

## **6. ATTITUDES TOWARD MANAGEMENT CONTROLS AND RESTRICTIONS**

### **6.1 Summary**

Visitors were given a series of statements about management options, and were required to indicate their attitude towards them on a scale "Strongly Disagree" (1) to "Strongly Agree" (5). Any major differences in the levels of pre-visit and post-visit responses were assumed to represent a change in attitude resulting from experiences or conservation learning achieved on their trips. In a similar fashion, any major differences in the responses from passengers on large and small vessels were assumed to represent a combination of different trip experiences, and different types of passengers. These responses are summarised in Section 6 when differences are apparent. The responses are arranged under descriptive headings for Sections 6.2 to 6.4.

Visitor responses were very supportive of the management controls and restrictions being applied to island visits. They did not indicate significant demand for any additional access, services or facilities which would compromise the primary conservation objectives of management for these islands.

- Visitors accepted the need for visitor numbers to be limited, and that any visits should be carried out in a controlled way, with controls applying to access to many areas.
- Contact with conservation staff was considered important, and accompanied a strong preference for information and interpretation of the natural biota and settings experienced.
- Small group sizes and informative guides were preferred.
- Onshore convenience and information facilities were not widely preferred, although some desire for toilet and shelter arrangements were important to a significant minority of visitors (up to 30%).
- Pre-visit and post-visit differences were not generally apparent, suggesting that visit experiences did not much alter visitor opinions toward these statements.
- Differences in the responses of large and small vessel visitors were generally minor.

### **6.2 Access controls and restrictions**

**6.2.1 Limitations to visitor numbers** (Table 15) Current management policy is to limit visitor numbers to a maximum of 600 visitors to a site per year. The following statement aimed to assess visitor attitudes toward the limitation on visitor numbers.

- There is no need for limits or regulations to control visitor numbers to this island.

Most visitors strongly disagreed with this statement, indicating that most acknowledge the need for limits to visitor numbers, and approved of these limits. This opinion was consistent in pre- and post-visit responses, suggesting that these opinions were not greatly influenced by the visits, but reflected more the underlying conservation orientation of the visitors. The response was also consistent between large and small vessels.

**Table 15 Visitor attitudes towards use-level limits**

| VISITOR ATTITUDE TO STATEMENT |                     | Strongly Disagree | Tend to Disagree | Neutral | Tend to Agree | Strongly Agree |
|-------------------------------|---------------------|-------------------|------------------|---------|---------------|----------------|
| -                             | Pre-Visit response  | 63                | 17               | 5       | 9             | 6              |
| -                             | Post-Visit response | 64                | 17               | 5       | 6             | 8              |

**6.2.2 Visitor freedom to explore onshore** (Table 16) The current management approach is to require visitors to move onshore in small controlled groups with some limitations on where they can go. The following statement aimed to assess the desire of visitors for more freedom to choose where they went when onshore.

- Visitors should be free to walk and explore wherever they want to on the island.

**Table 16 Visitor attitudes towards freedom of movement onshore**

| VISITOR ATTITUDE TO STATEMENT |                     | Strongly Disagree | Tend to Disagree | Neutral | Tend to Agree | Strongly Agree |
|-------------------------------|---------------------|-------------------|------------------|---------|---------------|----------------|
| -                             | Pre-Visit response  | 59                | 30               | 6       | 4             | 1              |
| -                             | Post-Visit response | 61                | 28               | 5       | 4             | 2              |

Most visitors strongly disagreed with this statement, indicating that they acknowledged the need for controls on where visitors could go on the islands. This attitude was consistent in pre- and post-visit responses, and between visitors on large and small vessels. These results show that this opinion, which essentially favours retention of management controls onshore, is largely unaffected by visit experiences. This suggests that these attitudes are more representative of the underlying conservation orientations of the visitors.

**6.2.3 Confining visitors to special tracks** (Table 17) Current management policy is to keep visitors to tracks, where these are provided at visiting sites. This requirement is generally in accordance with visitor behaviour when a track is provided. Where a track is provided, visitors will generally stay on it. The following statement aimed to assess any visitor desire to be free of this type of limitation.

- Visitors should only be allowed to walk on specially provided tracks.

**Table 17 Visitor attitudes towards access controls - special tracks**

| VISITOR ATTITUDE TO STATEMENT |                     | Strongly Disagree | Tend to Disagree | Neutral | Tend to Agree | Strongly Agree |
|-------------------------------|---------------------|-------------------|------------------|---------|---------------|----------------|
| -                             | Pre-Visit response  | 2                 | 16               | 10      | 33            | 39             |
| -                             | Post-Visit response | 5                 | 18               | 11      | 36            | 30             |

Most visitors agreed with this statement, indicating some understanding by the visitors of the value to conservation management of keeping to the tracks provided. However, a substantial proportion (around 20%) were not in favour of this type of control. Comparison of before and after responses showed only minor differences in visitor responses.

When large and small vessel responses were compared (Table 18), differences were found between them, and in their pre- and post-visit scores. The main finding of these tests was that small vessel visitors appeared to become less supportive of this type of control after their visit. Large vessel visitors appeared generally more supportive of this type of control in both pre and post-visit responses.

**Table 18 Visitor attitudes from different vessels - special tracks**

| - visitors should only be allowed to walk on specially provided tracks |                        | Strongly Disagree | Tend to Disagree | Neutral | Tend to Agree | Strongly Agree |
|--|------------------------|-------------------|------------------|---------|---------------|----------------|
| Large vessels  | - pre-visit response   | 2                 | 12               | 10      | 32            | 43             |
|  | - post visit response  | 3                 | 15               | 8       | 27            | 36             |
| Small vessels  | - pre-visit responses  | 2                 | 22               | 9       | 33            | 33             |
|  | - post-visit responses | 7                 | 21               | 15      | 34            | 22             |

**6.2.4 Confining visitors to special viewing sites** (Table 19) Current management policy allows the viewing of wildlife from anywhere it is encountered. There are no regulations in place to specify key viewing sites and require use of them. The following statement aimed to assess visitor attitude towards this, in principle.

