Conflict between sea-kayakers and motorised watercraft users along the Abel Tasman National Park coastline,
New Zealand

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Executive Summary

The Abel Tasman National Park coastline is a mecca for water–based recreationists. Its golden beaches and clear water attract many thousands of visitors to the region each year. The area has witnessed many changes over the years, most notably a rapid increase in the number and size of commercial sea–kayak companies operating along the coastline. This growth has been paralleled by an increase in the number of independent sea–kayakers, a steady increase in the number of motorboat users and the introduction of jet–skiers along the coastline. Such use has resulted in increasing problems of crowding and conflict in the area.

This study responds to a research gap identified by Cessford (1998) in a report on visitors to the Abel Tasman National Park. He found that 53% of sea–kayakers were disturbed on the water by motorboats and stated that further research should focus on the conflict between the two groups. As jet–skiers are an emerging user group along the coastline, they were added to this study. Thus, this study examines conflict between sea–kayakers and motorised watercraft users (motorboaters and jet–skiers).

Conflict is often experienced by outdoor recreationists and the most intense conflicts often occur between motorised and non–motorised user groups. The common result of previous studies is an asymmetrical conflict relationship, where the non–motorised users dislike meeting the motorised users. The motorised users remain unperturbed by the presence of non–motorised users and may even enjoy their presence. This study seeks to understand the conflict issues for both groups involved in the study, and to examine the extent to which water safety contributes to such conflict.

Qualitative and quantitative research methods were used in this research. Two hundred and thirteen (213) questionnaire surveys were collected and 13 in–depth interviews with recreation area managers and commercial operators were conducted. Participant observation occurred throughout the study period, and brochures, promoting sea–kayaking and the Abel Tasman in general, were examined.

Data from this study provide a picture of the recreational use occurring along the Abel Tasman coastline. Sea–kayakers are inexperienced kayakers and users of the Abel Tasman coastline, whereas motorised watercraft users are experienced with the coastline and their craft. Day trips are the most common type of trip for both groups. Sea–kayakers generally travel in smaller groups than motorised watercraft users. Both groups participate in similar activities on the beach, although almost double the number of sea–kayakers than motorised watercraft users participate in walking and sightseeing.

Sea–kayakers are influenced to visit the Abel Tasman coastline by word–of–mouth, brochures, and the Internet, whereas motorised watercraft users choose the coastline because of the natural attractions, and many visit the area annually. Sea–kayakers choose to sea–kayak on their trip as it is something different and it enables them to see more of the coastline in less time than walking the coastal track. Motorised watercraft users choose to use their craft due to its speed, its ability to transport people and equipment to a beach quickly, and for water–skiing.

The two groups differ in their demographic and socio–economic characteristics. Sea–kayakers are a mixture of overseas visitors and New Zealanders, whereas motorised watercraft users are mostly New Zealanders. Sea–kayakers are generally younger, hold higher educational qualifications and are employed in more professional occupations than motorised watercraft users.
This study found two forms of conflict: an inter–group conflict between sea–kayakers and motorised watercraft users, and an intra–group conflict between motorised watercraft users. The main reason for the conflict is water safety issues, leading not only to a loss of enjoyment for some users, but the potential for people to suffer an injury or fatality.

The inter–group conflict between sea–kayakers and motorised watercraft users is asymmetrical, with sea–kayakers being affected by motorised watercraft users. This conflict is based on differences in the characteristics of recreationists who comprise the two groups and differences in their craft. Sea–kayakers dislike the noise, wake and pollution created by motorised watercraft and are disturbed by the high numbers of such craft along the Abel Tasman coastline. Sea–kayakers are also concerned at the potential danger posed by motorised watercraft and their drivers.

Within the motorised watercraft user group, the intra–group conflict results from motorised watercraft users annoyed by motorboaters who tow water–skiers in the wrong direction, do not wear lifejackets, overload their craft, breach the recreational boating regulations and act recklessly towards other craft. Thus, a primary determinant of this conflict is the perception of appropriate behaviour by other motorised watercraft users. This is exacerbated by motorised watercraft users’ emotional attachment to the Abel Tasman National Park coastline and their high level of specialisation with their activity.

