asked to explain the experience in the RSR:
Yeh, I saw it. I definitely felt much more like a tourist than I thought I would though. I thought we’d be doing a little more learning and practical stuff, but it turned out we were just like . . . .—Respondent #27

Antarctica was exactly what I was expecting. White, big, flat, well not that flat actually, landscape-wise Antarctica was exactly what I was expecting. Weather-wise it was a little bit warmer than what I was looking for. City-wise, McMurdo, I knew McMurdo was big, but I didn’t know it was as developed as like a real community. That was pretty much what Antarctica was for me. And I felt totally as a tourist . . . . They were telling us that we were not considered as a tourist in the stats, but according to me this is bullshit. Yeh, we were totally tourists, but who’s not a tourist though. If you’re a first-time scientist, or even if you’re a third-time scientist, and someone’s going to visit the historical huts, you got a pretty good
chance you’re going to just jump on the train and take it and go see that again and again and again and again. So yeh, scientists were coming to Scott Base to buy some souvenirs at the Scott Base shop, so they’re the tourists as well.—

Respondent #29

It probably wasn’t as isolated, or I didn’t feel as isolated as I thought it was going to be. We seemed to be in radio contact, send emails and telephones sort of everywhere. We’d be more isolated in the New Zealand bush going tramping for the weekend, than I felt that I was even at Scott Base or even out on camp; we could just about throw a stone to Scott Base.—Respondent #44

We kind of did a lot of pseudo science, a lot of those projects that we pretended were important; they weren’t really.—Respondent #26

“Pseudo science” being:

Yeh, it’s like high school, but yeh, it was interesting, I really enjoyed it. I really liked staying in the camp, I liked the camp; I liked the experience of living in the base. I wish I could go back.—Respondent #26

Apart from describing the fieldtrip in general, and continued unprompted discussion as to whether or not they were a tourist, respondents pondered the significance of the visit:

It’s probably just another trip actually. It’s pretty cool that I’ve . . . I think because it was so much, it was a school trip, that it was maybe less significant by itself. But this course has still been an amazing experience for me and that’s just part of the amazing experiences of the course, but it doesn’t stand alone so much.—Respondent #26

Yes, I’ve wanted to go for awhile and I finally got there, but then again I think oh my God I’m only 23 and I’ve already been there, that’s so cool and I want to go again, but this time not as a tourist, as like a scientist in some capacity. Because I’ve finally decided that we were tourists when we went down. I’m still not sure if I totally agree with it or not, but . . . .—Respondent #34

. . . I’m sure it will always be personally significant, I still look at my photos every night and think how amazing it was that we actually went down there . . . . Another thing I think is that I’d be really weary of going back down there and mentally preparing myself for a completely different experience because I just couldn’t imagine having the time that we had down there, like we just had literally a week of literally being tourists at Scott Base, like we pretty much had so much free time that we could just go cross-country skiing or snowboarding or wander over to McMurdo. So if you went down there for work, whether scientific or working at Scott Base, it would just be such a different experience. And I guess just personally significant, too; it makes me realise that actually you can go anywhere in the world if you put your mind to it. So that’s quite a cool thing.—Respondent #33

In saying this trip was significant, does the feeling of “it won’t be the same next time” have to do with the group as well?:

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For sure, like I couldn’t imagine going down with, say, a geology group, and I don’t know a 50-year-old geologist and—say a 30-year-old geologist—I think that would be completely different. I’ve just made some of the best friends of my life for sure. I’ll be really good friends with some people in the group for a long time. So although there were some people in the group I didn’t spend much time with, generally I had just so much fun with the people. —Respondent #33

In trying to understand experience as a process, respondents were asked to give thought to whether their motivations (which were not revealed from the previous phases) shaped their experience while in the RSR:

I did as much stuff as I could physically possible, drank a bit too much maybe, got a bit too tired.—Respondent #26

Yeh, I tried to spend more time hanging out in the labs, like when we toured McMurdo, and I always listened and went to all the science lectures as opposed to the other ones. And when we did do “quote unquote” science down there, I did more than most people, I think. I would definitely want to go back and do science.—Respondent #27

Lifelong dream certainly, I guess I’m interested in the history, Scott’s Days and stuff like that, and the wildlife and scenery . . . certainly was wonderful to go and see the huts at Cape Evans and Cape Royds. Wildlife, probably, I had realised before we got sent off just from lectures that we wouldn’t really see sort of Emperor penguins or a great lot of wildlife. Certainly the seals were really good, penguins were OK, but not that exciting.—Respondent #44

Prompting Respondent #44 for more on the topic of lectures and knowledge revealed the following:

Yeh; a lot of the science I enjoy, the climatology, the biology, the Southern Ocean sort of stuff. I hadn’t realised there is, or perhaps there isn’t, but I didn’t expect there to be as much politics in the course. We seemed to do quite a lot on politics and not so much on perhaps, say, history. Politics is not really my thing, so I’ve had plenty of that, especially with syndicate projects and stuff; they all ended up quite political.—Respondent #44

Regarding politics:

There was a reasonable amount in the course, especially with the syndicate topics, and we had Klaus Dodds talking to us in quite a few lectures, so that sort of seemed to put an emphasis on politics rather than on, say, science or history. We had quite a few interesting things about the history, but not very much. We went to the museum and we had Baden Norris speak to us, but that was pretty much one day and that was pretty much it.—Respondent #44

Upon relating the trip to pre-trip expectations:

I didn’t get enough time by myself, I don’t think, for me. I mean it was quite . . . I guess the isolation I was expecting to feel I didn’t get at all, but that’s partially my fault because I was always doing things with other people. I didn’t spend any time by myself. I did get away on a few walks at the camp. But when you’re in the base it’s pretty much impossible.—Respondent #26
Yep, it was just what I expected . . . Well, ‘cause I knew we were going to Scott and McMurdo so there would be a lot of people, it’s not necessarily isolated, so yeh my real expectations of Antarctica would be out in a field camp. Which I knew we weren’t going to, so I knew it wouldn’t get met.—**Respondent #27**

Well, I’ve been wanting to go for a few years and I think it was just that I wanted to go, but now that I’ve been, I know that I want to go again in a working capacity.—**Respondent #34**

And with a number of weeks left in the GCAS program back in Christchurch:

The lectures seem really irrelevant after we’d already been, especially since there’s a lot of repetitive content. And I really can’t stand that . . . I just don’t like that.—**Respondent #26**

. . . same old, same old.—**Respondent #27**

. . . in the sense that when people say ‘oh, the Erebus ice tongue’, well, you can actually visualise it, so it’s just a whole lot easier to relate to what the person’s talking about. You can picture it, so it just makes it a lot easier at the lectures.—**Respondent #34**

As a gauge to any changes in opinion, GCAS students were again asked about their thoughts on three scenarios in the Antarctic. Regarding tourism:

Well as a tourist . . . it was seriously like we were tourists at Scott Base. We had days to ourselves to do whatever we wanted, and if I think about our whole trip, I mean, yes, we did seal studies and ice shelf projects, but that was such a minute part of the whole trip it feels like. So yeh, as much as I kind of don’t like admitting it, yep I was totally a tourist down there. But we all had so much respect for the environment and got so much out of the experience, so in a way I can only say that it’s a positive thing.—**Respondent #33**

I think controlled tourism is OK, it’s the usual thing you would like to go, but you wouldn’t like anybody else to go, which is not very fair. But as long as they’re taking control of their IAATO rules and it’s not getting . . . we’re not building Surfer’s Paradise in Antarctica then I think it’s great that people can go and have a look there.—**Respondent #44**

Well, we were just tourists, weren’t we? Yeh, I can see why, it’s going to become less of an issue I think because we learned that the boats are going to all die soon anyway and then it’s not really that feasible for many other operators . . . I don’t really see it as being a problem.—**Respondent #26**

When prompted as to why they were “basically tourists”:

Based on the way people treated us, and what we did, and it was great and maybe they should offer that to more people.—**Respondent #26**

I think, yeh I’m OK with tourism as long as it’s not too, as long as they’re not building hotels. I definitely think what they’re doing now is fine; especially since I went as a tourist, I can’t really say too much bad.—**Respondent #27**
Again, “So you felt you went as a tourist?”
Well, I can kind of hide it as educational, but essentially we were tourists. Yeh, I definitely think there needs to be some regulation of it, keep it to a minimum, but I think anyone who wants to go should have the chance to go.—Respondent #27

I’m going to feel stupid saying that I’m against it, but I’m really glad I’ve been. It’s a tough call, depending on what kind of tourism you talk about. The tendency is that everything is unknown, but it looks like people are in there more and more and more, although they say it’s at a plateau, it’s going to go up again, I’m sure.—Respondent #29

And science as a scenario for Antarctica:
I don’t know . . . the whole preserving Antarctica as a place for pure science, as a place that hasn’t been ruined by the world and stuff, the whole thing when you’re living there at Scott Base, more so next to McMurdo, there’s freaking loaders working 24-7 and there’s roads and there’s shuttles, and there’s the constant sounds of airplanes, as they take off and you kind of think, oh my gosh, there’s such a human influence down here really. If you look at the bigger map of Antarctica, of course we are like a needle in a haystack, but then you walk into the Crary science centre at McMurdo and it’s just mind-blowing, so that kind of blows me away.—Respondent #33

There’s some fairly fancy sort of projects going on, and it’s great that Antarctica is so preserved as a place for science, and in some ways the countries wanting to make their presence there is actually promoting blue sky science that there isn’t actually a commercial end to it, but it’s all very interesting and they do find out things like the ozone hole that come as a spin-off, but it’s not commercially driven. So that’s pretty good.—Respondent #44

Some of the science I saw there seemed kind of ‘rinky-dink’, like it wasn’t really doing much, like there was no point of it and they just decided to do this project so they could go down. But you also see that everywhere, all science; but I definitely think science is still what Antarctica should be about.—Respondent #27

Respondent #27 was fairly pro-science from the very beginning, and so was asked if there were any problems with science:
There’s definitely an impact on the environment, that kind of thing; the whole reason bases are there is supposedly for science, so all the impact is because of it. But if you’re not going to do science, what’s the point, in my opinion.—Respondent #27

And finally, conservation in general, and conservation of the heritage related to the continent:
Yeh, it’s really interesting to think about the huts and the millions of dollars being spent preserving them. I mean when you walk in them it is amazing, and I think in a way I think, wow it’s worth all that money, but in a way I think perhaps they should just be left to disintegrate and do what they were going to do. Why spend millions preserving something when ideally you don’t want hundreds of thousands of people going down to look at them, i.e., just because you don’t want hundreds of thousands of people down on the continent. So kind of in two minds, if I think
away from the huts, yeh I’m all for conserving the continent, i.e., lets stop bio prospecting (large scale).—Respondent #33

I think they’re starting to put quite a big effort into preserving the huts and things. I think that’s valuable, it’s interesting and I think we were very privileged to be there before they had done too much conserving. They were pretty much, well, somewhat as they were, you could see that they’d lined up the pretty tins of mustard and stuff, but otherwise it was pretty much as it was. Whereas there’s talk now as to whether they bring the whole lot back to Christchurch or wrap it in a plastic bubble so that it doesn’t decay further, and I think it would have a different atmosphere if you went there to Scott’s hut in a plastic bubble . . . . Yeh, so I think they’re kind of at the deciding point at the moment, what they’re going to do, and they’re still learning what’s possible to be done. The huts have stood there pretty well for a hundred years: to be honest I’d be tempted to leave them stand there for 2 or 3 hundred more until they really fall down and then. [Let history take its course?] Yeh, you know then they’ll be gone to look at the road to the South Pole by then.—Respondent #44

As the commercial tourists go through an extended period of returning back from the RSR, respondents with GCAS were asked about their quick transition back to “real life”:

It was definitely weird just seeing dark again, and the humidity just knocked me of my feet. But as far as everything else, I had no problem adjusting. Seemed like everyday life.—Respondent #27

Yeh, just normal smells, and when we got back it had been raining and you know that rain smell, we hadn’t smelled that in ages so that was really beautiful . . . but also just the size and scale, you look at your photos now but it really just doesn’t convey it. Just the size of the place and looking in every direction and seeing white. Vast expanses of nothing. It was, not hard to grasp, just I guess, so flat. On Ross Island there were features, but when you look out on the ice shelf it’s just flat. And not knowing where the horizon is. Oh that’s another thing, we were by Mt. Erebus and it looked really close, but it was actually 30 km away. I guess we couldn’t really grasp, I think if you were there for a while you would, but not us because we weren’t really there for that long, so we couldn’t really get a handle on it.—Respondent #34

At this stage, shortly after returning, had the visit changed anything?

I wouldn’t say more passionate, but definitely still . . . I could easily go back, it wasn’t too hard. It’s not such a special thing to do anymore . . . . No, maybe a little less interested just because I’ve seen so much of it, but as far as working there, the interest is still there, that’s the thing.—Respondent #27

It’s nice to sort of put pictures on what you thought of it, I don’t know that it’s possibly changed it too much, just the isolation thing, as I say, I thought I’d feel a little more isolated than we did and that was, I guess you still would, if you went like trekking through Nepal or something.—Respondent #44
Some change, but maybe not huge change or significant . . . I think there’s a few people I know who were already quite passionate about Antarctica, and they either hadn’t been there or . . . so I think they’ll be very interested to hear, see the photos and stuff. Beyond that I’m not so sure there are many people that I’ve spoken to that have no idea where it was, or sounds cold, don’t want to know about it. I don’t think those will change very much.—**Respondent #44**

Respondent #29 was particularly vocal on this subject:

> **Oh the stupid question, will it change my life. I think it changed my passport with the stamps. I would have to say yes, but if you ask me if I went to Scotland and Scotland changed my life, yes, Scotland changed my life; if I went to Mexico, yes, Mexico changed my life; did it change it more? I think Antarctica changed the life of a lot of people who never lived in snow before. Looking at a huge amount of snow at the same time changed life of a lot of people, but I grew up with that, walking on frozen lake and playing with . . . yeh, a big area of snow. So I think what fascinated me is looking at people who had never seen snow before, and looking at their reaction. And it’s almost an orgasm . . . not for me, for them . . . so I don’t think my life changed as much as those people who never experience the cold, even if it was minus 2 degrees. They don’t know what’s a snowstorm, they don’t know what’s driving in snow, they don’t know what’s a snowball fight.—**Respondent #29**

So it may have changed other people more?

> **Yeh, I think so. But yeh, I’d say Antarctica changed my life, and I’m really glad I did it at that age. I don’t know, I guess every age slot has got a different perspective on Antarctica, there was a guy in our group who was 60, yeh Gil was 60, and I don’t think he saw it the same way as I’ve seen it, and if I was 10 years old I wouldn’t see it the same way. So yeh, as a 25-year-old boy, I would say that Antarctica changed my life, yeh.—**Respondent #29**

I haven’t seen Antarctica, I’ve seen 18 days of an area big as Montreal, I’ve seen 30 kilometres of Antarctica, so have I seen Antarctica? I don’t think so. I’ve been to Antarctica, but I don’t know Antarctica. If someone wants to mine the peninsula, I have no idea what the peninsula looks like, I don’t even know what South Pole, well, I can imagine what [the] South Pole looks like, but yes it would piss me off, yes I would be upset, yes I would go against it, probably would have done that without having taken the class. I think being down . . . was pretty much the only reason to do the class, but yeh, I didn’t love the class and I don’t think I would protect more Antarctica because I’ve been down, then because I learned about it.—**Respondent #29**

After only a few days or weeks since being in the RSR, respondents’ final thoughts were:

> **I enjoyed it, I really did, and I’ll go back if I can. But I wouldn’t go back to work on the base, maybe when I’m a rich old lady I could go and be a tourist.—**

**Respondent #26**

> A lot of people on the course were saying how funded McMurdo was and they just throw stuff around, but then they never complained, you never hear them
complain about the hot water and the showers and all the good food and stuff, so I think that’s kind of ironic, how . . . . They complain, but then they’re not complaining when they get the benefits of it.—Respondent #27

It’s bloody good, I’m a huge, huge advocate of the course, I couldn’t recommend it more to people. It’s just been amazing. Anyone who would criticize the course would get an earful from me. I think it’s such a positive thing, everything about it.—Respondent #33

The course was overall better than I thought it would be. At the start when you meet the people, you’re like oh we’re all so different, but then now we do have things in common that made us want to go. For $5,000 it’s the best way to get to Antarctica I reckon, best and fast, and you learn a lot and you make great friends.—Respondent #34

6.2 Recollection Email Survey

When asked if they had shared their experience, all respondents (N=53) indicated that they had. Once again, as these were shorter, more concise answers, respondent numbers have not been tracked. In sharing the experience, showing slide-shows and photos to friends and family were the main options employed. Some respondents mentioned speaking engagements, but three ANZ visitors clearly had more in mind, or have already done so:

To-date I have: contributed to a short feature in our staff work newsletter; presentation to two primary school classes; incorporated content/examples relating to planning and management issues in Antarctica in my teaching programme (training secondary school teachers in social studies); used the example of the planned route to the South Pole to model teaching and learning approaches to values exploration . . . . Production of education resources is in-track, but not yet complete. To be disseminated to current trainees, and nationally to practicing teachers; I am presenting at the Antarctica NZ conference next week; have been invited to participate in local school’s book week, reading from books relating to Antarctica and sharing experiences with a range of students.

In the winter I’ll be talking about it to a meeting of the Canterbury branch of the NZ Geographical Society; sharing my diary: I share the experience indirectly through my work in dealing with Antarctic information and people who require that information; indirectly, I share my experience through my work with managing Antarctic information; to a small extent I will be calling on my experience in Antarctica in my role as "continuity person" and introducer of speakers in the University of Canterbury's Continuing Education department's lecture series "Antarctica: The Great Explorers."

Invited to speak at Canterbury Branch of NZ Geographical Society; PowerPoint presentation to library staff; written report to Admemo—the college weekly newsletter; developing an Antarctic-based unit on tourism and NCEA level 2 issued based assessment activity for sharing via the Net with geography teachers; incorporated activities using Antarctic exemplars with trainee students; acted as a mentor and supervisor for students doing the Antarctic Studies course at Canterbury University; shared photos with many staff, friends, made some into
wall displays and provided a selection to Antarctic New Zealand; to give a joint oral presentation at the Annual Antarctic Conference 2003.

Amongst the other groups, even the standard showing of pictures for friends was expanded upon:

By talking to people, showing them my photographs and the illustrated diary I kept.

I have shared my experiences in the form of documents titled "Notes from Antarctica" which are stories I have written using my diary as a reference, and I've attached digitally scanned photos. These I have sent to a group of friends who have received "travelogues" of other adventures I have been involved in. I have also prepared a PowerPoint presentation using information gathered on the trip, photos from our trip and again my diary notes which will be presented to my work colleagues next month at a quarterly meeting. We have a slide-show of about 200 of our 1,300 slides which we have shown to friends, and this will also be shown to a company-wide group in instalments as the winter weather keeps us all inside at lunchtime.

Public slide-shows to 70 persons, friends/relations showing albums and brochures, discussion at organisation I am a member of; future slide-shows are planned.

And the benefit of sharing this experience for others was explained to be:

Whetting others appetites, educating about some unknown aspects, e.g., Dry Valleys, further appreciation of the world's special places, understanding of history and geology of Antarctica.

Bringing a generally unreachable place and experience closer; opening/continuing curiosity into polar explorers' stories through our own interest in them.

Perhaps a greater awareness of the nature of the continent, and of NZ's activities there, and of the challenges of working and living there. Perhaps a better service to those who benefit from my work with Antarctic material.

A greater appreciation of the grandeur, and the specialness of the continent.

Awareness of a pristine environment, pushing personal limits, 'investment'.

As mentioned in the last response, awareness appears to be the key. Even as one respondent mentioned “Information about a new opportunity,” although not made explicitly clear, perhaps the opportunity is not just Antarctica, but the GCAS course as well.

There was also the opposing response by a few; that their experience would be of little benefit to others:

None that I know of (except that a few more people now know where Antarctica is!!).

None—Antarctica is very remote to the UK.
Awareness and the links to ambassadorship: while not made emphatically clear, awareness is alluded to and examined by other Antarctic studies such as Tisdell et al. (2004) and Tisdell and Wilson (2004). Tisdell et al. (2004) asked respondents for their level of awareness on a variety of Antarctic-specific issues and assessed their level of advocacy.

When asked if their expectations had been met, 51 of 53 stated yes, while the remaining two respondents left the questions blank. One respondent from GCAS elaborated on expectations in that:

*A black and white question?? Not really sure what my expectations were . . . .

Maybe my expectation were more of more mountainous terrain, but then again we were only on the Ross Ice Shelf and only got the opportunity to explore a small part of Antarctica. The vast flatness of Antarctica was something you don't really think of, and the poor definition of the landscape at times is another thing. Plus the cultural side was different to what I expected . . . i.e., McMurdo and Scott Base. I tend to think of the people down there now rather than just the wildlife/landscape, etc. The thing is that I really enjoyed the group of people I was with during the course. If I went down as a scientist or research or with a tour group, I think it would have been different.*

Based on the majority of respondents having their expectations met, there was diversity in the level of enjoyment in following up on sharing the experience. As might be expected, the visit to the RSR was “As expected” by nearly 25% of recollection survey respondents (Table 6.1). Moreover, the visit was more than expected by the majority, while only three respondents did have less enjoyment than expected. In comparison to Bauer’s (2001) end-of-visit survey, 41% of his respondents had a much more enjoyable level, 26% somewhat more enjoyable, and 28% about as expected.