- Visitors should only be allowed to view wildlife from specially provided sites.

**Table 19 Visitor attitudes towards access controls - special viewing sites**

| VISITOR ATTITUDE TO STATEMENT |                     | Strongly Disagree | Tend to Disagree | Neutral | Tend to Agree | Strongly Agree |
|-------------------------------|---------------------|-------------------|------------------|---------|---------------|----------------|
| -                             | Pre-Visit response  | 7                 | 25               | 15      | 30            | 23             |
| -                             | Post-Visit response | 14                | 27               | 12      | 29            | 18             |

Visitor attitudes were divided over this statement, and there was a clear difference in pre- and post-visit responses. Visitor support for this type of control declined after their visits, particularly among passengers on small vessel, as revealed in Table 20. Passengers on small vessels were generally less tolerant of this type of control, and this attitude appears strengthened as a result of their visit.

**Table 20 Visitor attitudes from different vessels - special viewing sites**

| - visitors should only be allowed to view wildlife from specially provided sites |                        | Strongly Disagree | Tend to Disagree | Neutral | Tend to Agree | Strongly Agree |
|--|------------------------|-------------------|------------------|---------|---------------|----------------|
| Large vessels  | - pre-visit response   | 5                 | 21               | 12      | 33            | 29             |
|  | - post visit response  | 7                 | 23               | 9       | 35            | 26             |
| Small vessels  | - pre-visit responses  | 10                | 32               | 19      | 24            | 14             |
|  | - post-visit responses | 22                | 32               | 15      | 21            | 9              |

**6.2.5 Five metre approach-limit regulations** (Table 21) Current management policy imposes an approach limit of 5 metres between visitors and wildlife. The following statement aimed to identify the degree of support for this control.

- Visitors should be allowed to get closer to wildlife than the 5 metre limit.

**Table 21 Visitor attitudes to the five metre limit**

| VISITOR ATTITUDE TO STATEMENT |                     | Strongly Disagree | Tend to Disagree | Neutral | Tend to Agree | Strongly Agree |
|-------------------------------|---------------------|-------------------|------------------|---------|---------------|----------------|
| -                             | Pre-Visit response  | 40                | 27               | 15      | 13            | 5              |
| -                             | Post-Visit response | 40                | 25               | 13      | 15            | 7              |

Most visitors strongly disagreed with this statement, indicating that most accept this regulation. This remained consistent for pre- and post-visit assessments overall, including those for large and small vessel visitors.

There were some differences between large and small vessel visitor responses (Table 22). Small vessel visitors had lower support for the control before their visits, but support did increase after the visit. These results suggest that small vessel visitors in particular thought that the 5 metre limit would prevent adequate close-up encounters with wildlife.

**Table 22 Visitor attitudes from different vessels - five metre limit**

| - visitors should be allowed closer to wildlife than the 5 metre limit |                        | Strongly Disagree | Tend to Disagree | Neutral | Tend to Agree | Strongly Agree |
|--|------------------------|-------------------|------------------|---------|---------------|----------------|
| Large vessels  | - pre-visit response   | 48                | 23               | 16      | 10            | 3              |
|  | - post visit response  | 47                | 22               | 14      | 11            | 7              |
| Small vessels  | - pre-visit responses  | 29                | 35               | 13      | 17            | 7              |
|  | - post-visit responses | 33                | 28               | 12      | 21            | 7              |

### 6.3 Management facilities and services

**6.3.1 Provision of close-up wildlife opportunities** (Table 23) Current policy is not to provide any special close-up viewing or photography opportunities. The following statement aimed to identify what demand there may be for provision of close-up opportunities. It is recognised that many visitors do wish to touch and/or be photographed in close proximity with wildlife, and that they may not be aware of the undesirable impacts of these actions on the wildlife.

- Some wildlife should be made available for close-up viewing and photography.

**Table 23 Visitor attitudes towards providing special close-up encounters**

| VISITOR ATTITUDE TO STATEMENT |                     | Strongly Disagree | Tend to Disagree | Neutral | Tend to Agree | Strongly Agree |
|-------------------------------|---------------------|-------------------|------------------|---------|---------------|----------------|
| -                             | Pre-Visit response  | 21                | 18               | 18      | 31            | 12             |
| -                             | Post-Visit response | 23                | 20               | 18      | 26            | 13             |

Visitor attitudes were evenly divided over this statement, with over 30% agreeing that closer access should be possible. This pattern remained consistent in most post-visit responses. The main exception was amongst small vessel visitors, who indicated major differences in post-visit response (Table 24). These responses indicate that small vessel visitors disagreed a little more after their visits and suggests that their visit experiences provided them with some reasons for accepting that more close-up encounters may be undesirable.

**Table 24 Visitor attitudes from different vessels - special encounters**

| - some wildlife should be made available for close-up viewing and photography |                        | Strongly Disagree | Tend to Disagree | Neutral | Tend to Agree | Strongly Agree |
|---|------------------------|-------------------|------------------|---------|---------------|----------------|
| Large vessels   | - pre-visit response   | 24                | 20               | 15      | 32            | 9              |
|   | - post visit response  | 24                | 17               | 18      | 27            | 13             |
| Small vessels   | - pre-visit responses  | 16                | 14               | 23      | 29            | 17             |
|   | - post-visit responses | 21                | 23               | 19      | 24            | 13             |

Overall, however, these results indicate that a considerable proportion of visitors feel that access to wildlife should be, to some extent, based upon visitor preferences for close-up encounters rather than the needs and tolerances of the wildlife. The visit experiences did not appear to increase the visitors' perception of their impacts upon the wildlife, and this perhaps suggests a need for advocacy directed at education and examples illustrating the undesirable consequences of these impacts.