This study contributes to the literature on asymmetrical conflict relationships between motorised and non–motorised groups by identifying reasons, other than reciprocation, which suggest an impact of non–motorised users (sea–kayakers) upon motorised users. These reasons include the perception of sea–kayakers as a hazard to boating and water–skiing, the difficulty of seeing sea–kayakers thus making them difficult to avoid, and too many sea–kayakers in the area (crowding).

This study used Jacob and Schreyer’s (1980) framework of ‘goal interference’ as its theoretical basis. From this research, we suggest additional factors that contribute to conflict, not identified by Jacob and Schreyer’s model: recreational trends (the increase in day use of the area), physical geography (restricting interaction to the Astrolabe Roadstead), increasing commercialisation (place promotion increasing numbers of recreationists and creating a false image not experienced by sea–kayakers on–site), and the management regime (lack of co–ordination between the Department of Conservation and the Tasman District Council).

Management recommendations from this research include:
• Caution over the implementation of proposed ski–lanes as they are likely to exacerbate the conflict between motorised watercraft users
• Education of sea–kayakers and motorised watercraft users about each others needs and limitations
• A code of conduct (perhaps encouraging motorised watercraft users to stay 100 metres away from sea–kayakers on the water)
• Signage at launching points to assist with this educative approach
• Improvements to the visibility of sea–kayakers via manufacturing specifications
• Enforcement of the recreational boating regulations
• A coherent management regime for the Abel Tasman foreshore.

Keywords: Abel Tasman National Park, sea–kayak, motorboat, jet–ski, recreational conflict, crowding, water safety, commercialisation.
Chapter 1
Introduction

This report presents the results from a study which investigated conflict between sea–kayakers and motorised watercraft users along the Abel Tasman National Park coastline during the summer of 1998/1999. The study was undertaken to complete a masters degree at Lincoln University and is fully documented in the thesis titled Problems in paradise? Conflict between sea–kayakers and motorised watercraft users along the Abel Tasman National Park coastline (Hawke, 2000).

1.1 The Study Site
The beaches of the Astrolabe Roadstead, at the southern end of the Abel Tasman National Park (ATNP) coastline, formed the main data collection site for the research. Figure 1 shows the location of the Abel Tasman National Park and Figure 2 (page 2) provides an outline of the coastline. The Astrolabe area was chosen because it is the site of greatest interaction between sea–kayakers and motorised watercraft users (all sea–kayak and water taxi operators, personal communication, October, 1998–January, 1999).

1.2 Background to the Research Issue
In general, very few studies have examined water–borne users along the Abel Tasman National Park coastline. The Department of Conservation (DoC) (1993) were first to examine recreational motorboat use along the Abel Tasman coastline using data collected in the late 1980s. Sea–kayakers were not sampled or discussed in this report, thus conflict was not mentioned. Of most relevance to the current research is a study undertaken by Cessford (1998) who, as part of a broader study on visitors to Abel Tasman National Park, investigated sea–kayaker satisfaction and attitudes towards management in the Park. Data for his study were collected in 1994. Cessford (1998) found that 53% of sea–kayakers were bothered by the disturbance of motorboats on the water and recommended that further research be focussed on the conflict between sea–kayakers and motorboaters along the Abel Tasman National Park coastline. Cessford indicated the presence of conflict – he did not investigate it further. Motorboaters were not sampled and no reasons were suggested for the conflict experienced by sea–kayakers.

1.3 Aims and Objectives of this Study
The purpose of this research is to act on Cessford’s (1998) recommendation to examine the conflict he identified between sea–kayakers and motorised watercraft users. Jet–skiers were added to this study, as they are an emerging user group occupying the same space as sea–kayakers and motorboaters (DoC, 1998a). The term motorised watercraft has been adopted and utilised throughout this report to refer to motorboats, jet–skis and their users, collectively.