Table 6.1 Respondents’ Level of Enjoyment.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of respondents (N=53)</th>
<th>% of overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your level of enjoyment was:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Much more than expected</td>
<td>19</td>
<td>35.8</td>
</tr>
<tr>
<td>Somewhat more than expected</td>
<td>18</td>
<td>34.0</td>
</tr>
<tr>
<td>As expected</td>
<td>13</td>
<td>24.5</td>
</tr>
<tr>
<td>Somewhat less than expected</td>
<td>2</td>
<td>3.8</td>
</tr>
<tr>
<td>Much less than expected</td>
<td>1</td>
<td>1.9</td>
</tr>
</tbody>
</table>

To elaborate:

*I felt very at home and comfortable throughout the whole trip. I got to go out and do more things than I’d ever expected, I met some amazing people who will become lifelong friends and colleagues.*

*The visit was absolutely fantastic—no limits to my enthusiasm for it. However, I was expecting it to be incredible.*
Actually enjoyable is entirely the wrong word. I was expecting to be blown away and was, but in entirely different ways than expected.

I went on this trip with little knowledge about the environment, or what to expect, so everything that was done and achieved was fantastic.

I had expected to have a once-in-a-lifetime experience, but there were things that we did that exceeded my expectations.

Realisation of lifelong-dream to visit Antarctica.

I already had high expectations, which were exceeded.

Perhaps, those who did not enjoy their visit had a particularly bad, one-off occurrence; all part of the experience, but unappreciated none the less. This sentiment is echoed by two responses from a commercial tourist:

The company that ran the show were not professional at all, e.g., some people missed out on excursions because staff were allowed ashore before passengers, and we were told that no more trips were happening.

By comparison with my previous visit to the Antarctic Peninsula, which was on your scale, much more enjoyable than expected. The proportion of the time spent sailing was high; as I am a poor sailor, I was not feeling at my best much of the time. Yes, I did appreciate that this could happen, but you always have to go in hope. The food was not always to my taste and the prolonged service at dinner was past a joke. It was inexcusable that we ran out of coffee.

As with the preceding phases, mood was again monitored with respondents. Similar to Phase 1, respondents were given the opportunity to choose and rank three attributes. Each band of the circumplex (bulls eye) represents five responses (irrespective of visitor group). Moods chosen have been labelled as to their title and degree when shown on a particular circumplex. Thus, the longer the line, the greater the number of respondents who chose it; the particular quadrant of the circumplex that the line falls in indicates a group of related moods (see Fig. 3.1 and Table 3.1). Figure 6.1 shows those attributes ranked as the number-one mood, which represents their visit to the RSR.

The first-ranked responses (N=52) included six “other” attributes not listed, while only one response was left blank. Of the “other” responses listed for the entire recollection survey (all three ranking), “awe-inspiring” was mentioned numerous times. Also mentioned was “mind-boggling” and “emotional.”

Figure 6.2 illustrates the second-ranked attributes (N=51). In this case, there were two responses left blank, and no “other” responses. The third-ranked mood attributes are shown in Fig. 6.3; again, two respondents left a third mood blank, while four of 51 third-ranked responses were listed as “other.”
**Figure 6.1** Multiple moods of visitors; following the visit (1st rank).

**Figure 6.2** Multiple moods of visitors; following the visit (2nd rank).
In comparison to Bauer’s (2001) end-of-visit survey, respondent in that study indicated their mood during the visit had been 26% awe, 16% exciting, and 16% beauty. These results are similar to the first-ranked moods for this phase, but “satisfied” seems out of place in that it is highly ranked in this study, but only mentioned by 7% or respondents in Bauer’s (2001) study.

Table 6.2 illustrates recollection phase respondents’ membership in conservation and environmental groups. Similar to results from the anticipation survey, approximately three-quarters of respondents were not involved in such groups. As a level of awareness, and possibly a step toward or an intention to become an ambassador of the region, respondents were asked whether their membership had changed in terms of becoming more active, or simply deciding to join.

**Table 6.2 Respondents’ Recollection Conservation or Environmental Group Membership.**

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of respondents (N=53)</th>
<th>% of overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to visiting, were you a member of a conservation or environmental group?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>16</td>
<td>30.8</td>
</tr>
<tr>
<td>No</td>
<td>36</td>
<td>69.2</td>
</tr>
<tr>
<td>Not Stated</td>
<td>1</td>
<td>-----</td>
</tr>
</tbody>
</table>
If Yes, are you a more active member now?\(^1\)

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Not stated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>10</td>
<td>3</td>
</tr>
</tbody>
</table>

Yes 3 23.1
No 10 76.9
Not stated 3 -----  

If No, have you joined since?\(^2\)

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td></td>
<td>5</td>
<td>31</td>
</tr>
</tbody>
</table>

Yes 5 13.9
No 31 86.1

\(^1\) N=16, due to those not answering yes not having to respond to this sub-question
\(^2\) N=36, due to those not answering no not having to respond to this sub-question

Elaborating upon responses to this facet of the recollection survey, two respondents mentioned:

I support preservation and conservation, but believe that there needs to be a balance between this and effective use and management. My view of many conservation groups is that they would like to lock up the whole planet.

Have always been active.

With awareness playing a key role in the sharing of the experience, and being acknowledged as a starting point for the intention to become an ambassador, respondents were asked about the specific issues they had become aware of:

---

Vulnerability of continent to resource plundering; cumulative effects of visitors; preservation issues with the historic huts; political importance of U.S./Antarctica/NZ relationship; inaccuracy of media reporting and vulnerability/potential consequences of it.

The situation of the support crews on the continent (i.e., lack of freedom and ability to explore, particularly at Mac town), environmental and the ability of any country to do whatever they want there (USA and the road to the pole) mostly.

Politics and environmental problems.

Issues related to environmental impacts, logistics and transport efforts.

General knowledge amongst scientists about Antarctic issues is lacking. This was noticed when we went to McMurdo for a political meeting kind of thing then we started talking about the various Antarctic treaties and things affecting these treaties and most of the people there (scientists were also there) did not know what we were on about.

The mental dilemma regarding removal of rubbish versus historic relics . . . to elaborate on that one, I have always been of the view that we should leave absolutely nothing behind us (and still believe this); but just think, if the explorers had not left anything behind, what were we attempting to visit . . . the historic huts, which are essentially rubbish!

All groups seemed to mention the impacts through many different examples. The interesting difference between groups was that, from HE and QK passengers, there was
no mention of politics, as mentioned often by the government-supported visitors. Perhaps this can be explained by the fact that they did not have a political entity supporting their visit (ANZ logistically supports both their visitors and those of GCAS), and thus did not hear the same depth of conversation regarding this issue.

Moving on from aspects such as mood and awareness, had opinions changed with experience? Respondents were asked again their views on visitation and restrictions to visitation. Table 6.3 shows the recollection phase responses regarding visitation.

Table 6.3 Respondents’ Recollection Opinions on Visitation.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of respondents (N=53)</th>
<th>% of overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visitation—Does it harm or support?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harms</td>
<td>6</td>
<td>11.5</td>
</tr>
<tr>
<td>Supports</td>
<td>16</td>
<td>30.8</td>
</tr>
<tr>
<td>Both</td>
<td>30</td>
<td>57.7</td>
</tr>
<tr>
<td>Not answered</td>
<td>1</td>
<td>-----</td>
</tr>
<tr>
<td>If Both, do benefits outweigh impacts?¹</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>21</td>
<td>80.8</td>
</tr>
<tr>
<td>No</td>
<td>5</td>
<td>19.2</td>
</tr>
<tr>
<td>Not stated</td>
<td>4</td>
<td>-----</td>
</tr>
</tbody>
</table>

¹ N=30, due to the those not answering both not having to respond to this sub-question

In comparison with Table 4.6, some respondents appear to believe it is more harmful (a 6% increase), but for others, visitation is more supportive (9% increase). The only decrease was amongst those that “sat on the fence” and replied “both” (15% decrease). Among the few that still responded” both,” those that thought that benefits outweighed impacts increased 16%, while those who thought the opposite decreased the same amount.

Now that they have visited and felt some of the restrictions that are in place, has their opinion changed on this question (generally)? In the anticipation phase, this data came in the form of qualitative discussion, so there is no specific chart upon which to compare. Table 6.4 displays responses to this question in the recollection phase.

Finally, in alluding to the label of ambassadors, what do visitors think about such a label or statement being placed upon them? Table 6.5 displays those responses.
Table 6.4 Respondents’ Recollection Beliefs on Tourism and Visitation Restrictions.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of respondents (N=53)</th>
<th>% of overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you believe there are sufficient restrictions on tourism and visitation?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>38</td>
<td>73.1</td>
</tr>
<tr>
<td>No</td>
<td>9</td>
<td>17.3</td>
</tr>
<tr>
<td>Don’t know</td>
<td>5</td>
<td>9.6</td>
</tr>
<tr>
<td>Not Stated</td>
<td>1</td>
<td>-----</td>
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</tbody>
</table>

Table 6.5 Respondents’ Thoughts on the Label and Statement of Being an Ambassador.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of respondents (N=53)</th>
<th>% of overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Following your visit, would you label yourself an ambassador?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>40</td>
<td>80.0</td>
</tr>
<tr>
<td>No</td>
<td>9</td>
<td>18.0</td>
</tr>
<tr>
<td>Don’t know</td>
<td>1</td>
<td>2.0</td>
</tr>
<tr>
<td>Not Stated</td>
<td>3</td>
<td>-----</td>
</tr>
</tbody>
</table>

In allowing further feedback to the questions shown in Tables 6.3, 6.4, and 6.5, respondents gave the following opinions. These are aggregated, as respondents generally answered all in combination:

I can’t answer this with a yes or no. It depends on the type of tourism. Scientists, educators, artists, and administrators who go to Antarctica supported by National programmes are also Antarctic tourists. My impression before going to Antarctica was that all tourism was ship-based, which I now know is incorrect. There are adventure tourists in the mountains and on the polar plateau. Currently eco and adventure tourists leave little obvious evidence of their visits. Ironically, it is science that has the biggest 'footprint'. McMurdo and Scott Base wouldn’t exist if it wasn’t for science (and Politics), and McMurdo in particular is the biggest eyesore and potential polluter. Eco tourism could protect the continent, by raising the awareness of issues, although it would put pressure on particular features (such as the historic huts). However, large numbers and un-checked tourism activity would be detrimental. My answer is "it depends!"

With extreme care taken by tour operators impact can be kept to a minimum—government conservation representative on board helps in this regard—operators are very accountable.
Personally, I believe both science and tourism must be much more responsible for their actions in Antarctica. I think small, controlled expeditions, such as ours are the way to go—I strongly disagree with big cruise boats dispensing mass tourism in Antarctica. I also believe the scientific bases could improve their polluting ways. The Italians, at Terra Nova, have shown the way things can and should be done.

Speaking only from our experience of this trip, conservation and protection of the environment were very high on their list of do's and don'ts.

The fact is what interested me more about Antarctica is the politics, international law and the cultural kind things that go on there rather than the actual wildlife. I am interested in telling people more about this rather than the conservation side of things.

Besides, I signed a pledge to be an ambassador and I don't take that lightly.

I do not think that tourism is hurting Antarctica very much, if any.

Only because I'm back to focusing on my career and family, and am too old and busy to advocate for any cause.

As a means to examining changes in awareness through the experience, and give concrete comment as to changes in visitors, a further NEPr scale was presented for respondents to complete. In this phase, 48 respondents provided complete scores (Fig. 6.4), and the mean score was 57.6 out of a possible 75 (pro-environment). This mean score was 0.9 higher than the mean in the anticipation phase, with a two-point increase in median and a two-point increase in mode. Forty-three respondents had provided both anticipation and recollection NEPr scale scores, and thus this change in mean score could be crossed-checked. Table 6.6 displays the results of such.
Figure 6.4 Total NEPr scale scores (recollection).

Table 6.6 Differences in Respondents’ NEPr Scale Scores from Anticipation Through to Recollection.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of respondents (N=43)</th>
<th>% of overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differences in NEPr scale scores (From Anticipation to Recollection)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decrease greater than 5</td>
<td>8</td>
<td>18.6</td>
</tr>
<tr>
<td>Decrease of 1 to 4</td>
<td>6</td>
<td>14.0</td>
</tr>
<tr>
<td>No change</td>
<td>4</td>
<td>9.3</td>
</tr>
<tr>
<td>Increase of 1 to 4</td>
<td>14</td>
<td>32.6</td>
</tr>
<tr>
<td>Increase greater than 5</td>
<td>11</td>
<td>25.6</td>
</tr>
</tbody>
</table>

Table 6.7 shows mean scores for each NEPr scale statement in the recollection phase compared to that shown in Table 4.7 from the anticipation phase. Once again, data entered has been coded so that the closer to 5 a mean is, the closer it is to the pro-environment end of the spectrum.
Table 6.7 NEPr Scale Statements and Means (anticipation and recollection).

<table>
<thead>
<tr>
<th>NEPr scale statement</th>
<th>Anticipation mean</th>
<th>Recollection mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) We are approaching the limit of the number of people the earth can support</td>
<td>3.71</td>
<td>3.88</td>
</tr>
<tr>
<td>2) Humans have the right to modify the natural environment to suit their needs</td>
<td>3.04</td>
<td>3.27</td>
</tr>
<tr>
<td>3) When humans interfere with nature it often produces disastrous consequences</td>
<td>4.12</td>
<td>4.23</td>
</tr>
<tr>
<td>4) Human ingenuity will insure that we DO NOT make the earth unliveable</td>
<td>3.11</td>
<td>3.55</td>
</tr>
<tr>
<td>5) Humans are severely abusing the environment</td>
<td>4.05</td>
<td>3.86</td>
</tr>
<tr>
<td>6) The earth has plenty of natural resources if we just learn how to develop them</td>
<td>2.87</td>
<td>2.75</td>
</tr>
<tr>
<td>7) Plants and animals have as much right as humans to exist</td>
<td>4.41</td>
<td>4.56</td>
</tr>
<tr>
<td>8) The balance of nature is strong enough to cope with the impacts of modern nations</td>
<td>4.01</td>
<td>3.94</td>
</tr>
<tr>
<td>9) Despite our special abilities, humans are still subject to the laws of nature</td>
<td>4.41</td>
<td>4.65</td>
</tr>
<tr>
<td>10) The so-called “ecological crisis” facing humankind has been greatly exaggerated</td>
<td>3.62</td>
<td>3.71</td>
</tr>
<tr>
<td>11) The earth is like a spaceship with very limited room and resources</td>
<td>3.61</td>
<td>3.82</td>
</tr>
<tr>
<td>12) Humans were meant to rule over the rest of nature</td>
<td>4.09</td>
<td>4.20</td>
</tr>
<tr>
<td>13) The balance of nature is very delicate and easily upset</td>
<td>4.19</td>
<td>4.31</td>
</tr>
<tr>
<td>14) Humans will eventually learn enough about how nature works to be able to control it</td>
<td>3.80</td>
<td>3.76</td>
</tr>
<tr>
<td>15) If things continue on their present course, we will soon experience a major ecological catastrophe</td>
<td>3.54</td>
<td>3.37</td>
</tr>
</tbody>
</table>

The overall mean score for recollection scores was 3.86, again higher on the pro-environment end of the spectrum than in the anticipation phase, and higher than scores shown in Lück’s (2003) summary. With little change in NEPr scale scores, and the label of ambassador appearing to be ‘tossed’ around with relative ease, does the relative agreement between the label from respondents, operators, and writers translate into action? Awareness is one aspect of becoming and ambassador, but does ambassadorship not also include action, or at least the intention to act? Figure 6.5 displays respondents’ intention to undertake a variety of both Antarctic-specific and general behaviours.
To summarize, most respondents appear to intend to undertake certain behaviours (general mean around 4 out of a possible 5); however, Antarctic-specific behaviours rate no higher than general environmentally friendly behaviours. The easiest behaviours to undertake (recycling and conserving energy) are also considerably higher than the rest, and very few respondents intend to lobby government. Elaborating on these intentions or lack thereof, respondents gave additional comments, such as:

You need $$ to donate or subscribe.

My visit to Antarctica reinforces an existing wish/interest in minimising personal energy use and recycling materials, rather than causing a change in my attitudes or behaviour. I’m definitely more aware of Antarctic issues, but unsure at this stage how this will translate into political action. This awareness may affect my voting habits, but this will clarify as issues arise in the future. It is unpredictable at the moment.

We took this trip primarily to retrace the steps of Shackleton and Scott and feel like we had touched on a little bit of history. We also wanted to experience the Antarctic. Our motivation was not conservation or ecology. We are only partially convinced all the world's problems are a result of man's actions.

I have an interest in conservation and am gradually converting my house into alternative energy, to have the best of both worlds. I'm also in the process of purchasing land about 2 hours from Sydney to set up our totally alternate energy home, nestled in 100 acres of land which we intend to return to a "natural state"
using endemic species. I'm in the position that will never be able to give up my car—well not while I'm working at my present job, so my conservation attitudes are challenged by some things I do as convenience to my lifestyle, but I guess this is the same for everyone. Every little bit helps I think.

I know I'm a hypocrite. I don't expend energy on influencing others to think as I do. I don't even know about most of the environmental groups except the local ones I belong to. At home, I'm very conservative about not wasting—even save ice cubes because it took a lot from the environment to refrigerate and freeze water. I never throw out something that someone else could use—donate it. I recycle anything I can, avoid paper or plastic utensils if I can.

The Antarctic area is just a small part of the total issue of conservation. E.g., I believe whales should not be hunted; I see no need for a huge U.S. base at McMurdo or the South Pole; the commercial mining of minerals and/or oil in the Antarctic should never be allowed—EVER!!

In Antarctic literature, there is little proof of some of these intentions occurring. However, according to “Icebreaker’s passengers donate US$31,000 to Antarctic Groups, Causes” (2003), the passengers of the Kapitan Khlebnikov over three voyages in the austral summer of 2002–2003 raised US$31,000 during auctions held on board the ship. This money would be divided amongst a number of groups and causes, including the AHT, Scott Polar Research Institute, WWF, and Birdlife International’s “Save the Albatross” campaign. In the end, whatever changes occurred, or whether they have become ambassadors with intentions, going to the ‘ice’ provided for thoroughly rewarding experiences, remembered months following. For those with ANZ:

The most vivid memories come from being outside and experiencing Antarctica, because of the serenity and peacefulness of the place. Visiting the huts also evokes similar feelings memories, along with the history of what has happened on this continent.

The beauty of the place and the insignificance of humans there. I saw a quotation from Darwin in the paper last weekend in which he was talking about Patagonia. He said, “It would be difficult to imagine a place where man has fewer claims and less authority . . . when the inanimate works of—rock, ice, snow, wind and water—all warring with each other, yet combined against man, reigned in absolute sovereignty." I was struck by the same impression in Antarctica. Why? Because those aspects were so overwhelming.

How fragile and easily destroyed the continent would be. The untold science programs happening down there. How many countries can work together in harmony. My trip to Antarctica was not a holiday, but to gain as much knowledge as I could. That I certainly did.

For the GCAS students:

The camaraderie, because that is the strongest contrast to my day-to-day life, also the chill in the air and the feeling of space and the brightness. It is hard to get enough brightness when you are working in a lab all day.
The different things that we did that I did not expect. E.g., looking under the sea ice with mask and snorkel and seeing the life under the water, driving a Hagglund, Room with a View and the photos and memories of the amazing views from up there, cross-country skiing. All things that I would not have expected that I would do while I was down there.

The people living down there . . . because . . . . It is easier to relate to people than a penguin, also it is quite interesting. Especially at Ross Island where you have two bases (Scott Base and McMurdo) displaying their own national cultures very distinctly and looking at the way the bases interact with each other, and also the way the national programmes carry out science.

Historic huts, empty spaces. These things make Antarctica a special place.

With HE passengers:

The sense of awe and wonder and humility; the abundance of wildlife; the beauty of the different types of ice and icebergs we encountered. These are all aspects of the total experience which had a very strong affect on me. I am extraordinarily lucky to have been able to travel to this amazing place. To have experienced it in a heavy ice year I regard as even more fortunate.

The most memorable experience was the freezing of the sea around us. Its beauty and then its power to stop us.

Nature calls the tune, good leadership, a fine group of international people, stepping outside one's comfort zone.

The grandeur of the region and the clarity of the air, which allows you to see vast distances clearly.

And finally, Quark:

The beauty of the scenery . . . .

The care of the Quark team—to protect the environment by educating us how best to enjoy the experience—without disturbing wildlife or nature.

The people, all game for visits and change of climate.

At the end of the study, how had the trip and the RSR (Antarctica) affected respondents? For ANZ and GCAS visitors, there appears to be a focus on returning, and regaining perspective/ reassessment of life:

I was profoundly affected to the point of being prepared to give up almost anything to get back down there again. I was very reluctant to leave in the first place and could have spent much, much longer there. I fell in love with the magnificent landscape and could walk for hours on end just marvelling at the majesty and enormity of it. I became fascinated by the geology and am looking forward to working on my geology projects. I felt very at home and comfortable at Scott Base (could be because I know people there and know so may people that have spent time there) I loved the feeling of limitless space and time to walk, talk and contemplate. I enjoyed the company of the staff at Scott Base and was
fascinated by the many and varied projects being undertaken by scientists, I was interested in the scientists themselves and their lifestyles, persona, etc. It would be interesting to conduct research on researchers!! Now I am working on how to get back down there for a whole season.

I have gained much ongoing inspiration from my trip, which will continue to benefit my work.

Reassessment of current work/career options. These are unlikely to change in the near future, but my Antarctic experience makes me think more broadly about future work/life options.

I think I'm now more likely to get involved in an activity related to protecting the Antarctic environment than I was before I visited it. I think that this is because my appreciation of the value of the "unspoiled" nature of the place has increased. It would bother me greatly if I felt it had become a "modified" environment—that it was no longer a place where Man has few claims and little authority. I'm grateful for having had the opportunity to experience an environment that felt largely unmodified, and it matters to me that it remains that way, even though I'm unlikely to visit it again. The greatest "effect on my life" of my visit to Antarctica is difficult to express, but I can say that I now understand better Shackleton's apparent need to return to Antarctic again and again, and what he meant when he wrote about the "little voices." It's a hard place to stay away from.

