Tourism, Volunteers and Environmental Researchers: 
An Analysis of Participatory Environmental Research Tourism

Claire Ellis, BEd, BA (Hons), DipEd (Tas)

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CHAPTER SEVEN
MEMBERS OF THE FIELD CREWS

'These volunteers are the] pick of the bunch. They have made a commitment and are not just roped into it ... in short if you offered me eight people for a week and I could have anyone, Army, uni students, locals or anyone else, I would have [these volunteers]' (field crew member, 2003).

7.1 Introduction
This chapter examines the perceived goals of and benefits to the scientists, researchers and logistical staff that made up the field crew during one of the trips in the survey frame. The reasons that natural resource managers become involved with tourism and the perceptions of the outcomes are usually viewed at the agency or macro level (such as the environmental or economic impact of tourism on a national park). However, the growth of the PERT sub-segment appears to be limited by the supply of suitable trips and the involvement of natural resource managers is likely to be influenced by each individual's perception of their own work-related outcomes, their personal outcomes and possibly by other outcomes such as those accruing to their employer. Perceptions of individuals are analysed in this chapter. These individual views also contribute to the employers' or organisations' willingness to become involved in these trips, which will effect the supply of trips.

In the case of Landscope Expeditions, many respondents were employees of the agency, CALM, that was conducting the trip. But for the purposes of this research, the perspectives of members of the field crews were viewed separately to those of the agency. For both ease of description and to ensure that individual comments are not identifiable, all scientists, researchers and logistical support staff who were part of the surveyed field crews are termed 'respondents' in this section.

The method and the limitations of the research reported in this chapter are outlined in Section 7.2 and 7.3 respectively. Two surveys were conducted: a qualitative telephone interview and a quantitative email survey. The results are presented in Sections 7.4 and
7.5 respectively. The combined results from the telephone survey and the email survey are discussed in Section 7.6. Section 7.7 provides a summary of this chapter.

7.2 Method
The selection of the surveyed trips was outlined in Chapter 6. For each of the surveyed trips all the field crews who participated in the trip were considered within the scope of the survey. Usually three to five people went on the trip as leaders, researchers or logistical organisers and a total of 56 people were identified as having worked on the surveyed trips. Respondents included scientists, national park rangers, logistical support staff, university researchers, employees of CSIRO, PhD students, Government employees, members of not-for-profit organisations, commercial operators and people hired or included specifically to assist with a trip.

The surveying was conducted in two stages. Although there were minor variations, initially the organisation (or sometimes the trip leader) contacted the field crews, described the project (using the information sheet in Appendix 4) and asked whether they were willing to participate in the research. If the individual gave consent, contact details were forwarded by the organisation to me. The information sheet was sent again, with a request to arrange an interview time. Two members of field crews did not respond at this stage and were not contacted further. For all consenting field crews, a semi-structured telephone interview was conducted (see Appendix 5). One USA-based academic answered the same series of questions via email. The reasons for using a semi-structured approach were described in Chapter 3.7.2. Questions during the telephone survey were asked as topic headings and subsequent clarifying and probing questions were asked if necessary. A total of 32.5 hours were spent on the telephone interviewing these respondents and the interviews ranged from a minimum of 20 minutes to a maximum of 80 minutes and averaged 43 minutes (not counting the email interview). Extensive notes were taken during each telephone call and these were immediately transcribed into computer at the conclusion of the interview as recommended (Ezzy, 2002:70; Lofland, 1971:90).
At the conclusion of the interview, each respondent was asked whether they were willing to participate in the second survey (described in Section 3.7.2) that would be sent to them via email (or post) in the next few days. A copy of this survey is attached in Appendix 6.

Textual analysis on the transcribed telephone interviews was undertaken. The process used was the same as that described in Section 3.8.5. While the purpose of this research is to reveal the range of benefits, the aggregation of results also allows the more typical, or common, benefits to be discerned. A careful approach must be used (Silverman, 1993:59) quantifying text in this manner. The results are presented in an aggregated form and quotes are used to indicate the essence of individual comments. Quotes were selected to be representative, to show the range within a category, were selected across the three organisations and across the respondents.

All questions were asked in an open-ended manner. Multiple responses were permitted. Only the comments relevant to this research are included here. Responses to each question were grouped and tallied to determine common responses. As categories were aggregated, the number of respondents who made a response within that category was also noted. Because of the overlapping nature of the questions, comments mentioned by a respondent in one area may have been pertinent to another question, but were not necessarily repeated again by the respondent. A semi-structured style of interviewing was used to allow flexibility and questions were altered slightly if relevant areas had already been partially discussed. To provide a more complete view of all responses, comments by respondents were combined in the discussion section.

Significant amounts of textual material were examined before interviewing and these revealed aspects of the purpose of the trips and the goals. For instance, pre-trip material for participants usually documented the trip goals and work in detail (Earthwatch Expedition Brief’s for the surveyed trips were around 35-50 pages) enabling an understanding of each trip before the interview and enhancing the understanding of responses.
7.3 Limitations

This section extends the survey limitations already discussed in Section 3.10. Only people who participated in the field activities of the surveyed trips were interviewed. Past researchers, potential future researchers, and those involved in the design of the research or the subsequent use of the data, but not participating in the trip, were not included in this research. These people, plus researchers not involved in the program, may have different views regarding the use of these types of volunteer tourism trips to achieve research or personal goals. Examination of this wider group of stakeholders was beyond the scope of this project.

Because time limitations may have occurred during the interview process, preventing the discussion of later issues, the interview questions were ordered so all key areas were covered early. All respondents answered the core questions. Additional questions that would have been useful, such as the respondent’s view on why participants volunteered or joined the trip, were not included due to respondent burden. If respondents raised these issues themselves, their comments were included. Additional questions were also asked for respondents with certain organisations. For instance, Earthwatch field crews were asked to clarify the differences between corporate sponsored participants and retail participants (see Chapter 6) as the focus of this research was only on the retail, or paying, volunteer.

Comments also varied significantly depending on the role of the respondent during the trip. Some were principal researchers who had designed the trip. Others were asked to join at relatively short notice to assist with logistical aspects, including driving and catering, or undertaking PhD research. Only part of the research undertaken on the trip may have been relevant for some members of field crews. Generally, the principal researchers gave more detailed information concerning personal goals, goals of the organisation and the positive and negative issues surrounding the use of participants. Other field staff gave more information regarding the difference between using various types of volunteers in the field.
Some respondents had a long history of participating in PERT-style trips. Many discussed a range of issues to do with organising and running these trips, rather than specifically answering questions relating to the surveyed trip. While this was not the initial design or purpose of the interview, the range of comments was very interesting. The comments added significantly to gathering an understanding of the respondent's perceptions concerning issues involved in running these trips, results and changes over time. As these views altered the likelihood of the respondent becoming involved in subsequent trips, these discussions were continued, and added to the results.

Most respondents were supportive of the trips. However, it is acknowledged that scientists who do not support these trips are unlikely to have applied to conduct, or join a trip, and were therefore outside the focus of this research. As respondents were directly or indirectly working for the organisation during the trip, there may have been some positive bias in responses. Care was taken to minimise bias. Respondents were told the results would be aggregated and no individual would be identifiable. Most respondents appeared to speak quite freely about a range of issues concerning the trips.

7.4 Results of the Telephone Survey
Fifty-six people were identified as being within the sample frame for this research. Of these, 46 were interviewed, giving a response rate of 82%. Most of those interviewed had previously participated in other similar trips. However, seven respondents had only been involved in one trip (the trip within the survey frame) and an additional two respondents had limited previous involvement in similar trips.

7.4.1 Positive and negative aspects of using participants
Respondents were asked about the positive and negative aspects of using the volunteers, compared with being on a similar work trip without these type of volunteers. Comments relevant to the goals or benefits of the stakeholders were collated and grouped. The number in brackets indicates the number of respondents who made this type of comment, not the number of comments.
Positive aspects of using participants

Multiple responses were common and all respondents commented, resulting in 282 positive comments. Comments were grouped into three major response areas: work-related, stimulating and educational. The comments are listed below with indicative quotes.

Work aspects (a total of 145 comments from 46 respondents were received):

- Get work done (39) that otherwise wouldn’t be done, free labour or extra hands and eyes, so got more done, and attention to detail on long, boring jobs meant these jobs were achieved (6):
  ‘Numbers and eyes, my project needs a lot of hands and eyes and this multiplies results, clearly time is an outcome.’  
  ‘Positives are that we get a group of people very highly focused. We work hard at this. We subject them to cruelty – they do boring long hours of work day after day and they do this with good cheer, and are honest when they feel they didn’t do a good job – and we get an enormous amount of data of high quality … in two weeks of the expedition we get the same amount of data as four months of work by ourselves and in terms of investment, it’s incredible.’

- The dollars (19) that came from the trip meant trips could access remote places, and researchers could return again later (on their own):
  [Because of the dollars we] ‘checked new potential sites by boat.’
  ‘Can use … trips to lever other things like a reccy [reconnoiter] trip, or prior infrastructure needed.’

- Participants encouraged researchers to reassess their own views (14) or contributed additional skills or knowledge to the work output (13):
  ‘Their resources they bring are what we are interested in.’
  ‘Some are quite useful as they are very knowledgeable.’
  ‘[They] bring ideas into the field and it is not necessarily that one idea has really changed the course of study but in explaining things over and over again and discussing them in the field, it is positive for research as it is demanding of me as I constantly critically review what we’re doing and this is helpful. It sharpens wits and makes you question about what you are doing.’
  ‘A non-scientist’s perspective gives a reality check that can create new lines of thought, particularly if you don’t have the answer for them so they are very useful.’
  ‘Fresh eyes and opinions on your work.’
Stimulating time (117 comments were received from 45 respondents):

- **Met interesting people (30) with broad backgrounds, sometimes cross-cultural backgrounds:**
  
  'Meet interesting people with broad backgrounds.'

- **Personally developed by learning new skills or knowledge that was significant (21) and influenced the way they viewed or conducted their own work:**
  
  '[Your] own skills you learn and hone on these trips are transferable to other work.'
  
  'For me this made me look at myself and how I was interacting with people, made me look at myself and my attitude.'

- **High levels of motivation (13) were infectious and stimulated researchers to do more or examine area more widely:**
  
  'Time and enthusiasm they are willing to spend in the field is greater than paid staff.'
  
  'Very self-motivated people, makes it great to work with them.'
  
  'High levels of motivation are infectious.'
  
  'Most positive people I have ever met, people fed off each other.'

- **Conversations and diversity of tasks made it interesting and fun for staff too (12):**
  
  'Makes work enjoyable.'
  
  'A lot more fun with a mob of people around.'

- **Conversations were stimulating and (the researcher) gained a personal sense of worth in own work from interest taken by public in project or organisation (6):**
  
  '[You get a] personal sense of worth in your own work from the interest taken by the public in your project.'

- **Personal satisfaction derived from seeing the volunteers achieve, from the volunteers being excited about the work of the researchers, or in conservation generally (6):**
  
  'For us when we see their face when they hold their first [animal].'
  
  'I see volunteers learn about things they had no idea about.'
  
  'Volunteers can potentially have a learning, a once-in-a-lifetime, experience.'
  
  '[I get a] kick out of seeing people change and they do, they relax, come out of their shell.'
  
  'You have to stop and then realise how special this is for people [but routine for us]. You see their faces and their look, it's kind of good sharing this, seeing their faces, seeing them cry when they hold ... for the first time.'

Education of public and extension of community links (33 comments by 17 respondents):

- **Education regarding the project or wider research, conservation, or teaching participants to appreciate nature (17):**
  
  'Share our knowledge and the way it is received gives us energy to do more.'
• Strengthening community ties or bringing benefits to the community (5):
  'Positive in a community sense, [the trip is] working towards a common aim on a very valuable project.'
  'Local publicity, involvement of local people, awareness of international people coming to their own area ... regional self esteem can't be undervalued ... people sense their space is important and interesting.'

Respondents were very positive about the use of these participants as indicated by summary statements from two respondents; 'a totally win-win situation' and 'a very valuable exercise and very encouraging that people are prepared to pay. It is rewarding to see support for conservation and the work ... [and the impact] ... in the community.' One respondent stated the positive results varied considerably from trip to trip.

While most comments fell within the three broad themes identified above, some relevant aspects were raised by only one or a few respondents. For instance, two respondents thought these trips allowed them to access a group of people that would not normally be volunteers and another stated it was a way of creating new long-term volunteers.

Negative aspects of using participants

Multiple comments were possible and 196 comments were received from 45 respondents. Although this research did not focus on identifying mechanisms to ensure trip success, these responses allowed a more comprehensive understanding of the respondent’s perspective. Responses were categorised into three main areas: lack of work output, management issues and logistical issues and these are listed below with indicative quotes:

• Lack of work output (31):
  'Time taken to educate means we are slower but education is an important aspect.'
  'teaching slows you down.'
  'Managing people constantly and this can take your mind off your own work.'
  'Constantly have to double check so don’t lose things.'

• The volunteers are not selected by the research team so this can result in inappropriate physical fitness for the tasks and personality issues (27):
  'I spend a lot of time coaxing people through difficult times, sitting have cups of coffee and chocolate, there a lot of social work aspects.'
'Can't vet people in advance and a remote (site) is too difficult for some.'
'people have elevated views of their physical abilities.'

- Management and logistical issues (29):
  'The management of volunteers and shuffling of tasks is a negative but it isn't, as it is just part of the process.'
  'Constant demands on time is very tiring.'
  'Huge amount of work and on balance it is worth it but it cuts your private life.'
  'Managing a team of people takes a lot of time and energy.'
  'Reports and budgets and additional administrative work.'

- Other aspects (12):
  'Too many people can trample site.'
  'Needs to be to interesting place to sell.'
  'If site is too remote you waste too much travel time and so the scientific output is limited.'
  'People walk off with knowledge and spread it but it is lost to Department and district – cumulative knowledge is important.'
  'Need to organise so far in advance it introduces inflexibility …seasonal issues change results markedly.'

Many comments were quite specific and concerned the identification of appropriate tasks that were labour intensive but not physically taxing, involved spending time in one location and were within the participant’s capabilities. Negative comments were often qualified and respondents felt that provided the potential negative aspects were identified and discussed, good planning of an effective task or trip design would enable the potential negatives to be minimised. For instance, while participants did not have the same level of skills and knowledge as rangers, participants helped record measurements taken by experts and hence could speed up the overall process of data gathering. However, other aspects concerning the use of volunteers could create time inefficiencies including shorter workdays (than trips with no PERT-style volunteers) and more complex logistics. The overall outcomes varied depending on the organisation surrounding the trip, but generally additional hands and eyes meant more work could be achieved. It was also noted that as participants were inexperienced and observed differently than trained researchers, their work output was different, but this could be beneficial, and not detrimental, if planned properly.

The design of the tasks and projects was crucial to ensure quality output. While logistics became more difficult due to the number and type of participants, these participants also
helped with navigation, changing tyres, contributed to easing logistical aspects and made the trips interesting and stimulating for the researchers. A number of researchers also noted that the more experience they had had with volunteers and with running trips, the more the positives outweighed the negatives. Their own skills in logistics, task design and team dynamics improved with practice. For instance, an experienced researcher stated:

'Little things that new [researchers] see as negatives are because they themselves haven't learnt about getting the logistics together, and [got] skills in people management. If you'd asked me [this question about negative aspects] 10 years ago I might have said more.'

Discussion on positives and negatives

Overall, the trips were considered successful because they allowed field work to be undertaken that otherwise may not have been feasible due to labour and/or financial aspects. The general view, as stated by one respondent was, 'the positives are more than the negatives, otherwise we wouldn't be doing it.' As another respondent stated, 'Once you have decided to take a volunteer trip then there are no negatives, as the sacrifices have been made. Then you plan a trip that can be done with volunteers.'

7.4.2 Goals

All respondents were asked about their perspectives of the scientific goals of the trip, personal goals they may have had for participating in the trip and any additional goals for operating these trips. These sets of goals are dealt with separately below.

Scientific goals

Most trips had multiple scientific goals of varying relevance to different respondents. The scientific goals were usually well described in the marketing of the program and each respondent was told they did not need to re-state these goals, but were asked to add anything relevant that may not have been in the printed matter. Thirty-eight respondents (83%) thought the scientific goals of their trip were achieved and often stated this emphatically. Three key areas were identified. The additional funds provided by the trips
allowed exploratory work to be done, information was obtained from areas rarely visited and the work required considerable numbers of hands and eyes and the additional labour meant work was being achieved that was not possible (or rarely possible) to fund through alternative means. The use of the funds as seed money, or to assist in the provision of wages for full-time staff, was also reported as supporting the achievement of scientific goals. Five respondents stated the results (or part of them) would contribute data to a PhD or Masters research program, they were undertaking.

Some respondents viewed the science involved with the trips as essential work they had to conduct (6). Others stated it was worthwhile research, but not a key part of a larger project (2). An advantage of these trips was that unlike ‘normal’ work trips that were usually very focused on achieving specific tasks, this type of trip had more exploratory elements. Because of this, it was possible to discover species that may not have otherwise been found, and to have unexpected results.

**Personal goals**

Respondents were asked whether they had any personal goals for wishing to join the trip. All respondents indicated these goals were achieved. Multiple responses meant 126 comments were received and these were collated. Comments included:

- Meeting new people, the personal interactions, and development of new friendships (22):
  - ‘Getting to know people of different cultures.’
  - ‘Meeting new people.’
  - ‘It is personally motivating and energising.’

- The chance to share their knowledge, teach the public about issues, raise awareness of an area and the satisfaction of influencing people (20):
  - ‘People are not usually my thing ... but ... we make a little difference in people’s lives.’
  - ‘The satisfaction from other people getting satisfaction [from my work].’
  - ‘I enjoy educating and maybe I am a frustrated teacher.’
  - ‘Getting others enthused on conservation.’
  - ‘[Our] objective is to help people try to understand, and to introduce them to the life of scientists, tell them about problems we’re dealing with, to a scientist it is all-consuming often, the role of science.’
  - ‘To teach people about the environment, habitat, ecosystems, and environmental resources we need to live.’
The ability to get to an interesting or new location, in an area they enjoyed, or with species they enjoyed (18):

- ‘Chance to see another conservation area.’
- ‘I love arid shrub land sites.’
- ‘To get out camping.’
- ‘It’s a great location.’

Being able to get their work done (18):

- ‘This work was part of my job and one of my goals is to do my job well.’
- ‘Getting things done we couldn’t do otherwise.’

Personal learning (16):

- ‘[It is] challenging to operate in environment like this and run our own side and look after people. It’s a big motivation - the challenge.’
- ‘Get exposure to new ideas and new concepts.’
- ‘Learned a lot about fauna on the trip, I didn’t have a lot of experience in this area so I was interested in seeing the scientific output.’

Learning from each other in a team environment was highly stimulating (12):

- ‘Learned new approaches from [another researcher on the trip].’

Gaining a personal view on how the trips worked (7):

- ‘I wanted to see how the trip works.’

Developing personal communication skills (4):

- ‘Develop my own communication skills.’

The trips benefited their career development (4):

- ‘For my CV, to have worked with different animals, the type of work, it helps professionally.’
- ‘Professionally get to pick [another researcher’s] brain and talk on issues, to gain training.’

In summary, personal goals for joining the trips included the varied mental stimulation that was derived, the achievement of work goals that were personally important to them, the friendships and bonding with participants and with other staff, the ability to extend their own learning and experiences, and to communicate to the public about conservation or scientific aspects they personally viewed as important. Aspects were portrayed in different ways. For instance, one respondent stated he initially was purely work focussed and had no additional personal goals and, ‘to start with no, [I was] not enthusiastic about it. I am a sour old bastard who would much rather be left alone, but
[it] is impossible to stay this way when you are surrounded by a mob of enthusiastic and positive volunteers’.

Respondent perceptions of organisation goals
Respondents were asked about whether there were any broader goals for being involved with these trips, such as those associated with the organisation they work for (not including the scientific goals already discussed). An organisation-related goal was not always applicable, for instance, one person was in between jobs when they undertook the trip. Respondents indicated the comments were considered to have been achieved, or at least partially achieved. Thirty-four respondents (74%) made comments and these included:

- Education of the public about the project/organisation’s work and management (25):
  ‘Good PR for organisation to be with conservation group.’
  ‘Brings credit to us for our partnership with a well-known international organisation – it creates stability and credibility for our project.’
  ‘Research grant brings recognition to our institution.’

- The additional income stream it achieved (17) and the free labour aspects of volunteering (4):
  ‘It is a way to fund the project.’
  ‘The dollars.’
  ‘Free labour to get the job done.’

- Education of the public about the area, species or importance of science and conservation (11):
  ‘A mechanism for the public to learn about [our] work in a manner that is not seen as a propaganda exercise.’
  ‘Advocacy, knowledge about the species.’
  ‘Increases public knowledge of science.’
  ‘The trips increased the sense of ownership and responsibility of the participants.’
  ‘[The trips] were an investment for the future [allowing] old attitudes of scientists to change and opening up aspects to the lay person.’

- Community relations (7):
  ‘Helps us carry out obligations to community.’
  ‘Increases the community appreciation and understanding of [our] work.’

- Broader recognition from media coverage, publications, speaking engagements (5):
  ‘Stories are often written up in the media.’
  ‘Gave international benefits and contacts.’
In summary, 74% of respondents stated that in addition to the scientific goals, there were additional broader goals for operating trips that accrued benefits to the organisation they worked for. These goals included educating the public about the organisation’s work or about the project, educating the public concerning conservation or more specific aspects, and educating the local community in the area and forging better links. The financial contributions and, to a much lesser extent, the labour the trips provided, were also important.

7.4.3 Repeat volunteers versus first-timers
Respondents were asked whether there was a difference between volunteers who had already undertaken a previous trip with the same organisation (not necessarily the same trip) and volunteers attending for the first time. The purpose of this question was to establish whether repeat volunteers were believed to have skills, knowledge or abilities that could be utilised in different ways compared with first-timers, or whether there were other perceived differences.

Five respondents did not feel they had sufficient knowledge on this to make a comment. Twenty-one respondents indicated there were not large differences. Seven of these respondents noted the differences between participants were based on their backgrounds or individual characteristics, and not whether they had been on a previous trip. Examples of excellent participants who had joined multiple trips and had skills as good as a technical officer were cited, as well as examples of repeat individuals who took photographs and enjoyed trips as an educational holiday rather than contributing significantly to the work. Volunteers who had returned to repeat on the same trip (not just with the same organisation) were usually considered very useful. These people were
already familiar with the specific procedures of that research project. Thirty-one respondents made comments. Grouped responses are presented below.

- Repeaters were more familiar with the generic attributes of the trips making operations a little smoother (23), although four respondents indicated that by the end of the trip this mattered less than the individual commitment to help:
  ‘They talk to other volunteers and support them.’
  ‘Serial repeaters know what they are doing. [They] require as much direction with research as everyone else, but have increased self sufficiency, find ways of contributing, [are] more professional in volunteerism ... and know what will be expected of them, have suggestions often on logistics around camp. They are more in control of the situation than first timers.’
  ‘Repeaters are more tolerant of camp and field conditions. Ours is not bad ... but new people are challenged by it.’

- Repeaters were not as enthusiastic as new participants (6) although each respondent qualified this and indicated it had no impact on the work. Two did not portray it as either positive or negative:
  ‘Some volunteers have been on a lot of projects, over 10, and are often more complacent about work, not as eager anymore and they do the job reasonably well and are methodical but have lost the spark of being new to it ... new people spark and jump in boots and all. The amount of work output is the same ... just subtle differences in attitude.’
  ‘We call them naive and repeat. The enthusiasm is different, for repeat, and I mean more than 10 or so ... trips. They are more level-headed, that doesn’t mean they don’t get excited about animals, but they don’t get emotional about being in the bush with animals or research.’

- After a participant had been on several trips, training needs decreased (3):
  ‘[They] might have done radio tracking before and so pick things up quicker and have done some of that type of work already. The differences are huge generally. They understand how to collect data.’
  ‘Generally the skills they bring to the trip is the willingness to do repetitive tasks, but repeaters know this as they are more familiar with science, and they know it is repetitive, and we don’t have to explain how important it is all the time to these people.’
  ‘Yes there is a difference. They are more confident and have a background in the tasks needed to be done and so become like assistant leaders.’

- Respondents asked the repeaters about previous trips to gain ideas to improve their own trips (3):
  ‘We quiz them about what they did on other ... trips and some things we can learn from.’
  ‘Experienced [trip repeaters] provide a perspective of the nature of the trip experience, of me, and the RA [research assistant] and of the sleeping, eating, toilets conditions relative to other ... trips, and this is valuable and we often ask them outright.’
Three sets of negative comments were received.

- Repeaters compared the current trip with previous ones and made negative comments that decreased the enjoyment of the current trip (6):
  
  ‘Repeaters can also be very annoying as they compare this trip to previous ones and ... make all the other volunteers feel inexperienced.’
  