**6.3.2 Information signs onshore** (Table 25) Current management approaches do not favour provision of onshore facilities for visitors, including signs. The following statement aimed to test the visitor demand for such provision.

- Information signs about features of island environments/wildlife should be provided.

**Table 25 Visitor attitudes towards provision of signs**

| VISITOR ATTITUDE TO STATEMENT |                     | Strongly Disagree | Tend to Disagree | Neutral | Tend to Agree | Strongly Agree |
|-------------------------------|---------------------|-------------------|------------------|---------|---------------|----------------|
| -                             | Pre-Visit response  | 14                | 15               | 17      | 29            | 25             |
| -                             | Post-Visit response | 14                | 18               | 20      | 32            | 15             |

Visitors were divided in their attitudes towards providing more information signs onshore. Approximately 50% of visitors agreed with this statement, suggesting that many may consider additional signage to be undesirable in the island settings. There was some change in post-visit responses, with a decline in agreement that signs should be provided, which suggests that, at the very least, the visit experience does not promote demands for increased signage onshore. There were no differences apparent in the responses of large and small vessel visitors.

**6.3.3 Toilet and shelter facilities onshore** (Table 26) Current management policy is against provision of any onshore facilities for visitors. The following statement was aimed at identifying visitor demand for basic facilities such as toilets.

- Basic toilet and shelter facilities should be available on the islands.

Visitor attitudes were evenly divided on this issue, although there was some difference in pre and post-visit responses. The responses indicate that some decline in visitor support for such facilities had occurred after the visit. These results were consistent for large and small vessel visitors. The main implication of these results is that managers and tour providers may need to explain the problems with providing such onshore facilities. If necessary, tour operators may need to consider provision of some portable facilities if the need is substantial.

**Table 26 Visitor attitudes towards provision of toilets/shelters**

| VISITOR ATTITUDE TO STATEMENT |                     | Strongly Disagree | Tend to Disagree | Neutral | Tend to Agree | Strongly Agree |
|-------------------------------|---------------------|-------------------|------------------|---------|---------------|----------------|
| -                             | Pre-Visit response  | 19                | 18               | 19      | 31            | 12             |
| -                             | Post-Visit response | 21                | 17               | 28      | 26            | 8              |

**6.3.4 Opportunity to stay overnight** (Table 27) Current management policy prohibits overnight stays by visitors on the protected islands. The following statement aimed to identify the extent of potential demand (if any) for this type of opportunity.

- Some visitors should be allowed to stay ashore overnight in huts or camps.

**Table 27 Visitor attitudes towards overnight stays ashore**

| VISITOR ATTITUDE TO STATEMENT |                     | Strongly Disagree | Tend to Disagree | Neutral | Tend to Agree | Strongly Agree |
|-------------------------------|---------------------|-------------------|------------------|---------|---------------|----------------|
| -                             | Pre-Visit response  | 33                | 24               | 14      | 21            | 8              |
| -                             | Post-Visit response | 34                | 25               | 14      | 23            | 5              |

A majority of visitors disagreed with this statement, although a considerable minority of visitors (up to 30%) agreed that stays should be possible. This response pattern was consistent in all pre- and post-visit response patterns, and between large and small vessels. These results suggest that advocacy highlighting the need to minimise human disturbance should be enhanced to counter such preferences.

**6.3.5 Meeting Department of Conservation staff and scientists** (Table 28) Current management policy is to allow contact with research and/or base staff and activities in order to promote the work being done, and the role it plays in conservation. Some trip programmes make a particular effort to incorporate base visits and staff contacts in their schedules. However, there is potential for visits to disturb work programmes. The following statement aimed identify how important contact with the conservation staff was for the trip experience of visitors.

- Meeting conservation staff/scientists is an important part of this trip.

**Table 28 Visitor attitudes towards meeting conservation staff/scientists**

| VISITOR ATTITUDE TO STATEMENT |                     | Strongly Disagree | Tend to Disagree | Neutral | Tend to Agree | Strongly Agree |
|-------------------------------|---------------------|-------------------|------------------|---------|---------------|----------------|
| -                             | Pre-Visit response  | 4                 | 3                | 10      | 37            | 42             |
| -                             | Post-Visit response | 1                 | 4                | 12      | 38            | 46             |

Most visitors agreed with this statement, and this response was consistent in pre- and post-visit responses, and between visitors from large and small vessels. These results suggest that visitors are very interested in the conservation and research work being done on these islands, and that positive encounters with conservation staff and scientists represent an important component of trip experiences. Clearly, conservation managers and tour providers can derive mutual benefits from continued co-operation during the summer cruise seasons.

#### **6.4 Conduct of site visits**

**6.4.1 Group size preference** (Table 29) Current management policy promotes onshore visits being carried out in small guided groups. The following statement aimed to determine what group size characteristics are preferred by visitors.

- When on the islands, people should be in a few small groups, not one big one.

**Table 29 Visitor attitudes towards group sizes ashore**

| VISITOR ATTITUDE TO STATEMENT |                     | Strongly Disagree | Tend to Disagree | Neutral | Tend to Agree | Strongly Agree |
|-------------------------------|---------------------|-------------------|------------------|---------|---------------|----------------|
| -                             | Pre-Visit response  | 2                 | 1                | 6       | 34            | 53             |
| -                             | Post-Visit response | 1                 | 2                | 8       | 37            | 52             |

Most visitors agreed strongly with this statement, and this remained consistent in post-visit responses, and between large and small vessel visitors. These results suggest that small group sizes are strongly preferred, which probably relates to the greater communication of information and questions possible in smaller groups. It may also reflect some perception that large groups are inappropriate to the natural settings and experiences of island visits.