Certainly makes me think about my future direction.

For Heritage and Quark visitors, the affect was on their personal feelings and the setting: 
At this stage I am still very much involved with my experiences. There is not an hour goes by when I don’t think about some experience of the trip. I must say that I have spent many hours writing up my diary and I am also preparing a journal of the trip for each of the grandchildren. In this I am including photographs I took. I appreciate much more the difficulties of working in a foreign environment especially taking photos and changing the lens when you are all togged up. I consider that the trip was one of the highlights of my life.

The rough seas crossing the Southern Ocean at times frightened me although I had faith in our ship. I would like to go to the Ross Sea again, but not across that ocean!! My awareness of the importance of the research/science management of the continent was good new knowledge for me. My husband and I have travelled in the High Arctic and learned a good deal about the differences of ice, global warming, winds, seas between the north and the south. Probably the strongest highlight of the entire trip was the seabirds, their numbers and variety during the crossings between New Zealand, Tasmania and the Antarctic.

It definitely left me in awe and the need to preserve the awe as in raw, to try to keep that piece of world an environment unchanged by human pollution and change.

For one, this was a chance for continued global contemplation:
Worldwide there should be much stronger regulations to benefit environment: cars, trucks/machines, industries have to be forced to limit output much sooner than they do. They do not enough till they have to. Existing transports in use should immediately be provided with things to reduce gases and filter smut; limit burning of forests/agriculture. Our output of human activities is very big. Volcanoes over the world, mangan gases from oceans, lots coming from nature, but humankind should not accumulate much more on this.

6.3 Conclusions

In introducing this chapter, reference was made to Kolb’s (1984) experiential learning cycle, and how respondents may reflect on what has occurred and thus generalisations could have been made, or thoughts given to the possibility of outcomes from the experience. Without re-testing respondents on their next visit, there is really no way for us to test Kolb’s (1984) fourth step of testing outcomes.

From simply the GCAS transition interviews, there already seems to be considerable reflection occurring. Students provided good raw thoughts and opinions on numerous topics, but particularly tourism and whether or not they were a tourist. In the email survey results, all respondents will or have shared their experience—generally, an attempt to provide an outcome from the on-site experience.

If we are to posit that individuals are more likely to share or remember positive features, then the visit to the RSR will surely be remembered and shared. In fact, Scott (2004) reported that visitors almost felt as though this dispersal of information was their duty. Virtually all respondents had their expectations met or exceeded, and when asked about their moods, all three rankings were mainly positive and satisfied, with virtually no negative moods expressed apart from frightened.

Looking specifically at awareness, both categories of visitation harming and supporting the continent saw increases in percentages of respondents from the anticipation phase. The category of both was the one that likewise decreased, perhaps as fewer respondents now “sat on the fence.” For respondents who still stated both, the further question about benefits outweighing impacts now had the benefits of visitation far outweighing the impacts.

The bottom line on this avenue of questioning was related to ambassadorship, and 80% of respondents self selected that they considered themselves an ambassador for the continent. This self-perception of ambassadorship is similar to the results of Scott’s (2004) study, but vastly different from Bauer’s (2001) extremely low 1.4% response that tourists came back from Antarctica as ambassadors. To back up the self-designation in this study, recollection NEPr scale scores were slightly up overall in terms of the mean, but more so when one looks at the percentages regarding actual moves. Again, while still quite pro-environmental, the question remains how they move from awareness to action. As a measure of this, when asked about their intention to undertake environmentally and Antarctic-specific positive behaviours, the general intention was yes, respondents did intend to undertake such actions. To differentiate, there does appear to be a greater likelihood that respondents will undertake easy-to-complete, environmental behaviours versus Antarctic-specific ones. Even up to four months later, the overall on-site experience was remembered as amazing, and considerable reflection could be given to any number of critical areas.
Chapter 7

Conclusions and Implications

This chapter will begin by returning to the research objectives, as these shaped the nature and the scope of the study. Following that, an examination of the significance of the research and the research design will occur. Practical implications regarding theoretical, methodological, and logistical aspects of the study will be presented, and finally recommendations for further research will be made, keeping in mind the limitations of the current study. In addition, the research will be placed in the bigger picture, relating the thesis to broader scholarly knowledge of the tourism experience.

7.1 Summarising the Nature and Scope of the Thesis

With this study aimed at examining the nature of visitor experiences in the Ross Sea region of Antarctica, visitors were defined as those who come into physical contact with the continent and whose primary activity and purpose was simply ‘being there’, experiencing the continent or attempting to understand why it is important that science occurs there. As shown throughout Chapter 1 there is a wide spectrum of visitors to Antarctica, and also to the Ross Sea region. Visitors are not only commercial tourists aboard cruise ships, and visitors are not those who fly over the continent on commercial overflights, as they do not come into physical contact with the continent. Nor are visitors the scientists or base and support staff whose primary purpose on the continent is their work. By examining visitors in a broader sense, this study reached beyond previous research that simply treats visitors as commercial ship-based tourists, or includes overflights.

Experience is a complex and subjective concept and thus difficult to define. The various disciplinary silos were exposed in Chapter 2, with the theoretical focus on examining the manner in which an experience is shaped over time, and the manner in which particular phases of the experience are linked and/or change. Thus, for this study experience encompassed the time period that extended from when the visitor was anticipating that a visit to the Ross Sea region would occur, to the visit, to the period directly following the visit when knowledge of the lived period was being synthesised. The use of the term experience in a temporal sense versus the cognitive sense of “I am experienced”, allowed the work of Clawson and Knetsch (1966) to serve as a starting point for the research and by adding the works of Driver and Tocher (1979), and Arnould and Price (1993) acted as a framework upon which to base the study. By also including the works of Beedie and Hudson (2003), Bauer (2001) and Grenier (2004), this study recognises the need to empirically and historically base the research, but not forget the anecdotal contributions made by research in other remote regions.

The Ross Sea region of Antarctica was chosen as the study area for a number of reasons. First of all, Antarctica appeared to be about as different from most people’s everyday life as possible and thus this “extraordinary” experience may have given rise to a unique visitor experience. As Shackleton (1986, p. 81) stated, the RSR is “a lot farther away from ‘civilization’ impart [ing] an all-pervading sense of solitude…[and] it is the heartland of that chapter of polar exploration remembered as the ‘heroic age’”.

In a contextual sense, this research furthered the examination of visitor experience in remote regions by looking at the Ross Sea region, which is a region not examined in other Antarctic tourism research that focuses heavily on the Antarctic Peninsula. With New Zealand’s
connection to the Ross Dependency, it appeared particularly important to understand the experience of those who visit this region, and as no other studies have done so before, examine visitors who traditionally fall outside of the traditional meaning of the term ‘tourist’. That is, attempt to include everyone who comes into physical contact with the continent, and whose primary activity and purpose is simply “being there.” Therefore visitors such as artists, writers, visiting dignitaries, education programs were included, while overflights that never land, and scientists or base and support staff were excluded. Empirical studies on visitor experience have recently also been conducted in remote areas of Canada’s Arctic, and the topic appears to be a new focus of organisations such as Parks Canada in their management of Canada’s national parks and historic sites (see Lachapelle, McCool & Watson, 2005; Parks Canada, 2006).

To complete a summary of the nature and scope of this research, what success was garnered in relation to the initial research objectives? As found in Chapter 1, the initial research objectives (listed in bold) were:

1. **To understand the dimensions of the experiences gained by visitors to the RSR**, focusing on the multi-phasic approaches promoted by Arnould and Price (1993), Beedie and Hudson (2003), Clawson and Knetsch (1966), and Driver and Tocher (1979) that divide experience into anticipation, on-site and recollection phases. This objective was achieved with both quantitative and qualitative results across the phases of experience. This study provided both an exploratory examination describing the phenomenon, but also added more depth in certain areas, including: the narratives of the on-site visit versus only short survey examination of that phase, and a much more comprehensive follow-up after the visit.

2. **To analyse whether any possible links exist in the transitions between the phases**. This objective sought to ensure that the nuances of the whole experience were not lost, or overstated. Previous Antarctic tourism studies by Bauer (2001) and Grenier (2004) have looked at individual phases and posited that a multi-phase process exists. Both Bauer (2001) and Grenier (2004) have examined aspects of a multi-phase experience, but not the whole process empirically, nor with reference to much of the material found in earlier studies such as Arnould and Price (1993), Beedie and Hudson (2003), Clawson and Knetsch (1966), and Driver and Tocher (1979). This objective was examined throughout the thesis, and the results hopefully illustrate the links and transitions. Specifically, the interviews with GCAS visitors showed transition phases, as do the anticipation and departure surveys from the journals. These surveys more closely resemble the standard before and after methodologies used in past Antarctic tourist research, and thus this study showed how dimensions differ with true before and after reporting.

3. **To examine the potential benefits derived from the experience**, utilising literature on tourism and recreation that has justified such activities and visitation by claiming that the benefit of visitors is their becoming advocates or ambassadors for conservation. It was hoped that by monitoring the entire ‘length’ of the experience some insight and clues may have been revealed as to the validity of such an argument. This objective has been examined more so here than in other Antarctic tourism studies, and gives some good insight, including the relative intentions of visitors to undertake behaviours that is potentially a more realistic measure for ‘ambassadorship’ than simply asking if they feel they are an ambassador. However, to truly measure these benefits a much longer term study,
or even a follow up to this specific research, would need to occur. A study that deals with true action post-visit and not simply intention to act.

7.2 Significance of the Research and Design

In general, the significance in any research is in its results. To summarise the results for the entire study is also to expose how it differs from past research. With regards to the respondents’ demographic profile there were some considerable differences found when compared to previous studies such as Bauer (2001), Cessford and Dingwall (1998), Davis (1995), Enzenbacher (1995) and Marsh (1991). Respondents in this study were generally younger, not as many were retired, and they had a wider variability in their incomes; although for most previous studies income was never fully disclosed, but rather anecdotally commented upon.

Given the nature of the four visitor programs involved in this research, and the physical cruising distance to reach the RSR, visitors in this study had both shorter and longer lengths of stay than found in previous studies. Commercial tourists stayed more than 20 days (generally), which is far longer than most Antarctic Peninsula voyages. Those with GCAS or ANZ, who stayed 10-20 days, had a length similar to commercial tourists on the Antarctic Peninsula, but may have stayed as little as four days given the ability of their programs to fly south from Christchurch. Overall, respondents had limited previous experience in Antarctica. Thus, they had not moved over to the RSR following a visit to the Peninsula as posited by Bauer (2001). Respondents also had a variable level of experience in visiting other remote or cold regions of the globe, which is similar to previous research.

In terms of visitor anticipation of their visit to the RSR, scenery was both the strongest motivator, and the highest ranked component of image; again, this was a point of difference from previous studies. The most significant expectations were safety, professional attitude, and expert education; detailing that visitors sought learning, but safe learning that was done in a high quality professional manner.

Visitors’ moods in the anticipation phase of their experience were found to be highly positive, but when pushed for more than just a single mood, as was the case in Bauer (2001), visitors were quite reflective in examining what else the on-site experience might bring. Prior to their visit, respondents had also given some thought to the acceptability of visitation, but were varied in their opinions with no single overriding response.

With higher than mean NEPr scale scores, respondents indicated a pre-disposition towards pro-environment thinking. Even more so than previous studies, visitors to the RSR seemed to value the environment over human development. Thus, while they had low membership in conservation or environmental groups, they may already be pseudo-ambassadors in a broad environmental sense before even visiting the ‘ice’.

With a lack of comparative studies into the nature of the visitor experience in the Antarctic using qualitative exploratory methods, conclusions made regarding on-site results focus specifically to this study in the time frame it was undertaken, the 2002/2003 and 2003/2004 austral summer seasons. 2002/2003 and 2003/2004 were the summer seasons examined due to limitations in the timing of the doctoral process. From the arrival survey, the first few pages of the journals, mood was similarly positive to that found in the anticipation phase results. This was expected as an exciting and much sought after or thought about event, visiting Antarctica, was now at hand. In relation to the broader picture, it is significant that mood remained positive and highly focused in a ‘pleasant-aroused’ realm of Russell’s (1980, 2003) circumplex, as this somewhat debunks Hammitt’s (1980) work that differentiated phases of experience using the dimension of mood. Referring to media, and the collection of information
prior to departure, it seems that the media’s portrayal of the RSR is lacking some aspects, or rather paints the picture of Antarctica broadly across the entire continent.

The most striking difference in results across the phases of experience relates to motivation. Scenery was missing in the arrival surveys and may account for differences between results of this study and previous studies given the method of collecting motivational details for all of those previous studies was during the beginning of the on-site experience versus in actual anticipation. Consistent with expectations regarding education, education was seen to be the most conclusive benefit that was reported from the on-site experience. From the journals which visitors completed during their experience, there were some differences between visitor groups’ responses. Overall, there was a sense of impressiveness and amazement at some point in all respondents’ journals. For ANZ visitors this appeared to happen right at arrival, despite the rush to get through all the processes and mandatory events such as AFT. GCAS visitors had mixed emotions upon arrival, but had the cohort of the group to lean on for strength. HE visitors had lots of information to take in at first (safety briefings, etc.), and then they had a ‘rock and roll’ through the Southern Ocean. This dread at travel dispersed once in the RSR, and turned to the amazement similarly experienced by the other visitor types. QK visitors did not mention the trip south, which can again be attributed to the different method used to access them for journal data—a significant finding in terms of research design. More so than the other groups, QK and GCAS groups mentioned people in their journals. The significance of these findings is that the mention of people takes Antarctica to a new ‘social’ level. Antarctica is a fantastic natural destination, but people in the visiting group definitely play a role in the experience and how it is processed.

Every group seemed mystified by the historic huts, and that combined with simple amazement are the two primary aspects upon which all the groups were found to be similar. GCAS students had a much wider variety of experiences in the field, in the bases and such, but missed out on the wildlife experiences of QK and HE visitors. ANZ visitors spent more time in base, and so seemed to have had a greater appreciation for the dynamics of the politics and base staff interaction. Neither ANZ nor GCAS visitors have the same sense of transition to and from the RSR, based upon flying south to the RSR. Again potentially because of the differences to the research design, whereby the QK visitors received anticipation instruments upon arrival to the tour rather than in true anticipation, even the QK visitors do not mention transition much. The significance of these findings is that transitions play an important role in processing experience, but simple logistics often shape that ability for transitional thoughts to show up in research results.

In the departure survey of the journal, it was evident that the primary take away value for visitors was the importance of just being there; the fact that they were able to visit and that others should have the ability to visit. For GCAS students, the human aspect (people on the course, at the base, etc.) was again prevalent. In the departure survey there were again glimpses at how the on-site experience would transition to the recollection phase. The benefits of education were mentioned, and the notion of value in ‘just being there’ began to take shape. The significance in this result was that visitation is in fact seen as okay. Tourism, with education, is an acceptable use of the continent, and there is not the feeling of hierarchy whereby they have visited, but then others should not be allowed too. The value of having a continent open for all was taking shape.

With reference to Kolb’s (1984) experiential learning cycle, how had respondents reflected on what had occurred and what generalisations had they made or thought given to the possibility of outcomes from the experience? Without re-testing respondents on their next visit, there was really no way to test Kolb’s (1984) fourth step of testing outcomes. From simply the GCAS transition interviews, there already seemed to be considerable reflection occurring. Students provided very raw thoughts and opinions on numerous topics, but particularly on tourism and whether or not they were a tourist. Again the key significance lied in the start of a reflection process; whereby the key point was that all people should be able to visit the continent
provided it is done so in an appropriate manner. Questions around who was a tourist reflect the sometimes fractured nature of the term as it is used in relation to national Antarctic programme activities.

In the email survey results, all respondents had shared their experience, generally as an attempt to provide an outcome from the on-site experience, and as “a given or a duty” as expressed by Scott (2004). If we posit that individuals were more likely to share or remember positive features, then the visit to the RSR would surely be remembered and shared. Sharing their experience served as a starting point for an intention to act upon experience-based learning. In order to share, one needed to reflect and think through what had happened to them, thereby influencing the manner they shared with others (slideshows, informal books, etc.) and the content being clear for those who have never visited. Virtually all respondents had their expectations met or exceeded, and when asked about their moods during the experience, all three rankings were mainly positive and satisfied, with virtually no negative moods expressed apart from ‘frightened’.

Looking specifically at visitor awareness, both the categories of visitation harming the continent and supporting the continent, saw increased response percentages when compared to the anticipation phase. The category of ‘both’ was the one that likewise decreased, perhaps as less respondents now ‘sat on the fence’. For respondents who still stated that both harm and support occurred from visitation, a further question about benefits outweighing impacts now had the respondents stating that the benefits of visitation far outweighed the impacts.

The bottom line on this avenue of questioning was related to ambassadorship, and 80% of respondents self-selected that they now considered themselves an ambassador for the continent. This self perception of ambassadorship was found to be similar to results of Scott’s (2004) study, but vastly different from Bauer’s (2001) extremely low 1.4% response that tourists came back from Antarctica as ambassadors. To back up the self-designation in this study, recollection NEPr scale scores were slightly up overall in terms of the mean compared to those found in the anticipation phase, but more so when one looks at the percentages regarding actual moves. Again, while still quite pro-environmental, the question remains: how do respondents move from a position whereby they are aware of an environmental issue to a position whereby they act on it.

As a measure of this, when asked about their intention to undertake environmentally and Antarctic-specific positive behaviours, the general intention was yes, respondents did intend to undertake such actions. To differentiate, there did appear to be a greater likelihood that respondents would undertake easy-to-complete environmental behaviours, such as recycling and conserving energy, versus Antarctic-specific ones, such as lobbying government about Antarctic issues or joining Antarctic groups. Overall, even up to 4 months later, the overall on-site experience was remembered as amazing, and considerable reflection could be given to any number of critical areas. However, it is the transition from reflection to application that is the item both the industry and the treaty parties seek to understand. In summary, exploring the links from on-site amazement to off-site intention is a stepping stone for what needs to occur next; a study of actual action off-site, that results from a visit.

7.3 Implications and Lessons Learned

The implications of this study can be broken down into three separate aspects: theoretical, methodological, and logistical. Within each of these categories there were some important lessons learned that could positively influence further research.
7.31 Theoretical Aspects

While previous studies, mentioned below, have each characterised or justified multi-phased experiences differently, there were important points to note from this research:

While Hammitt (1980) utilised mood as the primary indicator of the existence of a multi-phase experience, there appeared to be little change in mood over the three phases noted in this study. Thus, if one were to base the existence of multi-phases of mood using this research, no such evidence would exist.

Both Bauer (2001) and Grenier (2004) anecdotally mentioned multiple phases of experience. Thus, at the outset while implicitly recognising that such phases did exist and interact, this thesis provided empirical evidence and examination of the phase transitions. In an Antarctic context, it is the first to do so, moving beyond the anecdotes of Bauer (2001) and Grenier’s (2004) work.

Clawson and Knetsch’s (1966) discussion of the phases of experience, while dated, seems to hold true. Hammitt (1980) proved this using the single dimension of mood while this study did so with evidence from wide ranging changes in the overall commentary of respondents. Changes in scores such as on the NEPr Scale indicated a distinct event or moment(s) had occurred and made a change for respondents between the anticipation and recollection phases of experience. Thus, this research has revealed a unique on-site phase, perhaps more so in the mould of Bauer’s (2001) three phase discussion than Clawson and Knetsch’s (1966) model. An important point to make here is that methodologically this study was set up more in line with Bauer’s work than that of Clawson and Knetsch, perhaps skewing the theoretical implications.

While Beedie and Hudson (2003), like Bauer (2001) and Grenier (2004), derived their model anecdotally, it did appear to hold true in terms of items taken in and then out, based upon having an experience on-site. In other words, the experience on-site did appear to link with anticipation variables and impact those variables recollected. To make theoretical additions to Beedie and Hudson’s (2003) work, respondents in this study did re-assess themselves upon return, and they also initially located themselves within the group to begin with. Most respondents also noted, or results can be inferred, that they now had heightened awareness after the visit. Based upon reading all the respondents’ transcripts they most certainly had uninhibited discourse during the experience; respondents’ revealed some truly personal details of their life or events in Antarctica to a researcher they had never met.

Based upon this research, the subtleties of the experience, as mentioned by Arnould and Price (1993), appear to be true. If one were to determine how an experience and visit to the Ross Sea region best fit a theoretical model of multi-phase experience then this is the most universally acceptable theory. The research in this study showed a number of unique transitions and subtle changes for visitors that are not necessarily recognised in a very structured, phase by phase, examination. Theoretically, perhaps a spectrum approach for experience, along the lines of Driver and Tocher’s (1979) work, is in order; allowing respondent’s even greater flexibility in what they share, how they share, and when they share.

It is the combination of all of these studies, each with their own slant on a multi-phase framework, which gives this research its greatest credibility and applicability. The more recent studies (notably, Bauer, 2001; Beedie & Hudson, 2003; Grenier, 2004) place hardly any emphasis on past material and theories. Earlier studies though have become dated or are not specific to the more remote context of this research. Suedfeld (1991) indicated that in the context of remote or isolated environments, there is a need to understand the relationships between people and their environment, which may be something that this study achieved. Results are a step forward in understanding of the human-environment relationship for a population of ‘Antarcticans’ who are not generally studied at all (artists, writers, DVs) and a segment of tourists removed from the masses of the Antarctic Peninsula.
Visitors to the Ross Sea region seem to have had an ‘extraordinary’ experience versus a ‘familiar’ one and did give extensive consideration to the event before departure. On-site, visitors appeared to be subjective as to their surroundings, and recognised many of the antecedent conditions that interacted with their time on the ‘ice’. Positive motivations and a positive educational experience on-site did in fact produce an educational awareness and even if intentions were not fully clear, there is an acceptability surrounding the use of the term ‘ambassador’. The significance of this notion, an extraordinary experience leading to some level of intention to act and the self-acceptability of the term ‘ambassador’, is what future research should attempt to create concrete linkages between; the important dimensions that make this happen and how these dimensions can bet better facilitated. Specifically, what is the meaning and emotion that will allow intention to become ‘real’ action, and therefore ‘true’ ambassadorship? Ambassadorship, in terms of action, being the key, but often illusive, item that all sides (national programmes, operators, governments) covet in the discussion around the acceptability of public visitation to the continent.