  ‘People who have done it before have more expectations.’
  
  ‘[Repeaters have] a lot of preconceived ideas on what is going to happen, other ... trips are similar to each other, but not similar to ours. Our environment is different and [repeaters] come and do not expect it to be as hard as it is.’

- One of the organisation goals was to promote or improve public understanding of the organisation’s operations. Repeat people already were aware of at least some aspects, so benefits may be lower (3):
  
  ‘Repeat people already understand [the organisation] and what it is trying to achieve more.’

- Repeaters tended to be older and less physically able (2):
  
  ‘Repeaters tend to be elderly ... and age and physical abilities come into it.’

7.4.4 Differences between types of volunteers

Respondents were asked about previous experiences with other types of volunteers in the initial stages of the interview to help place their subsequent comments regarding this type of volunteer trip in context. Further in the interview, respondents were asked to compare the volunteers that were the subject of this research, with various other types of volunteers used by the respondents. This question provided insights concerning why respondents had chosen to be involved with these volunteer trips (as opposed to using other types of volunteer trips to achieve their goals). The question was used to develop further discussion on goals or benefits for the respondent.

Most respondents had experience using a variety of types of volunteers as well as the organisation case studied. Green Corps, Conservation Volunteers Australia (see Section 5.4.1), technical college or University students, associations such as the Wildflower Society or the Naturalists Club, and local community volunteers, were the more common groups mentioned. Responses to this question varied due to two aspects. First, it depended on the respondent’s previous experience with other volunteers. Most had considerable experience and were comfortable answering the question. Others qualified
their comments and made a comparison with a specific type of volunteer. In these cases, the comparison is mentioned here (unless it revealed an individual’s identity). The second aspect concerned the difficulty in identifying differences between volunteer types because of differences surrounding the design of trips.

Six respondents felt they were not able to make comments as they had insufficient experience with other types of volunteers. Fourteen respondents felt all types of volunteers were similar and another seven stated observed variations were based on individual differences and could not be categorised by organisation (or style of volunteer program) the volunteer had chosen to participate through. One researcher summarised the similarities shared by different volunteer types as a love of the outdoors, dedication to the general cause of the environment and willingness to do some sort of physical work. Another respondent stated that the similarity between all volunteers is that they, ‘all believe an individual can make a difference. They set an example, start doing it, [and] they have a shared perspective’. Another respondent stated, ‘[using] all volunteer groups involves managing different personalities, juggling different people’s personalities and their needs, with your own goals’.

Thirty-one respondents noted differences. The motivations of different types of volunteers were different (13) and this impacted on the enthusiasm of the volunteers (11). Four respondents extended this to say the high levels of enthusiasm with this type of volunteer meant the volunteers remained more focussed on the work, and often for longer. Not all respondents agreed though. For instance:

‘There are major differences between [local] volunteers and [these participants. These are] so motivated and positive, the most amazing group of people, really happy and they wanted to be there, especially the younger people. It was the most amazing trip and people had the time of their life, and said so, and would love to come back. They were much more motivated, really focused on the work at hand. Other volunteers have home pressures and are not as motivated and it’s harder to get them to do things. They are not as dedicated and [this trip] was more life experiences for people.’

‘Uni students, after day four or day five, get bored doing the same thing everyday, but [our volunteers] are still enthusiastic.’

‘Under-grads were 19-20 year olds, some were really good but others were 19-20 year olds, and how should I say this, were more interested in getting life experiences, not the science.’
Bushcare and Landcare volunteers have passion. [These volunteers] are interested but don’t have same passion.

Volunteers on the surveyed trips were generally older than other types of volunteers (6). The implications, according to one respondent, were threefold: maturity was greater; fitness was lower; and as they paid more for the trip, the expectations were higher. The same respondent also noted these volunteers tended to be ex-professional people with a high desire to learn. These sentiments were supported by other respondents who noted the differences as, maturity (2), work-related fitness issues (9), the high cost of the trips creating higher expectations compared with other types of volunteers (11) and the desire to learn being higher (6). Participants were well-educated and generally were well read, knowledgeable and interested in the area prior to arrival (7). Different respondents expanded these comments in several ways. For instance, two respondents commented that the age factor meant these volunteers brought life experiences with them that were often useful. Another stated that once a task is explained, the participants grasped it almost immediately, reducing training and supervision time compared with other volunteers. Instead of a teaching emphasis, learning was facilitated. Because of the higher fees associated with these trips, other respondents stated this altered who could come on these trips (2). The fees meant more remote areas were accessed than with any other volunteer group (4) and two others stated the paid aspect increased the participant’s expectations concerning participation and learning or meant there was a sense of being ‘on holiday, and want(ing) the touchy feely, exciting stuff.’

Specific comparisons with post-graduate and under-graduate students were made by a number of respondents. Nine respondents mentioned the importance of providing work experience to students or the value of having students as volunteers. Eight respondents mentioned the problems with students and stated a preference for PERT-style volunteers. These views were sometimes strongly given and comments included:

‘Students and graduates get very little field experience within their science degree and the opportunity [we] gave these [students] was critical, not only for the individual seeking to compete in the job market but for the broad education of these students.’

‘Non-trained volunteers [in field biology] can be good, trained [students] think they know what they are supposed to be doing, but don’t.’
Comments concerning work output varied considerably but generally, most other types of volunteers were considered to be worked harder with more physical tasks. For instance, one respondent noted participants did not have to work on the trip and may not undertake significant 'real' work, but their contributions were important and allowed significant amounts of 'real work' to be done. Not all respondents agreed. For instance, another respondent specifically mentioned the long hours worked by these volunteers due to their high level of commitment and high work output that resulted from this.

In addition, Earthwatch team members were asked about any perceived differences between people who paid for their own trip (retail) and those who had been sponsored by their employer (corporate). Self-paying volunteers were considered likely to have spent time researching and choosing the trip and this created expectations but also high motivation (6), and these volunteers were often already interested in environmental areas (5).

In summary, three key areas were highlighted. The dollar contribution made by participants was significantly different from other volunteers. Because of this, the trips attracted older people who were utilised in different ways to other volunteers and were generally less able to do long, physically tough work. Trips also generally attracted well-educated, highly motivated, interested participants who wanted to learn. Volunteer expectations were also different as trip marketing varied significantly between different types of volunteering programs.

7.4.5 Additional comments

All respondents were given time at the end of the interview to raise any other points they felt were important or relevant but had not yet been covered. Because of the semi-structured nature of the questioning, and depending on time and respondent burden, some respondents were asked additional questions. Comments relevant to this research are included here.
Six respondents commented on why they felt participants joined the trip. People who came on these trips were already very well travelled and came to see new species (often close up), new places and to learn (3). Some also came specifically to help scientists and contribute (2). One scientist noted that the participants are generally older and had done well (financially) in life and they wanted to put something back and do something for nature and ecology. Another stated, volunteers see themselves on other ecotourism holidays as ‘costly voyeurs’ and join these trips because ‘they want more, they want to personally, ethically and morally do more, not just be consuming’. It was also noted that volunteers come to learn specific skills they wish to apply in their own projects (implying serious leisure aspects discussed in Section 2.3.4 and examined further in Chapter 8) or to have a break from their own work.

Some respondents emphasised the importance of these trips to volunteers and noted the trips can be life-changing experiences for participants (3), and the realisation of how much volunteers get out of the trips was personally very rewarding for members of the field crews (4). Specific examples of volunteers who had undergone considerable development during the trip, or contacted the respondent later to tell them of changes they had made because of participation in the trip (including new jobs or career paths) were given to support these comments. Volunteers were considered to be well-educated and probably already conservation-friendly (4) but despite this, gained an increased understanding of specific issues from the trip (3).

Volunteers may be attracted to different trips for different reasons. For instance, flora trips may have attracted more conservation-minded people and fewer adventure-oriented people wanting to get somewhere new (1).

These types of trips were considered to potentially enhance personal, organisational and project recognition. Media coverage associated with the trips provided one type of recognition. The scientific outputs the trips contributed to, and the acknowledgement of
the difficulties and skills required to run these trips, were additional types of recognition noted.

7.5 Email Survey

After the telephone interviewing of the 46 respondents, each agreed to participate in an email survey and 34 surveys were returned (74% response rate). Respondents were asked to indicate the level of relevance of 16 potential reasons they had for using participants on the surveyed trip. An ‘other’ category was also included. A scale of 1-5 where 1 = ‘very relevant’ and 5 = ‘not relevant’ was used. Table 7.1 shows the results and associated means and standard deviations. A low mean indicates the reason was relevant. The most relevant reasons were ‘raise awareness of issues’, ‘needed the extra labour/hands’, ‘to increase understanding of role of science’, ‘raise awareness of species’ and ‘to change attitudes and behaviour of public’.

The reasons of least relevance were ‘program funding needed a longer time frame than grants allow’, ‘to help support the local community’, ‘asked to by employer’, ‘this form of funding has less bureaucracy than alternatives’ and ‘wanted more control over funding than the grant process allows’. The same set of survey questions was used for each case study, so that any variation in responses between organisations could be identified. Most items were similarly ranked but ‘to increase the understanding of role and activities of agency’ was rated second by Landscape Expeditions respondents (mean=1.75, sd=0.86), but fifteenth by Earthwatch respondents (mean =3.94, sd=1.35). As most of the former group of respondents worked permanently for that organisation, the difference in result was not surprising.
Table 7.1 The relevance of potential reasons for members of the field crews to use volunteers for this trip, 1= 'very relevant' and 5= 'not relevant'

<table>
<thead>
<tr>
<th>Reason</th>
<th>n</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raise awareness of issues</td>
<td>34</td>
<td>1.88</td>
<td>0.88</td>
</tr>
<tr>
<td>Needed extra labour/hands</td>
<td>34</td>
<td>1.88</td>
<td>1.01</td>
</tr>
<tr>
<td>To increase understanding of role of science</td>
<td>34</td>
<td>1.94</td>
<td>1.13</td>
</tr>
<tr>
<td>Raise awareness of species</td>
<td>34</td>
<td>2.03</td>
<td>1.00</td>
</tr>
<tr>
<td>To change attitudes and behaviour of public</td>
<td>34</td>
<td>2.35</td>
<td>1.10</td>
</tr>
<tr>
<td>Unable to get funding through alternative means</td>
<td>33</td>
<td>2.76</td>
<td>1.37</td>
</tr>
<tr>
<td>Social development – increase skills and abilities of public</td>
<td>34</td>
<td>2.79</td>
<td>1.09</td>
</tr>
<tr>
<td>Raise awareness of location</td>
<td>34</td>
<td>2.88</td>
<td>0.95</td>
</tr>
<tr>
<td>Enthusiastic new faces to work with</td>
<td>34</td>
<td>2.88</td>
<td>0.84</td>
</tr>
<tr>
<td>To increase the understanding of role and activities of agency</td>
<td>34</td>
<td>2.91</td>
<td>1.58</td>
</tr>
<tr>
<td>Gain the varied skills of volunteers</td>
<td>34</td>
<td>2.97</td>
<td>1.11</td>
</tr>
<tr>
<td>Improve political push for subject</td>
<td>34</td>
<td>3.18</td>
<td>1.19</td>
</tr>
<tr>
<td>Program funding needed a longer time frame than grants allow</td>
<td>32</td>
<td>3.56</td>
<td>1.44</td>
</tr>
<tr>
<td>To help support local community</td>
<td>33</td>
<td>3.70</td>
<td>1.19</td>
</tr>
<tr>
<td>Asked to by agency/ told to by employer</td>
<td>33</td>
<td>3.79</td>
<td>1.43</td>
</tr>
<tr>
<td>This form of funding had less bureaucracy than alternatives</td>
<td>32</td>
<td>3.91</td>
<td>1.06</td>
</tr>
<tr>
<td>Wanted more control over funding than the grant process allows</td>
<td>32</td>
<td>3.94</td>
<td>1.08</td>
</tr>
</tbody>
</table>

Respondents were asked to indicate the extent of their satisfaction with the outcomes for the same set of reasons using a scale of 1 to 6, where ‘1’ was ‘fully satisfied’ and ‘6’ was ‘not relevant’ (except the reason ‘asked to by agency / told to by employer’ was removed as satisfaction was not considered relevant). The means and standard deviations are show in Table 7.2 with ‘not relevant’ removed. The number of respondents who classified the reason as ‘not relevant’ is shown. Overall, all reasons received reasonably high satisfaction scores with the highest being the categories, ‘needed extra labour/hands’, ‘to increase understanding of role of science’, ‘enthusiastic new faces’, ‘to increase the understanding of role and activities of agency’, and ‘to raise awareness of the location’. The reasons that received the lowest scores of satisfaction were ‘wanted more control over funding than the grant process allows’ and ‘improve political push for subject’. Again there was some variation according to organisation. ‘To change the attitudes and behaviours of the public’ was rated second by Landscape.
Expeditions (mean = 1.60, sd = 0.51) and thirteenth by Earthwatch researchers (mean = 2.18, sd = 0.53). Missing data was a problem for some categories, and this could indicate a lack of relevance.

Table 7.2 Satisfaction with the outcomes of the trip/s by members of the field crews

<table>
<thead>
<tr>
<th>Category</th>
<th>n</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>'Not relevant'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needed extra labour/ hands</td>
<td>33</td>
<td>1.52</td>
<td>0.67</td>
<td>1</td>
</tr>
<tr>
<td>To increase understanding of role of science</td>
<td>33</td>
<td>1.70</td>
<td>0.59</td>
<td>1</td>
</tr>
<tr>
<td>Enthusiastic new faces to work with</td>
<td>31</td>
<td>1.71</td>
<td>0.64</td>
<td>2</td>
</tr>
<tr>
<td>To increase the understanding of role and activities of agency</td>
<td>24</td>
<td>1.79</td>
<td>0.72</td>
<td>9</td>
</tr>
<tr>
<td>Raise awareness of location</td>
<td>29</td>
<td>1.79</td>
<td>0.73</td>
<td>5</td>
</tr>
<tr>
<td>Raise awareness of species</td>
<td>34</td>
<td>1.79</td>
<td>0.59</td>
<td>0</td>
</tr>
<tr>
<td>Gain the varied skills of volunteers</td>
<td>30</td>
<td>1.80</td>
<td>0.76</td>
<td>4</td>
</tr>
<tr>
<td>Raise awareness of issues</td>
<td>33</td>
<td>1.82</td>
<td>0.53</td>
<td>1</td>
</tr>
<tr>
<td>To change attitudes and behaviour of public</td>
<td>32</td>
<td>1.91</td>
<td>0.59</td>
<td>2</td>
</tr>
<tr>
<td>Social development – increase skills and abilities of public</td>
<td>32</td>
<td>1.91</td>
<td>0.78</td>
<td>2</td>
</tr>
<tr>
<td>Unable to get funding through alternative means</td>
<td>21</td>
<td>2.19</td>
<td>0.93</td>
<td>11</td>
</tr>
<tr>
<td>To help support local community</td>
<td>18</td>
<td>2.28</td>
<td>0.96</td>
<td>15</td>
</tr>
<tr>
<td>Program funding needed a longer time frame than grants allow</td>
<td>16</td>
<td>2.44</td>
<td>1.03</td>
<td>16</td>
</tr>
<tr>
<td>Improve political push for subject</td>
<td>22</td>
<td>2.45</td>
<td>0.74</td>
<td>12</td>
</tr>
<tr>
<td>Wanted more control over funding than the grant process allows</td>
<td>11</td>
<td>2.73</td>
<td>0.79</td>
<td>21</td>
</tr>
<tr>
<td>This form of funding had less bureaucracy than alternatives</td>
<td>14</td>
<td>2.86</td>
<td>0.86</td>
<td>18</td>
</tr>
</tbody>
</table>

The overall satisfaction level for an individual concerning the use of volunteers on a trip will depend upon the importance, or weight, the individual places on each reason (and other relevant factors). For instance, if a potential reason was identified as 'very relevant', or 'relevant', as a goal for the trip, it is more significant whether this goal was thought to be achieved or a high level of satisfaction was recorded as an benefit, than if the goal was seen as 'not really relevant', or 'not relevant' for that respondent. Consequently, for each respondent the goals and satisfaction with outcomes for each reason were cross-referenced.

If a potential reason for using volunteers on the trip was rated as 'very relevant' (1), or 'relevant' (2) in Table 7.1, the level of satisfaction with the outcomes for that reason
were examined. Items that scored a '3' (partly satisfied), or lower, were recorded. Seventeen '2-3' combinations ('relevant' as a goal and 'partly satisfied' as an outcome) were recorded and eight '1-3' ('very relevant' as a goal and 'partly satisfied' as an outcome) were recorded from the 417 combinations. Twelve respondents (35% of the respondents to this survey) scored reasons they perceived as relevant or higher, as partly satisfied or lower. No 'very relevant' or 'relevant' reasons received a 'hardly satisfied' or 'not satisfied' score. The reason that received the most scores was 'social development – increase skills and abilities of public' (three sets of 2-3 combinations).

Questions were asked about the validity, replicability and quantity of data obtained on the trip and the pre-coded responses were 'no problem', 'minor problems', 'major problems' or 'not relevant'. Most respondents indicated there was 'no problem' with the data in these areas (62%, 47% and 68% respectively) and only one respondent noted major problems with replicability. Two respondents stated major problems with quantity.

Socio-demographic data were also collated to see whether there appeared to be any differences in responses based on age, gender, level of education or year of qualifications. Fifty-six per cent of the respondents were male and 65% had undertaken post-graduate studies. Ages were quite evenly spread and 44% of the respondents were 45 years or older. Sixty-one per cent had finished their most recent qualifications in 1991 or later. Age was grouped into two categories 'under 45 years' and '45 years and older'. Education was grouped binomially into 'up to and including undergraduate qualifications' and 'undertaken post-graduate qualifications'. Each of the reasons listed in questions 1 and 2 were also converted into a binomial grouping consisting of the first two categories ('very relevant and relevant' or 'fully or mostly satisfied'), and the remaining three (not relevant was excluded). Chi-squared tests and cross-tabulations were run so examine using these new variables as well as gender. Low numbers meant no statistical significance was discernable and a 25% cut-off was used to analyse cross-tabulations.
Older respondents rated the following reasons more highly: raising awareness of the species, program funding needed a longer time frame than grants allowed, enthusiastic new faces to work with, and gain the varied skills of volunteers. Older respondents were more satisfied with gaining the varied skills of volunteers. Older respondents rated the reason 'asked to by their agency' much lower than younger respondents. Respondents with a lower education level rated the following reasons more highly: raising awareness of the species and raising awareness of the location; enthusiastic new faces to work with; to increase the understanding of the role and activities of the agency; and to increase the understanding of the role of science. Satisfaction was very similar however, but the more highly educated group rated to help support the local community higher. Few gender differences were noted although females rated raising awareness of a location higher and rated lower the extent they were satisfied with changing attitudes and behaviour of the public, and improve political push for subject.

Rather than responses being associated with socio-demographic variations, they may vary depending on the role of the member of the field crew. Those who had a key role in the construction and design of the trip were identified. Although these people tended to be more highly educated, older and male, none of these factors were statistically significant. To determine whether this group had different reasons for joining or satisfaction levels with the results, chi-squared tests and cross-tabulations were run. Low numbers meant no statistical significance was discernable and a 25% cut-off was used to analyse cross-tabulations. Members who had a key role in the trip construction and design were more likely to rate gaining the varied skills of volunteers as an important reason for joining and all stated high levels of satisfaction with raising awareness of a location.

7.6 Discussion - Trip Benefits
The results sections (7.4 and 7.5) described the responses given by each respondent to each question, but at times, relevant comments were raised by respondents in different places. All the results of the telephone interviews and email surveys were combined to determine the range of perceived benefits of these trips for members of the field crews.
The number of respondents who commented in each area is indicated. Four key areas emerged. Care was taken to distinguish between goals and actual benefits described by respondents.

7.6.1 Perceived goals and benefits for field crews

The primary reason these trips were run was to conduct field work that would not otherwise be possible, would not be possible in the same format, or would be difficult to achieve through other means. In the interviews, the increased work output was mentioned by all respondents except one (98%) as a positive reason for having volunteers on the trips. Although this style of volunteer tourism is usually considered to be adopted because of budgetary issues, the requirement for large numbers of workers was considered more important by the field crews in this research. The extra labour was mentioned by 33 respondents (72%) in the telephone interview and rated second of the 16 potential reasons respondents used volunteers and first in terms of satisfaction. Gaining the varied skills of volunteers was rated seventh in terms of satisfaction in the email survey. The ability to gain dollars for research was mentioned by 29 respondents (63%) in the interviews. The additional income allowed more remote sites to be accessed, exploratory work to be done and hence new data to be collected and this was a positive aspect mentioned by 23 respondents (50%) in the interviews.

The second key benefit identified was education of the public. Forty respondents (87%) considered this important and mentioned it in the interviews under organisation goals (25), personal goals (20) and a positive aspect of having volunteers on the trips (20). Eight of the potential reasons for using volunteers in the email survey related to educating or influencing the public in some way. Apart from 'improve political push for subject', these all rated in the top 10 for both reasons for undertaking the trip and satisfaction. During the interviews, 24 respondents (52%) mentioned specific aspects relating to influencing the knowledge, views, attitudes or behaviours of the paying volunteers as an observed benefit (not a goal) of the trips. Examples were given, such as, participants becoming long-term volunteers, changing jobs, and applying the skills or knowledge they had gained on the trip at home as local volunteers.
The third key benefit related to a range of aspects that respondents felt they personally derived from the trip and described as personal goals and positive aspects of having volunteers on a trip. Personal learning was mentioned by 39 respondents (85%). Twenty-eight respondents (61%) stated being involved in the trips had altered their own perspectives, views or way they approached their work. The different perspectives of volunteers and discussing their own work, or area of research, with members of the public stimulated some respondents to think aspects through in a different manner. It altered the way respondents viewed or conducted certain aspects of their own work, and led to personal learning that was considered significant. Examples of this type of personal learning included both technical aspects (construction of databases, improved design of a collection process) and wider aspects, such as views on land management.

Seven respondents (15%) stated it helped their curriculum vitae or future job prospects and another two spoke of the application of skills learnt during the trips, to other aspects of their work. These skills came from working with, and organising groups, of volunteers but also from working in the field with other specialists.

Intrinsic rewards were also important. For instance, the enthusiasm and interest the public had in the trips had renewed the respondent’s personal commitment to the difficult (and long-term) tasks of conservation, land management and research. Stimulating conversations, often across a diverse set of topics, were personally enjoyable, rewarding and encouraged their own thinking. The capacity to educate a diverse set of people about the respondent’s own project and own views on conservation issues was personally rewarding. Overall, there was a strong sense of satisfaction, enjoyment and accomplishment after a trip. Directly observing the high levels of appreciation from volunteers was a very rewarding experience and reinforced how familiar respondents had become with special species, sights or places.

The trips were often initially regarded as a way to access a new location or get certain data-sets, but benefits would be limited due to logistical aspects of trip design and the
use of volunteers. Specific data-related goals and benefits were initially dominant considerations, but subsequent broader benefits were noted. These included personal learning benefits and recognition of less tangible benefits, such as helping achieve the long-term goal of conservation through education of the public. Respondents noted the trips were personally stimulating, broadened their own skill base, encouraged them to think more widely, as well as being enjoyable and providing a personal sense of worth. Three people took annual leave to undertake the trip (including one person who took leave from the same organisation he ran the trip for) and this was indicative of the commitment and enthusiasm for the trips many respondents felt.

More experienced respondents commented that the more trips they undertook and the longer their involvement with the trips, the more routine the logistics of the operations became. Respondents became more skilled at dealing with team dynamics and interpersonal issues. The initial attention needed to ensure the trips ran smoothly and to maintain quality and quantity during field research work, was emotionally and physically taxing. As the respondent’s own abilities and confidence increased, the benefits of the trip seemed to grow and negative aspects decreased. This theme emerged from the interviews. It is likely that researchers who found the challenge of overcoming group logistics and dynamics personally rewarding probably chose to continue using these types of trips to help achieve their work goals. Other researchers, with different perspectives, may not have chosen to continue their involvement with this type of trip, and so were less likely to have been surveyed.

Comments by respondents who had stated that they had a key role in the construction and design of the trip (14 respondents), and those who indicated that they had joined a trip designed by others (20), were examined for differences. Due to low numbers it was not possible to test significance and usually only minor variations in answers were detected between the trip designers and other field crew members. However, some differences were noted and from the interviews it appeared that the more experienced staff were more likely to value the range of pre-existing volunteer skills, and see education, particularly in science, as important. The email survey confirmed that this
group regarded the varied skills that volunteers bring to a trip as important and also were highly satisfied with the raised awareness of the location.

7.6.2 *Perceived goals or benefits for the organisation*

The interview results indicated members of field crews considered the key goals for organisation involvement in these trips related to education about the role of the organisation, the location or conservation issues and obtaining increased funds and volunteer labour. The email survey did not specifically ask about organisation goals.