This study has three research objectives. First, to investigate the conflict Cessford (1998) identified. Second, to determine the reasons, and contributing factors, for such conflict by examining both groups. Third, to investigate the extent to which water safety\(^1\) is a facet in the conflict relationship.

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\(^{1}\) The term water safety relates to water–safe attitudes and behaviour of recreationists. It includes the danger people operating craft may cause each other on the water.
Figure 2. Map of the Abel Tasman National Park Coastline
Chapter 2
Methods

Four data collection procedures were used to gain information for this study. These were in-depth interviews, participant observation, brochure analysis, and an on-site interviewer-administered questionnaire survey.

2.1 In–depth Interviews
In–depth interviews were conducted with 13 recreation area managers and tourism operators of the Abel Tasman coastline, including DoC staff, the Harbormaster of Tasman District Council (TDC) and commercial operators, both current and former.

2.2 Participant Observation
Observation of sea–kayakers and motorised watercraft users was undertaken to help understand the issues and the behaviour of the two groups. Informal conversations were held with recreationists, sea–kayak guides, water taxi operators, and the Launch Warden at the Kaiteriteri Boat Ramp.

2.3 Brochure Analysis
Advertising material was examined, including commercial sea–kayak companies’ brochures and Internet pages, brochures promoting the Nelson/Marlborough region, newspaper articles featuring the Nelson region, postcards of the Abel Tasman coastline, and pictorial books of New Zealand. The images, pictures and accompanying text presented in brochures were analysed for themes. Examples of themes found were: the natural beauty of the area (golden sand, clear water and lush green bush), calm sea conditions, sea–kayakers pictured on an isolated beach, and pictures showing kayakers close to shore with a lack of other craft in the vicinity, particularly motorised watercraft.

2.4 Interviewer–Administered Questionnaire Survey
A questionnaire survey was administered to sea–kayakers and motorised watercraft users on–site. Separate questionnaires were developed for the two groups (see Appendix 1). The questionnaires were primarily designed to test for the presence of conflict, to examine who experienced conflict, and why, and examine the role of water safety as a contributing factor to conflict. Part way through the study, a further question was added to the motorised watercraft users’ questionnaire, to identify how often people drive their craft. The study sought a representative sample of sea–kayakers and motorised watercraft users along the Abel Tasman coastline during the study period, 27 December 1998 to 24 January 1999.

Most questionnaires were collected on the beaches of the Astrolabe Roadstead. A motorboat was used to transport the researcher to and from the research site each day and upon arrival at the study site surveying began on the beach with the highest concentration of motorised watercraft users. Sea–kayakers arrived later in the day and were then surveyed. Surveying generally began in Stilwell Bay and the researcher then moved north to the other beaches during the day in a systematic manner.

To ensure the sample was randomly selected every group along the beach was approached. The group was asked to identify the person with the next birthday. To be eligible for the survey the respondent had to be fifteen years of age (the legal age to operate a motorised watercraft).

As well as being approached on a beach in the Astrolabe Roadstead, sea–kayakers were also approached after their trip at the base of Abel Tasman Kayaks at Marahau, and at campsites
along the coastline. Campsites used included those along the beaches through the Astrolabe Roadstead to as far north as Mosquito Bay. Motorised watercraft users were approached only on the beaches in the Astrolabe Roadstead area and at Anchorage.

The total number of questionnaires completed was 213; 110 from sea-kayakers and 103 from motorised watercraft users. In total, 222 people were approached, of whom nine did not wish to participate in the survey, giving a response rate of 96 percent. The error margin for the sample was +/− 6.7%.
Chapter 3
Results

This section presents the results from the questionnaire survey and the qualitative data. Data are presented in the order in which questions were asked in the questionnaire. Where relevant, comparisons are drawn with Cessford’s (1998) study. All relationships between data were statistically tested. However this section will only mention statistical significance where results of tests were significant.