7.32 Methodological Aspects

The integration of methods in this research was an attempt to better understand the visitor experience holistically. That is, not just as survey variables linked directly to the time when the visitor is arguably already on-site. By designing a research project that specifically examined experience, versus examining it as a tangent, this study was the first to do so in a context related to Antarctic tourism. Additionally, as a visitor study, the research moved beyond just the realm of traditional commercial tourism, and as such some methodological challenges presented themselves in dealing with both public and private agencies; with differences in both their concern for participant confidentiality and in terms of the flexibility needed to accommodate all groups. Even politics played a role in the methodology of the research, in that ‘tourist’ or ‘tourism’ was seen as a loaded term by some groups.

From the paragraph above, hopefully the lofty goal of this study is indicated, but was it successful methodologically? The answer is perhaps. By examining anticipation aspects of the visit, this study retained results different to previous ones that had an Antarctic context. Was that due to the methods or the population of respondents? Was that due to the time that had passed since earlier studies were completed or the ‘new’ geographic location? One cannot be sure in answering any of these questions. The journals and transition interviews with GCAS clearly provided new and exciting data. These truly helped broaden the study of visitor experiences in remote regions, and so should definitely be included in future research. Again with the departure survey and recollection survey the point of difference between this and other studies is difficult to ascertain. However, the truly pre and post visit methodology elicited much more critical thinking about the on-site experience and for a longer timeframe than previous studies. Additionally, the utilisation of e-surveying proved tremendously valuable and should be promoted in future research.

7.33 Logistical Aspects

The primary logistical aspect of lessons learned is the importance that industry support has. Without the support of the groups involved in this study (GCAS, ANZ, Quark Expeditions and Heritage Expeditions) none of this research would have been possible. This general industry assistance was a must for Antarctic research on visitor experience, and presumably the results provided offer valuable feedback to the organisations. While it may have initially been thought that the use of on-site methods (i.e. on-site interviews and observation) would have been more desirable, whereby the researcher takes a spot on a cruise or seat on a plane, this required more
of a time and money commitment from both the researcher and organisation. These methods could also be more intrusive and therefore impactful upon on the results. With a somewhat off-site method used to monitor the experience in this research (i.e. surveys, per/post interviews, and journals), it would be interesting in future studies to see what effects these off-site logistics had on results in relation to on-site methods used at the same time.

7.4 Research Significance: The Big Picture

The broad state of knowledge on tourism experience research has recently been reviewed by Uriely (2005), and shortly thereafter Larsen, Urry and Axhausen (2007) produced a compilation of tourism in an increasingly mobile world. These two reviews, in press concurrent to this research project being undertaken, now serve to place this study into the broader context. While Uriely (2005) mentioned none of the experience models followed by this study he did indicate some important advances in tourist experience work that can be corroborated by the linking of such models and theories with his review of the state of field. Uriely (2005) aimed to track and evaluate the conceptualisation of tourists experience from modernist to post-modernist modes and concluded the following developments had become the norm in the broadest sense: de-differentiating the experience, pluralizing the experience, understanding the role of subjectivity and moving towards relative interpretations.

This thesis research presents agreement with Uriely (2005) that the tourism experience cannot be divorced from one’s own wider life events and circumstances. Indeed, within this thesis, very personal experiences were reported by respondents, including the health of their family at home and a variety of commitments they had to friends and family relationships. As such, future research might consider where these links to home, and the transference of such, fit with a very specific experience that is not wholly divorced from ‘real life’. Of particular note for research into tourist experience in the Antarctic is the extent to which boundaries between work and tourism become blurred, especially for those visitors such as artists and students. Statements regarding the de-differentiation of the experience relate to how tourism should no longer be seen as disparate to routines undertaken in everyday life. While the ‘difference’ of the RSR was notable many visitors did in fact relate their activities back to their everyday life or they normalized them. Of note is that Uriely (2005) treats activities (trekking, climbing, and skiing being mentioned) as different to tourism. However, in the RSR and arguably elsewhere, these activities were themselves the tourism not separate or different and thus this level of conceptualisation created a bit of concern. The inclusion of visitors beyond the commercial tourist in this study also potentially provided an important example for Uriely’s (2005) reasoning. Visitors with work related contextualisation in their RSR visit provided orientations much like Uriely’s (2005) categories of “travelling workers” and working tourists”.

While Uriely (2005) noted that early conceptualisations of tourist experience did not account for variety of meanings and motivation, works that have moved along from Clawson and Knetsch (1966), such as Arnould and Price (1993), most certainly have. Again, neither of these studies were mentioned by Uriely (2005), but the outcomes he realises were very similar. The use of multiple disciplinary theories, such as those from education and consumer behaviour, display the results of this study as an excellent example of the type of experience study that should take place according to Uriely (2005). If studies focus too heavily on one particular disciplinary approach they neglect a holistic understanding. Another possibility is also that experience, particularly on-site, may also be better described in forms other than words, showcasing a variety of meanings through a wider variety of methods.

The subjectivity of tourists experiences is conceptualised by Uriely (2005) using the issue of authenticity. For visitors to the RSR, a huge variety of subjective experiences exist, as displayed by the results in Chapters 4-6. While an attempt to categorise results using external
verification was undertaken, the shear subjectivity of all the events leads to a wide variety of
interpretations. Tourists simply do not ‘see’, ‘feel’, or ‘experience’ things, objects, or travels in
similar manner. Experience is a nebulous concept, and its very study is subjective. This
subjectivity produced a difficulty in experience measurement, but there was indeed a need for the
use of personal diaries, or further perhaps films versus words that allow the layers of meanings
and emotions to be examined. Uriely (2005) also mentioned moving to relative and
complementary interpretations of experience, which links well with this study as it is the mixture
of absolute truths from the surveys tools linked to relative or subjective truths found in the
narratives that is key. By using both, items were expanded upon, or in some cases refuted, from
one phase to another. Thus, a notion of compromise in result interpretation became necessary.
The implications for future Antarctic visitor research were that these tools can easily be used by
the participant without the researcher present, provided some structure is given. Alternatively, a
researcher on-site could film or conduct diary studies, but must then be careful of their own
influence.

In summary, recent scholarly discourse tends to proffer that the “tourist experience is
currently depicted as an obscure and diverse phenomenon, which is mostly constituted by the
individual consumer” (Uriely, 2005, p. 209). This is supported by the outcomes of this research,
whereby other themes can be distilled by other readers, i.e. spirituality and luck. Every
experience in the RSR was unique; to generalise too far obscures the phenomenon. As
mentioned by Uriely’s (2005) third development, it was important to branch out from displaying
objects to negotiating meanings; capture the logic of contemporary yet still reconstruct links to
past studies. Again, this was certainly achieved in this study by connecting to theories where past
studies in the Antarctic had only relied on anecdote, and yet this research also went deeper into
some aspects of the experience than any Antarctic tourist studies had done before revealing how
phases linked together and individual variables changed between true anticipation and far-
removed follow up.

Uriely (2005, p. 211) specifically stated that “future studies should specify which types of
work-related activities are incorporated in contemporary tourist experiences” and hopefully by
encompassing the range of visitor groups in the RSR this was at least partially achieved. Given
some of the human-environment theories that shaped this research, and its definitive connection
specifically to the RSR, this research has certainly achieved two points that Uriely (2005, p. 212)
promoted for future research “not [ignoring] the nature of the specific visited object or the
particular form of tourism as a determinant of the subjective experience” and studies “should
focus on the nature of the relations between the objects and subjects that constitute the tourist
experience”. The nature of the RSR was most certainly a determinant in each of the respondents’
very subjective experiences and it is particularly the relations between both the RSR as an object
and the objects it contains that constitute the experience. However, the objects also form the
experience in such a way that, for example, the books and media read and seen beforehand link
to the subject, as do the pictures reviewed and connections to fellow travellers afterwards.

Visititation to the RSR is undoubtedly exotic, and as Larsen et al. (2007) have discussed a
mobile social life and the networks of tourism show that tourism research has been marginalised
because of its exoticism, while the experience itself has become more centre stage to people’s
lives. Larsen et al. (2007) have brought focus to how tourism has moved into assisting with
people’s friendships and reproducing their social relations. In the RSR, friendships and social
relations were present for participants, so even in such a remote location a shift in tourism is
evident. Social relations and their importance for groups that connect to Uriely’s (2005) notion
of de-differentiation with everyday life (i.e. GCAS, ANZ) show promise in changing
conceptualisations of tourist experience. Tourism does not happen for a specific time and place,
separate to ones everyday social world. Many respondents in this thesis noted the importance of
their new ‘group’ and how it connected to their ‘home’ network. This could perhaps connect to
the notion of ‘status’ as a rationale for visiting Antarctica; a motivation stressed by previous tourism research done on the continent. A future research opportunity in this vein of thought could be how status is itself actually revealed. The fact that status, i.e. ticking off a 7th continent, was not evident as a primary motive in this study, whereas non-status was, in terms of the ability for all to visit, creates an interesting set of questions. How do notions of social groups and home connect to this? Are societal perceptions to the status of visiting Antarctica, and in this case the RSR, changing?

Larsen et al. (2007) concluded by stating that tourists are not searching for lost difference, but rather distant connections. How respondents chose to connect to where they were and also to their peers on the visits definitely showcased the argument Larsen et al. (2007) have made. The relationships and connection between “here and there” in the RSR, as furthered by this research beyond the anecdotes of Beedie and Hudson (2003), served to move forward the de-exotification of tourism theory presented by Larsen et al. (2007). Respondent 26 described this well when stating “…Antarctica strikes me as not much different than anywhere we live. It’s up to you to get out and experience it”. This then serves as a possible future research opportunity; examining questions such as how are these distant connections made? What is their strength and impact? What is the relationship of this de-exotification to recollection of the visit?

Larsen et al. (2007) also described a network approach for tourism that includes tasks of scheduling, travelling, visiting, arguably all portions of a multi-phased conceptualisation of experience. The importance of networking tools in tourism is specifically noted by Larsen et al. (2007). As evidenced by the methods of sharing undertaken by the respondents, use of email in the research design of the study, and the media’s shaping of the visitors’ experiences, networking tools all facilitated a richer understanding and more interdependent patterns of sociability. In the RSR, the links to people on-site helps engaged Larsen et al.’s (2007) notion that tourists are experience producers and not just passive consumers, and thus their roles shape the experience for others. As Larsen et al. (2007, p. 259) stated, future research should decipher “the interconnections among place, events, and sociabilities, where experiences of place are complexly multifaceted. Their interconnections set out a new agenda so as to examine the multiple ways in which places and performances are elaborately intertwined”. The mixture of numerical truths and personal narratives served to expose connections, as did asking questions on recurring themes across phases. The link between place and performance was explicitly examined by the way individual participants explained themselves, and observed others acting in their own experience and acting in the experiences of others. Linkages to post-visit behaviour also served to evaluate place and performance connections. Does place effect future performances in Antarctica? Does place effect future performances elsewhere? Does place have a lead role in moving from intention to action? These are key extensions of the ambassadorship discussion made in this research.

7.4 Recommendations for Further Research

With the limitations of this study noted in combination with each of the recommendations, there are a number of positive recommendations to be made with regards to future research. These are in addition to future research recommendations made by Uriely (2005) of which some have already been advanced by this work.

Given the time constraints of the Ph.D. process the time frame used in this study, approximately 4 months pre and post visit for the anticipation and recollection phases, seemed appropriate. However, additional monitoring, particularly post-visit would provide tremendous opportunity for future research. Where do visitors take their on-site experience 1 year later, 5 years later, or even further into the future? If a longer timeframe is studied perhaps a better understanding of the visit versus real life can be gleaned. Further networks to the place and
people involved will have developed and a stronger sense of the opportunity to truly create a
corps of ambassadors may be recognised. The “hidden potential” for ecotourism, as mentioned
by Duenkel and Scott (1994), based on education and hands-on experience could then be
monitored, as could further aspects of Kolb’s (1984) fourth step of experiential learning.

While findings of this study may not be generalisable to a wider population of Antarctic
visitors, that was never the intention of the present study, and even within visitors to the RSR it
may not be possible to generalise due to those few visitor groups who were not involved in the
research. Results likely have provided a good glimpse at visitors to the region and their
experience for 2002-2004. A future research recommendation would thus be to cast future
studies further afield in scope across the continent, but also with consistent guaranteed
monitoring at constant intervals, thereby deleting issues around variable research designs. Just as
impact studies monitor at regular, say 5 year, intervals the same could be done for experiences in
a given setting (see Maher, 2003b). Experience studies could also be initiated in coordination
with impact studies in the Ross Sea, provided these were implemented as in the Antarctic
Peninsula (Ron Naveen, personal communication, 04/26/04) and a key tool for management
could be produced: a broader picture of impact mitigation side by side with examining the
production of quality visitor experiences.

As all methods used for this research were conducted only in English, results may be
skewed towards those who felt comfortable with the English language. However, as 71% of
commercial tourists to the RSR for 2002/2003 were from English speaking countries (not
considering those of unknown nationality), and nearly all those participating with the other
operations were New Zealand-based or studying at a New Zealand tertiary institution, it is
reasonable to believe that language was not a major barrier to response. For future research that
is spatially and temporally larger in scope, a more comprehensive translation and language
program may be necessary, and in fact would be desired to truly create a more generalisable, but
also more in-depth set of data.

Not as a limitation to the mixed method approach, but rather relating to the ability to
access different groups of visitors; as the techniques to reach visitors were not always
standardised there is the distinct possibility that experience has been looked at in too many ways
by this study. However, as the aim of the study was to examine the nature of the experience, it is
believed that it was more valuable to include a particular group under the conditions they
required rather than exclude them because they could not be sampled in the same manner as the
rest. The logistical aspects of lessons learned (section 7.33) mentions this; in that standardisation
of methods, based upon the complete ‘buy-in’ of organisations involved, would prove quite
valuable for many reasons.

The use of email surveying in the recollection phase may be considered a limitation as
not everyone has email access; however, respondents to the initial survey had considerable
income, or were students or professionals (groups that generally have high internet accessibility).
Mail surveys were always an option, and used if a respondent wanted to participate in the phase,
but did not have email access. The use of email, exclusively, in future studies would be an
excellent time saving endeavour, and results gained would likely be quite comparable.

7.5 Final Words

At the end of this thesis, and as with most inquiry, it must be recognised that research is a
process. This research is a step towards building a more complete picture of the specific visitor
experience and in general how to measure and monitor it. In future studies perhaps using a wider
variety of tools such as capitalizing on the journals used here, introducing films or more photos,
over a longer timeframe, could be the key. More specifically, how could this type of work be
logistically undertaken in other remote regions across the globe, not just the Ross Sea region?
This work has been stimulating and challenging; tiring and rewarding; meaningful and mind-numbing.

Understanding the visitor experience via this research may yield implications for policy statements, specific regulation, and micro or macro scale management for the Ross Sea region. Implications for policy could include: 1) not creating or encouraging the ‘us versus them’ relationship between tourism and science (government), work visitors versus traditional tourists; 2) examining the actual similarities between activities deemed acceptable through national programs and the so-called unacceptable activities of tourism; and 3) better linking the general public to the continent and what that ‘means’ for visitors and non-visitors alike. Implications for industry (inclusive of all visitor programmes) could be: 1) the need to fully understand how their actions, as a provider or operator before and after the visit, affect the experience and the ability of real action outcomes to materialise from participants; 2) the importance of social and group aspects to the experience; and 3) the place of social research in helping to shape a framework that manages Antarctica as more than just an operationalised natural landscape.

At the very least this research provided broader perspective on visitors continent-wide by moving outside of the Antarctic Peninsula, and it added to the theoretical debate on the concept of experience as noted in above sections. There is still a vast need for further research in the region and of the concept and development of visitor/tourist experience. Hopefully many more studies will materialise that advance upon both this one and those undertaken in the past.
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Denise Landau: Executive Director - IAATO
Greg Mortimer: Mountaineer, OAM, Owner of Aurora Expeditions
Ron Naveen: Principal of Oceanites
Lou Sanson: Chief Executive, Antarctica New Zealand
Erica Wikander: Owner/Director of Quark Expeditions
Bill Yates: Chaplain - McMurdo Station 2003/2004
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Appendix A: IAATO Visitor Guidelines.
RESPECT SCIENTIFIC AREAS

A variety of animals in the Antarctic have been studied without a national authority.

RESPECT PROTECTED AREAS

A variety of animals in the Antarctic have been studied without a national authority.

PROTECT ANTARCTIC WILDLIFE

Do not feed, harass, or disturb wildlife.

Do not feed, harass, or disturb wildlife.

Do not feed, harass, or disturb wildlife.

Do not feed, harass, or disturb wildlife.

Do not feed, harass, or disturb wildlife.
Appendix B: IAATO Marine Wildlife Watching Guidelines.
Marine Wildlife Watching Guidelines
(Whales & Dolphins, Seals and Seabirds)
For Vessel & Zodiac Operations

Introduction
The International Association of Antarctica Tour Operators (IAATO) has developed the following Wildlife Watching Guidelines to provide guidance to vessel operators while viewing cetaceans, seals, and birds in their marine environment. In addition, these guidelines suggest additional ways to comply with Annex II (Conservation of Antarctic Fauna and Flora) of the Protocol on Environmental Protection to the Antarctic Treaty. The guidelines do not replace any domestic governmental laws, but provide an additional code of conduct to help reduce potential disturbance to the marine environment. Some countries have guidelines or regulations stricter than these, and which may override these guidelines. Violations may be punishable by fines, imprisonment and, in extreme cases, seizure of vessel.

Members/operators of IAATO should be aware that compliance with these guidelines might be insufficient to prevent violation of, and penalties resulting from, national laws and regulations.

Compliance with the International Regulations for Preventing Collisions at Sea has priority over these guidelines at all times.

A. These Guidelines are Intended for:
• Use by any vessels ... (e.g. ship, sailboat, yacht, Zodiac, kayak, etc.), by the officers, crew, expedition staff and visitors involved in navigating in wildlife-rich areas during viewing sessions. (Note: The use of jet-skis, surfboards or windsurfers should not occur in areas of known wildlife.)
• Providing standard operating procedures in order to minimize wildlife disturbance.
• Protecting cetaceans, seals and seabirds and ensuring a maximum high quality wildlife-watching experience by responsible observation. (Many passengers themselves are often highly concerned about the welfare of the wildlife and expect high standards of conduct by operators.)
• Avoiding harmful impacts on marine wildlife populations by ensuring that the normal patterns of daily and seasonal activity of the animals are maintained in the short and long term.

Competent, careful boat handling avoids harming wildlife and leads to better wildlife watching.

B. Possible Impacts from Vessels
Possible negative impacts from vessel operations include physical injury, interference or disruption of normal behaviour, increased stress, increased underwater noise and possibly increased exposure to predators. In addition, animals could be exposed to increased levels of environmental contaminants such as oil from leaking outboard engines and discharged bilges.

The recommended guidelines will help minimize the level of potential disturbance and should prevent the following from occurring:
• Displacement from important feeding areas.
• Disruption of feeding.
• Disruption of reproductive and other social behaviours.
• Changes to regular migratory pathways to avoid human interaction zones.
• Stress from interaction.
• Injury.
• Increased mortality or decreased productivity/survivorship (and therefore population decline).

C. Approaching Marine Mammals and Recommended Distances – General Principles

The animal/s should dictate all encounters. It is very important for vessel operators to be able to evaluate the animal/s’ behavioural patterns. This can be difficult in practice and a good reason to have experienced naturalists onboard. The guidelines take into account the approach towards the animals, arrival at and departure from an optimal viewing area, and recommended distances from the animals.

Sometimes an animal will approach a vessel. If a marine mammal wants to interact, it may remain with the vessel. The vessel can then drift passively. If the animal is moving away from the vessel, it is choosing not to interact with or approach the vessel.

Take all care to avoid collisions. This may include stopping, slowing down, and/or steering away from the animal/s. Do not chase or pursue animals.

The following principles address vessels in general:

1. Cetaceans (Whales, Dolphins, Porpoises)
Cetaceans should never be approached directly head-on. Ideally, they should be approached from slightly to the side and rear of the animal (see Figure 1). Once travelling with the animal, travel parallel with it/them.

Figure 1.
1a. Vessels, Officers, Crew, Expedition Staff:
- Keep a good lookout forward (and ideally on the sides and from the stern) where cetaceans may be present.
- Always give the animals the benefit of the doubt.
- Avoid sudden change in speed and direction (including putting vessel in reverse).
- Avoid loud noises, including conversation, whistling, etc.
- Keep radios on a low volume setting.
- Should a vessel get closer than the recommended minimum distance, withdraw at a constant, slow, no-wake speed, to at least the recommended minimum distance.
- If animals approach the vessel, put engines in neutral and do not re-engage propulsion until they are observed well clear of your vessel. If the animals remain in a local area, and it is safe to do so, you may shut off the vessel's engine. Some whales will approach a silent, stationary vessel. (Note: Allowing a vessel to drift within accepted recommended distances could constitute an approach.)