7.6.3 *Perceived goals and benefits for participants*

Twenty-four respondents (52%) indicated they felt the trips influenced the volunteer's knowledge, skills or future behaviour. Forty respondents (87%) stated that education was an important goal for them and that the email survey showed stronger results with 100% stating the trip had fully, or mostly satisfied some educational aspect. This view complements the respondent comments indicating that they felt participants came to see new species, new places, and to learn. Respondents also stated that they thought the social aspects of the trip were important to the volunteers.

All respondents were asked about any differences they perceived between repeat and first-time volunteers. Volunteers who repeated on the same trip were highly valued and were seen to have gained skills that made them valuable. Few volunteers repeat the same trip however, but many repeat with the same organisation, but on another trip. These people were mostly seen as more quickly fitting into the field trip as they understood the style and modus operandi of the trips, were more comfortable with field conditions and sometimes had specific skills already that could be useful. Not all comments were positive though, and comparisons made with other trips were sometimes detrimental to morale. The infectious enthusiasm of first-timers was higher.
7.7 Summary

This chapter examined the key reasons that members of the field research teams became involved in trips and their perceptions of the benefits of the trip. Many comments related to a number of past trips, as well as to the specific trip within the survey frame. Consequently it was not possible to accurately distinguish between goals and benefits at all stages of this research or to identify the benefits derived from a single specific trip for each respondent. Participation in the trip resulted in an increased work output that was important to 98% of respondents, education of the public (87%), and personal learning (85%). In addition, intrinsic rewards concerning the achievement of these aspects and personal enjoyment were important perceived benefits. Personal goals were often also work-related and although overlaps between organisation and field crew's goals existed, differences were also evident.

Wegner, Moore and Macbeth (2004) had noted that within a protected area agency, rangers, scientists, managers and senior policy makers may all hold differing views. Other research has highlighted the different perceptions of wildlife scientists and wildlife tourism managers (Rodger & Moore, 2004) and communication issues between researchers and Earthwatch volunteers (Hartman, 1997). This research extends this area of knowledge by examining the benefits of involvement in PERT-style trips at an individual scale. Ironmonger (2000:67) had argued that two types of benefits accrue from volunteering, the output benefits (work achieved) and the process benefits (the benefits that accrue from having undertaken the task). These concepts are usually applied to the volunteer, but this research demonstrates it is equally applicable to the members of the field crews managing the volunteers.

This research revealed the range of benefits is much more extensive than the direct outcomes of free labour and financial support that are usually noted. Recognition of this will improve the ability of operators to market these types of trips to researchers, both at the individual level and to the organisation a researcher may be employed by. As this type of volunteer tourism appears to be supply-led (Turner et al., 2001) these findings are significant. Natural resource management agencies can also use this additional
knowledge of potential benefits to adapt their involvement in PERT-style trips to maximise their own outcomes. For instance, these trips assist team members in enhancing or broadening their own skill base and could strategically be used for training purposes. The inter-relationships between the results of this chapter and the goals and benefits of the organisation and participant are discussed in Chapter 9.
CHAPTER EIGHT
THE PARTICIPANTS

Lured by the aura of romance and mystery surrounding the outback, we journeyed together to a place where it can be difficult and dangerous to venture alone. Here we were, following in the footsteps of intrepid explorers, going where only the brave, the adventurous, or the foolhardy would go ... what I wasn't prepared for was the sheer magic of the experience (Lewis, 1999/2000:37, describing a Landscope Expeditions trip she took as a participant).

8.1 Introduction

This chapter examines aspects of the demand side of the PERT sub-segment and analyses who joins these trips as participants, or volunteers, why, and what benefits they perceived they accrued from their involvement in the trips. Participants were surveyed twice, initially soon after their return from the trip, and eight to nine months after their return. The methodology and survey design were broadly described in Chapter 3. These are extended here in Section 8.2. The results of the first survey are in Section 8.3 and additional data sources are described in Section 8.4. The results of the second survey are presented in Section 8.5. Differences among the results for each case study are discussed in Section 8.6.1.

Further discussion of the results is in three parts. Section 8.6.2 examines the participants in terms of socio-demographic data, their pre-trip behaviours and views. Section 8.6.3 examines the reasons participants undertook the trip and satisfaction levels for each of the reasons. The final part, 8.6.4, examines how the participants perceived they were influenced by the trip or had utilised skills or knowledge learnt on the trip. A discussion of the longitudinal view of skills gained and benefits and whether the prior volunteer experience of the respondent had altered their responses is included. Related work by other researchers is then discussed in Section 8.7 and a summary of the chapter is presented in Section 8.8.
8.2 Method

The broad methodology and specific issues relating to the design and implementation of the surveys are described in Chapter 3. Appendix 8 contains the first survey and Appendix 10, the second survey.

The surveys were designed to gather information from a variety of respondents dispersed both temporally and spatially and to provide information on a wide variety of individuals that would not have been feasible by other techniques. Data were aggregated to allow simpler presentation of results and to examine the most prevalent answers. The range of data were important and so the results are also presented qualitatively.

Data were inputted into Excel as it was received. Checking, cleaning and frequencies were calculated. When all data were received, it was transferred into SPSS 11.5 for further analysis. The second survey file was added to the first survey file so responses to both surveys from a single individual could be analysed. Some textual material was coded and also entered. Thematic coding was conducted allowing the categories to emerge from the data. Coding checks using other people were undertaken on a sample to ensure rigour. Demonstrating statistical significance was limited by the small number of respondents and high numbers of variables, but was done where possible. A number of other statistical techniques were used in an exploratory manner, where appropriate, including factor analysis and logistic regression. Only the results that added evidence or meaning to the discussion in this research are presented.

Sampling issues were also examined. Socio-demographic aspects of the Landscope Expeditions sample were checked against all past Landscope Expeditions participants (see Appendix 13). Similar secondary data were not available for Earthwatch Australia or Naturewise. For Earthwatch, the socio-demographic responses were compared with data collated by Weiler and Richins (1995) from participants between 1988 and 1991. The frame was slightly different as they excluded overseas participants and 17% of the Earthwatch sample in this research had overseas home addresses. The socio-
demographics of the second survey group were also compared with that of the larger first survey sample, to indicate non-response bias.

Question 1 from the first survey asked participants whether they had previously taken a similar trip with the same organisation. It was possible to check responses for Landscope Expeditions against the organisation register of past participants. This examined the accuracy of the organisation data, and the recall of participants. Only two anomalies were identified and from the written description on the survey forms, other CALM volunteering activities, but not Landscope Expeditions trips, had been included. These responses were shifted to question 3.

The aggregate responses to the second survey were initially compared with the responses to the first survey. Due to possible biases introduced by the self-selection process for the second survey, the comparison was refined. The aim was to understand differences in responses over time, so only the answers to the first survey, made by the second survey group (n=60), were used.

Additional data sources were used to identify any bias or gaps in the results. Sources varied among organisations. For Landscope Expeditions, trip evaluations and trip reports (described in Section 8.4.1) were used. Prior qualitative research had been undertaken on Landscope Expedition trips by two researchers. Charlton examined 'memorable moments' (2001) and Webb (2002) examined visitor experiences concerning a single trip conducted in 2001. Relevant data from these were used as a form of researcher triangulation and allowed new insights on the trips. Some past participants had also published descriptions of the trips and these provided background (Lewis, 1999/2000). Work by other researchers has also been conducted on Earthwatch trips within Australia. This was discussed in Section 6.3, and provided useful comparative data.
8.2.1 Limitations

Limitations associated with the methodology and initial survey design were outlined in Chapter 3. The discussion of the results contains further comments on issues regarding the interpretation of responses from specific questions.

The Landscope Expeditions trip journals were a secondary source of information, and allowed a greater understanding of how each trip was conducted, but were of limited direct use. The journals were a description of daily events or activities and did not necessarily contain personal goals or outcomes. Entries were anonymous so comments could not be compared with individual survey responses. All participants were encouraged to write a journal entry and the combined results were copied and distributed to all participants. Given the intended purpose of the journal, it was unlikely to contain negative comments. Despite this, journals provided a useful cross-reference to help understand the highlights and positive aspects of a trip for participants.

Despite piloting and pre-testing the surveys, after data from the surveys were collated and analysed, several issues were noted. In the first survey, question 3 asked about previous voluntary work trips undertaken and interpretation of the question may have varied between individuals due to a lack of clarity concerning relevant activities, length of trip and formality of organisation surrounding the trip. Although the data quality check conducted with Landscope Expeditions responses to question 1 indicated very little problem with recall, the first three questions could have been re-worded to indicate a fixed period, based on likely ability to recall, and relevance to the results, such as ‘since 1990 ...’.

The scale used in question 4a introduced two different concepts, ‘importance’ and ‘relevance’ and should have only covered one concept such as relevance.

The question section of question 14 in the first survey was identical to one used by Beaumont (1999) enabling subsequent comparison of data. It could have been more explicitly worded, stating, for instance, ‘never’, ‘only a few times in two years’, ‘several
times a year', 'every few months', 'monthly' and 'at least once a week'. This would have avoided the use of imprecise words that individual respondents may have interpreted differently (Bradburn & Sudman, 1979). While the response categories were altered slightly from Beaumont's, further activities could also have been included, such as home recycling, to allow comparison with other researcher results.

Difficulties existed surrounding the question concerning education level and interpretation of the results. Internationally, terms for schooling levels alter (such as 'college' in the USA compared with its use in Australia). The high level of Australian respondents in this study helped minimise this problem.

8.2.2 Response rates

The total valid response rate was 78% (n=106). This varied among organisations. The valid response rate for Landscope Expeditions was 91% (53 of 59), for Earthwatch was 65% (42 of 65), and for Naturewise was 73% (11 of 15).

Thirty-six Landscope Expeditions participants (68% of those who responded to the first survey) indicated they were willing to take part in the second survey. Twenty-six responses were received (a 72% response rate). Thirty-five of the 42 (83%) Earthwatch respondents agreed to take part in the second survey. One was uncontactable, one returned a blank form and 28 responded (80%). Ten of the 11 Naturewise respondents indicated they would be willing to take part in the second survey and six forms were returned (60%). In total, 60, of a possible 82 responses, to the second survey were received, giving a combined response rate of 73%.

8.3 Results of First Survey

Question 1 asked about previous volunteering on trips similar to this one, with the same organisation. Thirty-seven respondents (35%) had previously taken a trip with the same organisation and 21 (20%) had been on more than one trip.
Question 2 asked whether the respondent had undertaken a similar trip with another organisation. Ten people (10%) stated they had taken similar trips with other organisations and one form was blank.

Question 3 asked whether the respondent had previously taken a trip to help with other types of volunteer work. Thirty-one people (29%) answered ‘yes’ to having taken a trip involving other voluntary work besides environmental research work. Two of these were converted to a ‘no’ as they also stated it was day work only. Of the 29 (27%) remaining responses, the type of work varied considerably and included revegetation, botany, anthropology, museum assistance in the field, bushfire work, herbarium assistance, flora surveys and track maintenance.

Question 4a asked about the reasons for joining the trip. Fourteen possible reasons and an open-ended ‘other’ category were listed. Respondents were asked to code the reasons on a scale of 1 to 5 (1=most important, 5=not relevant). The results are presented in Table 8.1. Eleven reasons had a mean above three and relatively low standard deviations, indicating these were considered important to most respondents.

Question 4b asked about level of satisfaction with each of the reasons in question 4a. Respondents were asked to code the fourteen reasons listed in 4a on a scale of 1 (fully satisfied) to 5 (not satisfied) and 6 (not relevant). The results are presented in Table 8.1. Satisfaction levels were calculated by excluding the ‘not relevant’ category and determining the mean. The numbers of ‘not relevant’ responses are shown in a separate column. Although the rankings altered significantly from the rankings for question 4a, the means had very little variation and reflected high overall satisfaction. Seven ‘not satisfieds’ were recorded. No reason received more than one ‘not satisfied’ except for ‘to help the organisation’, that received two.

Questions 4a and 4b also had an ‘other’ category. If respondents felt there were other reasons they had joined the trip, they were asked to list these and then rate them. Thirty-five respondents made 43 comments. Nineteen of these comments appeared to overlap
with earlier responses in question 4 (such as ‘to contribute to something worthwhile’, ‘to learn easy ways to identify fish’ and ‘hopefully put something back into the planet’).

Other comments included:

- personal rewards (8) such as develop ‘my confidence’ and ‘to contribute albeit in a small way to the country to which I was travelling’;
- logistical, relating to dates or length of trip being suitable (5);
- personal challenges (5) such as ‘fear factor and the challenge’;
- accessing areas they could not otherwise access (3);
- school learning (2); and
- meeting other cultures (1).
Table 8.1 Importance of reasons participants joined the trip (4a) and satisfaction with that reason (4b), n=106

<table>
<thead>
<tr>
<th>Reason</th>
<th>4a Rank</th>
<th>4a Mean</th>
<th>4a sd.</th>
<th>4a Non-response</th>
<th>4b Rank</th>
<th>4b Mean</th>
<th>4b sd.</th>
<th>Not relevant</th>
<th>Non-response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learn about area</td>
<td>1</td>
<td>1.64</td>
<td>0.75</td>
<td>4</td>
<td>3</td>
<td>1.42</td>
<td>0.60</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Learn about research subject</td>
<td>2</td>
<td>1.70</td>
<td>0.82</td>
<td>1</td>
<td>5</td>
<td>1.52</td>
<td>0.69</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>To see new things</td>
<td>3</td>
<td>1.75</td>
<td>0.87</td>
<td>1</td>
<td>1</td>
<td>1.40</td>
<td>0.55</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Help scientists get data</td>
<td>4</td>
<td>1.90</td>
<td>0.95</td>
<td>7</td>
<td>11</td>
<td>1.64</td>
<td>0.74</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>To help organization</td>
<td>5</td>
<td>2.22</td>
<td>1.00</td>
<td>6</td>
<td>10</td>
<td>1.63</td>
<td>0.85</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>To feel closer to nature</td>
<td>6</td>
<td>2.26</td>
<td>1.17</td>
<td>2</td>
<td>4</td>
<td>1.50</td>
<td>0.78</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Sense of accomplishment</td>
<td>7</td>
<td>2.32</td>
<td>1.16</td>
<td>3</td>
<td>9</td>
<td>1.60</td>
<td>0.75</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Use skills to help others</td>
<td>8</td>
<td>2.38</td>
<td>1.04</td>
<td>1</td>
<td>14</td>
<td>1.98</td>
<td>0.87</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>Meet people with similar interests</td>
<td>9</td>
<td>2.41</td>
<td>1.06</td>
<td>4</td>
<td>7</td>
<td>1.56</td>
<td>0.73</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>To have a different holiday</td>
<td>10</td>
<td>2.68</td>
<td>1.18</td>
<td>2</td>
<td>1</td>
<td>1.23</td>
<td>0.45</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>Have fun</td>
<td>11</td>
<td>2.74</td>
<td>1.07</td>
<td>5</td>
<td>6</td>
<td>1.53</td>
<td>0.69</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>To relax</td>
<td>12</td>
<td>3.41</td>
<td>1.14</td>
<td>3</td>
<td>13</td>
<td>1.88</td>
<td>0.85</td>
<td>24</td>
<td>2</td>
</tr>
<tr>
<td>To get work experience</td>
<td>13</td>
<td>4.25</td>
<td>1.16</td>
<td>4</td>
<td>12</td>
<td>1.76</td>
<td>0.87</td>
<td>70</td>
<td>5</td>
</tr>
<tr>
<td>Join family/friends</td>
<td>14</td>
<td>4.28</td>
<td>1.15</td>
<td>4</td>
<td>8</td>
<td>1.56</td>
<td>0.58</td>
<td>72</td>
<td>7</td>
</tr>
</tbody>
</table>
Question 5 asked whether the respondent gained other benefits from the trip, in addition to those in question 4. Although respondents were asked to give additional reasons to those in question 4, considerable overlap was evident. Seventy-seven respondents (73%) answered ‘yes’, 25 (23%) ‘no’, and 4 (4%) left the answer blank. If respondents answered positively, they were asked to list the benefits and 74 respondents made 123 comments (multiple responses were possible). Each comment was coded only once although overlap was evident. For instance, a comment regarding gaining specific skills was coded under the theme ‘undertaking or learning an activity – research or tasks’ but also could have been included in the first category ‘understanding, appreciation, learning, gaining knowledge’. It was regarded as more informative to code each phrase as specifically as possible, rather than cluster comments under broader categories such as ‘learning’.

The number of respondents who made a comment in that category is given in parentheses and the results are:

- understanding, appreciation, learning, gaining knowledge (37);
- meeting people, social aspects, appreciation of other people (20);
- internal – such as health and well being (14);
- helping, sharing (9);
- undertaking or learning an activity – research or tasks (9);
- cross-cultural understanding (9);
- other or indirect, such as delicious meals/ recipes (8);
- understanding the organisation (8);
- viewing or living in areas not usually seen by others, remote or unusual places (5);
- career choice/ helped at work (2);
- escape/ have a break (1); and
- study (1).

Question 6 was an open-ended question that asked respondents to identify the highlights of their trip. All respondents commented, some making multiple comments and 223 comments were received. The same coding technique described for question 5
was used and the coded results are in Table 8.2. Comments coded into the ‘personal aspects’ category were phrases such as ‘sleeping under the stars’, ‘the challenge of clambering’, ‘the totally different daily rhythm’ and ‘getting to spend so much quality time in the outdoors’. Comments in the ‘other’ category included ‘good food’, ‘staying at homesteads’ and ‘photographing’.

Table 8.2 Highlights of the trip for participants, n=106 (first survey, question 6)

<table>
<thead>
<tr>
<th>Key responses</th>
<th>Number of responses</th>
<th>Per cent of respondents stating a response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Different or new environment, scenery, a specific place mentioned</td>
<td>37</td>
<td>35</td>
</tr>
<tr>
<td>Seeing certain species (flora and fauna), handling or getting close to species</td>
<td>37</td>
<td>35</td>
</tr>
<tr>
<td>Contributing, helping, working, the results, undertaking a task</td>
<td>31</td>
<td>29</td>
</tr>
<tr>
<td>Attributes of the people on the trip (other volunteers)</td>
<td>28</td>
<td>26</td>
</tr>
<tr>
<td>Learning/understanding</td>
<td>27</td>
<td>25</td>
</tr>
<tr>
<td>Cultural learning/appreciation</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>Personal aspects</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>Attributes of the leaders</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Remote or new area to explore, not a tourist place</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>All aspects of the trip</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

Question 7 asked the respondent to list any recommended changes. This question helped highlight problems. Comments generally related to logistical issues such as equipment lists, team size and preferences for either longer or shorter trips. No data concerning goals or benefits were received.

Question 8 asked overall, how much respondents thought they had discovered or learnt during the trip, on a scale from 1 (nothing) to 9 (a lot). The results are in Table 8.3. The mean was 7.72, and standard deviation 1.50.

Table 8.3 Scale showing the amount respondents thought they learnt during the trip, (first survey, question 8), 1 = ‘nothing’ and 9 = ‘a lot’

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9 (a lot)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of responses</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>16</td>
<td>20</td>
<td>16</td>
<td>47</td>
<td>106</td>
</tr>
<tr>
<td>%</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>15</td>
<td>19</td>
<td>15</td>
<td>44</td>
<td>100</td>
</tr>
</tbody>
</table>
Question 9 asked whether respondents thought they will, or already had, used the skills and knowledge learnt on the trip elsewhere. Seventy-eight respondents (74%) answered ‘yes’, 24 (23%) answered ‘no’, and 4 (4%) left the answer blank. Respondents were asked to comment if they stated ‘yes’, and 125 different comments were coded. One comment was negative stating they now knew not to donate to that organisation.

Comments related to:

- where, or when, respondents would use the new skills and knowledge (37 responses, 30%)
  - on other trips (15 responses),
  - on other trips with the same organisation (11 responses),
  - on own travels, such as ‘checking other areas for rare or endangered flora’,
  - on own property,
  - daily living, or
  - in other volunteering, such as ‘I am a project manager of [a volunteer project] and experiencing another researcher’s goals and methods has given me ideas for my own project’ and ‘doing transects for botanist’.

- increased knowledge but unclear on how it was utilised (33 responses, 26%)
  - ‘flora id [identification] skills’,
  - ‘what to look for to identify some animals’,
  - the ability to ‘set up and collect quadrat not just randomly’,
  - ‘learnt to id [identify] more finely, more detail, about issues with amateur observations’.

- passing on the information to others (13 responses), such as ‘pass on knowledge to members of local field nats [naturalists] club’,

- non-environmental applications (7 responses) such as vehicle maintenance, camping experience and new recipes,

- future study (6 responses), and

- future work (5 responses).
Question 10a and 10b asked the respondent to place themselves on a continuum scaled from 1 (not an environmentalist) to 9 (strong environmentalist), before the trip (10a), and after the trip (10b). One participant left the question blank. The mean for 10a was 7.09, sd=1.53 and for 10b, the mean was 7.39, sd=1.36. The results are in Table 8.4.

Table 8.4 Scale showing the environmentalist position respondents placed themselves at before and after the trip, where 1= lowest and 9= highest, n=105 (first survey, question 10a and 10b)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before trip, (10a)</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>9</td>
<td>28</td>
<td>21</td>
<td>13</td>
<td>29</td>
<td>105</td>
</tr>
<tr>
<td>%, 10a</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>9</td>
<td>26</td>
<td>20</td>
<td>12</td>
<td>27</td>
<td>100</td>
</tr>
<tr>
<td>After trip, (10b)</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>24</td>
<td>28</td>
<td>17</td>
<td>31</td>
<td>105</td>
</tr>
<tr>
<td>%, (10b)</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>23</td>
<td>26</td>
<td>16</td>
<td>29</td>
<td>100</td>
</tr>
</tbody>
</table>

Comparing the responses on each survey form, 86 respondents (82%) indicated no change, 6 shifted up one place (6%), 11 (10%) shifted up two places and one (1%) shifted up three places. One respondent indicated a negative shift of one place. Grouping the answers, 63 respondents (60%) placed themselves at point 7 or higher on the scale prior to the trip. After the trip, 76 (72%) placed themselves at point 7 or higher on the scale.

Question 11 asked whether respondents would like to join another trip (of this style) again. Eighty-three respondents (78%) indicated ‘yes’, two ‘no’ (2%) and 20 (19%) ‘maybe’. If the respondent answered ‘yes’ or ‘maybe’ they were asked four subsequent questions (shown in Table 8.5). ‘Yes’ was coded as ‘1’, ‘maybe’ as ‘1.5’ and ‘no’ as ‘2’ to create the means.

Table 8.5 Participant preferences for undertaking another similar trip (first survey, question 11), 1= ‘yes’ and 2= ‘no’

<table>
<thead>
<tr>
<th>Question</th>
<th>N</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Join with the same agency?</td>
<td>100</td>
<td>1.11</td>
<td>0.22</td>
</tr>
<tr>
<td>Do another trip like this again?</td>
<td>105</td>
<td>1.11</td>
<td>0.23</td>
</tr>
<tr>
<td>Join with the same scientists?</td>
<td>97</td>
<td>1.22</td>
<td>0.32</td>
</tr>
<tr>
<td>Do a trip focusing on the same subject?</td>
<td>98</td>
<td>1.37</td>
<td>0.34</td>
</tr>
<tr>
<td>Do a trip focusing on the same area or location?</td>
<td>98</td>
<td>1.42</td>
<td>0.34</td>
</tr>
</tbody>
</table>
Respondents were asked to comment if they wished and 43 respondents did so. Comments were usually quite specific such as ‘there’s a lot of places I haven’t seen at all yet’ and ‘will definitely do another Landscope Expeditions trip, definitely to another area, but possibly also return to the Gibson Desert’. Fifteen comments related to the desire to see new places or do something different on the next trip, and nine to cost and distance being problematic.

Question 12 asked whether the respondent belonged to any conservation or environmental groups and for these to be listed. Sixty-three respondents (59%) answered ‘yes’, 36 (34%) answered ‘no’, and 7 (7%) were blank. Question 13 asked whether the respondent was a member of any special interest nature or outdoor groups. Forty-seven (44%) respondents answered ‘yes’ and 50 (47%) answered ‘no’, and 9 (9%) were blank. Membership of the organisation they travelled with was not coded, as automatic membership occurs with each of these organisations. The responses to questions 12 and 13 overlapped and were not mutually exclusive. Both questions permitted multiple responses. Some respondents placed a membership (such as Birds Australia) in question 12 whilst others placed membership of the same association in question 13. This was not considered important and the total results for the two questions were cumulated. Grouping also removed duplication as some respondents had listed the same membership in each question. Two hundred and six total memberships were reported and 174 memberships of environmental or conservation groups. Total memberships varied from 1-12 per respondent, with a mean of 3.12, sd=2.03. The maximum number of environmental groups listed by one respondent was 10 and the mean for environmental group membership was 2.72, sd=1.78 (n=64).