3.1 Type of Craft Used
Type of: sea–kayak OR motorised watercraft
Three classifications of sea–kayaker (guided, freedom and personal)\(^2\) and two classifications of motorised watercraft user (motorboater and jet–skier) were sampled. Table 1 shows that freedom kayakers were the most common sea–kayaker sampled, and that motorboaters dominated the motorised watercraft users’ sample.

<table>
<thead>
<tr>
<th>Sea–kayaker n=110(^4)</th>
<th>Motorised watercraft user n=103</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guided 34</td>
<td>Motorboater 95</td>
</tr>
<tr>
<td>Freedom 60</td>
<td>Jet–skier 2</td>
</tr>
<tr>
<td>Personal 6</td>
<td>Both (motorboat and jet–ski user) 3</td>
</tr>
</tbody>
</table>

Table 1\(^3\)
Classifications of sea–kayakers and motorised watercraft users

3.2 Abel Tasman National Park Visits
How many times have you been to the Abel Tasman National Park coastline before?
Many sea–kayakers (SK) in the sample were on their first visit to the Abel Tasman National Park coastline (Figure 3). Cessford (1998) found that 39% of his sea–kayak respondents were on their first visit to the Abel Tasman National Park, compared with 75% of sea–kayakers in this study. Motorised watercraft users (MWC) in the sample were very experienced with the coastline, as many had frequented the area more than twenty times. A statistically significant difference exists regarding the number of previous trips to the Abel Tasman National Park coastline for the two sample groups: \(\chi^2(5, 213)=52.41, p<0.001\).

If this is not your first visit, state the main activities you participated in on previous trips.
Table 2 (p.6) shows that of the sea–kayakers who had visited the coastline, many had previously

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\(^2\) A guided kayaker is one who has hired equipment from a commercial sea–kayak company and has a commercial sea–kayak guide accompany them for their entire trip. A freedom kayaker has rented equipment from a commercial sea–kayak company but a guide does not escort them during the trip. A personal kayaker is independent of a commercial sea–kayak company.

\(^3\) There are two types of tables in this section. The first type is where responses add to 100% as this table does. Other tables present data from open–ended questions, where respondents could mention as many responses as appropriate. Such tables do not add to 100%.

\(^4\) Hereafter, the sample size (n) for each table remains the same as for this table unless otherwise stated.
participated in sea–kayaking, and many had walked either part of, or the entire, coastal track. Other activities in which sea–kayakers had participated included sightseeing and photography. Of the motorised users who had visited the coastline, most had participated in boating activities. Previously some had walked either part of, or the entire, coastal track, and some had been involved with beach activities such as playing cricket, throwing a Frisbee and making sandcastles. Other activities in which motorised watercraft users had participated included picnicking, fishing and scalloping.

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<tr>
<td><strong>Sea–kayakers</strong></td>
<td><strong>Motorised watercraft users</strong></td>
</tr>
<tr>
<td>Walking the track</td>
<td>Walking the track</td>
</tr>
<tr>
<td>Sea–kayak</td>
<td>Boating activities</td>
</tr>
<tr>
<td>Other</td>
<td>Beach activities</td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

3.3 Experience With the Coastline and Craft
This part of the questionnaire comprised eight questions, some of which differed between the sea–kayak and motorised watercraft questionnaires.

3.3.1 Experience With the Activity and Coastline
The questions in this part of the questionnaire were structured differently for each group. Sea–kayakers were asked to state the number of sea–kayak trips in which they had participated, whereas motorised watercraft users were asked to state years of involvement with their activity. The reasons for the different measures are explained below.

*How many sea–kayak trips have you been on? How many sea–kayak trips have you been on along the Abel Tasman National Park coastline?*

Interviews with managers and commercial operators indicated that most sea–kayakers would be inexperienced with the Abel Tasman coastline, and be first time sea–kayakers. Thus, number of trips was chosen as an accurate measure of involvement in the activity for sea–kayakers. The categories in this question were based upon Cessford’s (1998) scale.