1b. Recommended Minimum Approach Distances:
- No intentional approach within 30 meters or 100 feet for Zoarcas, 100 meters or 300 feet for ships (150m/500 ft. if ship over 20,000 tons. 200m/600 ft. if 2 ships present).
- Current International Regulations:
  Argentina & Brazil: 100m/300 ft. with engines on.
  50m/150 ft. with engines off.
  South Africa: Licensed vessels only within 300m/1000 ft.
  No go zones e.g. Walker’s Bay, Hermanus.
  Australia: 100m/300 ft. whales 50m/150 ft. dolphins.
  New Zealand: 50m/150 ft. No wake within 500m/1000 ft.
  NB 200m/600 ft. from Sperm and Baleen whales with calves.
  USA: 30m/100 ft. except Alaska 100m/300 ft. and all Northern Right Whales 500m/1500 ft. (Handheld range finders may prove useful.)
  Canada: 100m/300 ft.
- Helicopters or any aircraft should not approach closer than 300 meters or 1000 feet vertical distance. Helicopters are banned from over-flying cetaceans in Australian waters (minimum altitude 1000m/3000 ft.). In New Zealand the minimum altitude is 1500m/5000 ft. Argentina 1500m/5000 ft. Alaska 500m/1500 ft.
- Aircraft should cease contact if the animals repeatedly dive or increase speed.

1c. Awareness of the Animal(s)’ Behavioural Patterns:
Be aware of changes in behaviour of the animal(s).
- If the cetacean is agitated or no longer interested in staying near the vessel, the following behavioural changes may be observed:
  - The animal starts to leave the area.
  - Regular changes in direction or speed of swimming.
  - Hasty dives.
  - Changes in respiration patterns.
  - Increased time spent diving compared to time spent at the surface.
  - Changes in acoustic behaviour.
  - Certain surface behaviours such as tail slapping or trumpet blows.
  - Changes in travelling direction.
- Repetitive diving.
- General agitation.
- Do not stay with the animal(s) too long. Suggested: 15 minutes – 1 hour. If disturbance or change in behaviour occurs, retreat slowly and quietly.
- Never herd (circle), separate, scatter, or pursue a group of marine mammals, particularly mothers and young.
- If a cetacean approaches a vessel to bow-ride, vessels should not change course or speed suddenly. Do not enter a group of dolphins to encourage them to bow-ride.
- If a cetacean surfaces in the vicinity of your vessel, take all necessary precautions to avoid collisions. This may include stopping, slowing down, and/or steering away from the animal.
- Do not feed any wild animals. This includes throwing food or garbage in the water in their vicinity.
- Avoid teaching or sudden movements that might startle the cetacean.
- If a cetacean comes close to shore or your boat, remain quiet.
- Playback of underwater sound of any kind should not occur. This includes recorded whale or dolphin sounds. By all means, do use hydrophones to listen to the underwater sounds (usually an engines off situation, ideal for Zoarcas rather than ships). The sounds can be listened to on headphones/mini speakers and, of course, recorded. There are a number of sites on the Internet, which offer hydrophones for sale.

1d. When the Vessel is In Sight of Whales:
- Approximately 3000 to 1500 meters/Two to one mile away
  - Reduce speed to less than 10 knots.
  - Post a dedicated lookout to assist the vessel operator in monitoring the location of all marine mammals.
- 1500 to 750 meters/One to one-half mile away
  - Reduce speed to 5 knots.
- Approximately 750 meters/Half a mile or closer
  - Reduce speed to less than 5 knots.
  - Maneuver vessel to avoid a head-on approach.
  - Avoid sudden gear changes (i.e., into reverse).

1e. Close Approach Procedure for Vessels and/or Zoarcas:
- Approximately 200 meters/600 feet or closer:
  - Approach at no faster than “no-wake” speed or at idle, whichever is slower.
  - Approach the animal(s) from parallel to and slightly to the rear (see Figure 1).
  - Never attempt an approach head-on or from directly behind.
  - Approach from behind and to one side at 4 or 8 o’clock to the whales heading 12 o’clock (see Figure 1).
  - Stay well clear of feeding baleen whales.
  - Try to position your vessel downwind of the animals to avoid engine fumes drifting over them.
  - Communication between vessels and Zoarcas in multi-vessel approaches should be established, to coordinate viewing and to ensure that you do not disturb or harass the animals.
  - Do not “box-in” cetaceans or cut off their travel or exit routes. This is particularly important when more than one vessel is present.
Vessels should position themselves adjacent to each other to ensure the cetaceans have large open avenues to depart through if desired.

- Beware of local geography – never trap animals between the vessel and shore. Assess the presence of obstacles such as other vessels, structures, natural features, rocks and shoreline.
- **Remember:** Avoid sudden or repeated changes in direction, speed or changing gears when close to marine mammals.

1f. Close Approach Zone:

(Note: Ideally this should be no more than one vessel at a time)

Approximately: 30 meters/100 feet for Zodiacs/100 meters/300 feet for ships.

- When stopping to watch cetaceans, put your engines in neutral and allow the motor to idle without turning off, or allow the motor to idle for a minute or two before turning off. This prevents abrupt changes in noise that can startle the animals.

- Avoid excess engine use, gear changes, manoeuvring or backing up to the animals. These produce sudden, large changes in underwater noise levels, which may startle, agitate or drive the animals away.

- Avoid the use of bow or stern lateral thrusters to maintain position. Thrusters can produce intense cavitations (air bubble implosion) underwater.

- Be aware that whales may surface in unexpected locations.

- Breaching, tail-lobbing or flipper slapping whales may be socialising and may not be aware of boats. Keep your distance.

- Feeding humpback whales often emit sub-surface bubbles before rising to feed at the surface. Avoid these light green bubble patches.

- Emitting periodic noise may help whales know your location and avoid whale and boat collisions. For example, if your Zodiac engine is not running, occasionally tap on the engine casing with a hard object (not your radio!)

- If cetaceans approach within 30 meters or 100 feet of your vessel, put engines in neutral and do not re-engage propulsion until they are observed clear of harm’s way from your vessel. On rare occasions, whales have been seen to use ships as ‘backscratchers’, remain drifting.

- Stay quiet (turn that radio down) and restrict passenger movement in Zoedicals during close encounters.

- **Enjoy the experience.**

1g. Departure Procedures:

- Move off at a slow ‘no-wake’ speed to the minimum distance of the close approach zone. Avoid engaging propellers within the minimum approach distance, if possible.

- Always move away from the animals to their rear, i.e., not in front of them.

- Do not chase or pursue “departing” animals.

1h. Swimming with Cetaceans:

Swimmers should stay at least 30 meters/100 feet from wild animals (it’s up to the animal to come closer). Human and animal safety cannot be guaranteed and great caution should be exercised. If in doubt, retreat. Cetaceans and seals can occasionally be aggressive and attack. Operators may want clients to sign a special waiver before entering the water for any potential encounter. Ongoing research into the subject is continuing, see [www.wdcn.org](http://www.wdcn.org) for more information and updates.

- **Swimming or snorkelling only.** No Scuba (except supervised ice diving). Do not enter the water within 30m/100 ft. of the animals nor dive or jump in. Swim with gentle, quiet movements. Approach animals from the side and rear. Do not swim with calves of the year or pods with calves of the year. Vessels to maintain their normal distances.

- **Argentina:** No swimming with cetaceans.

- **New Zealand:** No swimming with whales.

- **Brazil:** no swimming within 50m/100 ft. of cetaceans.

2. Seals

2a. General Guidelines:

Seals hauled out on land, rock or ice are sensitive to boats and human presence. Noises, smells and sights may elicit a reaction. When observing seals in water, please apply similar principles as outlined for cetaceans. On land, be aware of seal behaviour that indicates a seal has been disturbed.

- When viewing seals on ice or land, do not surround or separate them, especially mothers and pups. Stay on the side where they can see you.

- On beaches, avoid getting between seals and the sea, walk ‘above’ them.

- Try not to break their horizon.

- Do not feed them.

- Pups are often left alone when the mother is feeding. They are not abandoned and should be left alone and not touched.

- Keep commentary, conversation and engine noise to a minimum.

- Be aware of your radio volume.

- Any seal response other than a raised head should be avoided.

- Beware of seal raised and moving (open mouth in defense posture for Leopard Seal on ice, or Elephant Seal on land).

- If a seal dives, you should retreat.

- If a herd moves towards the water or there is a hurried entry into the water by many individuals, you should retreat.

Suggested minimum distances ashore 5-10 meters (25 meters from jousting bulls) New Zealand: 5 meters. Beware of animals in tussock grass areas. Ideally, staff member should lead, carrying walking stick or equivalent.

2b. Swimming with Seals:

The suggestions for cetaceans apply. See 1h.
3. Seabirds

3a. General Guidelines:
- Birds such as penguins may be subject to disturbance by Zodiac operations close to landings or colonies.
- Approach or depart a landing or colony slowly to minimize any disturbance.
- Staff/crew should assess the best landing point – ideally as far from the birds as possible. This is particularly important if birds are mouthing near the shore.
- Avoid blocking ‘walkways’ in colonies and water entry and exit points. Avoid boat operations in water where birds enter and exit, are bathing, or are feeding close to colonies.
- Be aware of birds in the water and slow down and/or alter course to avoid any collision.

Sometimes spectacular concentrations of seabirds may be found out at sea – rafts of birds either on the surface, diving from it, or simply resting and bathing. Many of these bi may have flown hundreds if not thousands of miles, often to find food for their young.
- Stay on the fringes of these concentrations. Ships should stay 100 meters and Zoarcas 30 meters away.
- There may be occasions when swimming penguins find themselves in a Zodiac when they ‘porpoise’, landing on the deck. Occupants should remain quiet and wait for the penguin to find its own way over the side and return to the water, normally by jumping onto the anchor box. It is not normally necessary to assist.

The same advice applies to ‘feeding frenzies’, which may involve species diving from the air into and under the surface of the sea.
- Some seabirds may be attracted to drifting vessels.
- Under no circumstances should ‘chumming’ (depositing fish guts or oil) occur to attract birds south of 60°.
- Never feed wild birds.
- Ashore, keep 5-10 meters from nesting seabirds (10 meters from nesting, 25 meters from displaying Albatrosses on South Georgia). New Zealand allows approach to 5 meters. Giant Petrels seem particularly prone to disturbance whilst nesting, stay 25-50 meters away, if possible. If parent birds are blocked from returning to their nests, increased predation of eggs and chicks may occur by skuas and gulls.
- Take care in tussock grass where birds may be nesting, including in burrows under bare earth.
- If skuas (jaegers) or terns start dive-bombing, they are protecting young or nests. Retreat in the direction you approached from.

4. Entanglement and Stranglings
- Any animals entangled in fishing equipment, etc., should be assisted where possible. Please use experienced staff/crew for these situations.
- Photographs of the entanglement should be taken. Please complete a report and send it to IAATO.
- Should you not be able to assist, please record details including Lat and Long, species, and type of entanglement. Please report the event as soon as possible, so assistance may be sought from other vessels that may have experienced staff.
- Details of dead (floating) cetaceans and ‘stranglings’ (beached) animals should be recorded. Where possible, please take photographs recording the front and side of the head of the animal (for species identification). Please include a scale of measurement (e.g., a ruler or Zodiac paddle) in the photographs.

5. Identification and Data Collection
- Identifying and, in many cases, recording species for trip-log purposes is part of most onboard naturalists’ remit. Logs, which include this data and the Latitude and Longitude of sightings, species identification and any additional information, such as identification photographs, are of immense value. Please send copies to the IAATO Secretariat (www.iato.org).

Helpful Hints!
- Reducing Pollution from Engines – In all close wildlife encounters, please ensure you are using ‘clean running’ engines, especially on Zoarcas, and are creating minimum air and water pollution (e.g. light oil spills on the sea).
- Viewing Marine Animals – Polarizing sunglasses can considerably enhance viewing of submerged/partially submerged marine mammals in water.
- Encourage the use of binoculars for viewing marine mammals and seabirds.

The Following Field Guides are Helpful Tools

Cetaceans: Whales, Dolphins and Porpoises
by Carwardine & Cann 1995
by Folkens et al. 2002
Seabirds: A Photographic Guide by Harrison 1987
A Complete Guide to Antarctic Wildlife by Shirihai 2002

Acknowledgements
Biologists and expedition staff who have worked many seasons in Antarctica helped to compile these Marine Animal Watching Guidelines:
- Whale watching regulations (as of 24/10/01):
  Argentina Law 2381/84
  Brazil IBAMA Edict 117 1996
  Australia ANZECC Australian National Guidelines for Cetacean Observation 2000
  New Zealand Marine Mammals Protection Regulations 1992
  USA National Marine Fisheries Service Whale Watching Guidelines 1997

*Note: Vessel officers and staff should be aware of the full current regulations in place, in their respective operating areas.

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Rev. January 03
Appendix C: Initial Survey for Visitors supported by Antarctica New Zealand.
Visitor Experiences in Antarctica

Having read the information letter and signed the consent form please complete this survey honestly and in as much detail as possible. Once you have completed the survey please enclose it, along with the consent form, in the envelope provided; then simply drop this envelope in your nearest post box, no postage is required. Your time and assistance in this research project is greatly appreciated.

Section A: Anticipation and Pre-expedition Views

1) Of the following attributes, please indicate the strength of each, in regards to motivating you to visit Antarctica. For each, please number based on whether the attribute is a:

<table>
<thead>
<tr>
<th><strong>Strong Reason</strong></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th><strong>Weak Reason</strong></th>
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</thead>
<tbody>
<tr>
<td>__ Wildlife</td>
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<td></td>
<td></td>
<td>__ Dates were suitable</td>
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<td>__ Curiosity</td>
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<td></td>
<td>__ Life-long dream</td>
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<td>__ Scenery</td>
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<td>__ Development or use of skills</td>
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<td>__ Remoteness</td>
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<td>__ Challenges involved</td>
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<td>__ Sense of Adventure</td>
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<td>__ Education</td>
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<td>__ Photography</td>
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<td>__ Escape from everyday life</td>
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<td>__ Pristine Environment</td>
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<td>__ Cope with everyday life</td>
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<tr>
<td>__ History</td>
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<td>__ Meeting new people</td>
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<tr>
<td>__ Status (i.e. last continent to visit)</td>
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<td>__ Bonds to those you’re travelling with</td>
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<tr>
<td>__ Family Reasons</td>
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<td>__ Relaxation</td>
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</tbody>
</table>

*If an attribute is not a reason for your visit at all, please mark it “NA”*

Did any other attributes motivate your decision to visit Antarctica? Please list and rank here.
2) Please **rank** the following categories, based on their significance to your current **image** of Antarctica. For each, please number based on whether the category is the:

<table>
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<tr>
<th>Most Significant</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Least Significant</th>
</tr>
</thead>
</table>

- Wildlife
- Scenery
- Science
- Climate
- History

If there are other categories that contribute to your **image** of Antarctica, please list them here.

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

3) Please indicate the importance of the following attributes in relation to your expectations of the time you will spend in Antarctica. For each, please number based on whether the attribute is:

<table>
<thead>
<tr>
<th>Very Important</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Not at all Important</th>
</tr>
</thead>
</table>

- Professional atmosphere is __
- Professional appearance of facilities is __
- Expert education and information is __
- Allowance for choice and personal control is __
- Price is __
- Safety and reliability is __
- Allowance for risk taking or adventure is __
- Small group size is __
- Other’s recommendation of Antarctica is __
- Having a “once in a lifetime” experience is __
- Relaxed social atmosphere is __
- Other: ____________________ is ____________
- Other: ____________________ is ____________
4) Overall, what do you expect your trip to be like?

*From the list below choose 3 moods and rank them accordingly: (1) the most expected, (2) the second most expected and (3) the third most expected*

__ Astonishing  __ Depressing
__ Exciting  __ Miserable
__ Delightful  __ Unpleasant
__ Pleasant  __ Frustrating
__ Serene  __ Frightening
__ Satisfying  __ Alarming
__ Calm  __ Infuriating
__ Sleepy  __ Other:
__ Boring

5) In the context of Antarctica, which of the following tourism types are you in favour of? Tick (✓) all that apply

☐ No tourism
☐ Airborne tourism/Overflights
☐ Ship-borne tourism with no landings
☐ Ship-borne tourism with limited landings
☐ Ship-borne tourism with unlimited landings
☐ Summer-only land-based activities
☐ Year-round land-based activities
☐ Permanent land-based tourism facilities

6) a) Do you believe visitation by personnel not supported by a National Antarctic Programme (i.e. tourists) harms or supports the conservation of Antarctica?

☐ Harms
☐ Supports
☐ Both

b) If you answered both to question 6a, do you believe the benefits of tourism to Antarctica outweigh its negative impacts on the ecosystems visited?

☐ Yes
☐ No
If you feel it necessary to clarify your answer to questions 6 (a and/or b), please do so here.

7) The statements listed below are about the general relationship between humans and the environment. For each, please tick (✓) one box indicating whether you:
STRONGLY AGREE (SA)
MILDLY AGREE (MA)
are UNSURE (U)
MILDLY DISAGREE (MD)
STRONGLY DISAGREE (SD).

<table>
<thead>
<tr>
<th>Do you agree or disagree that:</th>
<th>SA</th>
<th>MA</th>
<th>U</th>
<th>MD</th>
<th>SD</th>
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<tbody>
<tr>
<td>We are approaching the limit of the number of people the earth can support</td>
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<td>Humans have the right to modify the natural environment to suit their needs</td>
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<td>When humans interfere with nature it often produces disastrous consequences</td>
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<td>Human ingenuity will ensure that we DO NOT make the earth unliveable</td>
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<td>Humans are severely abusing the environment</td>
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<td>The earth has plenty of natural resources if we just learn how to develop them</td>
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<td>Plants and animals have as much right as humans to exist</td>
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<td>The balance of nature is strong enough to cope with the impacts of modern industrial nations</td>
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<tr>
<td>Despite our special abilities, humans are still subject to the laws of nature</td>
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<tr>
<td>The so-called “ecological crisis” facing humankind has been greatly exaggerated</td>
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<td>The earth is like a spaceship with very limited room and resources</td>
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<td>Humans were meant to rule over the rest of nature</td>
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<tr>
<td>The balance of nature is very delicate and easily upset</td>
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<tr>
<td>Humans will eventually learn enough about how nature works to be able to control it</td>
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<tr>
<td>If things continue on their present course, we will soon experience a major ecological catastrophe</td>
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</table>
Section B: Background Information and Previous Experience

8) What are the dates of your visit to Antarctica?


9) Prior to deciding to visit Antarctica, have you previously visited other cold climate or remote regions?

☐ No

OR Yes, tick (√) all that apply

☐ Northern/Arctic Europe
☐ The Andes
☐ The Himalayas
☐ Arctic Canada
☐ Greenland
☐ Arctic Russia
☐ Arctic Alaska
☐ Svalbard
☐ Central Asia (Mongolia, Tibet, etc.)
☐ The Galapagos Islands
☐ Easter Island
☐ Other:

10) Have you had any previous Antarctic experiences?

☐ No

OR Yes, tick (√) all that apply

☐ Visited before as a commercial tourist (ship or land-based)
☐ Flew over the continent on a commercial overflight
☐ Visited previously as media personnel or a government official
☐ Visited an Antarctic tourist attraction
☐ Worked at a national base
☐ Other:

________________________
11) Are you currently a member of a conservation or environmental group?

☐ Yes
☐ No

If Yes, which one(s)?


12) Are you?

☐ Male
OR
☐ Female

13) Please indicate your age: _______ years at last birthday.

14) What is your approximate total household income? _______________________

*Please indicate both currency and timeframe, e.g. $40 000 New Zealand dollars per year*

15) What is your highest educational qualification (completed, not in progress)?


16) a) What is your job title and what industry do you work in?


b) If you are presently retired, what was your primary occupation before retirement?


17) What is your place of permanent residency? Please tick (√) only one

☐ United States
☐ United Kingdom
☐ Australia
☐ New Zealand
☐ South Africa
☐ Germany
☐ Sweden
☐ Canada
☐ Japan
☐ Switzerland
☐ Argentina
☐ Other: ________________________________

Thank you for completing this initial research survey regarding visitor experiences in Antarctica. Having completed the survey please enclose it, along with the consent form, in the envelope provided; then simply drop this envelope in your nearest post box, no postage is required.

Whether or not you choose to participate in further phases of my Ph.D. research, thank you for your time spent completing this survey. I hope you enjoy your visit to the Ross Sea Region, and as a reminder, if you wish to be included in the prize draw for Antarctic-related literature tick the appropriate box on the consent form.
Appendix D: Initial Email to Antarctic-wide operators.
Hello [INSERT NAME]

I am a doctoral candidate at Lincoln University, New Zealand researching Antarctic tourist experience. Thus, I am contacting you for assistance in completing my research. I gathered your name from the IAATO website, as I am currently trying to compile a list of contact names for various IAATO companies. Are you the individual at [INSERT COMPANY NAME] who I would converse with on the subjects of research or research access? If not, could you please forward my email along to such a person? Upon contacting the appropriate individual, I have a letter and package of information for them, outlining my research and how it would involve both [INSERT COMPANY NAME] and myself.

To further introduce myself, I am currently in the second year of my Ph.D. research having spent the initial year sorting out the theoretical and logistical basis for the project. Prior to my current studies I was at Lakehead University in Canada and completed a BA in Geography, an Honours in Outdoor Recreation and an interdisciplinary minor in Northern Studies. My study in New Zealand is under the auspices of a Commonwealth Scholarship from Canada. Previous experience I have with Antarctica includes: a voyage to the Antarctic Peninsula with Abercrombie & Kent and a voyage to the New Zealand and Australian Sub-Antarctic Islands with Heritage Expeditions. I have also been involved in workshops and discussion with Antarctica New Zealand and the Canadian Antarctic Research Network. Most of my previous employment involves working as an instructor at various outdoor/adventure centres, including a two-year stint instructing summer and winter programs for the Canadian Outward Bound Wilderness School. Additionally, I have taught at a university level in both Canada and New Zealand and have been involved in numerous private expeditions.