Question 14 asked respondents to indicate how often, in the last couple of years, they had participated in a range of environmentally friendly behaviours. Eight behaviours were listed and respondents were asked to indicate how often they undertook these activities on a scale of 1 (never) to 5 (always). The results are presented in Table 8.6.
Table 8.6 Participation in environmental behaviours prior to joining the trip by participants (first survey, question 14), 1 = ‘never’ and 5 = ‘always’

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>n</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engaging in minimal impact practices in natural areas</td>
<td>102</td>
<td>4.06</td>
<td>1.23</td>
</tr>
<tr>
<td>Conserving water</td>
<td>102</td>
<td>4.05</td>
<td>1.01</td>
</tr>
<tr>
<td>Watching environmental shows or reading environmental literature</td>
<td>104</td>
<td>3.76</td>
<td>0.97</td>
</tr>
<tr>
<td>Buying environmentally friendly or recycled products</td>
<td>103</td>
<td>3.69</td>
<td>0.97</td>
</tr>
<tr>
<td>Making donations to environmental organisation/s</td>
<td>102</td>
<td>3.09</td>
<td>1.26</td>
</tr>
<tr>
<td>Taking public transport whenever possible or carpooling</td>
<td>100</td>
<td>2.75</td>
<td>1.32</td>
</tr>
<tr>
<td>Local environmental conservation work</td>
<td>100</td>
<td>2.56</td>
<td>1.38</td>
</tr>
<tr>
<td>Writing to politicians, signing petitions or attending meetings regarding environmental issues</td>
<td>101</td>
<td>2.41</td>
<td>1.20</td>
</tr>
</tbody>
</table>

A summation of all responses was conducted to give an overall level of involvement in pro-environmentally friendly activities (8 behaviours each rated at 1-5 meant the maximum was 40). This is a very basic tool, but allowed comparison with other research (Beaumont, 1999:206). The results are in Table 8.7.

Table 8.7 Summation of participant’s responses to question 14 (first survey)

<table>
<thead>
<tr>
<th>Overall environmental behavioural scores</th>
<th>None/very low (0-8)</th>
<th>Low (9-16)</th>
<th>Medium (17-24)</th>
<th>High (25-32)</th>
<th>Very high (33-40)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of respondents</td>
<td>3</td>
<td>6</td>
<td>38</td>
<td>46</td>
<td>13</td>
<td>106</td>
</tr>
<tr>
<td>Percentage</td>
<td>3</td>
<td>6</td>
<td>36</td>
<td>43</td>
<td>12</td>
<td>100</td>
</tr>
</tbody>
</table>

Question 15 asked whether there were other environmentally friendly activities the respondent undertook that were not in question 14. Fifty-five respondents (52%) stated ‘yes’, 25 (24%) ‘no’, and 26 (25%) were left blank. As multiple responses were possible, 78 comments were received. Some of the stated activities were significant in scale, such as placing a conservation covenant on part of their property and managing it in an environmentally friendly way. Comments included:

- formal volunteering through associations, informal volunteering or significant volunteering in the recent past (30 responses, 28%);
- personal activities they undertook (23 responses, 22%), such as maintaining a native garden, and low personal consumption levels such as having installed solar heating or running an organic hobby farm;
- home recycling (14 responses, 13%);
• teaching, either directly or through publishing articles or books, (5 responses, 5%);
• activities in the workplace (5 responses, 5%);
• current study (1 response); and
• encouraging others (1 response).

Question 16 asked whether participation in this trip had changed, or was going to change, the frequency of the respondent’s participation in any of the activities listed in question 14 or question 15. Twenty-one stated ‘yes’ (20%), 74 (70%) stated ‘no’, and 11 (10%) were blank. Eleven made the comment that they were already committed so there could be no change. Three made neutral comments, such as they would continue the same trip frequency. The types of changes indicated were:

• will participate in more local environmental work (11);
• do more trips if can (6);
• personal aspects such as increased passion or commitment (5); and
• others, such as public transport and donating (4).

Questions 17 to 22 asked about demographic and socio-economic details. Forty-four respondents (41%) were male and 61 (58%) female and one form was blank. Table 8.8 shows residence, Table 8.9 shows education level, and Table 8.10 shows age.

Table 8.8 Location of participant’s residence based on home postcode, n=106

<table>
<thead>
<tr>
<th>Residence</th>
<th>Number</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>94</td>
<td>89</td>
</tr>
<tr>
<td>Asia</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>USA/Canada</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>New Zealand</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Europe</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 8.9 Education level of participants, n=106

<table>
<thead>
<tr>
<th>Education level</th>
<th>Number</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to and including grade 12</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>Technical studies</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Other advanced studies, Diploma or partial university</td>
<td>22</td>
<td>21</td>
</tr>
<tr>
<td>Completed a university degree or higher</td>
<td>59</td>
<td>56</td>
</tr>
<tr>
<td>Unstated</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 8.10 Age of participants, n=106

<table>
<thead>
<tr>
<th>Age</th>
<th>Number</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 25 years old</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>25-34 years old</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>35-44 years old</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>45-54 years old</td>
<td>24</td>
<td>23</td>
</tr>
<tr>
<td>55-64 years old</td>
<td>41</td>
<td>39</td>
</tr>
<tr>
<td>65 years or older</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>Unstated</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

8.4 Other Data Sources

8.4.1 Landscape Expeditions

Post-trip evaluations conducted by Landscape Expeditions for the same survey group were examined. Only three of the questions were relevant to this research and these are shown in Table 8.11. Thirty-two evaluation forms from a possible 48 were received (not including evaluation forms for turtle-tagging trips), giving a 65% response rate.

Table 8.11 Landscape Expeditions: Evaluation form responses, where 1= agree and 5= disagree

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I gained an understanding of the research procedures being applied</td>
<td>24</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>32</td>
</tr>
<tr>
<td>The expedition has increased my interest in the subject</td>
<td>24</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>32</td>
</tr>
<tr>
<td>The project made good use of my skills/expertise</td>
<td>10</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>29</td>
</tr>
</tbody>
</table>

Since 1997 (trip 21), Landscape Expeditions researchers in conjunction with the operational staff for CALM have produced a report on each trip. This was sent to each participant as a reminder of their trip (often about a year later). The trip reports contained two data-sets that were used for triangulation in this section. On each trip, participants completed a journal for the organisation with a different person filling out each day. The journal provided background information used to help understand survey comments. Participants were also asked to write a short summary about themselves and their reasons for joining the trip. The published summaries were included in the trip report and were usually no more than three to five sentences. These were edited by CALM Landscape Expeditions staff but all reasons for joining were included, so if a person mentioned two reasons, both were included (Paton, 2001). Seventeen trip reports (all that were available) between 1997 and 2001 were examined and all reasons for joining were coded. The results are in Appendix 15. The 184 participants included
in the analysed trip reports gave 343 reasons for joining. The most commonly stated reasons for joining, and the percentage of respondents stating that reason, were:

- help conserve flora and fauna, 45%;
- specific interest in visiting that location, 38%;
- specific interest in that activity 35%;
- they regularly travelled and wanted to see new sights, go somewhere new or remote, do something different, 26%;
- already a volunteer and this was relevant in their decision to take the trip, 21%; and
- wanted to meet other people, scientists and other participants, people with similar interests, social interaction, 14%.

Other reasons for joining the trip were adventure, photography, to be useful, and to understand history.

8.4.2 Earthwatch Australia

Post-trip evaluations conducted by Earthwatch Australia for the same survey group were examined. Only three of the questions were relevant to this research and these asked about the participant’s most positive experience on the trip; about personal, professional and educational impacts of the trip; and whether the Earthwatch project inspired or motivated them to become more involved. Thirty-seven evaluation forms relevant to this research were received. Multiple responses were possible. Responses were coded into the same classes as those that emerged from the first survey, where possible, to enable comparisons. For instance, the evaluation report’s responses concerning the participant’s most positive experience were compared with question 6, trip highlights. The responses generally supported the results of the survey.

Respondents noted a considerable range and number of impacts and 64 responses were coded. The most prevalent comments were the value of doing something worthwhile (24 responses), learning and knowledge gain (14 responses) and personal growth (9 responses). However, only seven comments were received concerning the question, ‘has your Earthwatch project inspired or motivated you to get involved in...?’. Two of
these comments stated the respondent was already involved, implying further involvement may not be feasible. Three respondents noted increased communication (such as published an article, or increased involvement in environmental education). One respondent noted increased political action.

The most frequent positive experiences mentioned by respondents concerned the subject of the trip. Comments focused on learning, seeing, or being close to the species that was the focus of the trip research. This was mentioned by 22 respondents. Other people, both scientists and team members, were mentioned by 17 respondents, the location or place by 16, the science by 13, the value of their monetary or physical contribution to the project by 12, and meeting and learning about the local community by 11. Other positive experiences mentioned included learning about the place (10), personal aspects (7), exploring a new area (1) and doing new things (1).

8.4.3 Naturewise
Research conducted by Naturewise (Davies, 2004[b]) determined the key reasons participants joined trips were to:

- enjoy the outdoors;
- practical experience;
- see new places;
- work in a team;
- make new friends;
- learn about the environment; and
- make a contribution to conserving the environment.

8.5 Results of Second Survey
Question 1 asked respondents how many holidays of one week or longer in duration they took per year. Seventeen per cent took 0-1 holiday per year, 63% took 2-3, 10% took 4-5 and 8% took more than five holidays per year. One form was left blank.
Question 2 asked a series of questions relating to whether they would like to undertake another holiday similar to the trip they undertook with Landscape Expeditions (where ‘yes’ =1, ‘maybe’ =1.5, and ‘no’ =2) and the results are presented in Table 8.12.

Table 8.12 Responses indicating whether participants would like to take another similar trip, n=60 (second survey, question 2)

<table>
<thead>
<tr>
<th>Question</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do another research-oriented trip?</td>
<td>1.11</td>
<td>0.25</td>
</tr>
<tr>
<td>Join another similar trip with the same agency?</td>
<td>1.15</td>
<td>0.28</td>
</tr>
<tr>
<td>Do another similar trip but with a different subject?</td>
<td>1.16</td>
<td>0.28</td>
</tr>
<tr>
<td>Do another similar trip but in a new area?</td>
<td>1.19</td>
<td>0.31</td>
</tr>
<tr>
<td>Join another similar trip with the same scientists/s?</td>
<td>1.24</td>
<td>0.37</td>
</tr>
<tr>
<td>Take a similar trip but with different scientists?</td>
<td>1.28</td>
<td>0.35</td>
</tr>
<tr>
<td>Do another similar trip focusing on the same subject?</td>
<td>1.30</td>
<td>0.37</td>
</tr>
<tr>
<td>Do another similar trip focusing on the same location or area?</td>
<td>1.46</td>
<td>0.38</td>
</tr>
<tr>
<td>Take a similar trip but with another agency?</td>
<td>1.47</td>
<td>0.38</td>
</tr>
</tbody>
</table>

If respondents answered ‘yes’ or ‘maybe’ to any part of question 2 (all respondents did), they were asked how soon they may realistically undertake this trip (question 3). Of the 60 respondents, two forms were left blank and 3% stated ‘have already’, 13% stated ‘in the next six months’, 37% ‘in the next 12 months’, 38% ‘in the next 2-3 years’, and 5% ‘some time beyond 3 years’.

Question 4 asked respondents to list their main reasons for wanting to undertake another trip. One hundred and eighty responses were initially coded into 23 classes. The reasons from question 4 in the first survey were used to aid subsequent comparisons. Other classes that emerged from the responses were added as needed. The classes were then grouped (reducing the number of comments to 176). The number of respondents making a comment in each class is shown in Table 8.13. No comments for the classes ‘to relax’ and ‘to help the organisation’ (from question 4, first survey) were received.
Table 8.13 Main reasons participants wished to undertake another field research-oriented trip, n=60 (second survey, question 4)

<table>
<thead>
<tr>
<th>Reason</th>
<th>Number of responses</th>
<th>Per cent of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sense of accomplishment</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>Meet people with similar interests</td>
<td>27</td>
<td>45</td>
</tr>
<tr>
<td>Learn about research subject, interest in research subject</td>
<td>22</td>
<td>37</td>
</tr>
<tr>
<td>Have fun, enjoyable, great experience</td>
<td>18</td>
<td>30</td>
</tr>
<tr>
<td>Learn about area</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>Help scientists get data, to undertake tasks</td>
<td>14</td>
<td>23</td>
</tr>
<tr>
<td>To see new things, beautiful area, access a remote area</td>
<td>13</td>
<td>22</td>
</tr>
<tr>
<td>To have a different holiday, holiday with a focus, mentally stimulating</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>To learn from experts, be with scientists</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>To feel closer to nature/ love the outdoors/ love the environment</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Demanding, physically active</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Use skills to help others</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>To get work experience</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Personal</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Join family/friends</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Well organised</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Question 5 asked about the aspects of the trip they took eight to nine months ago that were now most important to the respondent. One hundred and sixteen comments from fifty-eight respondents were coded and are presented in Table 8.14.

Table 8.14 Aspects of the trip most important to participants eight to nine months after the trip, n=58 (second survey, question 5)

<table>
<thead>
<tr>
<th>Comments</th>
<th>Number of Responses</th>
<th>Per cent of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning about the area and the research subject</td>
<td>27</td>
<td>47</td>
</tr>
<tr>
<td>The people they met</td>
<td>23</td>
<td>40</td>
</tr>
<tr>
<td>The scientific results, contributing to the achievement of these</td>
<td>20</td>
<td>34</td>
</tr>
<tr>
<td>Exploring new areas, doing new things, seeing places others don't get to</td>
<td>15</td>
<td>26</td>
</tr>
<tr>
<td>Personal</td>
<td>14</td>
<td>124</td>
</tr>
<tr>
<td>Beauty of the area</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Meeting the scientists</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Making a contribution</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

263
The personal category included comments such as ‘learning about what’s really important in my life - getting priorities right’, ‘improved sense of self-reliance’, ‘being surrounded by the dolphins’ and ‘having great photographic opportunities’.

Question 6 asked respondents to indicate on a nine-point scale how much they consider they discovered or learnt during the trip. No respondents stated ‘3’ or less, and the mean was 7.30, sd=1.67.

Question 7 asked respondents to list any specific skills or knowledge they thought they gained from participating on the trip. Fifty-eight respondents (97%) answered and responses included:
- additional knowledge (46 respondents, 77%) such as ‘gained historical knowledge’ and ‘learnt about seed dispersal and how that works and affects eco-systems’ and ‘learnt about moving around a wild animal’s habitat’. Four respondents specifically mentioned a better understanding of the scientific method, and comments included ‘understanding of the difficulties in conducting research of this type, the time and cost of such research’ and ‘learning about biological data-taking’;
- new skills gained (33 respondents, 55%) such as ‘use of radio tracking equipment’, ‘learning to use GPS’, and ‘how to do a quadrat, make a collection and name a collection and dry collection’; and
- gaining new people skills (4 responses) such as a ‘greater understanding of people’ and logistical skills (2 responses) such as ‘how to take care of myself in the bush’.

Question 8 asked respondents whether they had already used any of the skills or knowledge gained from participating in the trip and 45% of respondents stated ‘yes’, 53% ‘no’, and 2% left this question blank. Respondents who stated ‘yes’ were asked to comment and 43 comments were coded from 36 respondents. Comments included:
- in aspects of local volunteering (12);
- during specific discussions concerning the understandings they had gained from the trip with others (7);
• in personal ways (6) such as 'used the 4x4 [four-wheel driving] skills', 'snorkelling' or 'digital photography';
• on further volunteer tourism trips or trips back to the same location (5);
• as guest speakers, discussed the trip with groups or written newsletter articles (4);
• utilised learning on their own property (2);
• teachers who had included their learning in classes (2);
• students and it had been useful in further studies (2); and
• in their work environment (1).

Respondents were asked in question 9 to indicate the extent that they saw the trip as holidaying versus volunteering. Table 8.15 indicates the responses.

Table 8.15 Extent that the participants saw the trip as holidaying versus volunteering, n=60 (second survey, question 9)

<table>
<thead>
<tr>
<th>Number of responses</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>All holiday</td>
<td>1</td>
</tr>
<tr>
<td>Mostly holiday but some volunteering</td>
<td>5</td>
</tr>
<tr>
<td>About half holiday and half volunteering</td>
<td>27</td>
</tr>
<tr>
<td>Mostly volunteering, but some holiday</td>
<td>26</td>
</tr>
<tr>
<td>All volunteering</td>
<td>1</td>
</tr>
</tbody>
</table>

A nine-point scale was used in question 10 asking respondents to indicate the extent they perceived themselves as an environmentalist from 1 (not an environmentalist) to 9 (a strong environmentalist). The mean was 6.73, sd = 1.99.

Question 11 asked respondents to indicate whether participating in the trip had influenced their pro-environmental behaviours. No participants indicated the trip had decreased their participation in any of these behaviours and 133 positive influences were stated (ranging from one per respondent to nine) from 37 respondents (62%). Twenty-three participants stated no changes. Specific behaviours were listed and the results are presented in Table 8.16 ('more' = 1, 'no change' = 1.5 and 'less' = 2).
Table 8.16 Perceived change in undertaking listed pro-environmental behaviours by participants in the post-trip phase, due to the trip (second survey, question 11), 1= 'more' and 2= 'less'

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>n</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buying environmentally-friendly or recycled products</td>
<td>60</td>
<td>1.35</td>
<td>0.23</td>
</tr>
<tr>
<td>Engaging in minimal impact practices in natural areas</td>
<td>60</td>
<td>1.35</td>
<td>0.23</td>
</tr>
<tr>
<td>Watching environmental shows or reading environmental literature</td>
<td>60</td>
<td>1.35</td>
<td>0.23</td>
</tr>
<tr>
<td>Making donations to environmental organisation/s</td>
<td>59</td>
<td>1.35</td>
<td>0.23</td>
</tr>
<tr>
<td>Conserving water</td>
<td>60</td>
<td>1.38</td>
<td>0.21</td>
</tr>
<tr>
<td>Participation in local environmental conservation work</td>
<td>59</td>
<td>1.39</td>
<td>0.21</td>
</tr>
<tr>
<td>Writing to politicians, signing petitions or attending meetings regarding environmental issues</td>
<td>58</td>
<td>1.41</td>
<td>0.20</td>
</tr>
<tr>
<td>Participating in local volunteering (of any type)</td>
<td>60</td>
<td>1.43</td>
<td>0.17</td>
</tr>
<tr>
<td>Membership of outdoor or special interest nature groups</td>
<td>25</td>
<td>1.44</td>
<td>0.16</td>
</tr>
<tr>
<td>Membership of environmental groups</td>
<td>59</td>
<td>1.46</td>
<td>0.14</td>
</tr>
<tr>
<td>Taking public transport whenever possible or car pooling</td>
<td>59</td>
<td>1.47</td>
<td>0.11</td>
</tr>
</tbody>
</table>

Five respondents added a comment stating they were already very active in these areas and could not really make further changes.

The final question (question 12) asked whether any other respondent activities had been influenced by participation in the trip. Multiple responses were possible. Twenty-two (37%) respondents indicated 'yes', and an additional four indicated they already did as much as they could and so the trip didn't really influence how much they undertook certain activities. Comments stated the trip had:

- influenced daily, or personal activities, or their ability to discuss issues (7);
- helped with local volunteering activities (5);
- increased the amount of local volunteering work they undertook (3);
- made them decide to take another similar trip (4);
- helped clarify their chosen university enrolment or changed their work habits (3);
- made them subscribe to or join an environmental group (2); or
- made presentations because of the trip (2).
8.6 Analysis of Results

The results presented above are aggregated across the three case studies, as discussed in Chapter 3. Differences among case study results are discussed initially, and then the three key parts of this section of the research are examined. The first part aimed to identify the type of people participating in these trips. The next part examined the reasons participants joined these trips and what they perceived as their own outcomes. The last part examined how participants felt they had been influenced by the trip.

8.6.1 Differences among case studies

Each case study was initially analysed individually, but the results were presented here in an aggregated form, as agreed prior to the start of the research with each organisation (see Section 3.5.3). For most instances, there were only small differences among the responses of participants from each organisation. However, some notable differences among organisations occurred, and these and their implications, are discussed here, unless considered sensitive.

Both Landscape Expeditions and Earthwatch had 35-40% of respondents who were ‘repeaters’ but Naturewise, because the program was new, did not have repeat participants. The involvement in other environmental research trips or other volunteering trips was similar for all organisations.

The trip was outside the home country for 67% of Earthwatch respondents compared with 7% of Landscape Expedition respondents and 18% of Naturewise respondents. Cross-cultural aspects and the impact of taking a trip in less familiar surroundings may have impacted the results for Earthwatch participants.

Because the number of respondents for Naturewise was much smaller than for the other two organisations, this affected percentage comparisons. The discussion in the next section is limited to differences between Earthwatch and Landscape Expeditions respondent results. Because of low numbers, it was not possible to discern statistical
differences, and judgement was used to discern what appeared to be substantial differences using cross-tabs.

Earthwatch respondents rated 'to have fun' as a more important reason for taking the trip and rated themselves more highly in question 14 when frequency of undertaking certain environmental behaviours was summed. Earthwatch respondents rated themselves higher before a trip in terms of environmentalism (question 10a), in the amount they learnt on the trip (question 8), took more public transport or carpooled prior to the trip and more stated participation in the trip would change their frequency of certain environmental behaviours (question 16). Landscope Expeditions respondents answered more positively on all aspects of question 11 concerning their likelihood to undertake another similar trip with the same organisation and on additional environmental behaviours they undertook that had not been listed already (question 15). Responses concerning other benefits derived from the trip (question 5) were similar, but more Landscope Expeditions participants listed 'viewing/living in areas not seen by others/ remote/ unusual places' and 'helping the organisation' while more Earthwatch participants mentioned cross-cultural aspects. Socio-demographic differences are discussed in the next section.

In the second survey, the results from Landscope Expeditions and Earthwatch participants were also very similar. However, Landscope Expeditions participants were more likely to state they wished to do another similar trip and were more likely to wish to return on another trip to 'see new things, a beautiful area, access a remote area', for a 'sense of accomplishment', and more rated 'exploring new areas; doing new things, seeing places others don't get to' as important aspects of the trip to the participants eight to nine months later. More Earthwatch participants regarded personal factors as important aspects of the trip eight to nine months later. Landscope Expeditions participants were most likely to have used the skills and knowledge gained from the trip and more likely to have increased their participation in local volunteering of any type after the trip. Landscope Expeditions participants considered themselves higher environmentalists.
Overall, there were few major differences between the responses of Earthwatch and Landscope Expeditions participants, but the differences between these organisations and the third, Naturewise, were more marked. Naturewise participants considered the trip to be more holidaying than volunteering, were least likely to wish to return to the same area, were considerably less likely to have been influenced by the trip, and were less likely to have used any skills or knowledge gained again, compared with the other organisation participants. Naturewise respondents were more likely to take another trip to focus on the same subject and take another trip with the same organisation, had the highest levels of conservation or environmental group membership but fewer were active in watching environmental shows or reading environmental literature. The small number of respondents meant these comparisons need to be carefully interpreted but differences were possibly due to the variation in style of the trips (see Chapter 6) or the slightly different demographic structure (see Section 8.6.2).

8.6.2 Who participated in these trips?
Participants on PERT style-trips may be ‘hard-core’ or ‘already converted’ in terms of caring about conservation and environmental issues. The discussion in Chapter 2 revealed these terms require further defining, but relevant attributes of the participants, such as socio-demographic characteristics, their volunteering levels prior to undertaking the trip, perceived views of themselves in terms of environmentalism, pre-trip memberships of nature and outdoor clubs, and pre-trip levels of environmentally-friendly behaviour are examined here as indicators.