Table 3 shows that many sea–kayakers were on their first sea–kayak trip, as expected. In addition, the majority of sea–kayakers were on their first sea–kayak trip along the Abel Tasman coastline. They were thus both inexperienced sea–kayakers and inexperienced users of the coastline.

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<thead>
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<td><strong>SK trips</strong></td>
</tr>
<tr>
<td>First trip</td>
<td>69</td>
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<tr>
<td>2–5 trips</td>
<td>21</td>
</tr>
<tr>
<td>6–20 trips</td>
<td>6</td>
</tr>
<tr>
<td>More than 20 trips</td>
<td>4</td>
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</tbody>
</table>

*How long have you been a motorised watercraft user? How long have you been using a motorised watercraft along the Abel Tasman National Park coastline?*

Motorised watercraft users were not asked to state the number of trips in which they had participated because interviews revealed that most would have participated in more than twenty
trips and some had been visiting the area all their life. Therefore years of involvement was used as a more appropriate and accurate measure of involvement in the activity for motorised watercraft users.

Table 4 shows that most motorised watercraft users in the sample were experienced users of their craft, with more than one quarter having used a motorised watercraft for more than twenty years. As expected, motorised watercraft users were also relatively experienced users of their craft along the Abel Tasman coastline.

<table>
<thead>
<tr>
<th>Use</th>
<th>MWC use</th>
<th>MWC use along ATNP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than one year</td>
<td>9</td>
<td>19</td>
</tr>
<tr>
<td>1–2 years</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>3–5 years</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>6–10 years</td>
<td>23</td>
<td>20</td>
</tr>
<tr>
<td>11–19 years</td>
<td>18</td>
<td>16</td>
</tr>
<tr>
<td>More than 20 years</td>
<td>26</td>
<td>15</td>
</tr>
</tbody>
</table>

3.3.2 Safety Equipment

What equipment is/was on your craft for this trip?

Table 5 demonstrates that all sea–kayakers were equipped with life jackets and spray decks. This is to be expected as most hired their sea–kayak from a commercial sea–kayak company. In addition, most carried bilge pumps and self rescue equipment, such as flares. Many also carried a radio. Other equipment carried included a first aid kit, cellphone, eperb⁵, signal mirror, towline, a map and spare clothes.

Most motorised watercraft users also carried safety equipment. All had life jackets, and most carried a bilge pump, paddles, fire extinguisher, cell phone and flares. Other safety equipment generally included: a first aid kit, spare blankets, extra clothes, global positioning system (GPS), EPIRB, spare petrol, spare propeller, and compass.

<table>
<thead>
<tr>
<th>Equipment</th>
<th>SK %</th>
<th>MWC %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life jacket</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Spray skirt</td>
<td>100</td>
<td>N/A</td>
</tr>
<tr>
<td>Bilge pump</td>
<td>93</td>
<td>81</td>
</tr>
<tr>
<td>Self rescue equipment</td>
<td>88</td>
<td>72</td>
</tr>
<tr>
<td>VHF radio (hand held or mounted)</td>
<td>61</td>
<td>28</td>
</tr>
<tr>
<td>Cellphone</td>
<td>0</td>
<td>74</td>
</tr>
<tr>
<td>Oars/split paddle</td>
<td>60</td>
<td>77</td>
</tr>
<tr>
<td>Fire extinguisher</td>
<td>N/A</td>
<td>75</td>
</tr>
<tr>
<td>Depth finder</td>
<td>N/A</td>
<td>38</td>
</tr>
<tr>
<td>Auxiliary motor</td>
<td>N/A</td>
<td>26</td>
</tr>
<tr>
<td>Other</td>
<td>61</td>
<td>53</td>
</tr>
</tbody>
</table>

⁵ An eperb is a distress signal caller.
⁶ N/A infers that such equipment is not carried or required by the craft.
3.3.3 Instruction Course and Boat Certificate

Have you participated in a sea–kayak instruction course, other than the safety briefing before this trip? If yes, what was the content of the course?