I look forward to your response to my email and hope that once I am in contact with the appropriate individual from [INSERT COMPANY NAME], we can each play a co-operative role in this research.

Kind regards,

Pat Maher
Appendix E: Initial Letter to Antarctic-wide operators.
Dear Capt. Endresen,

As stated in my initial email, I am a Ph.D. candidate at Lincoln University currently beginning research into the experience of tourists in the Ross Sea Region and Antarctic Peninsula. The aim of this doctoral research is to examine the nature of the Antarctic tourist experience throughout the travel process.

In order to accomplish this aim, the following specific research objectives will be undertaken over the spectrum of the project:

- Investigation and description of tourists’ motivations and expectations prior to their visit to Antarctica.
- Description of the perceptions, moods and behaviours associated with the tourists’ on-site experience.
- Description of the content of Antarctic tourists’ post-visit recollections.
- Analysis of the links between the three primary stages of experience (anticipation, on-site, recollection).
- Analysis of the potential benefits derived from the experience.

As a means to undertake this research I am looking for your support as an IAATO member company, membership indicating a commitment to responsible tourism and the conservation of Antarctica. Support would include a one-year commitment to the project and the following logistical assistance:

- **Access to the names and addresses of tourists travelling with your company to the Antarctic in the 2002/2003 season.** The purpose of this support would be so that a mail-out survey pre-expedition and an email correspondence post-expedition can be initiated. If obtaining such confidential contact information is unacceptable, copies of the initial pre-expedition package can be provided to you so that they may accompany your own information sent out to each tourist.

- **Transportation aboard one tour of the 2002/2003 season.** This support would allow the researcher to accompany a sample group of company-specific tourists for the purposes of holding in-depth interviews with up to 10 individuals about their experience and making general observations and documentation of the specific on-site Antarctic tourist experience.

The purpose of this research is to provide information currently lacking from an understanding of Antarctic tourism, that being the nature of the tourist’s experience. It is hoped that you could play an integral role in the initial set up and discussion of the research methodology so that results are useful not only to my Ph.D., but also to you as a responsible commercial operator in Antarctica.

For the involvement and support invested in this project, Polar Star Expeditions would be provided with the following:

- **Full acknowledgement in the thesis and any additional publishing or presentation of the results that occurs (academic journals, conferences, etc).**
- **A copy of the entire hardbound thesis, including all results, recommendations and findings.**
- **The services of the researcher, while on-board the tour and not engaged in research, in whatever capacity is required, i.e. lecturer, guide, ‘gopher’.

If you choose to support this research project and would like to engage in discussion regarding the logistical commitments outlined above, please reply via email before **May 31st, 2002**.
This research seeks to contribute valuable information about the human aspect of Antarctic tourism and its relationship to conservation, which in turn may be of use to both IAATO and the ATS. As a research project initiating from Lincoln University, the overall study is being run under the supervision of Dr. Gary Steel and Dr. Alison McIntosh. The project is currently being reviewed by the Lincoln University Human Subjects Ethics Committee and is receiving support from a Commonwealth Scholarship and the Human Sciences Division at Lincoln University.

If you would like to examine the research proposal, the researcher’s CV, or the current methodology (two surveys, interview questions, and observation tables), please email maherp@lincoln.ac.nz and copies will be emailed to you. Any other questions or concerns can be directed to the above email or by phoning the Lincoln University Human Sciences Division.

Sincerely,

Patrick Maher
Ph.D. candidate
Human Sciences Division / Tourism Group
PO Box 84
Lincoln University
Canterbury
New Zealand
Appendix F: Accompanying Letter from Antarctica New Zealand.
Antarctic Survey

Enclosed is a letter from Patrick Maher who is undertaking a survey as part of his Ph.D. He is a student at Lincoln University, and has asked for our assistance in contacting the people he wishes to survey – Antarctic visitors for the 2002/2003 season.

For reasons of the Privacy Act, we have not given Patrick your name directly, but have said we would send out his information and he can take it from there, depending on your response as a participant.

The subject matter appears timely given the increasing interest in visitors to Antarctica, and the responses to the questions should elicit sufficient information to enable a good study to be undertaken.

Thank you in anticipation

Yours sincerely

Vivienne Allan
Communications & Marketing Manager
19 September 2002

Dear Antarctic Visitor

Your journey to Antarctica is quite soon and your enthusiasm must be building. Having visited Antarctica, and subsequently visited the Sub-Antarctic Islands of Australia and New Zealand, I became encouraged to continue my academic career studying something I was passionate about, visitation to Antarctica. I am inviting you to take part in my Ph.D. research regarding the visitor experience to Antarctica; your responses will be part of the sample to be termed “Government Supported Visitors”. The aim of this research is to examine the values of visitors to Antarctica, measuring and documenting changes occurring through anticipation of the visit to Antarctica, on-site experience in Antarctica, and post-visit recollections of Antarctica.

Participation in this research initially involves filling out the accompanying survey and consent form, which will take approximately 10 minutes. At the end of the consent form there are boxes to indicate whether you would be interested in taking part in additional phases of the research; these additional phases are designed to measure your on-site experience and post-visit recollection of Antarctica.

If you agree to take part in the on-site experience phase of this research, you will be requested to write a short personal narrative of your experience in Antarctica, thus a personal journal will be sent to you if you decide to participate in this phase of the research. The post-visit recollection phase, two to six months after your visit to Antarctica, will require another 10-minute time commitment via email; if you do not have email access, then you can still participate via another mail back survey. Upon completion of this initial research phase your name can be entered in a draw for a prize of Antarctic-related literature, should you choose this option on the consent form.

Participation in all aspects of this research is voluntary and at no point should you feel like you must answer a particular question.

Please be aware that:
- Any information given by you will be kept confidential.
- Your name will not be associated with any information presented.
- Nobody, except for my two supervisors and myself, will read raw data or consent forms.
- E-mail in the recollection phase will be sent individually and will not be placed on a distribution list.
- The information provided in this survey and any subsequent surveys will be used for this project only.
- You may withdraw from the project at any time (before analysis is completed) without having to give any reasons.
- You will have the opportunity to ask questions of the researcher and have them answered to your satisfaction.
- Findings of the research may be published in academic journals, presented at academic conferences, summarised for International Antarctic associations or parties of the Antarctic Treaty System, but will not identify individual participants.
- Lincoln University and the Lincoln University Human Ethics Committee have approved this project.
The Environment, Society & Design Division of Lincoln University and a Commonwealth Scholarship, provide financial support for this research.

If you have any questions or would like to receive further information about the project please contact me by email at maherp@lincoln.ac.nz, or contact my supervisors:

- Dr. Gary Steel, by email: steelg@lincoln.ac.nz or phone: 64 3 325 3838 ext. 8784, or
- Dr. Alison McIntosh, by email: mcintosa@lincoln.ac.nz or phone: 64 3 325 3838 ext. 8767.

Whether or not you choose to participate in my Ph.D. research, thank you for your time spent in reading over the above information. Have a wonderful journey to Antarctica.

Kind Regards

Patrick Maher
Ph.D. student - Social Science, Tourism & Recreation Group
Environment, Society and Design Division
Appendix H: Initial Participant Consent Form.
Visitor Experiences in Antarctica

Research undertaken by Patrick Maher, Ph.D. student, Lincoln University, Canterbury, New Zealand

I have read and understood the information about the above-named project.

I agree to take part in this research.

Name (Please Print):

Date:

Signature:

Please read the following and tick (✓) the boxes as appropriate.

☐ I would like to be entered into the prize draw for a prize of Antarctic-related literature, to be drawn following completion of this initial research phase via random selection of a consent form response number. (Please print postal address below)

☐ I would like to take part in the on-site experience phase of this project, please mail me instructions and a personal journal to use while I am in Antarctica. (Please print postal address below)

☐ I would like to take part in the post-visit recollection phase of this project, to be undertaken approximately two to six months after I return home from Antarctica. (Please print email address below, or postal address should you not have email access)

Postal Address:

Email Address:
Appendix I: Email to GCAS Participants willing to be interviewed.
Name,

About two months ago you completed my initial research survey about visitors experiences in Antarctica. You indicated on the consent form that you were interested in taking part in the on-site experience phase. As such, I hope a personal journal reached you in the mail, (if not please let me know) and now I am contacting you about conducting the first of two brief interviews.

The first interview will take approximately 30-40 minutes of your time before you leave for Antarctica, thus in the next two weeks. This interview will help me understand how your thoughts and perceptions of Antarctica may be changing from the time you completed the survey through the first month of your certificate course.

As I realise your time is precious with all the GCAS requirements, I am willing to interview you in whatever time period you may have available. I can meet you at the University of Canterbury, or anywhere else that may be convenient. The interview will be fairly informal and more like a conversation, however, I would like to tape each interview so that I can accurately transcribe the results in the future.

Please simply respond to this email, letting me know where and when it would be convenient to meet, and should you not desire to be interviewed at this time that’s your call.

Cheers,

Pat
Project and Contact Information

• Participation in all aspects of this research is voluntary and at no point should you feel like you must answer a particular question.
• Any information given by you will be kept confidential.
• Your name will not be associated with any information presented.
• Nobody, except for my two supervisors and myself, will read raw data or consent forms.
• E-mail in the post-visit recollection phase will be sent individually and will not be placed on a distribution list.
• The information provided in this survey and any subsequent surveys will be used for this project only.
• You may withdraw from the project at any time (before analysis is completed) without having to give any reasons.
• You will have the opportunity to ask questions of the researcher and have them answered to your satisfaction.
• Findings of the research may be published in academic journals, presented at academic conferences, summarised for International Antarctic associations or parties of the Antarctic Treaty System, but will not identify individual participants.
• Lincoln University and the Lincoln University Human Ethics Committee have approved this project.
• The Environment, Society & Design Division of Lincoln University and a Commonwealth Scholarship, provide financial support for this research.

For further information, feel free to contact:

Me, by email at maherp@lincoln.ac.nz or my supervisors:

Dr. Gary Steel, by email: steelg@lincoln.ac.nz
or phone: 325 3838 ext. 8784, or

Dr. Alison McIntosh, by email: mcintosa@lincoln.ac.nz
or phone: 325 3838 ext. 8767.
Appendix K: GCAS Pre-Antarctica Interview Schedule.
GCAS Interview (Pre-Antarctica)

Have you read the initial survey form, consent form and journal info? Any questions of me?

In this interview I’d just like to understand your thoughts/views on Antarctica, how these may be changing due to the GCAS program, your thoughts on some factors that may influence your experience and what this all means to you.

PROMPT FROM NOTES MADE

** REMEMBER - How… What… Where… Whom… When… Why…
**Can you - Describe / Explain / Tell me more / Clarify / Refine / Express / Say
**Turn on tape recorder and microphone**

Motivations/Expectations
Tell me your reasons for visiting Antarctica? Is your visit important to you personally? Is your visit important to anyone else? What do you expect from your visit to Antarctica?

GCAS
Tell me a bit about your GCAS experience so far.

What new knowledge has the GCAS revealed about Antarctica? Has anything "struck" you about Antarctica, based on the GCAS experience? How has the GCAS, so far, changed your image or attitude towards Antarctica?

Scenarios
At this point, I’m going to ask your attitude and other thoughts towards 3 scenarios:

Tourism in Antarctica
Science in Antarctica
Conservation/Heritage of Antarctica

Group
How do you feel about the group (overall GCAS Group) you are currently working/studying with? Will your relationship change when you are living and working with them in Antarctica? Is there a group “culture” forming? : Culture being a system of interaction, set of norms Do you see any potential problem areas or areas of strength within the group?

Relationship
Do you think that visiting will change your relationship with Antarctica? How? In what ways? Why do you think such a change will occur? Is this change significant? In what ways? Significant to whom?

**Turn off tape recorder and microphone**

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Appendix L: Initial pre-survey letter for Heritage Expeditions’ Participants.
24 September 2002

Dear Antarctic Traveller

Your journey to Antarctica is quite soon and thus your enthusiasm must be building. Having visited Antarctica, and subsequently visited the Sub-Antarctic Islands of Australia and New Zealand, I became encouraged to continue my academic career studying something I was passionate about, visitation to Antarctica. I am inviting you to take part in my Ph.D. research regarding the tourist experience to Antarctica. The aim of this research is to examine the values of tourists to Antarctica, measuring and documenting changes occurring through anticipation of the visit to Antarctica, on-site experience in Antarctica, and post-visit recollections of Antarctica.

Heritage Expeditions, your Antarctic tour operator, support this research, however, they require that I ask your permission prior to obtaining your contact details. If you choose to take part in this research, please complete the detachable portion of this letter. Once Heritage Expeditions receives your permission, they will allow me access to your contact details and I will mail you the initial survey and further research details.

If you are travelling to Antarctica with a partner or as a group, please individually consider participating in this research. For example, if there were two people in your group and both wanted to take part in the research, you would each send back the detachable portion of the letter.

Participation in this research initially involves filling out a mail-back survey and consent form, which will take approximately 10 minutes. Upon completion of the initial survey phase you can be entered in a draw for a prize of Antarctic-related literature. There are also two additional phases of research designed to measure your on-site experience and post-visit recollection of Antarctica. On the initial survey consent form you will be given more information about these phases and asked to participate in them, at your own discretion.

*Participation in all aspects of this research is voluntary and at no point should you feel like you must answer a particular question*

Please be aware that:
- Any information given by you will be kept confidential.
- Your name will not be associated with any information presented.
- Nobody, except for my two supervisors and myself, will read raw data or consent forms.
- You may withdraw from the project at any time (before analysis is completed) without having to give any reasons.
- You will have the opportunity to ask questions of the researcher and have them answered to your satisfaction.
• Findings of the research may be published in academic journals, presented at academic conferences, summarised for the International Association of Antarctica Tour Operators (IAATO) or parties of the Antarctic Treaty System, but will not identify individual participants.
• Lincoln University and the Lincoln University Human Ethics Committee have approved this project.
• The Environment, Society & Design Division of Lincoln University and a Commonwealth Scholarship, provide financial support for this research.

If you have any questions or would like to receive further information about the project please contact me by email at maherp@lincoln.ac.nz, or contact my supervisors:

Dr. Gary Steel, by email: steelg@lincoln.ac.nz or phone: 64 3 325 3838 ext. 8784, or
Dr. Alison McIntosh, by email: mcintosa@lincoln.ac.nz or phone: 64 3 325 3838 ext. 8767.

Whether or not you choose to participate in my Ph.D. research, thank you for your time spent in reading over the above information. Have a wonderful journey to Antarctica.

Kind Regards

Patrick Maher
Ph.D. student - Social Science, Tourism & Recreation Group
Environment, Society and Design Division

☐ I have read and understood the information about the above-outlined research. I would like to participate in this research project so please release my contact details to Patrick Maher for the purposes of contacting me with the initial survey and further information regarding the research.

Name: __________________________________________

Date: ____________________

Signature: _______________________________________

*Please cut away this half of the page and mail it back to Heritage Expeditions in the pre-paid envelope provided*
Appendix M: Multiple phase booklet for Quark Expeditions’ Participants.
Tourist Experiences in the Ross Sea region, Antarctica

Research undertaken by:

Patrick Maher, Ph.D. student
Social Science, Tourism & Recreation Group
Environment, Society and Design Division
Lincoln University
Canterbury, New Zealand
28 December 2003

Dear Antarctic Traveller

Having visited Antarctica, and subsequently visited the Sub-Antarctic Islands of Australia and New Zealand, I became encouraged to continue my academic career studying something I was passionate about, visitation to Antarctica. I am inviting you to take part in my Ph.D. research regarding the tourist's experience in the Ross Sea region. The aim of this research is to examine the values of tourists, measuring and documenting changes occurring through anticipation of the visit, on-site experience in Antarctica, and post-visit recollection.

Quark Expeditions, your Antarctic tour operator, support this research and as such are distributing and collecting my survey booklets. If you choose to take part in this research, please complete the pre-visit survey and consent form, then enjoy your voyage. You will notice a post-visit survey also attached, this is to be completed just before your final disembarkation.

If you are travelling with a partner or as a group, please individually consider participating in this research. For example, if there were two people in your group and both wanted to take part in the research, you would each complete a survey booklet.

Participation in this research initially involves filling out the pre-visit survey and consent form, which will take approximately 10 minutes. The post-visit survey of this booklet is designed to measure your on-site experiences and will take approximately another 15 minutes. A post-visit recollection phase, two to six months after your visit to Antarctica, will require another 10-minute time commitment via email; if you do not have email access, then you can still participate via another mail back survey.

Upon completion of this survey booklet and consent form you can be entered in a prize draw for Antarctic-related literature, should you choose this option on the consent form.

Participation in all aspects of this research is voluntary and at no point should you feel like you must answer a particular question.

Please be aware that:

- Any information given by you will be kept confidential.
- Your name will not be associated with any information presented.
- Nobody, except for my two supervisors and myself, will read raw data or consent forms.
- E-mail in the post-visit recollection phase will be sent individually and will not be placed on a distribution list.
- The information provided in this survey and any subsequent surveys will be used for this project only.
• You may withdraw from the project at any time (before analysis is completed) without having to give any reasons.
• You will have the opportunity to ask questions of the researcher and have them answered to your satisfaction.
• Findings of the research may be published in academic journals, presented at academic conferences, summarised for the International Association of Antarctica Tour Operators (IAATO) or parties of the Antarctic Treaty System, but will not identify individual participants.
• Lincoln University and the Lincoln University Human Ethics Committee have approved this project.
• The Environment, Society & Design Division of Lincoln University, an Antarctica New Zealand/New Zealand Post Postgraduate Research Scholarship and a Commonwealth Scholarship, provide financial support for this research.

If you have any questions or would like to receive further information about the project please contact me by email at maherp@lincoln.ac.nz, or contact my supervisors:

Dr. Gary Steel, by email: steelg@lincoln.ac.nz or phone: 64 3 325 3838 ext. 8784, or
Dr. Alison McIntosh, by email: mcintosa@lincoln.ac.nz or phone: 64 3 325 3838 ext. 8767.

Whether or not you choose to participate in my Ph.D. research, thank you for your time spent in reading over the above information. Have a wonderful journey to the Ross Sea region.

Kind Regards

Patrick Maher
Ph.D. student
Social Science, Tourism & Recreation Group
Environment, Society and Design Division
Consent Form

Tourist Experiences in Antarctica

Research undertaken by Patrick Maher, Ph.D. student, Lincoln University, Canterbury, New Zealand

I have read and understood the information about the above-named project.

I agree to take part in this research.

Name (Please Print):

Date:

Signature:

Please read the following and tick (✓) the boxes as appropriate.

☐ I would like to be entered into the prize draw for a prize of Antarctic-related literature, to be drawn following completion of this initial research phase via random selection of a consent form response number. (Please print postal address below)

☐ I would like to take part in the post-visit recollection phase of this project, to be undertaken approximately two to six months after I return home from Antarctica. (Please print email address below, or postal address should you not have email access)

Postal Address:

Email Address:
Tourist Experiences in Antarctica
Pre-visit Survey

Having read the information letter and signed the consent form please complete this pre-visit survey honestly and in as much detail as possible. Once you have completed this survey please enjoy your visit and complete the post-visit survey prior to your final disembarkation from this voyage. At such time, please return the entire survey booklet and consent form to your Expedition Leader. Your time and assistance in this research project is greatly appreciated.

Section A: Anticipation and Pre-expedition Views

1) Of the following attributes, please indicate the strength of each, in regards to motivating you to visit Antarctica. For each, please number based on whether the attribute is a:

<table>
<thead>
<tr>
<th>弱理由</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>强理由</th>
</tr>
</thead>
</table>

*If an attribute is not a reason for your visit at all, please mark it “NA” *

__ Wildlife
__ Curiosity
__ Scenery
__ Remoteness
__ Sense of Adventure
__ Photography
__ Pristine Environment
__ History
__ Status (i.e. last continent to visit)
__ Family Reasons
__ Dates were suitable
__ Life-long dream
__ Development or use of skills
__ Challenges involved
__ Education
__ Escape from everyday life
__ Cope with everyday life
__ Meeting new people
__ Bonds to those you’re travelling with
__ Relaxation

Did any other attributes motivate your decision to visit Antarctica? Please list and rank here.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
2) Please rank the following categories, based on their significance to your current image of Antarctica. For each, please number based on whether the category is the:

<table>
<thead>
<tr>
<th>Most Significant</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Least Significant</th>
</tr>
</thead>
</table>

__ Wildlife
__ Scenery
__ Science
__ Climate
__ History

If there are other categories that contribute to your image of Antarctica, please list them here.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

3) Please indicate the importance of the following attributes in relation to your expectations of your Antarctic tour operator. For each, please number based on whether the attribute is:

<table>
<thead>
<tr>
<th>Very Important</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Not at all Important</th>
</tr>
</thead>
</table>

Professional learning atmosphere is __
Professional appearance of facilities is __
Professional attitude is __
Expert education and information is __
Allowance for choice and personal control is __
Price is __
Luxury accommodation and cuisine is __
Safety and reliability is __
Allowance for risk taking or adventure is __
Small group size is __
Recommendations of friends/others is __
Having a “once in a lifetime” experience is __
Relaxed social atmosphere is __
Other: ____________________________ is __
________________________________________________________________________
4) Overall, what do you expect your trip to Antarctica to be like?

*From the list below choose 3 moods and rank them accordingly; (1) the most expected, (2) the second most expected and (3) the third most expected*

- Astonishing
- Exciting
- Delightful
- Pleasant
- Serene
- Satiﬁng
- Calm
- Sleepy
- Boring

- Depressing
- Miserable
- Unpleasant
- Frustrating
- Frightening
- Alarming
- Infuriating
- Other: __________________________

5) In the context of Antarctica, which of the following tourism types are you in favour of? Tick (✓) all that apply

- No tourism
- Airborne tourism/Overﬂights
- Ship-borne tourism with no landings
- Ship-borne tourism with limited landings
- Ship-borne tourism with unlimited landings
- Summer-only land-based activities
- Year-round land-based activities
- Permanent land-based tourism facilities

6)  a) Do you believe visitation by tourists harms or supports the conservation of Antarctica?