Socio-demographic data
More females (58%) than males (41%) undertook these trips. Most were well-educated, with more than half having completed a University degree (56%). Respondents were also older, with 75% aged 45 years or more. Almost 90% of those surveyed were Australian residents. Table 8.17 reveals differences existed among the organisations. Landscope Expeditions respondents were older, more likely to be male and resided in Australia (with most residing in the same State as the trip).
Table 8.17 Socio-demographic characteristics of participants; a comparison among case studies

<table>
<thead>
<tr>
<th></th>
<th>Landscape Expeditions, n=53</th>
<th>Earthwatch, n=42</th>
<th>Naturewise, n=11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>46%</td>
<td>69%</td>
<td>64%</td>
</tr>
<tr>
<td>55 years or older</td>
<td>62%</td>
<td>44%</td>
<td>36%</td>
</tr>
<tr>
<td>Bachelor degree or higher</td>
<td>57%</td>
<td>57%</td>
<td>46%</td>
</tr>
<tr>
<td>Reside in Australia</td>
<td>93%</td>
<td>83%</td>
<td>82%</td>
</tr>
<tr>
<td>Respondents who took a trip outside their own country</td>
<td>7%</td>
<td>67%</td>
<td>18%</td>
</tr>
<tr>
<td>All participants (including non-respondents) who took a trip outside their own country</td>
<td>7%</td>
<td>57%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Previous researchers had often focussed on international volunteer tourism (Broad, 2001; Galley & Clifton, 2004; Wearing, 2001), but this research showed domestic participation was dominant for two of the organisations case studied, and significant for the third. The low numbers of international tourists surveyed may have been influenced by airline and tourism problems at the time of surveying, such as those associated with the USA-Afghanistan ‘war on terrorism’ and the Bali bombing. It was possible to examine the level of overseas residence of past participants for Landscape Expeditions. A comparison with earlier years showed there had been no decline in international participation during the survey period. Naturewise had not been operating for sufficient time to examine this, and it was not possible to check past Earthwatch statistics.

International reply-paid coupons and email were used to facilitate responses from international participants, and non-response was checked to determine any bias in responses. Respondents are compared with all participants (respondents and non-respondents) who took a trip outside their own country in Table 8.17. The only notable difference was with Earthwatch, where fewer Australians taking a trip in their own country responded, compared with the total number of participants.

Appendix I revealed prior research noted some differences among statistics relating to volunteering and age. Generally, older people volunteered more, although the 35-44 year olds were the most active group of volunteers in Australia, probably due to
significant involvement of parents volunteering in their child’s activities, such as sport and school events. USA-based data in Appendix 1 showed young people (20-24 years old) were the most active age group of environmental volunteers. Chapter 2 discussed the complexities surrounding the term 'ecotourists', the problems in defining and clarifying motivations and behaviours of ecotourists (Page & Dowling, 2002:89) and hence identifying the profiles or characteristics of this group. Despite this, ecotourists are generally considered to be ‘outdoor enthusiasts who are well-off financially, well-educated, older people who have the free time to travel’ (Ballentine & Eagles, 1994:210).

Because of the costs involved, PERT-style trips could be expected to have an older profile than other forms of volunteer tourism, and possibly be similar to ecotourism profiles. Broad (2001), Wearing (2001), and Galley and Clifton (2004) examined international trips within volunteer tourism and each were dominated by young people (see Appendix 1). But PERT-style trips surveyed in this research, and examined by other researchers, such as Landscape Expeditions and Earthwatch (Weiler & Richins, 1995), appeared to attract middle-to-older-aged volunteers.

Uriely (2001:4-6) stated both younger and older people become ‘working holiday tourists’ but argued that young adults dominated the category. Broader participation may be evident in environmental volunteering. For instance, in the USA, involvement in environmental or animal care volunteering showed two peaks in age categories, less than 25 years old, and 45-54 years old (Bureau of Labor Statistics, 2003:12). Possibly, the younger age group are not yet settled, have no children and may seek longer volunteer tourism projects than those within PERT. Longer volunteer tourism projects are often cheaper, provide significant life experiences, the possibility of tertiary level education credits, significant work experience to place on curricula vitae or may be used to help determine future career directions. Broad’s (2001:256) research on a longer volunteer tourism project revealed the average length of stay was four months, and 55% of participants during her research were students or recent graduates. Her results appear to supports this hypothesis. Older people, whose children have grown up,
have increased discretionary income, are remaining physically fit and mentally alert for a longer period, and may be more interested in PERT-style trips. Work obligations mean long periods of volunteer tourism may not be practical, but shorter trips of less than one month could be undertaken. Financially, PERT-style trips are often similar in costing to an ecotourism trip and are affordable to this group. Tourism research indicated a growth in experiential and educational tourism (Hall & Weiler, 1992) where tourists take an active interest in their surrounds. For some, this may include using their own skills and abilities to ‘give back to society’ and the undertaking of a volunteer tourism trip (Turner et al., 2001).

The results of this research revealed that children are not usually allowed on trips because of the need to follow specific instructions for data collation. Young families are therefore absent in the socio-demographic profiles. Over half of Naturewise participants were between 45 and 64 years old and none were 65 or older. Over 64% of Earthwatch Australia respondents were 45 years or older and Landscape Expeditions appeared more specialised within this category, with 84% of respondents 45 years or older. This data indicates the case-studied organisations were attracting this second group of older, well-educated people suggested in ecotourism and experiential travel literature. However, these data did not suggest the socio-demographics were as bipolar as generalised above, and although older people may dominate the PERT sub-sector, all ages (of adults) participate.

This research did not ask about family relationships, but the mail-out process and anecdotal conversations with organisation staff confirmed many bookings were single. Other researchers have found single, widowed or divorced was a common status for Earthwatch participants (Weiler & Richins, 1995). Younger volunteers are also often single (Galley & Clifton, 2004) and this may explain why social aspects such as meeting people were considered important. Other research on Earthwatch Australia members revealed the profiles of trip participants and non-trip participants (but Earthwatch members) were similar, but married members were less likely to take a trip (Weiler, Richins and Markwell, 1993:155). Broader Australian research examining
barriers to participation showed couples ‘with dependent child(ren) rated highest for those households stating they had no time for environmental actions’ (64%) (ABS, 2001:10). In contrast to these findings, Warburton et al., (2001:589) in a study of older Australian volunteers and non-volunteers, found more volunteers were married. Whether the environmental focus, the trip-taking aspects of this type of volunteering, or other factors made these trips more attractive to single, older people, requires further research.

Prior researchers have suggested females were more likely to be active in episodic volunteering (Gazley, 2001). Volunteer data varies but indicates more females generally volunteer than men, although in some studies men were more active and more active in environmental volunteering (see Appendix 1). Within ecotourism research, gender data have altered depending on the type of ecotourism activity being studied (Weaver, 2002). Ecotourism, and specialised areas such as bird watching, were considered to be dominated by males (see Appendix 1) but gender is no longer seen as a discriminating factor, although slight differences among specific activities may occur (Wight, 1996a). Weaver’s study of hard-core ecotourists in Australia revealed more females were in this category (Weaver, 2002) and volunteer tourism data indicated females were more prevalent. This research indicated more females participated in PERT-style trips, but there can be considerable variation between trips, and between organisations. For instance, two turtle-tagging trips run by Landscope Expeditions in 2003 had a 67% male participation rate, yet overall participation on all trips by males was 43% (Appendix 13). Trip variation within an organisation confirms the views of Russell who considered individual Earthwatch trips appealed to different people (Russell, 1995:154).

Volunteer, ecotourism and volunteer tourism data indicated people with higher education have a higher participation rate (see Appendix 1). This research confirmed the high participation rate of well-educated people in this type of tourism. Fewer older people, particularly females, had access to higher levels of education in the past and given the higher participation rate of older females in this research, the high levels of
education are noteworthy. The level of involvement of students in PERT-style trips and environmental volunteering may not be as contradictory as it appears, as they may be well-educated, seeking experiences away from home and interested in work that may aid their careers.

Comparing the results from the case studies with the findings from the global search described in Chapter 4, revealed strong similarities. Although little global information was available on participants, data indicated they were more likely to be female, well-educated, professional, and people joined individually, not in groups. Although a minimum age is applied by most organisations, all adult age categories appeared to participate.

In summary, PERT-style participants appear to be older, generally over 45 years old, female, well-educated, single and may travel within their own country, or outside it, to undertake a PERT-style volunteer tourism trip. The cost of the trips may have contributed to the higher involvement of older people with professional backgrounds and high education.

Existing behaviours and pre-trip views

Behavioural and activity-based factors are considered better indicators of future behaviour than socio-demographic factors (see Section 2.2). Weiler and Richins (1995:30) regarded Earthwatch participants as extreme ecotourists and one of the three criteria used to determine this was the participant's level of environmental responsibility or impact. While their work examined the motives for joining and concluded the decision to join and subsequent participation in an Earthwatch trip supported the environment, this research sought to examine a wider range of pre-trip views and behaviours, acknowledging that trip choice may be influenced by many factors (such as to join friends). It is not easy to determine the extent participants may be 'hard-core' as actual levels of pro-environmentally friendly attitudes and behaviours are difficult to determine, the terms ‘extreme’ or ‘hard-core’ are not clearly defined, and pro-environmental beliefs may not be exhibited evenly across all types of pro-
environmental behaviours (Stern, 2000). To help overcome these difficulties, this research used a number of questions to examine this area.

Membership of conservation groups has been used as an indicator of environmental interest by other researchers, and this was examined to determine the extent it may reflect the ‘hard-core’ nature of participants. In this research, 60% of respondents stated they belonged to an environmental or conservation group. Although comparisons between studies need to be conducted with caution, as question design and interpretation of what constitutes an environmental or conservation organisation may differ, the results of this research are higher than many other related studies. For instance, research on Earthwatch participants in Australia from 1988-1991 stated 52% were members of conservation-oriented groups (Weiler & Richins, 1995:33) and Galley and Clifton’s study of volunteer tourists found that ‘over one third of the volunteers were members of an environmental organisation’ (Galley & Clifton, 2004:75).

Statistics on environmental or conservation group membership from ecotourism case studies generally were considerably lower, but varied based on the type and style of ecotourism trip surveyed. For instance, 26% of ecotourists in an Australian study were members of an environmental or outdoor organisation (Beaumont, 1999:22) but only 12% were members of a conservation or local environment group (Beaumont, 1999:371). At least 63% of respondents to another Australian ecotourism study were not members of an environmental organisation prior to the trip (Mayes et al., 2004:47) and 87% of those undertaking an Australian whale-watching trip were not members of an environmental group (Muloin, 1998:206-7). Results from more ‘hard-core’ examples such as Antarctic visitation studies seem to be higher, but variation still exists. Cessford and Dingwell (1996:4) examined visitors to New Zealand’s sub-Antarctic islands and found 59% were members of a conservation organisation. Bauer (2001:151) found that 50% of cruise ship passengers to Antarctica were members of an environmental organisation, but only 13% of overflight Antarctic visitors (Bauer, 2001:176). Maher (2003b:433) found that 87% of visitors to the Ross Sea, Antarctica were not members of conservation or environmental organisations. Around 3% of the total Australian
population were members of an environmental group (Australian Bureau of Statistics, 2001e:18). A national Gallup poll (2000) in the USA indicated 15% of the population were members of an environmental group (Kitchell et al., 2000:1).

Limited data exists concerning environmental organisation membership of active environmental volunteers. Membership levels are likely to be higher than those found in ecotourism as active volunteers may be seeking the information membership entitles them to, see membership as an additional way to support the environment, or may be attracted to the training, volunteer options and social network a formal organisation offers. Weston’s et al. (2003:209) study showed 81% of active environmental volunteers in the Australian Threatened Bird Network were members of conservation or natural history groups.

Despite the high response rate concerning environmental membership in this research, people who preferred to undertake informal or personal means of undertaking environmental activities rather than joining formal associations were not included. Some respondents mentioned informal activities to explain their negative answer in the survey and so, in this research, the membership of conservation groups as an indicator of the level of environmentalism appears to be an under-estimate. The high level of membership and the socio-demographic profiles found in this research, and discussed earlier, are consistent with broader research that noted conservation movement members come from upper-middle class occupations (Dennis and Zube, 1988:232). Despite the apparent high level of interest in environmental issues that could be inferred from the membership levels revealed in this research, environmental organisations can have quite different goals and modes of operating. For instance, Schuett and Ostergren (2003:30) noted the level of environmental concern and involvement of members in different organisations varied, and Kitchell et al., (2000:17) examined the variations in self-identification, beliefs and behaviours among members of different types of environmental organisations. The reasons respondents were members of environmental organisations was not explored in this research.
It was beyond the scope of this survey to produce an accurate measure of the concept of ‘environmentalism’ and self-identity connected with the term ‘environmentalist’ can vary (Kitchell et al., 2000). Questions 10a and 10b (survey 1) were used as self-reported indicators and were not designed to be objective, but were adapted from Beaumont’s (1999:205) work. Question design limitations meant respondents may have had varied interpretations of a numerical scale, although the use of words in place of numbers is also problematic (Bradburn & Sudman, 1979). In addition, someone who appeared to undertake significant environmental behaviours may still consider themselves to be far short of where they perceive they could, or should be, and may rate themselves relatively low. Alternately, a person may do little in terms of the surveyed pro-environmental behaviours but perceive themselves to be quite pro-environmental and rate themselves highly. Both these variations were seen in the responses. Despite the limitations, before joining the trip, most respondents considered themselves as moderate to strong environmentalists with 86% answering ‘6’, or above, to question 10a. Forty per cent rated themselves as strong, at ‘8’ or ‘9’ on the nine-point scale before the trip (n=105). These results are very similar to Beaumont’s study of much less specialised Australian ecotourists. Using a similar scale, she found 90% rated themselves as moderate to strong environmentalists (Beaumont, 1999:374). Question 10a, therefore, did not identify PERT participants as hard-core compared with other types of ecotourists.

Questions 14 and 15 examined the types of self-professed, pro-environmentally friendly behaviours undertaken and their frequency. Using Stern’s (2000:421) groupings of pro-environmental behaviours (discussed in Section 2.6.1), private sphere pro-environmental behaviours were generally more frequently undertaken than non-activist behaviour in the public sphere. The exception was the highest rated behaviour ‘engaging in minimal impact practices in natural areas’ which could be classed as a non-activist behaviour in the public sphere.

The responses to certain behaviours were compared with other studies although care needs to be taken in interpretation as the questions were not identical. An Australian
study revealed 56% of Australian households 'did not adopt any steps to conserve water at home' (Australian Bureau of Statistics, 2001e:39) whereas this study showed over 91% of respondents stated in the last two years they had occasionally or more often, conserved water. Orams and Taylor (2003:636-7) used a five-point scale similar to this research (from never to always), to examine environmental behaviours of ecotourists on a New Zealand marine mammal tour. Twenty per cent frequently, or more often, indicated they were involved in environmental activities, and 20% frequently, or more often, indicated they made a donation to an environmental cause before taking the trip, compared with 29% and 40% respectively, in this research. The World Values Survey 1981-1990-1995 stated 13% of respondents indicated they had attended a meeting, signed a letter or petition aimed at protecting the environment in the last 12 months (World Values Survey Association, no date), compared with 47% who stated they undertook this activity sometimes, or more often, in this study. A USA study of forest recreationists in 1999-2000, used a five point scale to examine behaviours and 59% stated they were in the top two categories concerning purchasing products made from recycled material (Thapa & Graefe, 2003:86-7), compared with 64% in this survey.

Question 14 was based on a question used by Beaumont (1999) but modified slightly. Her study of much less specialised ecotourists in Australia indicated 85% of her respondents performed medium or higher levels of pro-environmental behaviours prior to joining the ecotourism trip (Beaumont, 1999:374). Using the same multiple-act criteria behavioural index of Beaumont's, the results of this survey indicated 92% of PERT-style respondents had a score of medium or higher (Table 8.7).

As pro-environmental beliefs or actions may not be evenly distributed and people active in one area, such as composting and recycling, may do little in another area, such as making a donation to an environmental cause, each survey was individually examined to see the stated range of behaviours. There were only four respondents who had taken no previous environmental or volunteering trips (questions 1, 2 and 3), and scored below 20 in a summation of the responses to question 14. However, each of these respondents stated they undertook at least one of the behaviours listed in question
14 frequently, or mentioned other environmentally friendly activities they undertook in question 15.

The results demonstrate that respondents were quite active in their self-reported environmental behaviours, particularly in areas such as water conservation, compared with the whole Australian population, but may be similar for some behaviours to other ecotourists. Overall, all respondents considered themselves to be reasonably high on an environmentalist scale, undertook some environmental behaviours, or were members of environmental groups. Hypothesised profiles of participants as people already interested in the environment and conservation issues appear, therefore, to be true. This does not necessarily indicate that the trips were only ‘preaching to the converted’ or unable to influence the participant’s subsequent likelihood to undertake environmentally significant behaviours due to a ‘ceiling effect’ (discussed in Sections 2.10.2 and 2.10.4). The results showed considerable variation existed concerning participant levels of pre-trip, pro-environmental behaviours. For instance, 51 respondents (48%) stated they had never, or rarely, participated in local conservation work during the last two years. The next section examines whether these trips influenced participants and whether skills and knowledge gained on these trips were subsequently used.

8.6.3 Why did participants join and did they achieve their goals?
The reasons participants joined the trips and the positive influences the trip may have had on the participants are discussed here. The issues surrounding measuring benefits were discussed in Chapters 2 and 3. As the range of potential positive influences was very broad and were likely to alter over time, a series of questions from the first and second surveys were used.

Learning about the area and research subject, seeing new things and helping the scientists were the four key reasons respondents joined the trips (question 4, first survey). Additional important goals (a mean of 2.5 or less) included: helping the organisation, feeling closer to nature, gaining a sense of accomplishment, using their
skills to help others and meeting people with similar interests. The secondary data source of Landscope Expeditions trip reports confirmed that helping, visiting the location and seeing new things were key reasons participants joined these trips.

The answers to question 4b showed an overall high level of satisfaction (a mean of less than 2) for all reasons for joining and more than 80% of respondents stated they were mostly, or fully satisfied, for each of the reasons listed, except 'to relax', 'to join friends and family', 'to get work experience', and 'to use skills to help others'. Overlapping questions (5 and 6 in the first survey) confirmed the importance of, and satisfaction with, learning and seeing new things. The ability to access remote or unusual places and the opportunity research trips provided to be close to, or to touch, species, were considered highlights of the trip.

Some reasons for joining received relatively low scores, but high satisfaction ratings. These reasons may have been important (and achieved) for only a few of the respondents and relatively unimportant, or irrelevant, for others, such as 'to join friends and family' and 'work experience'. Other reasons such as 'to have fun' and 'to relax' appeared to be relevant, but not important reasons for joining, but most respondents were highly satisfied with the results. This could show unintended outcomes of the trip. Alternately, if a reason for joining was less important to the respondent, the criteria used for judging whether it was achieved may be less rigorous, and hence it may have been easier for that reason to receive a higher satisfaction rating.

To determine whether some goals of individual respondents were not achieved, reasons for joining, rated as 'very important' (1), or 'important' (2) in question 4a, and in 4b rated a '3', 'partly satisfied', or lower, were recorded. Not counting blank responses, 26 respondents made 54 ratings within these boundaries, from the total 1421 combinations recorded, so the level of partial satisfaction or dissatisfaction was low (4%). Of these 54 ratings, 29 were a 2-3 combination ('important' as a goal and 'partly satisfied' as an outcome). The highest number of scores from one respondent was five. Thirteen respondents rated the reason 'use skills to help' as partially achieved, or lower and was
the highest ranked reason in each case study, as well as in the aggregated results. The reason ‘sense of accomplishment’ was second, receiving partial achievement or lower scores from eight respondents.

These results are supported by the secondary data source of evaluation sheets for Landscape Expeditions where the category ‘the project made good use of my skills/expertise’ received the lowest levels of satisfaction. Despite this, contributing and helping, were common responses in question 5 and 6, and considered significant highlights. The importance of the sense of having made a worthwhile contribution was also confirmed by the secondary data source from Earthwatch evaluations. The apparent discrepancy in these results may be due to respondents having felt the new skills they learnt on the trip allowed them to contribute, rather than their pre-existing skills. The knowledge that their financial contribution supported the research was also specifically mentioned by some respondents. Volunteers may also have found that they were more directed in terms of their contribution than they expected, and so felt their existing skills were not fully utilised. Overall, the results indicate that most respondents were satisfied with this aspect, but for a small number of respondents it was an unmet goal, or a partially met goal. Research on older volunteers (aged 50 years or more) in all fields of volunteering in the United Kingdom, revealed 33% stated they wanted better opportunities to use their skills and this was a frustration or difficulty with their current volunteering (Institute for Volunteering Research, no date [b]). The frustration may, therefore, be common in all types of volunteering.

Examination of the logistics of the trips helped verify the strong achievement levels concerning learning and gaining knowledge and lower achievement levels by some concerning using their skills to contribute. Generally, trips were designed so participants were divided into small teams and rotated through different sets of tasks. This approach ensured participants learnt about a range of different aspects of the study and often worked with different team leaders. The approach had the disadvantage of not necessarily allowing participants to become sufficiently familiar with one set of tasks to feel they had become significantly involved in the study. It helps explain the strength of
the comments relating to learning and seeing new things, and the lower level of satisfaction for some respondents relating to making use of their skills and expertise.

Comments regarding additional reasons for joining the trip and trip highlights stated in the first survey (question 4 ‘other reasons’, and questions 5 and 6) included the social interactions these trips provided with local communities, with other volunteers and with the research team. Social outcomes were noted, such as the ability of a diverse (and sometimes cross-cultural) team of volunteers to recognise each others strengths and weaknesses, work through team dynamics, and bond together to achieve tasks. Comments also covered personal aspects. Trip highlights included, ‘the totally different daily rhythm’, ‘being submerged in the activity’, and ‘sleeping under the stars’ as well as reasons for joining that indicated rejuvenation aspects such as, a ‘new sense of purpose and responsibility in my life’ and ‘revived [my] interest to learn’, while other personal comments included, ‘forgot everyday work problems’, ‘gained confidence in my ability to travel alone’ and ‘got hooked on bushwalking’.

Eight to nine months later, the most important aspects about the trip were learning about the area and research subject, the people they met, and the scientific results the participants helped achieve. Seeing new places or species was less important than it had been soon after the trip, but people and social aspects were more important. The highlights of the trip mentioned in the first survey by this group of respondents are in Appendix 14, Table A14.1. The longitudinal comparisons of comments are only indicative however, as survey questions were not identical.

The desire to take another trip was very high (97%) and the key reasons for wishing to take another similar trip were for a sense of accomplishment and to meet people with similar interests. Responses helped clarify whether people sought to undertake another trip for similar, or different reasons (survey 2, question 4), to the trip they had already taken (survey 1, question 4a). Responses are compared in Appendix 14, Table A14.2. There was a strong desire to take another similar trip, with the same organisation, but to a new location or to focus on a different subject, thus confirming the importance of
learning and seeing new things as trip motivators. Differences among the responses may be because over 63% (of the second survey group of respondents) were ‘first timers’. Their expectations concerning a second trip may have been adjusted, based on participation in the first trip. For instance, no respondent stated ‘to relax’ as a reason for taking another trip, although 23% stated this was ‘quite important’ or ‘very important’ as a reason for joining the trip they had just taken.

Alternately, respondents may have felt they achieved certain goals on the first trip and may be seeking different, or additional outcomes, from future trips. Despite the positive comments about individual scientists, the area visited and subject researched, very few respondents repeat the same trip again, according to organisation staff and scientists. The desire to take another trip to deepen their understanding on the same set of research issues does not seem high, and possibly respondents have achieved the level of learning or knowledge gain they sought on the first trip, for that area or species.

Some differences between the results of the two surveys may also be due to coding. For instance, ‘seeing new things’ and ‘learning about [new things]’ appeared in open-ended responses. These were coded differently based on the presence of the word ‘learning’. But in the mind of the respondent, this coded difference may be artificial, as seeing something new may have resulted in learning or gaining knowledge. Crompton (1979:419) noted this overlap, and although he argued there were two cultural motives (novelty and education) for pleasure travel, he also stated the novelty aspects such as new destinations, sights and experiences were presumably also educational. Other overlaps are also likely between coding classes such as ‘helping scientists’, ‘use your skills and help others’ and ‘a sense of accomplishment’. The first two appear more altruistic while the third relates to personal rewards, and may be associated with contributing to the research goals but could also refer to other aspects (such as personal physical accomplishments). ‘To help the organisation’ was not mentioned in the second survey, but received a significant number of responses in the first survey. There are several potential reasons for this. Open-ended responses in the second survey may not have made a clear distinction between helping scientists working for the organisation
and helping the organisation. Alternately the residual euphoria after trips observed for outdoor education trips (Hattie et al., 1997:55) may have increased the range of positive responses to the first survey.

The results of this research were compared with other studies. Beaumont (1999:371) found relaxation, recuperation and recreation aspects were the dominant motivators of ecotourists in her Australian study. Seeing nature was also a primary motivator for ecotourists in her study, but learning about nature was less important. Weaver’s (2002:28) study of Australian ecotourists found significant differences between the motivations of hard-core ecotourists compared with other ecotourists. His study found experiencing the peace and tranquillity of nature, being close to nature, seeing wildlife, escaping the urban environment and learning were the most important motivators of hard-core ecotourists and aspects such as self-discovery were far more important for this group. Additional motivations including the absence of crowds, having new, exciting and adventurous experiences, being physically active, visiting many sites, and meeting people with similar interests were also statistically more important for hard-core ecotourists. Studies of PERT-style respondents, such as that of Weiler and Richins (1995:33) examining the motivations of Earthwatch participants in Australia, found very similar key reasons for joining trips to the results of this research, although also found ‘relieving stress’, and ‘seeking adventure’ were significant, but less important motivations.