Twenty percent of sea–kayakers had participated in a sea–kayak instruction course other than the safety briefing before their trip. The content of courses was generally basic sea–kayaking, which included how to paddle, packing the craft, and safety procedures, such as performing a wet exit when the craft had capsized.

Do you have a boating certificate? If yes, which certificate, and how long have you had the certificate?

Four percent of motorised watercraft users held a boating certificate. Of those, half held a day skipper’s licence, one quarter held a boat master’s certificate and the remaining quarter held a special commercial licence. Half the licensed users had held their certificate between eleven to nineteen years, one quarter for three to five years, and the other quarter for less than one year. This information must be treated with caution as many motorised watercraft users sampled did not own or operate the vessel.

3.3.4 Clubs and Organisations

Do you belong to a boating club or organisation?

There was low involvement in clubs or organisations for both groups. Four percent of sea–kayakers and twelve percent of motorised watercraft users belonged to a boating club or organisation.

3.3.5 Sea–kayaker Competency

How competent are you at sea–kayaking?

Sea–kayakers were asked to state their perceived level of competence as a sea–kayaker. Table 6 indicates that most sea–kayakers considered themselves to be of average competence or less. This finding is interesting given that 69 percent of sea–kayakers were first time sea–kayakers, yet most do not class themselves as beginners. Motorised watercraft users were not asked this question, as many respondents did not operate the craft.

<table>
<thead>
<tr>
<th>Competency level</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner</td>
<td>16</td>
</tr>
<tr>
<td>Between beginner and average</td>
<td>26</td>
</tr>
<tr>
<td>Average</td>
<td>44</td>
</tr>
<tr>
<td>Between average and advanced</td>
<td>9</td>
</tr>
<tr>
<td>Advanced</td>
<td>5</td>
</tr>
</tbody>
</table>

3.3.6 Knowledge of the Recreational Boating Regulations

How much knowledge do you have of the main recreational boating regulations?

Both sea–kayakers and motorised watercraft users were asked to state their understanding of the recreational boating regulations by placing themselves on a continuum. Figure 4 (below) demonstrates that motorised watercraft users perceived themselves to have more knowledge of the regulations than sea–kayakers. A statistically significant difference in terms of perception of knowledge of the regulations was found between sea–kayakers and motorised watercraft users: $\chi^2 (4, 213) = 23.45, p<0.001$.

---

7 In this report the recreational boating regulations refer to both the Water Recreation Regulations 1979 and Maritime Rule Part 22–the Collision Prevention rule.
3.3.7 Time Respondents Spent Driving Motorised Watercraft

How often do you drive the motorised watercraft?

Part way through the study it was realised a new question should be asked of the motorised watercraft users. Respondents were asked to estimate the time they spent in control of their craft. Seventy-five motorised watercraft respondents were asked the question. Table 7 shows that sixty percent of these users, at some time, drove their craft. However, most of those sampled either seldom drove or never drove the craft. Less than one quarter of those sampled mostly drove the craft.

Table 7
How often motorised watercraft users drive the motorised watercraft

<table>
<thead>
<tr>
<th>Time drive</th>
<th>% time drive</th>
<th>n=75</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never drive</td>
<td>(0%)</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Seldom drive</td>
<td>(1%–30%)</td>
<td>32</td>
<td>44</td>
</tr>
<tr>
<td>Often drive</td>
<td>(31%–60%)</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Mostly drive</td>
<td>(61%–99%)</td>
<td>23</td>
<td>31</td>
</tr>
<tr>
<td>Always drive</td>
<td>(100%)</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3.4 Trip Patterns

This part of the questionnaire contained eighteen questions for the motorised watercraft user questionnaire and twenty-one questions for the sea-kayaker questionnaire.

3.4.1 Duration

What is/was the duration of your sea-kayak/motorised watercraft trip?