**6.4.2 Control by guides** (Table 30) Current management policy is to require guides at a ratio of one for every ten passengers onshore. This is specified to ensure visits are well supervised, and to encourage the provision of higher quality information. The following statement aimed to identify the degree to which visitors accept the requirement that they should be accompanied by guides.

- Visitors should be controlled by guides at all times while on the islands.



**Table 30 Visitor attitudes to control by guides**

| VISITOR ATTITUDE TO STATEMENT |                     | Strongly Disagree | Tend to Disagree | Neutral | Tend to Agree | Strongly Agree |
|-------------------------------|---------------------|-------------------|------------------|---------|---------------|----------------|
| -                             | Pre-Visit response  | 4                 | 13               | 13      | 32            | 38             |
| -                             | Post-Visit response | 3                 | 16               | 12      | 30            | 38             |

Most visitors agreed with this statement, and this remained consistent in post-visit assessments and between large and small vessel visitors. These results appear to represent acknowledgement of the need for some supervision of onshore activities, and perhaps also a desire for more information while on visits. A desire for complete freedom of activity onshore does not appear to be present.

**6.4.3 Removal of rubbish** (Table 31) Current management policy prohibits littering and requires the removal of all rubbish from the islands. The following statement aimed to highlight the degree to which visitors were committed to this fundamental conservation behaviour.

- Visitors should take all their own rubbish and waste off the islands when they leave.

**Table 31 Visitor attitudes to rubbish removal**

| VISITOR ATTITUDE TO STATEMENT |                     | Strongly Disagree | Tend to Disagree | Neutral | Tend to Agree | Strongly Agree |
|-------------------------------|---------------------|-------------------|------------------|---------|---------------|----------------|
| -                             | Pre-Visit response  | 2                 | 0                | 0       | 6             | 92             |
| -                             | Post-Visit response | 1                 | 1                | 0       | 9             | 89             |

Virtually all visitors agreed strongly with this statement, and this was consistently expressed. This indicates that visitors are aware of the protected status of the islands, and the responsibilities required of any visitors to them.

**6.4.4 Clothing checks to limit pest introductions** (Table 32) Current management policy is to minimise the unintentional transfer of soils, plant matter and animal species between islands. This requires that checks be made on clothing and any baggage being taken onshore and offshore after the visit. The following statement aimed to identify how visitors felt about this requirement, which could be perceived by some to be annoying or intrusive.

- Clothing/baggage should be checked to prevent introduction of plant/animal pests.

**Table 32 Visitor attitudes towards clothing/baggage checks**

| VISITOR ATTITUDE TO STATEMENT |                     | Strongly Disagree | Tend to Disagree | Neutral | Tend to Agree | Strongly Agree |
|-------------------------------|---------------------|-------------------|------------------|---------|---------------|----------------|
| -                             | Pre-Visit response  | 5                 | 10               | 20      | 29            | 35             |
| -                             | Post-Visit response | 4                 | 6                | 27      | 34            | 28             |

Most visitors agreed with this statement, although a considerable proportion gave a neutral response. In this case, a neutral response most probably represents a problem with understanding the statement. This response remained consistent for post-visit assessments. Overall, the responses indicate visitor awareness that accidental introduction of pests is a constant threat to the indigenous species and habitats.

There was a major difference between large and small vessel visitors, with small vessel visitors agreeing more with this statement, while large vessel visitors were much more often "neutral" (Table 33). These responses represented greater support from small vessel visitors for the need to control potential pest introductions. This may be a reflection of their greater membership of conservation groups (e.g., Section 2.2.5).

**Table 33 Visitor attitudes from different vessels**

| - clothing/baggage should be checked to prevent introduction of plant/animal pests |                        | Strongly Disagree | Tend to Disagree | Neutral | Tend to Agree | Strongly Agree |
|--|------------------------|-------------------|------------------|---------|---------------|----------------|
| Large vessels  | - pre-visit response   | 6                 | 11               | 23      | 31            | 28             |
|  | - post visit response  | 3                 | 8                | 32      | 31            | 23             |
| Small vessels  | - pre-visit responses  | 4                 | 8                | 16      | 24            | 46             |
|  | - post-visit responses | 3                 | 4                | 21      | 37            | 35             |

**6.4.5 Nature interpretation on visits** (Table 34) Current management policy is to encourage tour operators to provide information and education about natural features of the islands through experienced guides and specialist lecturers. The following statement aimed to identify how important visitors felt this type of service was to their visits.

- All visits should include some nature education instruction about plants/wildlife.

Almost all visitors agreed with this statement, and this was consistently expressed in post-visit responses, and between large and small vessel visitors. This response indicates that virtually all island visitors want information and explanation provided about the natural biota and environments they are encountering.

**Table 34 Visitor attitudes towards provision of nature education**

| VISITOR ATTITUDE TO STATEMENT |                     | Strongly Disagree | Tend to Disagree | Neutral | Tend to Agree | Strongly Agree |
|-------------------------------|---------------------|-------------------|------------------|---------|---------------|----------------|
| -                             | Pre-Visit response  | 1                 | 4                | 12      | 42            | 41             |
| -                             | Post-Visit response | 1                 | 3                | 14      | 44            | 37             |

Apart from the fundamental requirements such as reasonable comfort, food and courtesy on voyages, this aspect of service under the control of tour operators and conservation managers appears to be where the quality of the voyage and the island visits is determined. Visitors appear to be expressing a strong desire to learn more, and appear to attach much importance to this as a key component of their overall experiences. The quality of their experience will depend considerably upon how well this is provided.