Appendix 2 summarised volunteer motivations from key population-wide studies and Section 2.3.4 discussed benefits sought by volunteers. While the psychological functions met by volunteering (Clary & Snyder, 1991; Stebbins, 1982, 1992a, 1996a) have been examined, the dominance of different aspects varied in different circumstances. The relationship between altruism and self-interest was shown to be complex (see Section 2.3.4) and a number of researchers considered younger generations more influenced by personal development and self interest than altruism (Institute for Volunteering Research, 1997) compared with older volunteers. Less work has been done concerning the motivations of environmental volunteers, but their
motivations appeared consistent with other types of volunteers. For instance, the key factors contributing to satisfaction of volunteers in ecological restoration included a chance to be away, meaningful action, participation, personal growth, physical aspects and fascination with nature (Miles et al., 1998:33). Gazley (2001) suggested short term or episodic volunteers may have the same motivations as longer term volunteers but the relative values may be vary and learning and personal growth may be more important. The dual importance of self-interest aspects and altruism as motivators within volunteer tourism programs has been noted (Broad, 2001:246; Wearing & Neil, 1997) although results generally have supported the view that personal growth and learning were key factors (Broad, 2001; Galley & Clifton, 2004; Wearing, 2001). However, these studies were international and had a younger profile than this research.

The results of this research demonstrated for older episodic volunteers, that a wide range of reasons for joining existed, but aggregated responses indicated learning, and the sense of helping and contributing were important in the first and second surveys. The motivations of PERT-style participants in this research appeared to be similar to those of hard-core ecotourists, but the importance of motivations may be slightly different, with learning more highly rated. An additional motivating factor, helping and contributing, is not evident in most ecotourism motivation studies, but is important in volunteering research. Although self-interest and altruism were important reasons for joining, the reasons for taking another trip were more focused on self-interest, and this result is important for understanding the retention of episodic volunteers.

Respondents in this research were participating in episodic volunteering, and many were also active in local environmental work, or had previously taken other similar episodic volunteering trips. The level of stated environmentalism and conservation organisation membership were high, and so respondents on these trips may have viewed their trip as part of a larger or longer term commitment they have to learning and helping the environment. If this was the case, Stebbin’s (Stebbins, 1982, 1992; 1996a) argument that volunteers may be classed as pursuing serious leisure and achieving the durable benefits he identified, is valid.
Although this research did not aim to determine the applicability of Stebbins' work, the results fit within the benefits Stebbins identified, except the durable benefit of financial return initially does not seem applicable in this discussion. However, it may be important in volunteer tourism if volunteers are seeking valuable work experience or skills that can be placed on a curriculum vitae, as some volunteer tourism studies have shown (Broad, 2001; Galley & Clifton, 2004). Other distinctions that Stebbins made between casual and serious leisure appear to support the inclusion of PERT-style trips as serious leisure. Differentiating factors can occur within a trip as well as over the whole period of the serious leisure pursuit. For instance, the trips are often physically and mentally demanding, in remote areas and living conditions can be rough, so the need for occasional perseverance and significant personal effort can occur, contributing to the development of a unique ethos and camaraderie. These aspects are important in adventure and outdoor education where eventual mastery over difficulties can help promote personal development. The identification with the pursuit is tied to the durable benefits of self-expression and self-image and personal growth has been noted as a participant outcome in volunteer tourism (Broad, 2001; Wearing, 2001).

The reasons respondents joined trips in the three case studies presented here were compared with the key reasons for joining listed by global PERT organisations in their marketing (see Table 4.2). Learning, helping scientists and gaining a sense of accomplishment were the three most common reasons used in global marketing and so strong similarities exist. However, the results of this research demonstrated additional significant reasons participants joined, such as feeling closer to nature and additional personal aspects.

8.6.4 Influence of the trip on participants

Data from the second survey, conducted eight to nine months later, provided information concerning how respondents' perceptions of the trip had influenced their activities over the past months. These responses were compared with questions in the first survey that asked respondents how they felt the trip may have influenced them.
Learning has already been noted as an important reason why participants joined these trips and this goal was largely considered to have been achieved. In the first survey, 74% of respondents indicated they would subsequently use the skills and knowledge gained on the trip elsewhere (question 9). Despite this, only 20% of participants stated they would change the frequency with which they participated in pro-environmental behaviours due to the trip (question 16). Initially, these responses appear conflicting but on closer analysis are not. Question 16 asked about altered frequency of undertaking certain behaviours, but question 9 indicated many respondents felt the trip had, or would, improve or alter their ability to undertake current activities. For instance, respondents already volunteering with local environmental groups stated they would be able to apply the new skills to their on-going volunteering.

There were differences in the level and type of response between how people thought they may have been influenced (survey 1), and what they later reported (survey 2). In the second survey, questions 8, 11, and 12 asked respondents about behaviours that the trip may have influenced or how they had already utilised skills and knowledge. Cross-referencing the responses for each individual showed 50 (83%) of the respondents stated the trip had influenced or altered the way they undertook an activity in some way.

In the first survey, 14 (22%) of (the second surveyed) respondents felt the trip would change their frequency of undertaking a listed behaviour in question 14, or any additional behaviour the respondent noted in question 15. The most frequently suggested change was to increase participation in local environmental conservation work, followed by general comments on increased commitment and attitude (but no reference to a specific behaviour), and to increase the number of similar style trips taken. In the second survey, 37 respondents (50%) indicated the trip had influenced the same set of pro-environmental behaviours. The most frequent areas indicated were buying environmental or recycled products, making donations to environmental organisations, engaging in minimal impact practices, and watching environmental
shows or reading environmental literature. Conserving water and participation in local environmental conservation work also scored well. Although there was some variation in the way the questions were asked between the two surveys, the results confirm the previous research findings that surveys some time after a trip may indicate greater changes than measurement immediately after an event or trip. The first survey also asked about an intention to change, while the second survey asked about actual changes. Only two respondents who stated they would be influenced in the first survey, reported no change in the second survey.

Forty-five per cent of respondents stated in the second survey (question 8) that they had already used the skills and knowledge gained through local volunteering, varied communications with others (including speaking to groups or writing newsletter articles), further volunteer tourism, as well as a range of personal ways. Seventy-eight per cent (of the second group) had indicated in the first survey how they thought they would use these skills and knowledge gained in the future (question 9, see Appendix 14, Table A14.3). The most common responses included to use on other similar trips, pass on to others, and use in volunteering. Some of these responses were not sufficiently detailed to provide a clear comparison, but the respondent’s predicted application of the skills and knowledge was similar to the way they indicated, eight to nine months later, that they had used the skills and knowledge. The most common suggested response was to utilise the skills on another trip, but insufficient time had elapsed to confirm this in the second survey, so this may account for the higher hypothesised usage in the first survey than actual usage recorded in the second survey.

The results were compared with those of other researchers. Beaumont (1999:391) found 9% of Australian ecotourists in her study indicated immediately after the trip that it had influenced their behavioural intentions and 14% stated they had actually implemented a behaviour change four months later. Increases in two specific behaviours, minimum impact in natural areas and direct political action such as writing to politicians, signing petitions or attending meetings, were noted (Beaumont, 1999:391). There were significant differences between Beaumont’s study and this one, however. This study
examined trips of one to two weeks duration, whereas Beaumont's ecotourists were within scope if they visited Lamington National Park. Her respondents included people on a packaged day visit as well as longer term visitors. In addition, her second survey conducted four months later, asked about changes in behaviours in the home or in natural areas. This research used a longer time period after the trip and did not restrict where the behaviour change may be manifested.

Oram's (1997) analysis of the interpretation program at an Australian dolphin feeding operation also explored environmental behaviour change. He found that 23% of respondents who received a specific education program stated they had made a donation to an environmental organisation because of the trip, but only 11% of respondents in the control group had done so, two to three months later (Orams, 1997:303). In this research, 30% of respondents stated that they had increased the frequency of this behaviour because of the trip. Although Orams analysed a specifically designed interpretive program aimed at creating behaviour change, the length of the ecotourism experience was short compared with the longer, more immersive nature of the trips studied here.

The results of this work demonstrated that the measurement of the frequency change of behaviours provided only a limited view of how a trip may have influenced participants. Learning was a primary motive for joining the trip, and the subsequent skills and knowledge gained were considered by some participants to have improved their ability to undertake existing activities. This type of trip appears to have been influential in terms of modifying environmental behaviours. This is discussed further in Chapter 9. Some of these modifications were not apparent until some time after the trip.

Involvement in other volunteering
Understanding 'repeaters' is important from a marketing point of view. Determining whether their characteristics were the same, or different, from all participants was relevant. 'Repeaters' have already been influenced by their involvement in past trips and may have given different responses because of this. The characteristics of
‘repeaters’, defined here as those that had previously undertaken a trip with the same organisation, are discussed next.

A number of variables were reduced to binary scores but low numbers still limited the ability to discern statistical significance. Several significant differences emerged. At the 0.05 level of significance using a t-test, more first-timers than repeaters rated ‘to have fun’ and ‘to have a different holiday’ as a very important reason for joining, and in the first survey stated they would change their participation in pro-environmentally friendly activities due to participation in the trip. In the second survey, more repeaters stated that because of the trip they now watched more environmental shows or read environmental literature ($X^2=3.95$, $df=1$, $sig=0.05$). Repeaters rated themselves significantly higher on the self-assessed level of environmentalism (question 10a, $X^2=5.85$, $df=1$, $sig=0.02$) before the trip and at the 0.05 level of significance using a t-test, more rated ‘to learn about the area’ as a very important reason for joining, and were 55 years or older.

Other differences were noted using cross-tabulations and a 25% cut-off, but these were not statistically significant. For instance, repeaters had a higher satisfaction concerning ‘to use skills to help others’, ‘to meet people with similar interests’ and ‘to help the organisation’. More repeaters responded positively concerning their membership of conservation groups (question 12), rated themselves higher on self-assessed level of environmentalism after the trip (question 10b) and considered they learnt more during the trip (question 8). All repeaters stated they would like to do another trip, another trip with a different subject and another trip in a new area (some first-timers did not). More repeaters stated they would like to repeat again with the same organisation, but fewer would like to return to the same location or area or be with the same scientists (question 11). In the second survey, repeaters were more likely to have noted an increase in participation in local environmental conservation work and making donations to environmental organisations (question 11). First-timers were more likely to like to try another similar trip with another organisation than repeaters.
The issues surrounding repeat trip-taking were discussed in Chapter 2. Repeaters travelling with the same organisation were likely to have had a greater understanding of the trips and the work they may undertake, so observed differences between reasons for joining trips were expected. Generally, repeaters considered they had higher levels of environmentalism and educational aspects of the trip were more important. Repeaters had higher satisfaction levels with the social aspects of meeting people and the altruistic aspects of helping and contributing. Their high preference to repeat, but to see new things and visit another location, supported their emphasis on learning. Repeaters also showed, post-trip, an increased frequency in seeking more environmental information through reading or television. Desired goals such as learning or gaining knowledge are likely to be continually sought or require refreshing, and the prior trip taking by repeaters, stronger focus on learning as a reason for joining the trip, and increased post-trip focus on learning confirms the applicability of serious leisure.

The term 'local environmental conservation work' was used in this research to allow comparability with other research (Beaumont, 1999). In hindsight, because of the greater overlap with volunteering in this research, more specific wording such as 'local environmental/conservation volunteering', would have allowed a better analysis of volunteering habits. Responses to question 14a were recoded into a binary code, dividing respondents who sometimes, or more often, undertook local environmental conservation work (local workers) and those who stated they undertook it only seldom or never (not local workers). Although the terms used such as 'work', 'local', and 'volunteer' are imprecise, the results demonstrated 62% of repeat respondents were active in local environmental work and 30% were not, during the last couple of years and more repeaters were local workers prior to the trip ($X^2=7.17$, $df=1$, $sig=0.007$). Not only were repeaters more active in local environmental work before the surveyed trip, but also more repeaters stated they had increased the frequency of this activity after the trip.

Respondents stating they were local workers were also more likely to have done other types of volunteer trips (question 3, $X^2=17.12$, $df=1$, $sig=0.000$) and local workers rated
themselves higher in terms of environmentalism before and after the trip (question 10a, \(X^2=9.03, df=1, sig=0.03\), and 10b, \(X^2=4.95, df=1, sig=0.03\)). At the 0.05 level of significance, t-tests on the responses to question 4a and 4b, revealed local workers were more likely to have joined the trip to learn about the research subject and for a sense of accomplishment and respondents who were not local workers were more likely to have joined the trip to relax and for a different holiday. All local workers were members of environmental organisations.

Olli et al. (2001:187) argued that organised environmentalists (who they defined as active volunteers in environmental organisations) in Norway should display higher levels of pro-environmental behaviours. They argued ‘participation in an organization can be viewed as a personal commitment to behaviours that are expressed verbally, and on the other hand, as the issuing of a social permit for others to monitor one’s environmental commitment’ (Olli et al., 2001:187). Their research, undertaken in 1995, found active volunteers performed private environmental behaviours more frequently than inactive members of environmental organisations, who in turn rated higher than non-members (Olli et al., 2001:192). The environmental behaviours investigated by Olli et al. (2001:193) included buying environmentally friendly or recycled products and avoiding using a car for environmental reasons. They also noted that the intensity of social networks within environmental organisations had an effect on the environmental behaviours of respondents and determined that social context was the most important correlate of environmental behaviour, roughly equal in its effects to environmental attitudes or all socio-demographic factors. This research, although quite different in its approach, did not find that repeaters or those active in local volunteering were more active in terms of stated pre-trip behaviours. The difference may be because participation in local environmental work is only one way of displaying environmental commitment and based on trip choice it could be assumed all participants in PERT-style trips may be committed to the environment.

The stated re-utilisation after the trip of skills and knowledge gained by first-timers and repeaters, and local workers and non-local workers, were virtually the same. However,
although first-timers indicated a higher intention to change behaviours, eight to nine months later, it was more likely that repeaters or local workers had actually altered a pro-environmental behaviour. Repeaters stated higher activity in three areas. They were significantly more likely to have increased their viewing of environmental shows and reading environmental literature ($\chi^2=3.95$, $df=1$, sig=0.05), a relatively easy behaviour to change, and one that may reinforce knowledge gained. Repeaters were also more likely to have increased their levels of donations and local environmental work and local conservation workers were more likely to have made donations and engaged in minimal impact practices in natural areas (based on cross-tabulations using a 25% cut-off). Membership and active participation in an environmental organisation may provide a mechanism in the post-trip phase for each of these behaviours to be increased, or displayed. Mayes and Richins (2003) noted in their study of participants after a dolphin-swim program, that intended changes were more likely to be those that took less time, effort or money (Mayes & Richins, 2003:494) and these behaviours could be perceived as ‘easier’ behaviours to alter but further research is needed in this area.

8.7 Other Data Sources
Research focussing on Landscope Expeditions participants has been undertaken by other researchers. Webb (2002) accompanied a Landscope Expeditions trip to the Little Sandy Desert in August 2001. He ‘sought to identify experience themes for participants on a facilitated nature-based science expedition’ (Webb, 2002:149) and identified six themes. Education was the most dominant experience theme and ‘interesting’, ‘fulfilling’, ‘learning’, and ‘enlightening’ were indicative descriptors (Webb, 2002:154). Of second highest importance were ‘social aspects’, and this was ‘emphasised by a strong sense of community, with many shared moments and much support between participants evident. ‘Sharing’, ‘friendly’, and ‘lasting’ described the rapid bonding both among participants and expedition leaders alike” (Webb, 2002:155). In addition to the two primary themes mentioned, the nature of the landscape, the way participants related to the landscape, a spiritual dimension, and strong emotional terms (which Webb termed ‘affect’) were noted as other salient themes. Webb concluded that the themes that emerged from his study paralleled themes developed by other authors.
(Webb, 2002:158) in studies of natural environmental experiences, but that different experiences resulted in different themes and a different hierarchy of themes.

Additional research on memorable moments of Landscape Expedition participants undertaken by Charlton (2001:3-4), an interpretation officer for CALM, supports Webb's results. The two most salient themes identified by Webb (educational and social) may have been perceived as outside the scope of Charlton's research.

Webb's detailed work helps provide triangulation with this research. The two most salient experience themes Webb identified, the learning (or educational) and social aspects, were also the most important in this research. The next four areas Webb identified, and which Charlton's work overlapped with, relate to the nature of the location of the trip, how the participant related to the landscape and how it affected them. These aspects emerged during the first survey, particularly concerning trip highlights, and in the second survey in responses concerning the most important aspects of the trip, as well as in the goals and outcomes outlined in the first survey and reasons for taking another trip (second survey). The methodological approach of this research was not likely to reveal detailed information on emotive areas and Webb's work provided a useful extension, clarifying the importance of this aspect. Work by other researchers in ecotourism and outdoor education also supports the powerful influence the outdoor setting, or 'nature', can have on an individual.

Russell (1995) examined two Earthwatch projects focusing on the rehabilitation of orangutans in Indonesia. Her results divided participants into two groups, animal welfarists who had a desire for physical contact with the orangutans, and conservationists, who had joined the trip to see rare animals in the wild. She noted the satisfaction gained from feeling needed was important to many participants. The desire to get close to specific animals, to see and visit new things and places few others visited, were all noted in her research and although the focus of Russell's research was different to this work, the motivations and highlights for participants she observed are complementary with the results of this trip.
Louden, an Earthwatch Australia employee, undertook a qualitative analysis of seven Earthwatch volunteers and examined past evaluation forms (Louden, 2004). Her results noted the episodic nature of the trips allowed people to try volunteering, to see what it was like, without having to change their day-to-day lifestyle habits. Immediate post-trip changes in self-perception, knowledge and enthusiasm occurred. Communicating to others was a key outcome. Longer term benefits, two years after the volunteer trip, concerned self-perception, a changed view on volunteering (it had now become part of their lives), and for some, social networks were still maintained. Although this research was not extensive, the individual examples demonstrated some participants remained episodic volunteers, while the experience influenced others to also become local volunteers, supporting the results of this research.

Chapter 2 discussed the difficulties in influencing an individual’s behaviours. Within tourism, the need for specific persuasive communication messages to be structured into interpretation programs had been advocated to help influence behaviours in a desired manner. The results of this research indicated high levels of behaviour modification. Webb (2002) in his analysis of a Landscape Expeditions trip, concluded that the expedition seemed to indicate the type of peak experience Maslow (in Webb, 2002) defined as higher level transcendental experiences that ‘surpass the usual level of intensity, meaningfulness and richness bringing the highest happiness and fulfilment to individuals’, an aspect other social scientists have also noted when researching individual’s experiences, in and with, nature (Webb, 2002:158). Webb’s view may help account for the higher levels of influence the trip had on participants compared with other ecotourism trips, even those with specifically designed interpretative programs to create behaviour change. This research did not aim to separate the experience emotive impacts of outdoor or natural experiences or physical and mental challenges from program messages. The length and intensity of the trips in this research may mean the experience is more similar to some outdoor education immersive-style trips that have been noted to potentially impact participants over a long term, rather than other ecotourism trips.
8.8 Chapter Summary

This chapter examined participants on six Landscope Expeditions trips in 2002-03, two Naturewise trips, and a year (2003) of ‘retail’ participants for Earthwatch Australia. Although there were differences in the responses among each organisation’s respondents, most differences were relatively minor.

Previous research had mostly focussed on international volunteer tourism and indicated a dominance of younger participants. Ecotourism data varied but usually indicated a dominance of older participants. This research of PERT trips revealed participants were generally older (more than 45 years), female, well-educated and domestic travellers. Children were not usually permitted to take part in these trips, and so young families were absent from the socio-demographic profiles, but the age of adult participants varied widely supporting the global results noted in Chapter 4. The surveyed PERT trips required a financial contribution as well as volunteering, and probably because of this, PERT participants appear to have similar profiles to ecotourists, particularly hard-core ecotourists. Participant responses did not significantly alter with their socio-demographic profile, but Landscope Expeditions participants were more likely to utilise the skills and knowledge gained and volunteer locally. Respondents with this organisation mostly took a trip within their own state. Further work is needed to determine whether the proximity to the research locations and an on-going connection between respondents and the visited area enhanced the respondent’s ability or likelihood to re-utilise new skills and knowledge.

Key reasons for undertaking the trips were to learn, to see new things and to help scientists collect data. A very high level of satisfaction was noted and participants mostly had achieved their goals for joining. These factors were still considered important aspects of the trip eight to nine months later, but meeting people was more highly considered than seeing new things. There was a strong desire to undertake another trip and the key reasons for this differed slightly to the reasons for taking the previous trip. The key reasons to join again were to achieve a sense of accomplishment,
the social aspects of meeting people, and to learn. The preference to visit a different location, or to take a trip with a different research focus, reinforced the results concerning the desire to learn and see new things as being important to participants. Although the observed reasons for joining were similar to those in ecotourism and volunteering, the emphasis on learning and aspects such as helping and gaining a sense of accomplishment, may distinguish PERT-style trips from other types of educational or hard-core ecotourism. The results also confirm the suggestion of Gazely (2001) that learning may be a more important motivator for episodic volunteers compared with ‘traditional’ volunteers.

Previous research in volunteer tourism had not considered repeat trip-taking aspects. Unlike areas such as youth-oriented volunteer tourism, a high level of repeat-trip taking was observed within this research on PERT-style trips. Although repeat and first-time respondents were often similar, repeaters considered themselves higher on a scale as environmentalists, both before and after the trip, and many were also active in local environmental work. Repeaters stated greater post-trip changes in the longer term.

This research revealed some participants were repeat episodic volunteer tourists, but did not undertake similar volunteering work in their home environment, while others were both local volunteers and episodic volunteer tourists. The relationship between local volunteering and volunteer tourism requires further research. For instance, the reinforcing activities of post-trip local volunteering (in terms of information, social networks, and the capacity to re-utilise skills and knowledge gained) may have supported subsequent behaviour modifications initially influenced by the trip. It is also likely that people who engaged in local volunteering prior to the trip may have chosen a volunteer tourism trip to extend their interest and activities in environmental pursuits. The on-going nature of the accumulation of durable benefits from volunteering noted in serious leisure research is inclusive of both local and tourist events (Stebbins, 1996b) and both types of volunteering may enhance repeat purchase behaviour of volunteer tourism trips.
Although the data collated here were only indicative of environmental interest, all respondents could be classified as 'hard-core', based on their responses concerning behaviours or views before joining the trip, as well as the previously suggested reason of trip choice. Despite this, the data did not support the notion that 'hard-core' ecotourists were not likely to be influenced by a trip as they were 'already converted'. Most respondents felt they had learnt a lot from participating in the trip. Eight to nine months later, 83% stated they had been influenced by the trip, 62% believed they had increased their frequency of participating in specific environmental behaviours and 45% indicated ways they had already re-utilised the skills and knowledge gained. The pro-environmental behaviours listed as having been most influenced by the trip were buying environmental or recycled products, engaging in minimal impact practices, watching or reading about environmental issues in the media, and donating. The subsequent implementation of learning, understanding and knowledge gains was mostly undertaken through local volunteering, on other trips, or in personal ways. Although the participants could be classified as 'hard-core', considerable variance in pre-trip activity levels of environmental behaviours was noted. This research did not attempt to demonstrate cause and effect or determine why certain behaviours were influenced by the trip. Further research is needed to clarify these aspects.
CHAPTER 9
ANALYSIS OF BENEFITS AND IMPLICATIONS OF RESEARCH

9.1 Introduction
One of the aims of this research was to identify the benefits that were accrued by specific stakeholders involved in the PERT sub-segment. Chapters 6, 7 and 8 examined the views of the organisations, members of the field crews and participants concerning benefits gained from involvement with PERT trips. However, these benefits do not accrue in isolation and the inter-relationships among the stakeholders impact on the benefits, strengthen partnerships and contribute to the long-term sustainability of operations. The extent this occurs within the PERT sub-segment is examined in this chapter.

Section 9.2 analyses the inter-relationships between the goals and benefits of all three stakeholders but does not re-iterate the individual benefits identified for each set of stakeholders and examined earlier. The methodological implications arising from this research are discussed in Section 9.3, policy implications in Section 9.4 and additional implications in Section 9.5. Limitations of this research are described in Section 9.6 and a chapter summary is given in Section 9.7.

9.2 Inter-relationships Between Stakeholder Goals and Benefits
9.2.1 Provision of funding and labour
A key goal for operating PERT-style trips for organisations and researchers was to obtain funding and free labour for research projects in need of this type of support. For both Landscape Expeditions and Earthwatch, the principal reason the trips were introduced by the organisation was to provide an alternative means of supporting field research. Both organisations believed they were achieving these goals. Naturewise had no stated research goals and because of the short period of operation, it was not possible to determine whether its research objectives had been achieved.
Field crew comments indicated the primary reason they became involved with the trips was to get work done that would otherwise not be possible, not be possible in the same format, or would be difficult to achieve through other means. Although the need for labour was rated slightly higher than the need for funding, both budgetary reasons and the need for a large work pool were the primary reasons members of the field crews stated they initially became involved with PERT-style trips.