The most common trip duration for sea-kayakers was day trips (not overnight) followed by two night trips (Figure 5). Almost all motorised watercraft users were on day trips. A statistically significant difference was found between the duration of trips for sea-kayakers and motorised watercraft users: \( \chi^2 (5, 213) = 79.36, p<0.001 \).
3.4.2 Accommodation

If you stayed overnight in the Abel Tasman National Park, what type of accommodation did you use?

Table 8 demonstrates that of the sea–kayakers who stayed in the Park overnight almost all stayed in a tent in a DoC camping ground. Very few motorised watercraft users stayed in the Abel Tasman National Park overnight. Those who did mostly stayed in a private bach.

Table 8 Accommodation utilised by overnight users

<table>
<thead>
<tr>
<th>Sea–kayakers n=67</th>
<th>Motorised watercraft users n=5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tent in DoC campground 97</td>
<td>Private bach 80</td>
</tr>
<tr>
<td>DoC Hut 1</td>
<td>Tent in DoC camp ground 20</td>
</tr>
<tr>
<td>Tent and hut 2</td>
<td></td>
</tr>
</tbody>
</table>

3.4.3 Group Size

How many people are there in your group for this trip?

Motorised watercraft users tended to travel in larger groups than sea–kayakers (Figure 6). Sea–kayaking groups generally consisted of two or three people although some had eight or more, which were guided day trips. Many of the motorised watercraft groups contained eight or more members. The average group size for sea–kayakers was three people compared with four people for motorised watercraft users. Group size was expected to be different as the average sized motorboat used along the Abel Tasman coastline could comfortably seat six people. A statistically significant difference regarding group size was found for sea–kayakers and motorised watercraft users: $\chi^2 (4, 213) = 41.65, p<0.001$.

3.4.4 Activity

What activities did you participate in during your sea–kayak OR motorised watercraft trip?

Sea–kayakers and motorised watercraft users both participated in walking, picnicking, sunbathing, swimming, and sightseeing, although almost double the number of sea–kayakers participated in walking and sightseeing than motorised watercraft users (Table 9, p.11). In addition, many motorised watercraft users participated in water–skiing. Other activities in which both groups participated included: drinking, socialising and enjoying the holiday/relaxing.
Table 9  
*Activities people participated in during their trip*

<table>
<thead>
<tr>
<th>SK activities</th>
<th>%</th>
<th>MWC activities</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walking</td>
<td>78</td>
<td>Walking</td>
<td>33</td>
</tr>
<tr>
<td>Picnicking</td>
<td>85</td>
<td>Picnicking</td>
<td>84</td>
</tr>
<tr>
<td>Sunbathing</td>
<td>76</td>
<td>Sunbathing</td>
<td>90</td>
</tr>
<tr>
<td>Swimming</td>
<td>87</td>
<td>Swimming</td>
<td>92</td>
</tr>
<tr>
<td>Sightseeing</td>
<td>80</td>
<td>Sightseeing</td>
<td>41</td>
</tr>
<tr>
<td>Fishing</td>
<td>10</td>
<td>Fishing / scalloping</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Waterskiing</td>
<td>76</td>
</tr>
<tr>
<td>Other</td>
<td>29</td>
<td>Other</td>
<td>26</td>
</tr>
</tbody>
</table>

3.4.5 Where the Trip Began  
*Where did your motorboat or jet–ski trip begin?*  
Most sea–kayakers (95%) began their trip at Marahau Beach. Some departed from Kaiteriteri Beach (4%) and one group (1%) launched from Pohara Beach in Golden Bay. In comparison, the majority of motorised watercraft users (91%) launched from Kaiteriteri Beach, with 4% departing from Marahau and 5% from other locations, such as Stephens Bay, at Little Kaiteriteri, and Riwaka.