**6.4.6 Provision of safety equipment** (Table 35) Current management policy is to require that tour providers be adequately equipped for self-sufficiency in passenger safety in all circumstances. The following statement aimed to determine passenger attitudes toward the responsibility for safety management.

- All visitor groups should have their own safety equipment with them.

**Table 35 Visitor attitudes towards requiring safety equipment**

| VISITOR ATTITUDE TO STATEMENT |                     | Strongly Disagree | Tend to Disagree | Neutral | Tend to Agree | Strongly Agree |
|-------------------------------|---------------------|-------------------|------------------|---------|---------------|----------------|
| -                             | Pre-Visit response  | 4                 | 7                | 20      | 31            | 38             |
| -                             | Post-Visit response | 2                 | 6                | 19      | 39            | 34             |

Almost all visitors agreed with this statement, and this was consistently expressed in post-visit responses, and between large and small vessel visitors. Most providers are well prepared, and this is clearly the expectation of the visitors. The role required for conservation managers and any seasonal onshore conservation/research staff appears to be only that of emergency backup.

**6.4.7 Taking of souvenirs and mementoes** (Table 36) Current management policy is to impose a complete prohibition on any form of item souveniring. The following statement aimed to identify how passengers felt about the possibility of taking souvenirs.

- Visitors should be allowed to take small approved items as mementoes of their visit.

**Table 36 Visitor attitudes towards taking of souvenir objects**

| VISITOR ATTITUDE TO STATEMENT |                     | Strongly Disagree | Tend to Disagree | Neutral | Tend to Agree | Strongly Agree |
|-------------------------------|---------------------|-------------------|------------------|---------|---------------|----------------|
| -                             | Pre-Visit response  | 58                | 19               | 11      | 9             | 4              |
| -                             | Post-Visit response | 53                | 22               | 11      | 10            | 3              |

Most visitors disagreed with this statement, and this was consistently expressed in post-visit responses and between large and small vessel visitors. These results indicate that visitors generally recognise that such practices are inappropriate. However, it should be noted that some direct comments written on the survey questionnaires expressed some desire for souvenir items to be made available (e.g., t-shirts). Whether this is an issue for tour providers or conservation managers to address is a moot point, and may require consideration.

## 7. CONCLUSIONS AND RECOMMENDATIONS

### 7.1 Conclusions

- (i) The study has achieved its objectives of improving knowledge about tourists to New Zealand's subantarctic islands and their attitudes towards management. We now have comprehensive tourist profiles, and information on tourists' demands and satisfactions, perceptions of impact, and attitudes towards management and controls.
- (ii) Current policies and practices for managing tourist visits appear to be supported by visitors. They accept that their visits have impacts and should be subject to some controls.
- (iii) Current patterns of tour operations and visitor satisfactions show that high quality natural experiences for tourists are being achieved without known significant detrimental impacts to the natural values of the island reserves. Therefore there should be little basis for significant conflict of interest between the objectives of tour operators and those of island managers under current management conditions.
- (iv) There are some differences between passengers from large and small vessels. The main distinctions are found in their demographic profiles, reasons for undertaking voyages, expectations and satisfactions. These suggest the visit experiences also differ, with the differences largely reflecting the different scales of the operations. If desired, these differences could be minimised by considering changes to the ways in which visits are planned and conducted.
- (v) Results to date indicate that given adequate management controls and satisfactory visitor compliance, it is possible to conduct ecotourism visits to some strictly protected island nature reserves, which can satisfy the requirements of the visitors, tour operators, and island managers.
- (vi) It is important to continue efforts to establish monitoring mechanisms to provide early warning of any detrimental impacts which would be exacerbated by significant increase in tourist visitor numbers. Monitoring would allow for timely management intervention to ensure continued protection of the natural values which attract tourists to visit these islands.

### 7.2 Recommendations

These recommendations are directed primarily at island reserve managers, but some are directly relevant to tour operators.

- (i) **Continue to approve permits for visits from both large and small vessels in order to maintain a diverse range of visitor opportunities.** The current

practice of approving permits for visits from both large and small vessels appears to be justified. This is appropriate because there are two distinct groups of visitors being catered for. While visitors from both large and small vessels have much in common in their expectations and satisfactions, there are some differences between them in the specific attractions and experiences they seek, and enjoy. In addition, differences in the scale and capability of the vessels allows diversity in the visitor experiences provided and the sites potentially visited.

- (ii) **Review the universal ceiling of 600 visitors per site, and consider adjustments which could be made subject to management controls on a site-by-site basis.** While the current 600 limit is a useful pragmatic maximum figure, the results reported here suggest that on the basis of social perceptions at least, it may be a conservative figure at some sites. Given the continued imposition of management controls and continued compliance and co-operation by the visitors, it may be possible to increase this limit at certain sites. Reduction of visitor numbers at some sites may also be appropriate. If increased numbers are permitted, careful monitoring would be required to ensure there are no undesirable physical and biological impacts.
- (iii) **Consider what options there may be for providing more landing opportunities and increasing the time spent ashore.** There is a demand, particularly from small vessel passengers, for more opportunities to land onshore, and for spending more time onshore. This has implications for tour operators in planning their visit schedules, and for island managers in deciding on available landing sites. There is potential for greater proliferation of impacts at a wider range of sites, which requires careful consideration of the supervision and conduct of site visits. Well managed visits may not necessarily represent a major concern.
- (iv) **Consider options for the route, design and marking of tracks to minimise trampling impacts.** The only notable physical impact perceived by visitors was that trampling was damaging to soils and vegetation. Trampling impacts are unavoidable, although these can be minimised and confined by directing visitors along marked tracks or routes. Where these routes traverse untracked terrain, regular realignment of marker poles would effectively disperse the impact, and prevent formation of informal tracks (and associated long term impacts).
- (v) **Continue to enforce the 5 metre minimum approach distance from wildlife.** While responses from visitors generally support this restriction, suggesting most visitors have some understanding of the need to avoid wildlife disturbance and accept that their visits should be controlled in this way, a substantial minority did indicate preference for greater close-up viewing of wildlife.
- (vi) **Consider the ways in which portable and secure toilet arrangements could be provided ashore during landings.** While there is no strong demand for providing built onshore facilities, some concern was expressed about the availability of some toilet arrangements. At selected sites, portable and secure