One of the key reasons participants indicated they joined the surveyed trip was to assist scientists collect data. There was a high level of post-trip satisfaction with this reason for joining, and it remained important eight to nine months after the trip. Participants gained a sense of personal accomplishment and the feeling of ‘contributing, helping and working’ was a significant highlight. The altruistic aspects of contributing to research and conservation were emphasised in marketing material by all three organisations. This aspect is the key factor separating PERT-style trips from other educationally-focused ecotourism trips.

Marketing information often emphasised, directly or indirectly, that participants would gain the rewards of knowing that they had contributed to pioneering studies in remote areas, would be at the forefront of research, or would gain a taste of scientific discovery. Some organisation staff noted trips fulfilling at least one of these aspects sold better, and some members of field crews noted that remote trips allowed access to new sites or an interesting location and this was an important reason for joining. Members of field crews also stated the program allowed exploratory trips to be designed sometimes resulting in significant research outcomes. For participants, as well as researchers, visiting new places, seeing new species, accessing areas they would not otherwise be able to get to, were important trip benefits.

9.2.2 Education

The second key benefit was education of the public. Education was important to all three stakeholders, but the emphasis varied. The opportunities for learning and receiving high level interpretation concerning conservation, an area, specific species,
and the research work was emphasised by each organisation in their marketing. Learning about the area and the research subject, and seeing new species were key reasons participants joined the trips. Learning remained important after the trip was over and was a key goal for taking another PERT-style trip. For field crews, educating the public about science, changing the attitudes and behaviour of the public, and education of the public on an area, species, or on nature were important. For each stakeholder group, aspects of learning and education appeared to have been achieved.

There were some differences in emphasis among organisations. Both Landscape Expeditions and Earthwatch stated the trips gave participants the opportunity to acquire skills. Skill acquisition was also noted by participants and was seen as an outcome by some of the field crews. Landscape Expeditions trips not only enhanced the understanding of specific issues for species and areas, but also educated the public concerning the land management role of CALM.

The extent that education as a goal was achieved was not possible to determine, but two key mechanisms through which organisations and field crews could achieve their goals of educating the public emerged. The primary mechanism was via the participants, changing their skills and knowledge. The second study showed 83% of respondents felt the trip had in some way influenced their post-trip activities. The post-trip utilisation of the learning was mostly carried out through local volunteering, on other trips, or in personal ways. The most common increased frequency of post-trip participation in environmental behaviours occurred for the behaviours, buying environmental or recycled products, engaging in minimal impact practices, watching or reading about environmental media, and donating.

The second method was indirect, through participants subsequently telling other people about the trips, through the media surrounding the trips, and from the impact the trips may have had on local communities. Examples of participants passing on information they had gained through, for instance, talks to nature groups and published newsletter articles were mentioned by respondents within each stakeholder group. These types of
communication meant that participants spread their knowledge gains to a wider audience and word-of-mouth advertising was created that helped market future trips to potential participants.

9.2.3 Personal rewards for participants
Providing an experience that may not otherwise be a part of participant’s life was a stated goal for Landscope Expeditions and a facet mentioned by both volunteers and field crews from each organisation, although often indirectly. The trips were advertised as offering to volunteers more than ecotourism trips could offer and allowed visits to hard-to-access locations, access to experts, and the ability to contribute to a research expedition. Self-discovery was identified as an important motivator that separated hard-core ecotourists from other ecotourists (Weaver, 2002:28) and the ability of volunteer tourism trips to contribute to the personal development of participants had been noted as a key outcome by earlier researchers (Broad, 2001; Wearing, 2001). Although this research was conducted on trips of a shorter duration than most previous volunteer tourism studies and with an older average age of participants, personal growth was evident in respondent comments. A high number of volunteers stated that the trip had influenced them, but fewer stated that they had made a major change in behaviour because of participation in the trip. Descriptions of the impact the trip had made on individuals often included emotive words and referred to personal or intrinsic aspects. Research from the fields of wildlife tourism, ecotourism, outdoor and environmental education and recreation studies have noted the significant impact nature, or a natural experience, can have on individuals. The tools used in this research did not specifically aim to determine emotive or spiritual impacts resulting from the trip and the outcomes may have been stronger for participants than recorded in this research. However, personal factors such as relaxation, fun, rejuvenation and feeling closer to nature were noted. Webb’s (2002) research concerning volunteers on a Landscope Expeditions trip, confirmed the importance of emotive/spiritual aspects.

Enabling participant goals to be achieved was not a specific goal for members of the field crews. However, the personal stimulation that members of field crews received
from the trip was important to most members. After a trip there was a strong sense of enjoyment, satisfaction and achievement, and it was considered rewarding to have opened the eyes of participants to new aspects. Places and species had become familiar to the field crews and observing the joy in volunteers who saw these things, reinforced their own commitment to their work, and to conservation. Emotive aspects were included in these types of comments.

9.2.4 Friendships
For participants and members of the field crews, the friendships, stimulating conversations, meeting of like-minded people and camaraderie were personal goals and outcomes. Social aspects were noted as an important reason participants would consider taking another trip and the value of the social connections were recognised by the field crews, particularly those who had been involved with a number of trips. Social aspects made the trips more fun and stimulating and the flow-on effects noted by the field crews included an increased likelihood of participants subsequently volunteering, and smoother trip logistics. Although social aspects were not a direct organisational goal, the achievement of participant and field crew goals contributes to the long-term sustainability of the program for the organisation by ensuring supply and demand for the trips.

9.2.5 Personal gains for field crews
All members of the field crews considered they achieved some personal goals from the trip, and learning was mentioned as a significant outcome by 85% of the interviewed field crews. Neither organisational staff nor participants mentioned field crew learning as a goal or outcome, although both Landscape Expeditions and Earthwatch acknowledged volunteers can bring new skills and knowledge to a project. As well as learning skills or knowledge from volunteers, additional learning arose from other sources. For instance, as part of a larger field team, members of field crews learnt from each other, gained a better understanding of the public’s view of their work, improved their own communication and inter-personal skills, and mentioned other knowledge they gained from the different experiences and the backgrounds of the volunteers.
The personal learning by the field crews contributed to the enthusiasm and enjoyment this group derived whilst on the trip, and hence to participant outcomes through positive flow-on effects. The achievement of work-related goals was the primary reason that field crews initially became involved in these types of trips. The improvement of their ability to achieve these goals, or enhancement of specific aspects surrounding the research project, was considered major outcomes by field crew respondents. The organisation also benefited as the long-term supply of suitable trips is enhanced by the acknowledgement of the broader advantages of participation for members of field crews.

9.2.6 Volunteering

Both organisations and field crews perceived that the trips allowed them to access members of the community not already active in environmental volunteering. The creation of new conservation volunteers was a goal for some field crews and a stated goal for the Naturewise program. Just under half of the responding participants had not undertaken local environmental or conservation work at least sometimes over the last two years, demonstrating PERT-style trips attract new, or currently inactive, conservation volunteers.

Three types of participants were observed in this research:

- first-time or repeat participants not previously active in local conservation work but who stated that the trip participants had influenced them to subsequently become local volunteers;
- episodic volunteers only, both repeaters and first-time participants, not active in local conservation work before or after the trip, but who planned to undertake more episodic volunteering; and
- participants who were both repeat episodic volunteers and active in local conservation work.

So as well as participating in the surveyed trip, each type of respondent planned to make further contributions to conservation, and 30% of respondents stated they had
increased the donations they made to environmental organisations because of the trip and 22% stated they had increased the frequency of their local volunteering.

In the second survey all participants stated that they would like to undertake another trip. While some had already taken or booked another trip, the time frame for this research was too short to check whether this intended behaviour actually occurred for all respondents. Potentially there is another type of volunteer, first-timers who did not participate again in episodic volunteering. Further research is needed to examine the factors that influence the decision to repeat, and take another PERT-style trip.

9.2.7 Partnerships
A secondary organisation goal was to enhance partnerships. The extent this occurred varied among the case studies. Landscope Expeditions trips allowed access to remote areas and achieved the organisational goal of giving CALM representatives the ability to meet local communities. Determining the impact of the Landscope Expeditions program on host communities was beyond the scope of this research. Because most Landscope Expeditions volunteers took trips within their home state, trips were seen as also promoting partnerships with the broader public. Earthwatch had a stated goal of promoting partnerships with businesses, schools, and local communities and a recent change in the mission statement further highlighted this aspect of their work. Field researchers with Earthwatch were from outside the organisation and so the trips also created partnerships with research institutions.

This research confirmed that the trips produce positive experiences, and each of the stakeholder groups studied recognised they gained a range of benefits from involvement with the trips. The inter-dependence of the benefits is also crucial in developing, strengthening and reinforcing the partnerships. The long-term benefits derived from an increased capacity building within each group of stakeholders are an important outcome of this research. Considerable work has examined techniques that support and encourage increased public participatory decision-making and mechanisms to increase social capital (Healy, 2003b; Light & Higgs, 1996). The activities within the
PERT sub-segment contribute to the participant’s ability to actively engage in future conservation decision-making and importantly also raise the appreciation amongst scientists and researchers of the value of involving members of the public in scientific work and the contribution the public can make to research programs.

This research asked members of the field crews about negative aspects of the trip, and overall the trips were considered benign and to produce positive outcomes although it was beyond the scope of this research to determine the total impacts of PERT-style trips. Further work is needed to determine the extent that these trips can provide, or support, a linkage between tourism and conservation.

9.2.8 Impact of participant socio-demographic profiles on outcomes
The socio-demographic profiles and outcomes of participants were discussed in Chapter 8. Respondents were generally older, female, well-educated people, who may be travelling within their own country or internationally, and this had significant consequences for the field crews. The tasks older people were able to physically undertake were different to those achieved by younger volunteers and comments in terms of trip design and task construction from members of field crews showed this had been taken into account. While less ability to undertake hard physical activity may have limited the tasks that could be undertaken, people at this stage of their life cycle often have the time and income to contribute and the ability to access funding to assist the field trips was a key reason for operating the trips and for researchers to join trips.

In comparison to other volunteers, the maturity, skills and experiences these volunteers contributed were noted by members of field crews and these factors enhanced the overall work output and sometimes project design. For instance, contributions of database programmers and dentists were given as examples. The range and quality of pre-existing work skills that older volunteers contributed to projects was more closely related to age, than, for instance, motivation. High education levels also contributed to these benefits and had additional impacts.
Stimulating conversations were significant for both field crews and participants and these sometimes encouraged members of field crews to think differently about their own project or broader work. Interesting conversations also contributed to the social rewards and added to overall enjoyment levels. Field crew respondents noted that these volunteers, compared to other types, quickly understood the instructions relating to tasks and had often read and learnt about the area before undertaking the trip. These factors made a difference in the overall work outcomes by, for instance, speeding up logistics allowing more work to be done. It was not possible to determine the extent that education levels, age or other factors such as motivation, may have contributed to the noted differences between types of volunteers, but high education levels of participants were mentioned by field crew respondents as a factor.

Previous population-wide research had indicated socio-demographic characteristics were likely to alter a person’s motivations for volunteering, although one case study within PERT had not observed any significant differences in the experiences based on gender (Webb, 2002:154). This research found participant goals and outcomes did not significantly alter with their socio-demographic profile, although repeat trip-takers tended to be older (over 55 years old).

The residence of participants impacted overall benefits. Around 75% of Landscope Expeditions participants resided in the same state as the location of the trips, a much higher statistic than for the other two organisations. Helping the organisation was more likely to be considered a trip benefit by Western Australian participants than out-of-state participants and strong connections between participants and the organisation existed.

Post-trip word-of-mouth extension of the new knowledge and understanding was frequently mentioned by participants. Western Australian residents were likely to receive media coverage of state environmental and land management issues and possibly had a greater opportunity to use the knowledge gained on the trip to assess
political debates and discussions and extend the conservation messages from the trip to other Western Australians.

Participants residing in Western Australia indicated they were more likely to have used the skills and knowledge gained from the trip and they were more likely to have increased their involvement in local volunteering (of any type) after the trip was over, compared with out-of-state participants. It may be that participants who undertook a trip in their own state were more easily able to apply new learning from the trip in their home location. Mayes and Richins (2003:494) observed that the behaviours most likely to alter from an ecotourism interpretation program were the easier or cheaper ones. Alternately, the new learning may have been applied in a way that most readily provided durable benefits. For instance, the application of new learning in local volunteering work may have contributed to personal rewards such as self-expression and altruistic elements of helping other volunteers as well as providing social rewards (Stebbins, 1996a). This research indicates the societal benefits derived from local volunteering (Kerr & Tedmanson, 2003) may also be applicable to non-local volunteers.

Landscope Expeditions organisation staff also considered trip design factors slightly differently to other organisation staff because of the state-based target market. Landscope Expeditions participants rated the ability to access unusual places, remote sites, and places others don’t get to see, more highly than participants with other organisations. Related implications are discussed below in the ‘repeat episodic volunteer’ section.

This research was mostly conducted on respondents who were Australian residents. If Australia’s existing programs were expanded to include higher levels of international volunteer tourists, the benefits and styles of operation may alter. For instance, cross-cultural learning was considered a benefit for many participants and members of field crews who were part of Earthwatch programs. This organisation had the highest level of non-Australian participants during this research. Members of field crews also
mentioned issues concerning non-Australian volunteers such as lack of familiarity or confidence in the bush, and language barriers. The levels of certain pre-trip pro-environmental behaviours, and the influences the trip may have on participants may alter if the demographics of participants changes.

9.2.9 The influence a trip may have had on subsequent participant behaviour

Two notions relevant to this research had been suggested in the literature. Factors that contribute to the creation of behaviour modification in tourists (Orams, 1997) such as high levels of education and practice in certain behaviours are evident in PERT-style trips and consequently post-trip behaviour modification in participants should be observable. An alternative notion is that participants will show little behaviour modification after a trip, as volunteer tourism trips attract relatively 'hard-core' environmentalists who already undertook significant pro-environmental behaviours prior to joining the trip (Beaumont, 1998a). The research described in this thesis showed over 80% of respondents considered the trips had influenced their subsequent activities in some way, supporting the first statement.

Descriptions of 'hard-core' ecotourism usually included aspects concerning trip characteristics and attitudes or behavioural characteristics of participants. Researchers have previously considered 'science tourism', 'research trips' and 'volunteer tourism' to be hard-core in style (Martin, 1997; Turner et al., 2001). The style of PERT trips, described in Chapters 4 and 5, confirm characteristics that support this classification, such as the educational, experiential, longer duration and intense nature of the trips. Most volunteers considered themselves to be reasonably high in at least one type of environmental indicator and together with their choice of a hard-core trip, most individual participants would be considered hard-core, as suggested by Weiler and Richins (1995). However, individuals choose, and are able to, display, 'commitment to the environment' in different ways. This research showed individual participants before taking the trip demonstrated significant variation in activity levels between pro-environmental behaviours.
Orams (1996b) suggested that there were two types of desirable behaviour modifications from interpretation programs in ecotourism. One type altered the behaviour so participant's actions became more environmentally responsible, both during the tourism experience and in the longer term. The second type promoted tourist actions that directly contributed to the wildlife they were visiting (Orams, 1996b). This research demonstrated PERT-style trips produced both types of desired behaviour modification. Previous researchers have often ignored repeat trip-taking behaviour in an analysis of this area, yet in the case of PERT-style trips, the continued contributions may be significant. The results demonstrated that PERT-style trips can improve both the quality and quantity of short and long-term environmental behaviour (for instance, improving the skills of the volunteers and enhancing their contribution to the research during the trip, and encouraging subsequent modification of post-trip pro-environmental behaviour) and this impacts the achievement of the goals of other stakeholders.

This research examined ways the participants felt the trip had influenced them. The research work was done using only two time periods and further work documenting participants, the levels of repeat episodic volunteering and the rewards gained over time that stem from it, would be useful. Further work also needs to be done to analyse the frequency of any alteration in behaviours compared with the efficacy of respondents undertaking existing behaviours. Observed post-trip changes in behaviour may be those that most readily contribute to further accumulation of durable benefits rather than easier or cheaper modifications as suggested by Mayes and Richins (2003). This research only examined intended behaviours and perceived, self-reported behaviours. While there were differences between these, self-reported behaviours may not equate with actual behaviours, and further work is needed to clarify this issue.

Kitchell et al. (2000:12), examining members of environmental organisations, discussed the problem of whether like-minded people join the same group (through self-selection) or whether being active in the same group creates similarities in members. This research did not explore cause and effect and further work is needed to
determine whether the trips attract like-minded people ready to learn with a pre-
inclination to implement new ideas at home, or whether the trip itself helps develop the
desire to subsequently act on the new knowledge gained.

9.2.10 Repeat participants and trip outcomes
Trade-offs existed in the achievement of organisation and members of field crews
goals. Utilising more repeaters would result in a pool of more skilled volunteers with
increased knowledge and ability to help achieve scientific goals. Marketing,
administrative and supervisory requirements would be decreased. However, high levels
of repeaters would also decrease the ability to achieve the broader goal of educating the
public as fewer total people would be involved in trips. All organisations indicated they
filled trips on a first-in basis and while this quandary existed, there had not been a need
to specifically address it. Organisation staff did note that higher levels of repeat
participants helped fill trips, creating better financial returns. Tourism research
suggested repeat visitors not only provide stability to a location but also act as an
information network communicating messages about the location to others (Lau &
McKercher, 2004) so some wider education could be inferred to occur from high repeat
levels.

A number of field crew members stated that when they did get volunteers who had
previously joined their trip, the benefits were significantly greater than other repeat
volunteers. Despite the high level of satisfaction, and high desire to undertake another
trip with the same organisation, few respondents repeat and join the same trip again. It
could be inferred that retention and commitment to this type of episodic volunteering
appeared to be primarily motivated by the desire to see and learn about new things and
the altruistic aspects of contributing and helping with the research were secondary.
Earlier research indicates that social aspects and belief in the value of their contribution
are key aspects in the retention of volunteers and specifically of active environmental
members (Martinez & McMullen, 2004). This research confirmed this and clarified it
for this type of episodic volunteering. The decision concerning which PERT trip to join
appears more likely to be based on maximising personal returns rather than the
contribution to the project, as participants know they are making a satisfactory (and still valuable) contribution by joining any of the trips.

The need to attract repeat trip-takers impacted trip design and logistics, particularly for Landscape Expeditions and Naturewise which offered a small number of trips per year. Seeing new species and places were important reasons participants joined and this contributed to the inclusion of new trips (where possible) in each annual program according to Landscape Expeditions staff. ‘One-off’ trips increased set-up costs and added considerable burden in terms of planning and development for researchers, but field crews noted the exploratory nature of some of the Landscape Expeditions trips was beneficial and allowed researchers access to places rarely visited.

9.2.11 Summary of benefits

The trips provide funding and access to a free pool of willing labour allowing field research to be conducted that may not otherwise have been able to be undertaken. This characteristic distinguishes PERT trips from other types of educational ecotourism trips.

For an organisation to have long-term success in this area, as well as achieving its own goals, it must ensure that the trips are viewed positively from the supply side (the field crews), and from the demand side (the volunteers). While organisational goals and the goals of field crews overlapped, for the field crews the trips had to be considered the most effective way of achieving their goals, compared with alternative funding and volunteer methods. This research demonstrated that although the work-related outcomes were the primary initial reason for becoming involved, the trips were perceived to deliver a considerably greater range of advantages to members of the field crews. The perceived benefits were generally more extensive the longer a member of a field crew had been involved with PERT-style trips. Both output benefits and process benefits (Ironmonger, 2000:67) were accrued by field crews and elements of these also accrue to the organisation.
Volunteers indicated a high level of satisfaction with the trips, the level of repeaters was high and there was a high desire to take another trip. These factors help ensure an on-going supply of episodic volunteers for future PERT-style trips and enable longer term goals of field crews and organisations to be achieved.

9.3 Methodological Implications Arising from the Research

9.3.1 Measurement of episodic volunteering

Despite the acknowledgement of connections between environmental volunteering, episodic volunteering and ecotourism, few researchers have considered the methodological issues surrounding the area. Consequently aggregate data on volunteer tourism or episodic volunteering is currently poor and Section 2.3.3 discussed the shortcomings surrounding the accuracy of volunteer tourism and episodic volunteering data within current statistical measurements of volunteer rates. For instance, measures often exclude international volunteering (Australian Bureau of Statistics, 2001a) or volunteering outside the local area (The European Opinion Research Group [EORG], 2002).

Within volunteering research, questions concerning prior volunteering often use a reference period of the previous 12 months (such as used by Hughes & Black, 2002:61). Although recall may be a problem with certain types of episodic volunteering, recall of PERT-style trips is not likely to be a problem. For instance, during this research a high recall accuracy of past trip-taking over the previous 10 years was evident with Landscope Expeditions participants.

Survey problems with the term ‘volunteering’ may be exacerbated within volunteer tourism where respondents have difficulty reconciling the mixture of pleasure and work (Gazley, 2001). Consequently, volunteer tourism may not have been considered ‘real volunteering’ due to the holidaying component, and may not be included in a response. For instance, in this research, 55% of respondents considered the trip to be half, or more, holidaying. Care needs to be taken in question design to clarify to the respondent whether volunteer tourism should be included.
With the growth in episodic volunteering and in volunteer tourism, researchers within the fields of volunteering and tourism need to consider whether their research incorporates or excludes these areas. An episodic volunteer who volunteers for 10 hours a day for a 10 day period, once per year (a similar workload to many of the trips included in this research), has contributed similar hours as a volunteer working for two hours, most weekends of a year. If the episodic volunteering was undertaken eight months ago future research needs to clarify whether this type of volunteering and level of contribution is to be incorporated.

9.3.2 The need for better data on episodic volunteering

Although this research identified the PERT area as starting in the early 1970s and continuing to grow, episodic volunteering is currently believed to be minor compared with other types of volunteering. Despite this, the review of broad scale trends within volunteering indicated a number of factors contributing to the continued growth of the PERT sub-segment and the wider areas of volunteer tourism and episodic volunteering. A better understanding of the extent of episodic volunteering and the factors affecting it, including volunteer tourism, may be critical in the development of future volunteer management strategies.

Implications for environmental research also exist. For instance, environmental or conservation volunteering is often used indicatively in surveys examining environmental concern or pro-environmental behaviours. Understanding episodic volunteering and accurately measuring it is essential as it is likely that more types of environmental volunteering are seasonal, require trips, or are suited to short-term field requirements, than other types of volunteering such as hospice work. In addition, if environmental volunteering is to be used as an indicator of environmental commitment, concern or activity, this research revealed some people who were episodic volunteers were not members of environmental groups, nor active locally in environmental volunteering. Inaccurate measurement of episodic volunteering potentially may lead to incomplete results.
Tourism research, particularly within ecotourism, educational or experiential tourism, should also consider the measurement of episodic volunteering. People who enjoy travelling may demonstrate a preference for volunteer tourism over other types of volunteering, and research needs to be sufficiently accurate to allow future trends in this area to be discernable. Evaluation of environmental education and interpretation programs in ecotourism often use a comparison of levels of pre- and post-trip environmental volunteering as an indicator of program success. During the program, the respondents are undertaking the desired action in an episodic manner, and may adopt the desired behaviour episodically, yet analysis of previous question design in this area indicates past research may not have accurately measured episodic behaviour.

Volunteer research also needs to develop accurate measures of episodic volunteering. The need for volunteers in many countries appears to be increasing, including Australia. Future supply may fall short of demand for volunteers unless more innovative recruitment and retention practices are adopted by volunteer managers. Yet the mechanisms to ensure a continued supply of the variety of volunteers needed within communities have not been fully explored. Episodic volunteering, and more specific areas such as volunteer tourism, are not sufficiently well understood, but this research demonstrated that PERT-style trips attracted people who otherwise were not currently volunteers, the post-trip desire to become a repeat episodic volunteer was high and some increased their level of local conservation work. The examination of PERT-style trips is also important as concern was noted in Chapter 2 regarding changes in the participation rates of older volunteers. In the past, older retired people have contributed greater hours to volunteering compared with other age categories. As PERT trips tend to attract older volunteers and the population of Australia is aging, mechanisms that attract older people to volunteering, such as PERT, are important.

The demand for episodic volunteering opportunities in the USA and Canada (Handy & Srinivasan, 2004; Safrit & Merrill, 2000) is increasing rapidly (Macduff, 2004). Free time is often listed as a barrier to volunteering for all age categories, and being tied
down or committed to regular fixed hours has also been noted as a barrier, for young volunteers (Institute for Volunteering Research, no date [b]) and even with older retired people (Warburton et al., 2001). More flexible arrangements, such as short-term project-based volunteer opportunities, are needed to recruit and retain volunteers. Supply of these opportunities has been a limiting factor and this research extended the knowledge of the benefits to field crews and organisations concerning involvement in these trips.