- Harms
- Supports
- Both

b) If you answered both to question 6a, do you believe the beneﬁts of tourism to Antarctica outweigh its negative impacts on the ecosystems visited?

- Yes
- No

If you feel it necessary to clarify your answer to questions 6 (a and/or b), please do so here.
7) The statements listed below are about the general relationship between humans and the environment. For each, please tick (✓) one box indicating whether you:

STRONGLY AGREE (SA)
MILDLY AGREE (MA)
are UNSURE (U)
MILDLY DISAGREE (MD)
STRONGLY DISAGREE (SD).

<table>
<thead>
<tr>
<th>Do you agree or disagree that:</th>
<th>SA</th>
<th>MA</th>
<th>U</th>
<th>MD</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>We are approaching the limit of the number of people the earth can support</td>
<td></td>
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</tr>
<tr>
<td>Humans have the right to modify the natural environment to suit their needs</td>
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<tr>
<td>When humans interfere with nature it often produces disastrous consequences</td>
<td></td>
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</tr>
<tr>
<td>Human ingenuity will ensure that we DO NOT make the earth unliveable</td>
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<tr>
<td>Humans are severely abusing the environment</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>The earth has plenty of natural resources if we just learn how to develop them</td>
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</tr>
<tr>
<td>Plants and animals have as much right as humans to exist</td>
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<tr>
<td>The balance of nature is strong enough to cope with the impacts of modern industrial nations</td>
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<tr>
<td>Despite our special abilities, humans are still subject to the laws of nature</td>
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</tr>
<tr>
<td>The so-called “ecological crisis” facing humankind has been greatly exaggerated</td>
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<tr>
<td>The earth is like a spaceship with very limited room and resources</td>
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<tr>
<td>Humans were meant to rule over the rest of nature</td>
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<td></td>
</tr>
<tr>
<td>The balance of nature is very delicate and easily upset</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Humans will eventually learn enough about how nature works to be able to control it</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If things continue on their present course, we will soon experience a major ecological catastrophe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Section B: Background Information and Previous Experience

8) What are the dates of your tour?  

9) Prior to deciding to visit Antarctica, have you previously visited other cold climate or remote regions?
   ☐ No

   OR Yes, tick (√) all that apply

   ☐ Northern/Arctic Europe
   ☐ The Andes
   ☐ The Himalayas
   ☐ Arctic Canada
   ☐ Greenland
   ☐ Arctic Russia
   ☐ Arctic Alaska
   ☐ Svalbard
   ☐ Central Asia (Mongolia, Tibet, etc.)
   ☐ The Galapagos Islands
   ☐ Easter Island
   ☐ Other: ____________________________

10) Have you had any previous Antarctic experiences?
   ☐ No

   OR Yes, tick (√) all that apply

   ☐ Visited before as a commercial tourist (ship or land-based)
   ☐ Flew over the continent on a commercial overflight
   ☐ Visited as media personnel or a government official
   ☐ Visited an Antarctic tourist attraction
   ☐ Worked at a national base

   Other: ____________________________

11) Are you currently a member of a conservation or environmental group?
   ☐ Yes
   ☐ No

   If Yes, which one(s)? ____________________________
12) Are you?

☐ Male

OR

☐ Female

13) Please indicate your age: _________ years at last birthday.

14) What is your approximate total household income? ________________________

*Please indicate both currency and timeframe, e.g. $40 000 New Zealand dollars per year*

15) What is your highest educational qualification (completed, not in progress)?

________________________________________

16) a) What is your job title and what industry do you work in?

________________________________________

b) If you are presently retired, what was your primary occupation before retirement?

________________________________________

17) What is your country of permanent residency? Please tick (✓) only one

☐ United States

☐ Sweden

☐ United Kingdom

☐ Canada

☐ Australia

☐ Japan

☐ New Zealand

☐ Switzerland

☐ South Africa

☐ Argentina

☐ Germany

☐ Other: __________________________
This is the end of the pre-visit survey. Thank you for completing this portion of the research, enjoy your visit to Antarctica.

In the final days of your voyage, prior to final disembarkation, please turn the page and complete the post-visit portion of this survey booklet. Once you have completed one or both of the survey portions in this booklet, along with the consent form, please return them to your Expedition Leader.

Whether or not you choose to participate in the final post-visit recollection phase of my Ph.D. research, thank you for your time spent completing these surveys. I hope you enjoy your visit to Antarctica, and as a reminder, if you wish to be included in the prize draw for Antarctic-related literature tick the appropriate box on the consent form.

Southern Polar Projection
Source: http://visibleearth.nasa.gov, 2001
1) Please write a short narrative about your Antarctic experience.

Be open and honest in your writing and comment on any aspects of your Antarctica experience you believe are important. These aspects may include, but are not limited to: the places you visit, the weather conditions, the educational programmes you are presented with, the social culture of the group you visit with, spectacular or unique experiences and your own personal satisfactions, challenges or feelings while visiting.

Also consider the following questions, but simply treat these questions as a guide.

What did you do on your voyage? (Perhaps provide a rough outline of the overall activities)
What was the weather like?
What educational programmes did you participate in?
How do you feel about the group you are travelling with?
What new things have you experienced?
What “strikes” you most about Antarctica?
Have you had any experiences that you would describe as “unique” or “spectacular”? What were they?
What thoughts have gone through your head?
Have you felt emotional during the visit? In what ways?
Reflect on your visit as a whole?
What have been the most memorable experiences?

[3 Lined response pages follow in original survey]

2) As you leave Antarctica, how do you feel about your visit? Please tick (√) only one option.

__ Astonished
__ Excited
__ Delighted
__ Pleasant
__ Satisfied
__ Calm
__ Sleepy
__ Bored
__ Depressed
__ Miserable
__ Unpleasant
__ Frustrated
__ Frightened
__ Alarmed
__ Infuriated
__ Other: ________________________
3) Some people see Antarctica as a place of science, others see it as a place of business, and others see it as a place for nature and preservation. Now that you have visited Antarctica, under which scenario do you see Antarctica? Why? Of the three scenarios presented, what thoughts do you have regarding the two scenarios you didn’t choose?


4) Which aspect of your Antarctic experience did you find most rewarding? Why? In what ways was it the most rewarding? How does this make you feel?


5) Has your Antarctic visit been what you expected? Why or why not? What aspects did you or did you not expect?
6) How have you benefited from your experience in Antarctica? Why is this important?

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

7) Do you think there are benefits for others that will result from your Antarctic visit? Who? Is it important that they benefit?

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

Thank you for completing this post-visit survey regarding your on-site experience in Antarctica.

Now, simply return this survey booklet, along with the completed consent form, to your Expedition Leader.

Whether or not you have chosen to participate in the final post-visit recollection phase of my Ph.D. research, thank you for your time spent completing the first two surveys. I hope you have enjoyed your visit to Antarctica.
Appendix N: On-site Journal-Template from a 12 day Antarctica New Zealand visitor.
Personal Journal

On-site Phase of:
Visitor Experiences in Antarctica

Research undertaken by:

Patrick Maher, Ph.D. student
Social Science, Tourism & Recreation Group
Environment, Society and Design Division
Lincoln University
Canterbury, New Zealand
Thank you for agreeing to take part in the on-site experience phase of my Ph.D. research. For this phase, you are requested to complete a daily journal, if possible, of your experience while in Antarctica. Your response will again be part of the sample to be termed “Government Supported Visitors”. Please be open and honest in your writing and comment on any aspects of your experience you believe are important. These aspects might include, but are not limited to: the places you visit, the weather conditions, the educational programmes you are presented with, the social culture of the group you visit with, spectacular or unique experiences and your own personal satisfactions, challenges or feelings.

In this journal you will notice four coloured sections, please read and complete each. These coloured sections are as follows:

- **Cream** – Journal information and photography consent form; please sign the photography consent form if you are interested in contributing to a pictorial record of the Antarctic visitor experience.
- **Yellow** – An initial set of arrival questions to be completed within your first two days in Antarctica.
- **White** – Space for daily journal entries, with possible questions and prompts to consider.
- **Blue** - A set of departure questions, to be completed on your last two days in Antarctica.

**Please also be aware that:**

- Any information given by you will be kept confidential.
- Your name will not be associated with any information presented.
- Nobody, except for my two supervisors and myself, will read raw data or consent forms.
- The information provided in this journal and any subsequent surveys will be used for this project only.
- You may withdraw from the project at any time (before analysis is completed) without having to give any reasons.
- You will have the opportunity to ask questions of the researcher and have them answered to your satisfaction.
- Findings of the research may be published in academic journals, presented at academic conferences, summarised for International Antarctic associations or parties of the Antarctic Treaty System, but will not identify individual participants.
- Lincoln University and the Lincoln University Human Ethics Committee have approved this project.
- The Environment, Society & Design Division of Lincoln University and a Commonwealth Scholarship, provide financial support for this research.

If you have any questions or would like to receive further information about the project please contact me by email at maherp@lincoln.ac.nz, or contact my supervisors:

Dr. Gary Steel, by email: steelg@lincoln.ac.nz or phone: 64 3 325 3838 ext. 8784, or

Dr. Alison McIntosh, by email: mcintosa@lincoln.ac.nz or phone: 64 3 325 3838 ext. 8767.

Kind regards, have a wonderful visit to Antarctica.

**Patrick Maher**
Ph.D. student - Social Science, Tourism & Recreation Group
Photography Use Consent Form

Visitor Experiences in Antarctica

Research undertaken by Patrick Maher, Ph.D. student, Lincoln University, Canterbury, New Zealand

As part of this research, there is a need for personal photography of the places you and other visitors experience in the Ross Sea Region. If you would like to contribute such photographs, please sign the following photo release and send your prints, print negatives or digital images to the researcher along with this journal in the postage paid envelope provided. All originals will be promptly returned to you upon duplication and/or digital scanning.

Please be aware that:

- Any photographs that show individual persons will be digitally altered to protect anonymity and confidentiality, unless previous written consent from the subject is obtained.
- All photographs will be fully acknowledged to the photographer in both the Ph.D. thesis and any subsequent publications. Please label each submitted photographs with the photographer’s name, photo location and date.
- Any costs involved in the mailing of photographs to the researcher, duplication of photographs, etc. will be fully covered or reimbursed by the researcher.

I agree to allow my photographs to be displayed as pictorial evidence of the Ross Sea Region experience in this research project.

Name (Please Print): ____________________________________________

Date: ______________________

Signature: ____________________________
**Please answer the following five questions within the first two days of your arrival in Antarctica**

1) Now that you are in Antarctica, how do you feel about your visit? Please tick (✓) only one option.

   __ Astonished  __ Depressed
   __ Excited     __ Miserable
   __ Delighted   __ Unpleasant
   __ Pleasant    __ Frustrated
   __ Serene      __ Frightened
   __ Satisfied   __ Alarm
   __ Calm        __ Infuriated
   __ Sleepy      __ Other:
   __ Bored

2) Through what media (books, films, etc) have you learned about Antarctica?

   ____________________________________________
   ____________________________________________
   ____________________________________________

3) Having landed in Antarctica, is the media’s portrayal accurate with your personal experiences thus far?

   ____________________________________________
   ____________________________________________
   ____________________________________________

4) What are your reasons for travelling to Antarctica? Why are these reasons important?

   ____________________________________________
   ____________________________________________
   ____________________________________________
5) What benefits are you seeking from your Antarctic experience? Why? Will these benefits extend beyond you? How?
Now describe your Antarctic experience.

If possible, you are asked to write clearly and in a regular, daily entry format.

Each day there is a set of questions for you to consider prior to writing, but simply treat these questions as a guide. Be open and honest in your writing and comment on any aspects of your Antarctica experience you believe are important.

These aspects may include, but are not limited to: the places you visit, the weather conditions, the educational programmes you are presented with, the social culture of the group you visit with, spectacular or unique experiences and your own personal satisfactions, challenges or feelings while visiting.

If you need additional space to write, please feel free to write on the reverse side of the pages.

**Day 1:**
What did you do today? (Perhaps provide a rough outline of your activities)
What was the weather like?
What educational programmes did you participate in?
How do you feel about the group you are travelling with?
What new things have you experienced today?
What "strikes" you most about Antarctica today?
Have you had any experiences that you would describe as "unique" or "spectacular" today? What were they?
What thoughts have gone through your head today?
Have you felt emotional today? In what ways?

[2 Lined response pages follow in original survey]

**Day 2:**
What did you do today? (Perhaps provide a rough outline of your activities)
What was the weather like?
What educational programmes did you participate in?
How do you feel about the group you are travelling with?
What new things have you experienced today?
What "strikes" you most about Antarctica today?
Have you had any experiences that you would describe as "unique" or "spectacular" today? What were they?
What thoughts have gone through your head today?
Have you felt emotional today? In what ways?

[1 Lined response page follows in original survey]
**Day 3:**
What did you do today? (Perhaps provide a rough outline of your activities)
What was the weather like?
What educational programmes did you participate in?
How do you feel about the group you are travelling with?
What new things have you experienced today?
What “strikes” you most about Antarctica today?
Have you had any experiences that you would describe as “unique” or “spectacular” today? What were they?
What thoughts have gone through your head today?
Have you felt emotional today? In what ways?

[1 Lined response page follows in original survey]

**Days 4-10:**
Summarise what you have done on these days? (Perhaps provide a rough outline of your activities)
What was the weather like?
What educational programmes did you participate in?
How do you feel about the group you are travelling with?
What new things have you experienced?
What “strikes” you most about Antarctica?
Have you had any experiences that you would describe as “unique” or “spectacular” on these days? What were they?
What thoughts have gone through your head?
Have you felt emotional today? In what ways?

[6 Lined response pages follow in original survey]

**Day 11:**
What did you do today? (Perhaps provide a rough outline of your activities)
What was the weather like?
What educational programmes did you participate in?
How do you feel about the group you are travelling with?
What new things have you experienced today?
What “strikes” you most about Antarctica today?
Have you had any experiences that you would describe as “unique” or “spectacular” today? What were they?
What thoughts have gone through your head today?
Have you felt emotional today? In what ways?

[2 Lined response pages follow in original survey]

**Day 12 – Your Final Day:**
What did you do today? (Perhaps provide a rough outline of your activities)
What “strikes” you most about Antarctica today?
Have you had any experiences that you would describe as “unique” or “spectacular” today? What were they?
What thoughts have gone through your head today?
Have you felt emotional today? In what ways?

Reflect on your visit as a whole?
What have been the most memorable experiences?

[2 Lined response pages follow in original survey]
6) As you leave Antarctica, how do you feel about your visit? Please tick (√) only one option.

- __ Astonished
- __ Excited
- __ Delighted
- __ Pleasant
- __ Serene
- __ Satisfied
- __ Calm
- __ Sleepy
- __ Bored
- __ Depressed
- __ Miserable
- __ Unpleasant
- __ Frustrated
- __ Frightened
- __ Alarmèd
- __ Infuriated
- __ Other: __________________________

7) Some people see Antarctica as a place of science, others see it as a place of business, and others see it as a place for nature and preservation. Now that you have visited Antarctica, under which scenario do you see Antarctica? Why? Of the three scenarios presented, what thoughts do you have regarding the two scenarios you didn’t choose?

____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

8) Which aspect of your Antarctic experience did you find most rewarding? Why? In what ways was it the most rewarding? How does this make you feel?

____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
9) Has your Antarctic visit been what you expected? Why or why not? What aspects did you or did you not expect?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

10) How have you benefited from your experience in Antarctica? Why is this important?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

11) Do you think there are benefits for others that will result from your Antarctic visit? Who? Is it important that they benefit?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

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Thank you for completing this personal journal of your on-site experience in Antarctica. If you wish, please feel free to photcopy the journal for your own personal records.

Now, simply enclose the journal and any photographs you choose to submit in the envelope provided; then simply drop this envelope in your nearest post box, no postage is required.

Whether or not you have chosen to participate in the final follow-up phase of my Ph.D. research, thank you for your time spent completing the first two phases. I hope you have enjoyed your visit to the Ross Sea Region.
Appendix O: Follow-up Visitors Survey-Email version.
Dear

You may remember taking part in a survey about your experience as an Antarctic visitor, roughly six months ago. You may have also been involved in keeping a personal journal while on your Antarctic trip. This was all part of doctoral research being undertaken by Patrick Maher, a Ph.D. candidate at Lincoln University in New Zealand.

Thank you for also agreeing to participate in this follow-up phase of the research. Please answer this e-survey honestly and provide as much detail as possible. To complete the survey, simply copy the survey below (Questions 1-13) and paste it directly into a reply message. Then fill in the blanks with an [X] as applicable or unless told otherwise and make written comments where required, taking as much space as needed. Send your reply back to the researcher at maherp@lincoln.ac.nz. If you hit reply on your email server rather than typing in the researcher’s email address your response will only go directly back to the researcher as no distribution list or carbon-copying functions were used when the initial email survey was sent.

If you are having problems reading the text formatting of my survey, this may be due to differences in email servers; please let me know and I can resend the survey as an attached Word document for you to complete. Thank you for your time and contribution to this research.

Kind regards,
Pat Maher

1A) Have you shared your experience in the Antarctic with others since returning home? [ ] Yes [ ] No

**If you answered YES to question 1a, please also answer 1B and 1C.

1B) In what ways have you shared the experience?

1C) In your opinion, what are some of the benefits others may have experienced from this sharing?

2) Were your expectations of Antarctica met? [ ]Yes [ ] No

3A) After reflecting on your Antarctic visit, please choose the most appropriate statement indicating your level of enjoyment? (Mark only one)
[ ] Much more enjoyable than expected
[ ] Somewhat more enjoyable than expected
[ ] As enjoyable as expected
[ ] Less enjoyable than expected
[ ] Much less enjoyable than expected

3B) Please elaborate as to why you chose your response to question 3.
4) Were you a member of a conservation or environmental group prior to visiting Antarctica?  
[ ] Yes  [ ] No

**If you answered YES to question 4, are you a more active member now?  [ ] Yes  [ ] No

**If you answered NO to question 4, have you since joined a conservation or environmental group?  [ ] Yes  [ ] No

5) Overall, how was your trip?  
**For this question only, choose 3 moods and RANK them accordingly:

[ ] Astonishing  [ ] Exciting  [ ] Delightful  [ ] Pleasant  [ ] Serene  [ ] Satisfying  [ ] Calm
[ ] Sleepy  [ ] Boring  [ ] Depressing  [ ] Miserable  [ ] Unpleasant  [ ] Frustrating  [ ] Frightening
[ ] Alarming  [ ] Infuriating  [ ] Other:________________

6) What issues connected with Antarctica have you become more aware of because of your visit?

7) Do you believe visitation by personnel not supported by a National Antarctic Programme (i.e. tourists) harms or supports the conservation of Antarctica?  [ ] Harms  [ ] Supports  [ ] Both

**If you answered BOTH to question 7, do you BELIEVE the benefits of tourism to Antarctica outweigh its negative impacts on the ecosystems visited?  [ ] Yes  [ ] No

8) Do you believe that sufficient restrictions on tourism are in place to conserve Antarctica as a continent for peace and science?  [ ] Yes  [ ] No

9) If one were to label you an ambassador for Antarctica’s conservation after having visited Antarctica, would you agree with this statement?  [ ] Yes  [ ] No

10) The statements listed below are about the relationship between humans and the environment. For each, please INSERT the corresponding letters into the box indicating whether you:

STRONGLY AGREE [SA]
MILDLY AGREE [MA]
are UNSURE [U]
MILDLY DISAGREE [MD]
STRONGLY DISAGREE [SD]

i) We are approaching the limit of the number of people the earth can support.  [ ]

ii) Humans have the right to modify the natural environment to suit their needs.  [ ]

iii) When humans interfere with nature it often produces disastrous consequences.  [ ]

iv) Human ingenuity will insure that we DO NOT make the earth unliveable.  [ ]

v) Humans are severely abusing the environment.  [ ]

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vi) The earth has plenty of natural resources if we just learn how to develop them. [ ]

vii) Plants and animals have as much right as humans to exist. [ ]

viii) The balance of nature is strong enough to cope with the impacts of modern industrial nations. [ ]

ix) Despite our special abilities, humans are still subject to the laws of nature. [ ]

x) The so-called ecological crisis facing humankind has been greatly exaggerated. [ ]

xi) The earth is like a spaceship with very limited room and resources. [ ]

xii) Humans were meant to rule over the rest of nature. [ ]

xiii) The balance of nature is very delicate and easily upset. [ ]

xiv) Humans will eventually learn enough about how nature works to be able to control it. [ ]

xv) If things continue on their present course, we will soon experience a major ecological catastrophe. [ ]

11A) The statements listed below relate to how your trip to Antarctica may have affected aspects of your behaviour. Please INSERT the corresponding letters into the box after each statement, indicating how likely you are to engage in that activity (as a result of your visit to Antarctica):

*If prior to your Antarctic visit you already engaged in the activity, please enter [AE] in the box.

i) Lobby government on general conservation/environmental issues. [ ]

ii) Donate money to environmental organisations (e.g. WWF) or environmental causes. [ ]

iii) Recycle/reuse waste at home. [ ]

iv) Conserve energy where possible. [ ]

v) Join community cleanup efforts. [ ]

vi) Car-pool or use public transportation. [ ]

vii) Subscribe to environmental publications (e.g. National Geographic). [ ]
viii) Become a member of an environmental organisation (e.g. The Sierra Club). [ ]

ix) Vote for public officials due to their stance on environmental issues or environmental protection. [ ]

x) Donate money to Antarctic specific organisations or events (e.g. AHT). [ ]

xi) Subscribe to Antarctica-related publications (e.g. ANAN). [ ]

xii) Vote for public officials due to their stance on Antarctic related issues. [ ]

xiii) Lobby government on Antarctic issues. [ ]

xiv) Donate money to environmental organisations with a history in Antarctica (e.g. ASOC, Greenpeace). [ ]

xv) Become a member of an Antarctic organisation (e.g. AHT, ASOC). [ ]

11B) Please elaborate if you have any additional comments, or thoughts about your response to question 11.