toilet units could be brought ashore on each visit, and then removed when the visitors leave. This may provide the necessary facility to meet visitor demand, and management requirements to prevent site contamination and the development of onshore structures.

- (vii) **Consider making provision for more interpretation on site visits, and the means by which this can be most effectively achieved.** Clearly, island visits provide important opportunities for conservation learning and advocacy, and visitors indicated a considerable demand for improved provision of these opportunities. This suggests attention needs to be paid to providing more interpretive information and improving means for conveying it (e.g., written material, talks, small group sizes, informative guides, and contact with management and research staff). The responses of small vessel passengers suggest that the approaches taken with them are being more successful, and there is merit in considering greater application of these approaches to visitors from large vessels.
- (viii) **Enhance the interpretation of historical and cultural dimensions of the island reserves.** Given that historical and cultural aspects of the islands do not appear to be ranked as highly by visitors as the natural and wildlife features, there may be an opportunity for tour operators and managers to enhance the interpretation of these unique dimensions. This may be a useful way of enhancing overall visitor experiences.
- (ix) **Maintain the existing prohibition on overnight stays onshore.** While a notable proportion (up to 30%) of visitors considered overnight stays onshore were desirable, the current prohibition does not detract from their overall experiences of the islands. Therefore there is no justification for considering such an option, particularly given that visitors are already well provided with shipboard accommodation and services.
- (x) **Consider reorienting visitor survey research towards an ongoing visitor monitoring programme at key sites.** While this investigation has fulfilled its objective of refining the preliminary picture of tourists and their visit experiences first described in 1990/91, to be of ongoing utility to management of these islands, it will require further refinement and redesign into a visitor monitoring process concentrated on key sites.

## 8. REFERENCES

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## **APPENDIX 1**

### **RESEARCH METHODOLOGY**

#### A.1 Research Objectives

This report continues the work on subantarctic tourism initiated over the 1989/90 cruise season as part of the visitor monitoring programme being developed by Southland Conservancy of the Department of Conservation. The results of the preliminary survey undertaken then were finally published in 1994 (Cessford and Dingwall 1994), and had already contributed to the continuation of the survey approach in a modified form over the summer cruise seasons of 1992/93 and 1993/94. This report presents the results of these surveys in a comprehensive form. The main aim of this research was to collect visitor information on specific topics which comprised:

- descriptive characteristics including age, gender, nationality, occupation, conservation group membership, and previous experience of polar/sub-polar regions;
- pre-visit assessment of reasons for visiting these areas, including positive and negative expectations of the experience;
- post-visit evaluations of positive and negative experiences; suggestions for trip improvements; and indications of conservation learning by the visitors from their experiences;
- visitor perceptions of their impacts upon the islands that they visited; and
- pre-visit and post visit comparison of visitor opinions toward a list of statements relating to management of island visits.

Collection of data on these topics provides managers with an improved understanding of visitors to these areas, why they are coming, what their demands are, and how their attitudes and preferences conform with management requirements. In addition, it was considered useful to try and identify whether the experiences of visiting the islands had any positive effect on the conservation attitudes and knowledge of visitors. Achieving such positive outcomes for individual visitors, thereby promoting conservation generally, is commonly cited as the main justification for allowing access to special conservation areas.

#### A.2 Research Approach

To attempt to assess any positive outcomes from visits, a pre-visit questionnaire was designed to act as a control, with most of its questions then being repeated in a post-visit questionnaire, allowing a comparison of responses both before and after the experiences of island visits. Other questions evaluating the experience, and associated perceptions and satisfactions were also included.

The questionnaires were distributed on board the visiting ships at the beginning and end of their voyage in the subantarctic islands. This was made possible by the presence of Departmental staff on board each ship, acting as New Zealand Government official representatives while visiting the specially protected New Zealand subantarctic sites. The role of these staff was predominantly to observe and monitor the behaviour of visitors and the operations of the tour providers to ensure that the conditions of permits were properly adhered to. In addition, these staff generally assisted the tour operators as specialist guides and lecturers when possible.

### A.3 Application and Response

The survey sample was drawn from passengers visiting the subantarctic on a variety of different craft during the 1992/93 and 1993/94 summer seasons. These vessels represented a cross-section of the types involved in sub-antarctic and antarctic tourism. Table A.1 (below) gives the response details from the 6 craft included.