The suitability of episodic volunteering to meet trends noted in volunteering such as the increased emphasis on self-interest also indicates more attention should be given to this area. Self-interest is an important motivator in older people (Warburton et al., 2001) and episodic volunteer opportunities may also encourage people to start volunteering. Young potential volunteers want ‘taster sessions’ and more flexibility in time-tabling (Institute for Volunteering Research, no date [a]:3), and episodic volunteering may be well suited to meet these requirements (Safrit & Merrill, 2000). Encouraging young people to volunteer is not only important for their own life-skill development, but once people start volunteering they are more likely to continue to volunteer for the rest of their lives. The area of environmental volunteering, with the high interest from younger people, may be well placed to gain volunteers through a range of styles of volunteer tourism.

Turner, Miller and Gilbert (2001) discussed the variety of ways not-for-profit organisations were becoming more involved in tourism and the likely expansion of their involvement in tourism. As the charity sector has become increasingly competitive, both in terms of attracting grants as well as volunteers (Warburton & Mutch, 2000), this research revealed two ways PERT-style trips may help charities achieve their goals. This research indicated PERT-style trips are more likely to attract an older clientele, probably due to financial aspects. There is significant potential for PERT-style trips, with the attractions of learning and travel, to attract the baby boomer generation as they start to retire. As the inter-generational transfer of wealth occurs and inheritances are passed to the baby boomer generation, charities are examining how to
encourage this group to also donate. Tempting the 'giving-resistant rich' to initially volunteer rather than asking them to donate has been suggested (Cater, 2002) as research has shown volunteers are more likely to make donations. This research also noted that 30% of respondents indicated the trip had influenced them to increase their post-trip donations to environmental causes. PERT participants already contribute financially and through volunteering to field research projects and further philanthropic linkages may be feasible.

9.3.3 Measuring the influence a trip may have on subsequent participant behaviour

Measurement of the influence a trip may subsequently have on participants was discussed in Chapter 2. Research has often focused on measuring knowledge gain, attitude changes, or intention to alter behaviours. Trip influences may be small, specific to the individual, and alter due to situational factors. Despite the acceptance that the variety of pro-environmental behaviours a trip may impact is broad, researchers in ecotourism have generally asked about the frequency change for a small range of behaviours, such as those used in question 14, survey 1, in this study. This research showed that 83% of participants stated they were influenced by the trip, 50% increased the frequency of one or more stated pro-environmental behaviours, and 45% described ways they had already re-utilised skills and knowledge eight to nine months after a trip. In addition, 85% of members of field crews indicated significant personal learning outcomes.

This research extends previous work in volunteer tourism because of its detailed analysis eight to nine months after the trip. In addition to questions concerning an intention to undertake a behaviour, information was gathered on actual post-trip behaviours that respondents perceived had been influenced by the trip. Although limitations existed, the responses indicated participation in the trip was perceived to have altered not only the frequency of behaviours, but the efficacy of existing behaviours. Efficacy changes may be sizable, and may be as important, or more important, than frequency changes. For instance, discussing the application of new skills and knowledge, one respondent stated he re-utilised new skills in feral cat
trapping on his property, while another discussed her ability to identify additional flora taxa as a local volunteer. Both these examples were not a changed frequency but an increased efficacy of an existing behaviour. The size or significance of these benefits was not further measured.

High numbers of participants considered they were influenced by the trip, and although this research did not aim to determine cause and effect, a number of factors may have contributed to this result. These include the immersive and intense nature and duration of the trips, the emotive power of the natural setting and species studied, and the strong social bonds and social context the trips provided. The opportunity to apply a desired action skill is also important in encouraging behaviour modification (Orams, 1997). Opportunities existed during the trips. Earlier research demonstrated that a key reason people remain volunteers was the belief that their contribution was worthwhile (Martinez & McMullen, 2004) and involvement in PERT trips may re-confirm the value of volunteering and strengthen this belief. In addition, factors in the post-trip phase potentially helped the continual accrual of durable benefits and on-going rewards, such as self-expression and self-image (Stebbins, 1982, 1992, 1996a) for participants. Continual accrual of durable benefits can encourage enduring involvement with the trip; impact the on-going evaluation of the trip in the post-trip phase of travel; contribute to long-term satisfaction; support the desire to take another trip; and be important in encouraging and supporting ongoing behaviour modification. Care needs to be taken in measurement, however, as benefits are cumulative (as noted in serious leisure research) and the extent the benefits were derived from the trip or came from the subsequent application of these gains in local volunteering was not clarified (and respondents may not be able to segregate these).

This research demonstrated most respondents felt they had learnt a considerable amount on the trip but discussions in Chapter 2 noted there were many reasons why knowledge gain does not necessarily translate to modified behaviour. Most of the learning on the trip may not have influenced any subsequent actions, but 83% of respondents considered they had been influenced by at least one aspect. Commonly modified
behaviours included local volunteering or further episodic volunteering. Further research is needed to examine how the experience altered attitudes towards volunteering, the subjective norms, or perceived behavioural controls that influence a participant's intention to undertake additional volunteering according to Ajzen's (1991) Theory of Planned Behaviour. Although altruistic reasons were less important as a stated reason for taking another trip, they were present in the results and further research should include a moral norm as suggested by Parker, Manstead and Stradling (1995).

9.4 Policy Implications Arising from the Research

9.4.1 Organisational Aspects

Research within the PERT area has wider implications for public policy, such as the role of public, not-for-profit and private sector operations in PERT. Apparent conflicts between profit maximisation and the goals of sustainability and conservation have been discussed within ecotourism. However, this research demonstrated that globally commercial operations, not-for-profits and Governmental organisations all operate volunteer tourism trips, so further analysis is needed in this area. A detailed comparison of the three case studies selected in this research, including one Government-run operation, concluded many aspects were similar across each of the organisations studied. Despite this, the Government-run organisation did have slightly different goals and mode of working. It also had a slightly different participant base (older, local people). More work is required to determine whether the observed differences between the Government-run case study and the other case studies in this research were related to structural aspects.

Partnerships or collaborative approaches are common within volunteer tourism and there have been calls from within the tourism industry for greater collaborative efforts to help provide mechanisms where tourism can support conservation. Little work has been done to determine the most successful structures for partnerships within volunteer tourism. Turner, Miller and Gilbert (2001) explored the relationship of charities and tourism within the United Kingdom and noted that partnerships can be an effective way
of enhancing operations as well as avoiding conflicts, but the role of charities can be limited by public perception. Political and social acceptability must be maintained as well as economic and technical feasibility and the administrative ability to carry out the program.

Previous research in volunteer tourism has focused on the operations of not-for-profit organisations (Broad, 2001; Gilmour & Saunders, 1995; Wearing, 2001; Weiler & Richins, 1995) and implicitly, or explicitly, not-for-profit organisations have been regarded as the most appropriate organisational structure for volunteer tourism (or the only type). Research within volunteering indicated that volunteers need to perceive the cause as ‘worthy’ and also presumably, given the choices for philanthropy, that the organisation is the most appropriate way to donate funds and labour via volunteer tourism. Issues at the micro-scale also need further exploration such as the acceptance by volunteers of work on private landholder property or volunteering within a profit-making company. Ecological research is often conducted by government or academic institutions and volunteering with these agencies is a well accepted practice (such as for National Parks). However, this research also demonstrated that financial contributions by volunteers to government agencies occurred.

9.4.2 Volunteer tourism benefits compared with other types of volunteering benefits

There have been considerable calls from within natural resource management and within tourism for further research examining areas where tourism can contribute positively to conservation. This research argues that PERT-style trips are one mechanism where there are substantial benefits from working cooperatively together but earlier researchers have noted emerging partnerships are often dynamic and in practice can be difficult to introduce (Selin, 1999). Various interest groups need to be convinced that the net outcomes are positive or at least benign in the long run and stakeholders must be receptive to new approaches and consider the option to be a constructive way of tackling their own priorities.
This research demonstrated the beneficial outcomes of the PERT trips studied were much wider than has generally been recognised, particularly for the members of the field crew, but also for the organisation and participants. As volunteer tourism is generally believed to be constrained by supply (Turner et al., 2001), a better understanding of the ability of volunteer tourism to achieve the goals of the different stakeholders may help the sub-segment grow.

The value of using local volunteers is becoming well-established in natural resource management and long-term local volunteers who have ownership of an area, provide some stability in data collection, require less training than transitory volunteer tourists, and are clearly beneficial to natural resource managers. However, volunteer tourists can be useful in areas where there is virtually no local community; where the local community is unable or unwilling to volunteer; where additional funds are needed to support the program; or where broader education goals are desired. This research demonstrated that PERT trips were considered valuable as the additional funding allowed visits to remote sites and more exploratory work to be done. Some field crews also noted that volunteers within PERT were distinctly different to other types of volunteers, as they were older and less fit, but also highly motivated, well-educated and interested in learning.

As well as the direct benefits for stakeholders involved in the PERT sub-segment, this research has revealed that additional benefits also accrued from using volunteer tourists. Volunteer tourism may lead to subsequent local volunteering. The significant levels of education and learning recognised as having accrued during the post-hoc phase by both participants and members of the field crews indicates that operations within the PERT sub-segment may contribute to the development of the social capital of the area where the volunteering was undertaken and locations where each of the stakeholders reside. Three levels of social capital were identified by the World Bank (Winter, 2000): horizontal associations between people; trust and knowledge to allow people to work together; and structures and linkages that provide mechanisms to
support the social relationships. The PERT sub-segment helps build the capacity of society to undertake environmental conservation work at each of these levels.

Turner (2001) suggested that apparently positive forms of tourism such as PERT-trips may encourage other forms of tourism that are less sustainable to follow and Duffus and Dearden (1990) extended Butler's tourist lifecycle (1980) to produce a conceptual framework for non-consumptive wildlife tourism that incorporated this dynamism. Concern of this type is based on the assumption that the 'science tourism' is occurring in a remote or fragile area, not yet open to tourism. While this research noted visiting remote or new places was a factor, it was not essential and a number of the trips were in well-visited areas.

Further work is needed to provide a comparison of the advantages and disadvantages of PERT-style volunteer tourism with other types of volunteer tourism, other types of similar volunteering and other types of environmentally friendly tourism. For instance, organisations and researchers need to be able to assess the likely outcomes from trips within the PERT sub-segment, to trips using local volunteers rather than tourists, trips where tourists volunteer but do not financially support the project, and trips where tourists contribute financially only. Understanding the issues and outcomes for the many potential variations in volunteering and tourism partnerships would allow natural resource managers, tourism planners, and consumers, to make an educated choice concerning the most potentially suitable approach for a location. Chapter 5 demonstrated, for some research projects or locations, a combined approach utilising several types of volunteer tourism (and volunteering) has been a preferred option. Further analysis will also help develop a greater understanding how different types of volunteer programs can be integrated to achieve overall goals and to enable appropriate management recruitment and retention strategies to be developed.

9.4.3 Wider implications of this research for volunteering

Chapter 2 noted some population-wide surveys undertaken during the Year of the Volunteer in 2001 had indicated a decline in volunteering levels. Subsequent research
had not always supported these survey results, possibly either due to differing statistical methodology or because volunteering rates had subsequently increased. Despite the comparability difficulties in volunteering statistics, there has been widespread concern by volunteer researchers and managers about the future ability of volunteer supply to meet demand. Volunteering trends indicate an increasing desire by volunteers to undertake episodic or short-term, project-based volunteering, and this research examined one type of opportunity. Short-term volunteers are often regarded as increasing the costs and timelines for an organisation and impacting organisational goals, but this research demonstrated organisations can achieve long-term benefits from properly managing short-term volunteers. Both self-interest and altruism were seen as important in attracting and retaining episodic volunteers. The cumulative nature of the rewards or durable benefits that were derived during the post-trip period may be important in encouraging retention of episodic volunteers between periods of volunteering and so enhancing repeat business for operators. There is a need to provide more flexible volunteering opportunities that encourage people to volunteer and so this research and analysis of operations within episodic volunteering was important.

Assessment of the benefits flowing from volunteering, whether at the societal, community, institutional or individual level has usually focussed on benefits that were, at least partly, attributable to the volunteering being carried out in the community in which the volunteer resides. Also volunteering has usually been carried out regularly and this allows a gradual cumulation of benefits that may over time become significant in their impact. The extent participation in volunteer tourism contributes the same types of benefits needs examining.

9.4.4 Wider implications of this research for tourism

Although this research demonstrated that the number of trips and tourists in the PERT sub-segment is small, and may remain small, it is an area that positively connects tourism with conservation and it may potentially influence other areas within tourism. Just as aspects of ecotourism have been considered to have become mainstream, certain aspects of PERT trips may be incorporated more widely. The rewards from
contributing, in terms of a sense of accomplishment, altruism and the personal development which accrues to the volunteer, may be able to be applied in ecotourism operations. Already opportunities to plant a tree, or buy a turtle nest and save it from poachers, are established opportunities at some ecotourism lodges, allowing volunteering and philanthropy to be tied to the holiday experience. Tour operators already work with researchers providing regular feedback or reporting unusual occurrences, and this has been incorporated into interpretative material for tourists, raising the standard and relevance of the experience. A better understanding of PERT may allow further mainstreaming of these types of connections between conservation and tourism.

Further analysis of the theoretical aspects that overlap within tourism and volunteering may also have flow-on effects within tourism. For instance, self-image is recognised as an element in volunteer motivation and the view that individuals act in a way that reinforces their internal belief of who they are has been used in consumer purchasing and tourism research (Litvin & Goh, 2002). Ecotour operators may be able to strengthen their market appeal by recognising and utilising related motivators.

PERT-style trips often attract high media coverage. While some trips are to remote locations with virtually no local community, other trips may be well known in the host communities where they operate. Media coverage disperses the knowledge concerning the conservation value of a species or area more widely and also permits a number of positive linkages to be developed amongst local communities, researchers and tourism operators. Tourism is often criticised as taking advantage of the natural resources on which it depends but doing little to actively support, or ‘give back’. The positive connections resulting from PERT trips are often high profile, and may allow the continuing development of better perceptions and relationships between the commercial tourism industry and other stakeholders.

The research also demonstrated the advantages of longer term research. The participant’s post-trip view of benefits alters over time and will impact the decision to
repeat. Further research is needed to explore the mechanisms that operate to strengthen the benefits the individual accrues during the post-trip period. These may increase the commitment to an organisation in terms of further trip-taking. Additional analysis is needed concerning overlaps between the issues in volunteering relating to the retention of volunteers and the tangible and intangible rewards that encourage people to stay committed, and the mechanisms within tourism that encourage brand loyalty. This research demonstrated that reinforcement of commitment is likely to occur from other sources besides the operating organisation (such as through the membership of environmental organisations). Partnerships, both informal and informal, were also noted as common within PERT and there may be further win-win relationships encompassing volunteering, philanthropy and repeat trip-taking/brand loyalty that can be built to further foster the connection between tourism and conservation. The mechanism is discussed further in Section 9.5.2.

9.5 Additional Implications Arising from the Research

9.5.1 Motivations

Earlier research in volunteer tourism had focused on trips dominated by younger people and self-interest was seen as an important motivating factor for volunteers. Older people dominated the profiles of this research, and the findings revealed the reasons volunteers joined PERT trips were a distinct combination that included factors found in ecotourism but also factors observed within volunteering. Self-interest reasons such as learning, seeing new things and meeting people were important as well as altruistic aspects such as helping and gaining a sense of accomplishment.

In the volunteering literature the dominance of various motivating factors altered at each stage of the decision-making process, such as the decision to start volunteering, the choice of voluntary activity and organisation, and the decision to stay a volunteer. The research discussed in this thesis revealed additional stages exist in the decision-making process surrounding PERT-style trips. At each stage the knowledge and perceptions concerning choice selection will influence the decision-making. Although the order may vary
chronologically, the stages and possible dominant motivators are:

- the decision to volunteer, and this may be made for value-based reasons;
- the decision to undertake episodic volunteering as a volunteer tourist rather than (or in addition to) regular volunteering, which may be for logistical factors such as time commitments and finances, and self-interest (see new things) - tourism 'push' factor motivators such as 'escape the routine' will influence this decision;
- to volunteer to support an environmental or conservation cause (to take an environmentally-focused trip);
- the decision concerning which organisation to volunteer for, and this may be based on the feeling of contributing to a worthy cause, and the reputation of the organisation as well as social networks; and
- the selection of a specific trip, which may be based on self-interest (interesting area, get close to a species, see new places) and are likely to be based on the identified 'pull' factors in tourism research that affect destination choice (Crompton, 1979).

More research is required to confirm these stages. The applicability of factors considered relevant within wildlife tourism, such as the attractiveness of certain species (Ryan & Harvey, 2000; Woods, 2000) and the opportunity to see new places or species (Shackley, 1996:10) requires further research. The conversion of the intention to purchase a PERT-style trip to actual purchase also needs further research.

9.5.2 Repeat episodic volunteers and brand loyalty

The reasons respondents chose to take a trip were slightly different from the reasons they stated they would like to take another trip. This research revealed repeat levels were reasonably high and the desire to repeat from the surveyed respondents was very high (although this does not necessarily translate into actual trip-taking). The lowest preference for undertaking another trip was with another organisation. Social bias, strong loyalty, a preference by respondents for the familiar, or a lack of knowledge of other options may have contributed to the low preference to take a trip with another similar organisation.
Considerable work has been done within tourism research concerning destination choice, repeat visitation and to a lesser extent brand loyalty. Weaver and Lawton (2002:175) described the feedback loop that occurs after a trip and can influence subsequent trip choice. Views of a destination alter due to greater knowledge, or modifications in the traveller’s personality or culture. Although much of the tourism literature discusses brand loyalty to a destination, rather than an organisation, organisation loyalty is well known, particularly within segments such as adventure and ecotourism, and has been explored within cruise shipping (Marti, 1992) (although arguably the cruise ship is the destination).

The Travel Career Ladder (Pearce, 1992; Pearce, 1988, 1993) indicated that people return to the same holiday location as it contributes to their self-esteem (individuals have an increased knowledge of a place, talk and identify with a place) and may contribute to fulfilment (from feeling a part of a place). Gazley (2001) suggested self-actualisation may be the most important factor for repeat episodic volunteers and the research discussed in this thesis demonstrated it was a key factor. The research discussed in this thesis revealed additional reasons for repeating included a sense of accomplishment, social aspects and learning. These results align reasonably well with Pearce’s hierarchical model although the results described earlier in this thesis indicate self-esteem and fulfilment came from undertaking a type of trip (PERT) rather than visiting a single location, as Pearce discussed.

Gitelson and Crompton (1984) argued that travellers return to the same destination for reasons such as risk reduction, to meet similar people, emotional attachment, to explore an area more widely and to expose it to others. Anecdotally, within the sub-segment, there appears to be a low knowledge of alternative organisations running similar trips and a high knowledge is needed for volunteers to commit both time and money to undertake volunteer work in a holiday capacity, so risk reduction may be important within PERT. The research discussed in this thesis indicated meeting similar people was a key reason why respondents would like to join another trip, and exploring new
areas (and scientific research more widely) was important. The emotional attachment to nature and the experience was also a trip highlight for many. Members of the field crews commented that repeat participants were often socially helpful with first-timers, explaining aspects such as how camp worked and the routines of research. Familiarity with camp and routines is potentially tied to risk reduction, but it could be construed that the helping and contributing aspect noted included an element of introducing and helping first-timers adjust to the work schedule, and this corresponds with Gitelson and Crompton’s (1984) concept of exposing others to a location.

A longitudinal study over time would be useful to confirm actual repeat behaviour and to develop an understanding of the factors affecting brand loyalty, repeat behaviour and retention issues of episodic volunteers within the sub-segment. Despite the overlap between the organisation, field research team and participant goals, repeat episodic volunteering may be occurring through a search for an experience rather than a commitment to the organisation (Gazley, 2001:3) and further work is needed to clarify this. Consumer behaviour research confirms brand loyalty is a product of both behavioural and attitudinal factors and volunteers need to demonstrate a preference for the brand as well as simply repurchase behaviour.

9.6 Limitations of this Research

Limitations have been discussed at each stage of the research process and discussion of results but the overall findings of this inquiry must be placed in perspective. The key reason for this research was to analyse a mechanism where tourism can contribute to environmental field research. Although the benefits discussed in this research demonstrate substantial positive outcomes for the three key stakeholders involved, it was beyond the scope of this research to examine all benefits, to examine the impact of PERT trips on all stakeholders, or to examine the total impact of PERT trips by including potential negative impacts.

Self-reported and perceived benefits were discussed in this research. Not all benefits may have been recognised or reported and the benefits gained by an individual can alter
over time. Post-trip data was collected in this research and in the case of volunteers, in two snapshots, and the collection timeframe will have impacted the results (Stewart & Hull, 1992). In areas such as learning and behaviour modification analysis of cause and effect over time is complex. Because of the cumulative nature of benefits it is unlikely in this research that a respondent may have been able to distinguish between the influence of the PERT trip and subsequent reinforcing influences such as a documentary film or additional local volunteering. Consequently the PERT trip may have contributed to or initiated certain reported subsequent benefits but may not have been the sole agent in reported post-hoc decision-making. This research did not aim to prove cause and effect and further research is needed to clarify this area.

The data collection for this research was undertaken between 2001 and 2004, and demonstrated that the area of PERT was dynamic, with organisations altering their modes of operation and moving in and out of the sub-segment. Further work was needed to demonstrate that the PERT sub-segment was a new emerging product market but the area is likely to continue to evolve in response to the marketplace forces as well as government activities, social and cultural views. The purpose of this research was to improve the understanding of this area and highlight it as a possible mechanism that can provide benefits to tourism, volunteer organisations and natural resource managers and the increased knowledge and understanding of the area may also contribute to further changes.

The applicability of this research to overseas operations is questionable. A comparison of Chapter 4 (global snapshot) and Chapter 5 (Australia) indicated that not all styles of operations established globally in the PERT sub-segment were operating in Australia during the search period. Structural aspects, cultural views and government policies are known to be some of the factors that alter the reasons why people volunteer and how they make travel decisions. The range of choices available to field researchers concerning access to funds and volunteers to help them undertake field research varies between countries. Three Australian case studies were used to allow detailed analysis of operations within the PERT sub-segment and so the findings of this work were affected.
by the geographical focus used. This research also only analysed English-speaking operations and further research is needed to determine the extent of geographical variations in the PERT sub-segment.

9.7 Summary
By examining the global and Australian operations within the PERT sub-segment then three case studies, this research has significantly extended the earlier work of researchers who have usually only examined one trip (Webb, 2002), one project (Broad, 2001; Gilmour & Saunders, 1995), focussed on international volunteer tourism, longer term trips, trips aimed at students or the youth market (Galley & Clifton, 2004; Wearing, 2001), or principally focussed on only one stakeholder, often the participant, when describing volunteer tourism (Broad, 2001; Galley & Clifton, 2004). The benefits for scientists or conservation organisations were usually described as work outputs or long-term educational benefits concerning members of the public (Saunders, 2002). The research in this thesis demonstrated the inter-relationships between stakeholders supported and increased the overall benefits gained by each stakeholder strengthening the partnerships and contributing to the long-term sustainability of the PERT sub-segment.

The benefits gained by members of the field crews revealed in this research, have not been discussed widely or explored in detail by previous researchers. As the growth in this type of partnership between conservation and tourism is believed to be constrained by supply issues, the improved knowledge of the broader gains this group of stakeholders perceived to accrue from involvement in PERT-style trips is significant.

Field crews, volunteers and organisations viewed this type of volunteer tourism as distinctive in its characteristics and the results confirmed the view taken in stage one of this research, that PERT can be viewed as a sub-segment of the volunteer tourism market. A much older profile of participants, higher level of repeat trip-takers and a high desire to repeat was indicated in this analysis compared with other detailed work within volunteer tourism (Broad, 2001; Wearing, 2001). It reveals a broad demographic
target market exists and the capacity to build a loyal repeat client base was also demonstrated. Both these aspects are likely to assist with organisation viability and the growth of the area.

PERT provides an alternative mechanism within volunteering that can contribute to social capital and the capacity of society to engage in environmental conservation. This contribution occurs both at the location where the volunteering took place and subsequently in the home environments of volunteers and field crews as well as on future volunteer trips. In addition, this research overlaid issues from tourism and volunteering contributing to a further understanding of the blending of different types of philanthropic tourism programs with natural resource management.

Measurement issues concerning environmental volunteering and episodic volunteering are relevant to other researchers in areas such as environmental education, ecotourism and other types of volunteering. This research may assist with subsequent survey design where post-hoc behaviours are evaluated. Also volunteer tourism and episodic volunteering have not always been well measured and if relevant to a study, question design should be carefully examined to ensure this type of activity is included.