12) When recalling your experience in Antarctica, what aspects do you remember most? Why?

13) Please feel free to write additional comments below, regarding your trip to Antarctica and its affect on your life.
Appendix P: Follow-up Visitor Survey-Paper version with cover letter.
03 June 2003

Dear Joe Smith

You may remember taking part in a survey, roughly six months ago, asking about your experience as an Antarctic visitor. You may have also been involved in keeping a personal journal while on your Antarctic trip. This was all part of my Ph.D. research undertaken at Lincoln University in New Zealand.

Thank you for agreeing to participate in this follow-up phase of the research. Please answer this survey honestly and provide as much detail as possible. To complete the survey, simply fill in the blanks with a tick (√) as applicable, unless told otherwise, and make written comments where required taking as much space as you need. Send your reply back in the reply paid envelope provided.

Thank you for your time and overall contribution to this research.

Kind Regards

Patrick Maher
Ph.D. student - Social Science, Tourism & Recreation Group
Environment, Society and Design Division
Visitor Experiences in Antarctica

1A) Have you shared your experience in the Antarctic with others since returning home?
   ☐ Yes
   ☐ No

**If you answered YES to question 1A, please also answer 1B and 1C.

1B) In what ways have you shared the experience?

1C) In your opinion, what are some of the benefits others may have experienced from this sharing?

2) Were your expectations of Antarctica met?
   ☐ Yes
   ☐ No

3A) After reflecting on your Antarctic visit, please choose the most appropriate statement indicating your level of enjoyment. (Mark only one)
   ☐ Much more enjoyable than expected
   ☐ Somewhat more enjoyable than expected
   ☐ As enjoyable as expected
   ☐ Less enjoyable than expected
   ☐ Much less enjoyable than expected
3B) Please elaborate as to why you chose your response to question 3A.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

4) Were you a member of a conservation or environmental group prior to visiting Antarctica?

☐ Yes
☐ No

**If you answered YES to question 4, are you a more active member now?**

☐ Yes
☐ No

**If you answered NO to question 4, have you since joined a conservation or environmental group?**

☐ Yes
☐ No

5) Overall, how was your trip?

**For this question only, choose 3 moods and RANK them accordingly: [1] the most dominant, [2] the second most dominant and [3] the third most dominant.**

_ Astonishing
_ Exciting
_ Delightful
_ Pleasant
_ Serene
_ Satisfying
_ Calm
_ Sleepy
_ Boring
_ Depressing
_ Miserable
_ Unpleasant
_ Frustrating
_ Frightening
_ Alarming
_ Infuriating
_ Other:
6) What issues connected with Antarctica have you become more aware of because of your visit?


7) Do you believe visitation by personnel not supported by a National Antarctic Programme (i.e. tourists) harms or supports the conservation of Antarctica?

☐ Harms
☐ Supports
☐ Both

If you answered BOTH to question 7, do you BELIEVE the benefits of tourism to Antarctica outweigh its negative impacts on the ecosystems visited?

☐ Yes
☐ No

8) Do you believe that sufficient restrictions on tourism are in place to conserve Antarctica as a continent for peace and science?

☐ Yes
☐ No

9) If one were to label you an ambassador for Antarctica’s conservation after having visited Antarctica, would you agree with this statement?

☐ Yes
☐ No
The statements listed below are about the general relationship between humans and the environment. For each, please tick (✓) one box indicating whether you:

- **STRONGLY AGREE (SA)**
- **MILDLY AGREE (MA)**
- are **UNSURE (U)**
- **MILDLY DISAGREE (MD)**
- **STRONGLY DISAGREE (SD)**.

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<thead>
<tr>
<th>Do you agree or disagree that:</th>
<th>SA</th>
<th>MA</th>
<th>U</th>
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<td>We are approaching the limit of the number of people the earth can support</td>
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<td>Humans have the right to modify the natural environment to suit their needs</td>
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<td>Plants and animals have as much right as humans to exist</td>
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</tbody>
</table>
11A) The statements listed below relate to how your trip to Antarctica may have affected aspects of your behaviour. Please tick (√) the corresponding box, indicating how likely you are to engage in that activity (as a result of your visit to Antarctica):

VERY LIKELY [VL]
SOMewhat LIKELY [SL]
are UNSURE [U]
SOMewhat UNLIKELY [SU]
VERY UNLIKELY [VU]

**If prior to your Antarctic visit you already engaged in the activity, please enter AE in the box.

<table>
<thead>
<tr>
<th>Activity</th>
<th>VL</th>
<th>SL</th>
<th>U</th>
<th>SU</th>
<th>VU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lobby government on general conservation/environmental issues.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donate money to environmental organisations (e.g. WWF) or environmental causes.</td>
<td></td>
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</tr>
<tr>
<td>Recycle/reuse waste at home.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Conserve energy where possible.</td>
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<td></td>
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</tr>
<tr>
<td>Join community cleanup efforts.</td>
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</tr>
<tr>
<td>Car-pool or use public transportation.</td>
<td></td>
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</tr>
<tr>
<td>Subscribe to environmental publications (e.g. National Geographic).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Become a member of an environmental organisation (e.g. The Sierra Club).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vote for public officials due to their stance on environmental issues or environmental protection.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donate money to Antarctic specific organisations or events (e.g. AHT).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subscribe to Antarctica-related publications (e.g. ANAN).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vote for public officials due to their stance on Antarctic related issues.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lobby government on Antarctic issues.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donate money to environmental organisations with a history in Antarctica (e.g. ASOC, Greenpeace).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Become a member of an Antarctic organisation (e.g. AHT, ASOC).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11B) Please elaborate if you have any additional comments or thoughts about your response to question 11A.
12) When recalling your experience in Antarctica, what aspects do you remember most? Why?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

13) Please feel free to write additional comments below, regarding your trip to Antarctica and its affect on your life.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Thank you for completing this follow-up research survey regarding visitor experiences in Antarctica. Having completed the survey please enclose it in the envelope provided; then simply drop this envelope in your nearest post box, no postage is required.
Appendix Q: GCAS Post-Antarctica Interview Schedule.
Response #:
Setting:

**GCAS Interview (Post-Antarctica)**

Having completed the survey, various consent forms and the journal, as well as hearing my lecture; do you have any questions of me?

In this interview I’d like to again examine your thoughts/views on Antarctica, how these may have changed due to the GCAS program and your visit, your thoughts on some factors that may influence your experience and what this all means to you.

**PROMPT FROM NOTES MADE**
**REMEMBER - How... What... Where... Whom... When... Why...**
**Can you - Describe / Explain / Tell me more / Clarify / Refine / Express / Say**
**Turn on tape recorder and microphone**

**The Visit**
Tell me about your visit to Antarctica.
Was it significant personally? Professionally?
What “struck” you about Antarctica?

**Motivations/Expectations**
Can you remind me of your motivations to visit Antarctica?
Your motivations, did they influence your experience?
Can you remind me of your expectations of the visit?
Your expectations, were they met?

**GCAS**
Tell me a bit about your GCAS experience since the visit
Has your visit changed the way you approach the lectures? The course? The people?

**Scenarios**
At this point, I’m going to ask your attitude and other thoughts towards 3 scenarios:
- Tourism in Antarctica
- Science in Antarctica
- Conservation/Heritage of Antarctica

**Group**
After visiting Antarctica, and spending such an intense time with your GCAS group, have your feelings or interactions with the group changed?
The relationships that formed before and during the course, will they last? Personally or professionally?
For how long?
Was there a GCAS group “culture”? Will it be difficult to adjust back into “real” life, or was it immediately following your visit?

**Relationship**
Do you think that visiting has changed your relationship with Antarctica?
How? In what ways?
Why do you think such a change occurred?
Is this change significant? In what ways? Significant to whom?

**Turn off tape recorder and microphone**

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Appendix R: Respondent Profile (Anticipation Phase).
<table>
<thead>
<tr>
<th>Category</th>
<th>Number of respondents (N=87)</th>
<th>% of overall</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organisation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antarctica New Zealand</td>
<td>14</td>
<td>16.1</td>
</tr>
<tr>
<td>GCAS</td>
<td>12</td>
<td>13.8</td>
</tr>
<tr>
<td>Heritage Expeditions</td>
<td>29</td>
<td>33.3</td>
</tr>
<tr>
<td>Quark Expeditions</td>
<td>32</td>
<td>36.8</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 29 years</td>
<td>10</td>
<td>11.5</td>
</tr>
<tr>
<td>30-39 years</td>
<td>9</td>
<td>10.3</td>
</tr>
<tr>
<td>40-49 years</td>
<td>12</td>
<td>13.8</td>
</tr>
<tr>
<td>50-59 years</td>
<td>14</td>
<td>16.1</td>
</tr>
<tr>
<td>60+ years</td>
<td>42</td>
<td>48.3</td>
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<tr>
<td><strong>Gender</strong></td>
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<td></td>
</tr>
<tr>
<td>Female</td>
<td>45</td>
<td>51.7</td>
</tr>
<tr>
<td>Male</td>
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<td>Partially completed secondary school</td>
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<tr>
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<td>40.5</td>
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<tr>
<td>Post-graduate qualification</td>
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<tr>
<td>Not stated</td>
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<td>-----</td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
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</tr>
<tr>
<td>Administrator or Manager</td>
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<td>15.1</td>
</tr>
<tr>
<td>Professional</td>
<td>27</td>
<td>31.4</td>
</tr>
<tr>
<td>Technician</td>
<td>5</td>
<td>5.8</td>
</tr>
<tr>
<td>Service worker</td>
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<td>4.7</td>
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<td>Trade Worker</td>
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<tr>
<td>Student</td>
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<tr>
<td>Homemaker</td>
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<td>Retired</td>
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<td>34.9</td>
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<tr>
<td>Not Stated</td>
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<tr>
<td><strong>Country of permanent residency</strong></td>
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<tr>
<td>USA</td>
<td>15</td>
<td>17.2</td>
</tr>
<tr>
<td>UK</td>
<td>12</td>
<td>13.8</td>
</tr>
<tr>
<td>Australia</td>
<td>11</td>
<td>12.6</td>
</tr>
<tr>
<td>New Zealand</td>
<td>45</td>
<td>51.7</td>
</tr>
<tr>
<td>Canada</td>
<td>2</td>
<td>2.3</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1</td>
<td>1.2</td>
</tr>
</tbody>
</table>
Appendix S: All Cold/Remote Regions Previously Visited by Respondents.
(Multiple entries deleted)
Midwest USA
Northern Scotland in winter
Remote, privately owned mountain land in NZ
Port Adventure - Stewart Island.
Central Canada, -30C + in winter
Sahara
Patagonia and Sub-Antarctic Islands,
Sichuan
Yunnan Mountains
Many Solomon Islands
Papua New Guinea
Indonesia
Many South Pacific islands
Madeira.
Western China
Albania
Far East Russia
Falkland Islands
Kuril Islands
Kamchatka Peninsula
Western China
Sub Antarctic Islands (South Georgia, etc.)
Both Antarctic Peninsula and Ross Sea Region
NZ Sub-Antarctic (Snares, Campbell, Auckland, Macquarie)
NZ Alpine environment
Atacama desert
Central America
Papua New Guinea Highlands
Remote regions of Australia (Kimberleys and Tasmania)
Patagonia
Fire lands
Sahara desert
NW Australia
Alpine/sub alpine part of Australia (Kosciusko National Park)
Antarctic Peninsula and South Georgia
Appendix T: Conservation and Environmental Group Membership of Respondents.
(Multiple entries deleted)
Soil and Health (NZ Organics)
Greenpeace
Antarctic Heritage Trust
Massachusetts Audubon Society
Vineyard Conservation Society
National Resource Defence Council
Forest and Bird
Karori Wildlife Sanctuary
Royal Society for the Protection of Birds
Lancashire Naturalists Trust
Council for the Protection of Rural England
National Trust
Maritime Trust.
Witchwood
Lytham St. Annes Civic Society
British Trust for Ornithology
Cheshire Wildlife Trust
TR Sanctuary
North Shore Wildlife Refuge
Alaska Nature Conservancy
New York Nature Conservancy
Kachemak Heritage Land Trust (Alaska),
Duchess County Land Trust
Centre for Coastal Studies (Alaska)
Long Island Nature Conservancy (NY)
Historic Places Trust
Pennsylvania Resources Council
IWS
WWF
ACF
Tasmania Wildlife Society
Volunteer for native re-vegetation work in Australia.
National Parks Association (NSW)
NZ Historic Places Trust
Koonung B.N.C. Inc
Federation of Victoria Walking Clubs
Sierra Club
Audubon
The Nature Conservancy
Green Party
UK Antarctic Heritage Trust
Save the Rhino Campaign
Appendix U: Typical itineraries for RSR visitors, including photographs.

Itineraries adapted from: Antarctica New Zealand (2000); Curtin (2004); Gill, (1996); Headland (1993); Henzell (2003a, 2003b, 2003c, 2003d); Heritage Expeditions (n.d.); Lindblad & Fuller, (1983); Orsman (1998); Quark Expeditions (2004d); Thomas (1994); Webster (2001); Zehnders (1990); as well as information from respondents, and the author’s personal experience and observations.
The following appendix outlines the typical itineraries of the visitors involved in this research. Where possible, the itinerary is followed up with photographs taken by the author, research respondents or colleagues. In the instance that it is a respondent’s photograph, permission has been given to reveal the photographers identity.

**Ship-based visits**
These tours are typical of those aboard either HE or QK vessels.

Typically 25-30 days for a Ross Sea voyage.

Day 1 – Generally begin in one of the following gateway cities: Lyttleton, Bluff, or Hobart. If Bluff is the gateway, usually overnight is spent in Invercargill with transfer to the ship in Bluff in the morning. Lyttleton is similar, with accommodation either in Christchurch or Auckland the night prior.

Day 2 – depart for the Sub Antarctic.
If leaving from Hobart, the voyage generally stops at Macquarie Island, then the RSR, then the Auckland Islands (Enderby Island) and Campbell Island on return. This is generally the case if the voyage is Hobart to Hobart or Hobart to Bluff or Lyttleton. If the voyage is in reverse, then the island visits are generally reversed too, regardless of whether the voyage is Bluff-Bluff, Lyttleton-Lyttleton, or Bluff/Lyttleton-Hobart.

Occasionally visits are made at the Snares or the Balleny Islands if conditions and itinerary match. Due to regulations these visits are just cruises around the islands in zodiac/naiad rubber inflatable boats.

Days 3-8 spent exploring the Sub Antarctic Islands

Day 8-10 spent crossing the remainder of the Southern Ocean. Crossing the Antarctic convergence, Antarctic Circle and coming into contact with first icebergs and pack ice. During these first 10 days much time has been spent aboard the ship with preparatory safety information, landing information, educational lectures, social events, and limited landing at Sub-Antarctic sites. Once in the RSR, much more time is spent on landings, and follow-up lectures take place on the return crossing of the Southern Ocean.

Days 10-22 during these 12 days, every attempt is made to conduct as many landings as possible, given weather conditions and other logistical matters of visiting some sites on the way into the region and others on the return outwards. Landings are still conducted using zodiac, rubber inflatable craft, or when/if possible using helicopters. Possible landing sites include:

- Cape Adare – site of Borchgrevink’s hut and a large Adélie penguin rookery
- Cape Hallett – former site of a US-NZ station
- Terra Nova Bay – site of Italy’s Mario Zuchelli Station
- Drygalski Ice tongue
- Franklin Island
- The Ross Ice Shelf and its various large numbered icebergs (i.e. B15)
- The Dry Valleys – Only accessible by helicopter, this region is ice-free, desert-like and eroded by strong wind.
- Ross Island – views of Mt. Erebus, sometimes helicopter sightseeing flights.
• Cape Bird – Large Adélie penguin rookery
• Shackleton’s Hut at Cape Royds
• Scott’s Hut at Cape Evans
• McMurdo Sound – the furthest south you can go on any ship in Antarctica
• McMurdo Station – the US research station, Antarctica’s largest
• Scott Base – the NZ scientific base
• Scott’s Discovery Hut at Hut Point
• Possession Islands

Days 23-27 depending on the route, these four days are spent re-crossing the Southern ocean, with stops at the remaining Sub-Antarctic Islands not visited on the initial crossing.

Day 28-29 Arrive in and depart at the scheduled gateway city.

**Land-based visits**

**GCAS**
The GCAS programme typically begins in early November in Christchurch. During the time in Christchurch, students are engaged in a variety of lectures, tours of Antarctic-related facilities, and an initial field camp at Cass, near Arthur’s Pass National Park in New Zealand’s Southern Alps.

The field portion of the course is typically 16 days in duration. The field portion will be examined with the itinerary of all Antarctica New Zealand programmes to follow. Approximately a week after the field portion of the course has ended students are back in New Zealand and lectures reconvene. Lectures end approximately a month later, and are then followed up by final project work, submission and presentations.

**Antarctica New Zealand**
The length of Antarctica New Zealand visitor programmes vary greatly. Generally familiarisation trips are the shortest; perhaps less than one week in length, where as the secondary school programme lasts up to two weeks and the media or other educational programmes are individually tailored to the project, so may last eight days, two weeks or even longer.

- Regardless of length, the first day begins early with a few hours at the USAP passenger terminal, followed by a flight 6-8 hours in length, assuming it isn’t ‘boomeranged’, turned back by the weather at the runway in Antarctica.

- Once on the ice there is transport from whichever runway the plane arrives at (depends on the timing of visit within the season), followed by a regular procedure of briefings, introductions and tours for new arrivals at Scott Base. This if all followed by approximately 2 days of Antarctic Field Training (AFT), inclusive of survival training, rescue techniques, etc.

- For short-term visitors, all of AFT may not be necessary, and familiarisation for these visitors may commence with tours of McMurdo Station, Discovery Hut, and the general Scott Base vicinity. For those who visit early in the season, there will likely be the opportunity to visit Cape Royds and/or Cape Evans by Hagglund
Tracked, tank-like vehicle). If it’s later in the season these visits are only possible with helicopter access, unlikely except for the most distinguished visitors.

- After AFT, each programme is very dependent on its application. A geology focused educator may join a science party in the Dry Valleys, media, artists or general educators may visit a number of science parties and visit a wide-spread of the labs and facilities in the vicinity, and an educator with military interests may spend more time with the NZAF staff around base.

- For the GCAS students they now spend up to 12 days camped at Windless Bight, taking part in a variety of scientific, writing, and other projects. As the GCAS programme usually operates over the Christmas/New Years period, this holiday is often a big part of several days. Walks on the sea ice, cross-country skiing, using the Scott Base ski lift, and visiting IMAX crevasse are a few unique opportunities available to Antarctica New Zealand’s land-based visitors.

- At the end of any AntNZ-related visit, visitors generally come into Scott Base at least one day prior to the scheduled departure in order to deal with their equipment, paperwork and de-brief with various Scott Base personnel. Flights back to Christchurch are usually in the late-afternoon or evening, and so ‘bag drag’, packing, and buying souvenirs can usually take place the morning of departure. All of these final preparations are often extended or changed at little notice if the morning flight from Christchurch is turned around.

**Photographs**

The *Kapitan Khlebnikov*, operated by Quark Expeditions, in McMurdo Sound
The *Akademik Shokalskiy*, operated by Heritage Expeditions, at Cape Royds
(Photographer: M. Gross)

Naiad at landing on Macquarie Island
Using Argos and Naiads on sleds (Heritage Expeditions) to access Cape Evans
(Photographer: L. Marshall)

Helicopter on the deck of the Kapitan Khlebnikov
First Storm of the Southern ocean  
(Photographer: E. Melville)

Storm off the Balleny Islands  
(Photographer: L. Marshall)

Cape Adare  
(Photographer: M. Gross)
Passing Cape Adare  
(Photographer: M. Gross)

Steaming towards Ross Island – Mt. Erebus  
(Photographer: M. Gross)
Mt. Erebus from the bridge of the *Kapitan Khlebnikov* in McMurdo Sound

Shackleton’s Hut at Cape Royds
(Photographer: P. Cooper)
Scott’s Hut at Cape Evans
(Photographer: P. Cooper)

Inside Scott’s Hut at Cape Evans
(Photographer: M. Gross)
Scott’s Discovery Hut and Observation Hill

Artefacts inside Discovery Hut
Emperor penguins on the sea ice in McMurdo Sound

Adélie penguin
(Photographer: P. Cooper)
Weddell seal on the sea ice
(Photographer: P. Cooper)

Passengers from the Kapitan Khlebnikov touring Scott Base
Hillary’s TAE-IGY Hut at Scott Base

The USAP Passenger Terminal
(Photographer: P. Beck)
Hercules and Mt. Discovery from the sea ice runway
(Photographer: J. Bray)

Road to Pegasus runway
(Photographer: P. Beck)
Starlifter at Pegasus runway  
(Photographer: P. Cooper)

McMurdo Station from above  
(Photographer: P. Beck)
AFT campsite
(Photographer: J. Bray)

AFT training on the icefall
(Photographer: J. Bray)
Loading the Hagglund - Group going out on a familiarisation trip
(Photographer: J. Bray)

Checking sea ice cracks near Hutton Cliffs
(Photographer: J. Bray)
Familiarisation tour of McMurdo Station
(Photographer: J. Bray)

Exiting IMAX crevasse
Pressure ridges in front of Scott Base

The Royal Society Range from Vince’s Cross, Hut Point
Welcome to Scott Base – All the comforts of home