Table A1. 1: Source of Passenger Respondents (Ships)

| SHIP NAME                   | Notes  | Responses<br>(n=458) | Voyages<br>1992/93 | Voyages<br>1993/94 |
|-----------------------------|--|----------------------|--------------------|--------------------|
| Frontier Spirit<br>(Bremen) | - ice-strengthened cruise ship on visits through to Antarctica. Capacity of approximately 100-150. | 174                  | 3                  | -                  |
| Kapitan Khlebnikov          | - chartered Russian ice-breaker on visits through to Antarctica. Capacity of approximately 80-100. | 117                  | 1                  | 1                  |
| Pacific Ruby                | - small tour boat on exclusively subantarctic eco-tourism trips. Capacity of approximately 25-30.  | 128                  | 5                  | 3                  |
| Geomarine                   | - small tour boat on exclusively subantarctic eco-tourism trips. Capacity of approximately 25-30.  | 27                   | -                  | 2                  |
| Evohe                       | - charter yacht through southwest New Zealand and the subantarctic                                 | 5                    | -                  | 1                  |
| War Baby                    | - private yacht visiting the subantarctic  | 7                    | -                  | 1                  |

The circumstances of the voyages differed due to varying weather, schedules, tasks and personnel present, and problems due to last minute trip changes and cancellations. All this resulted in the questionnaire methodology often being applied on an unsystematic basis in most cases. These types of difficulties were anticipated, and on this basis the simple sampling strategy for achieving a reasonable sample size was to attempt to include every passenger possible. Despite these difficulties, a good sample size was achieved. Table A1.2 below details the patten of pre-visit and post-visit responses.

Table A 1.2: Survey Response (complete and partial)

| SURVEY RESPONSE                     | Responses |   |
|-------------------------------------|-----------|---|
|                                     |           | A total of 458 were sampled overall, and completed at least one of the two survey sections. |
| Completed Pre and Post-visit survey | 307 (67%) | The total who fully completed both pre- and post-visit survey sections.                     |
| Pre-visit component only            | 111 (24%) | The total of all the pre-visit sections completed was 418 (91%).                            |
| Post-visit component only           | 40 (9%)   | Total of all the post-visit sections completed was 347 (75%).                               |

This table shows that 458 visitors were included in the survey, with over 307 of these fully completing both the matched pre-visit and post-visit questionnaires. Some only completed the pre-visit section (111), while a few other completed only the post-visit section (40).

#### A.4 Notes on Analysis

Response frequencies and percentages for the whole sample were initially calculated and described. Then sub-samples were defined and compared for differences in their responses.

These sub-samples were based initially upon vessel size, to identify any patterns of response which may occur in association with different tour styles. To allow some comparison of the different responses from different styles of visitors, the vessels were grouped into "Large" and "Small" categories. The Frontier Spirit and Kapitan Khlebnikov comprised the "large" vessels while the remainder comprised the "small". Comparison of responses between these are shown in the text and appendices where appropriate. In addition, separate analyses were done of visitor responses on the three main vessels to provide extra detail of variations between different vessel types. The results of these comparisons are also noted in the text and presented in appendices where appropriate.

For the open-ended responses, comparisons were simply descriptive. For the Likert scale types of responses (e.g., score from 1-5), Chi-square tests were undertaken on the response frequency tables to identify whether significant differences were evident. Where the test indicated any differences, the interpretation of the nature of the difference was based upon viewing the percentage tables, and the mean scores. These gave an indication of how the responses differed.

Other non-parametric tests were considered (e.g., sign test, Mann-Whitney, Kolmogorov-Smirnov), but were not applied here as some data assumptions could not be met, or the tests gave results of limited practical application in this report. For more specific questions at a later point however, use of these tests is likely.

#### A.5 Survey Questionnaire

The pre- and post-visit survey questionnaires used for this research are attached to this appendix.



# SUBANTARCTIC ISLANDS VISITOR SURVEY

## PART 1. PRE-VISIT QUESTIONS

This survey is being carried out by the New Zealand Department of Conservation to gain a better understanding of visitors to the Subantarctic islands. You can help us by completing this brief Pre-visit questionnaire now, and a brief Post-visit questionnaire near the end of your trip. Both will be handed out and collected by the Department of Conservation representative on your voyage.

To help us **match** your **before and after-visit** responses, please write your cabin number, or other means of matching both parts (eg initials, symbols etc), at the top of each questionnaire when completed. **Your response will be strictly confidential.** If you have any questions, please ask the Department of Conservation representative.

By completing these questions, you will be providing information which will help ensure visitors have enjoyable experiences on their island visits, and will also be assisting in their conservation. Thank you.

1. Have you visited the Subantarctic, Antarctic or Arctic regions before?

NO, this is the first time

YES, once before    YES, 2-5 times    YES, 6-10 times    YES, over 10 times

● If YES, where have you been?

|  |                                       |                                  |                           |                          |                          |                          |
|--|---------------------------------------|----------------------------------|---------------------------|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/>               | <input type="checkbox"/>              | <input type="checkbox"/>         | <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| New Zealand<br>Subantarctic<br>Islands | Australian<br>Subantarctic<br>Islands | Other<br>Subantarctic<br>Islands | Antarctica<br>(Peninsula) | Antarctica<br>(Ross Sea) | Antarctica<br>(other)    | Arctic<br>Region         |

2. Why did you decide to come on this voyage?

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3. What aspects of the island visits do you think you may enjoy the most?

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4. What aspects of the island visits do you think you may enjoy the least?

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5. Please tell us a little about yourself so we can get a better description of visitors to the Subantarctic Islands (tick boxes and write in spaces below).

● AGE

- < 19 years
- 20-29
- 30-39
- 40-49
- 50-59
- 60 + years

● SEX

- Male
- Female

● OCCUPATION

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● HOME COUNTRY

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● Are you a member of any Conservation/Environment groups?  YES  NO

6. Please tell us how much you agree or disagree with the following statements, by circling the number that best represents your opinion.

| OPINION STATEMENTS   | Strongly Disagree | Tend to Disagree | Neutral | Tend to Agree | Strongly Agree |
|--|-------------------|------------------|---------|---------------|----------------|
| - there is no need for limits or regulations to control visitor numbers to these islands | 1                 | 2                | 3       | 4             | 5              |
| - visitors should be free to walk and explore wherever they want on the islands          | 1                 | 2                | 3       | 4             | 5              |
| - visitors should walk only on specially provided tracks                                 | 1                 | 2                | 3       | 4             | 5              |
| - visitors should view wildlife only from specially provided sites                       | 1                 | 2                | 3       | 4             | 5              |
| - information signs about island environments and wildlife should be provided            | 1                 | 2                | 3       | 4             | 5              |
| - basic toilet and shelter facilities should be available on the islands                 | 1                 | 2                | 3       | 4             | 5              |
| - some visitors should be allowed to stay onshore overnight in huts or camps             | 1                 | 2                | 3       | 4             | 5              |
| - when on the islands, people should be in a few small groups, not one big one           | 1                 | 2                | 3       | 4             | 5              |
| - visitors should have guides with them at all times while on the islands                | 1                 | 2                | 3       | 4             | 5              |
| - visitors should be allowed to get closer to wildlife than the 5 metre limit            | 1                 | 2                | 3       | 4             | 5              |
| - visitors should take all their own rubbish off the islands when they leave             | 1                 | 2                | 3       | 4             | 5              |
| - clothing/bags should be checked to prevent introduction of foreign plants/animals      | 1                 | 2                | 3       | 4             | 5              |
| - some wildlife should be available for close-up viewing and photography                 | 1                 | 2                | 3       | 4             | 5              |
| - all island visits should include nature education about the plants and wildlife        | 1                 | 2                | 3       | 4             | 5              |
| - all visitor groups should have their own safety equipment with them                    | 1                 | 2                | 3       | 4             | 5              |
| - visitors should be allowed to take small souvenirs as mementos of their visits         | 1                 | 2                | 3       | 4             | 5              |
| - meeting Conservation staff/Scientists is an important part of this trip                | 1                 | 2                | 3       | 4             | 5              |

Thank you for completing this Pre-visit questionnaire. The Post-visit questionnaire will be distributed to you near the end of your trip. Please check with the Department of Conservation representative if you have any problems or questions about this survey. Thank you for your help.



CONSERVATION  
TE PAPA ATgWHAI

# SUBANTARCTIC ISLANDS VISITOR SURVEY

Cabin no. \_\_\_\_\_

## PART 2. POST-VISIT QUESTIONS

This is the second part of the survey being carried out by the New Zealand Department of Conservation. Some questions are repeated from the first questionnaire, so comparisons can be made between what you expected and what you actually experienced. The responses you provide will contribute to the growing information base about the Antarctic and Subantarctic regions. Please check with the Department of Conservation representative if you have any problems or questions about this survey. Thank you very much for your help.

1. What were the most enjoyable features of your island visits?

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2. What were the least enjoyable things on your island visits?

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3. Do you think the restrictions placed on your island visits were reasonable?

YES

NO

(Comments on restrictions?)

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4. Please describe your satisfaction with the following list of island visit features, by circling the number that best represents how you felt about them.

| SATISFACTION WITH ASPECTS OF YOUR VISIT                 | Very Dis-satisfied | Dis-satisfied | Neutral | Satisfied | Very Satisfied |
|---|--------------------|---------------|---------|-----------|----------------|
| - the amount of time we had at the islands              | 1                  | 2             | 3       | 4         | 5              |
| - the rules and regulations that controlled our visits  | 1                  | 2             | 3       | 4         | 5              |
| - the onshore guiding we received from our trip leaders | 1                  | 2             | 3       | 4         | 5              |
| - all the different birdlife that we saw                | 1                  | 2             | 3       | 4         | 5              |
| - all the different plantlife that we saw               | 1                  | 2             | 3       | 4         | 5              |
| - seeing some particular rare plantlife/birdlife        | 1                  | 2             | 3       | 4         | 5              |
| - the historical locations and artifacts that we saw    | 1                  | 2             | 3       | 4         | 5              |
| - the organisation and planning on our trip             | 1                  | 2             | 3       | 4         | 5              |
| - the presence of man-made boardwalks/viewing sites     | 1                  | 2             | 3       | 4         | 5              |
| - our encounters with staff from the onshore bases      | 1                  | 2             | 3       | 4         | 5              |
| - getting close enough to view the wildlife             | 1                  | 2             | 3       | 4         | 5              |
| - the information given to us on the ship               | 1                  | 2             | 3       | 4         | 5              |
| - the information given to us while on the islands      | 1                  | 2             | 3       | 4         | 5              |
| - the explanation of rules and regulations of visits    | 1                  | 2             | 3       | 4         | 5              |
| - the group sizes we had when visiting the islands      | 1                  | 2             | 3       | 4         | 5              |

5. Do you think that your visits had any impacts on the places you went?  
(cross out the islands not visited)

|                   | YES                      | NO                       | COMMENTS |
|-------------------|--------------------------|--------------------------|----------|
| ENDERBY ISLAND    | <input type="checkbox"/> | <input type="checkbox"/> | _____    |
| AUCKLAND ISLANDS  | <input type="checkbox"/> | <input type="checkbox"/> | _____    |
| CAMPBELL ISLANDS  | <input type="checkbox"/> | <input type="checkbox"/> | _____    |
| SNARES ISLANDS    | <input type="checkbox"/> | <input type="checkbox"/> | _____    |
| ANTIPODES ISLANDS | <input type="checkbox"/> | <input type="checkbox"/> | _____    |
| BOUNTY ISLAND     | <input type="checkbox"/> | <input type="checkbox"/> | _____    |
| MACQUARIE ISLAND  | <input type="checkbox"/> | <input type="checkbox"/> | _____    |
| OTHERS ? _____    | <input type="checkbox"/> | <input type="checkbox"/> | _____    |