3.4.6 Trip Locations  
*Please mark on the map where you travelled on your sea–kayak/motorised watercraft trip, including where your trip began.*

For the purposes of this analysis, the Abel Tasman coastline has been divided into six main areas to indicate where people travelled. As Figure 7 (page 12) shows, area one includes Apple Tree Bay and Stilwell Bay. Area two includes beaches from Akersten to Watering Cove. Area three encompasses beaches from Te Puketea Bay to Sandfly Bay. Area four includes Bark Bay, Mosquito Bay and Onetahuti. Area five ranges from Awaroa to Totaranui and area six goes north from Totaranui to Separation Point.

Figure 7 (page 12) demonstrates that sea–kayakers and motorised watercraft users travelled to different locations along the coastline and that sea–kayakers were more dispersed along the coastline, although many sea–kayakers stayed within the Astrolabe Roadstead (areas 1 and 2). These people were often day users of the coastline. The typical pattern for sea–kayakers on day trips was to travel from Marahau around Adele and/or Fisherman Island and then land on a beach in the Astrolabe Roadstead before returning back to Marahau.

In addition, areas four and five were popular areas for freedom and personal sea–kayakers. In area four, Onetahuti, was the most popular beach. In area five, Awaroa was the main beach frequented by sea–kayakers.

Motorised watercraft users generally remained within the Astrolabe Roadstead area. The single most popular beach was Stilwell Bay, because its shelter produced perfect water–skiing conditions. Many motorised watercraft users also visited Anchorage and Torrent Bay in area three. A statistically significant difference was found for destination of the two groups: $\chi^2 (16, 213)=62.62, p<0.001$. 

11
Figure 7. Trip locations – Abel Tasman National Park coastline

Base map source: Murray & Von Kohorn (1994).

KEY
1–9%
10–19%
20–29%
30–39%
40–49%
3.4.7 Guided Trips

Did a guide accompany you for your entire sea-kayak trip? If yes, explain why.

Table 10 indicates that a guide accompanied almost one third of sea-kayakers for their entire trip. The most common reason mentioned for this was that they were inexperienced sea-kayakers. Other reasons included safety, and because some people in the group requested that a guide accompany the group.

Table 10
Reasons for choosing a sea-kayak guide

<table>
<thead>
<tr>
<th>Sea-kayak reasons</th>
<th>n=37</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inexperience with sea-kayaking</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Part of the tour deal</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Other reasons</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

3.4.8 Why the Abel Tasman?

Why did you choose the Abel Tasman National Park coastline for your trip?

Many sea-kayakers chose the Abel Tasman coastline because it was recommended to them (Table 11). Sea-kayakers had heard of the area by word-of-mouth, or had read about the area in brochures, guidebooks such as Lonely Planet, and other advertising material such as information from the Internet. These responses indicate that sea-kayakers were influenced by place promotion in commercial advertising material of the Abel Tasman coastline. Sea-kayakers also chose the area for its natural attractions and its close proximity to their other destinations. Other reasons for visiting the coastline included: previous visits to the area, the fact that travellers were already in the area, a long held desire to visit the area, they considered the area to be safe, and the warm climate.

In comparison, motorised watercraft users visited the area primarily for the natural attractions. Some were annual visitors to the area while others viewed it as a very desirable place to be, reflecting an emotional attachment to the Abel Tasman coastline. Other reasons included: it is close to home, not too crowded, good for all users, especially water-skiing, and peaceful. People also come to the area to be with family, to go scalloping, and because the access to the area is good.

Table 11
Reasons for choosing the Abel Tasman coastline

<table>
<thead>
<tr>
<th>SK Reasons</th>
<th>%</th>
<th>MWC Reasons</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>It was recommended</td>
<td>61</td>
<td>Natural attractions</td>
<td>87</td>
</tr>
<tr>
<td>Natural attractions</td>
<td>41</td>
<td>Only place to go</td>
<td>30</td>
</tr>
<tr>
<td>Convenience</td>
<td>16</td>
<td>Always visit the area</td>
<td>24</td>
</tr>
<tr>
<td>Other</td>
<td>27</td>
<td>Best place to go in NZ/world/love it</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Weather</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Good for water-skiing</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Safe water conditions</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>30</td>
</tr>
</tbody>
</table>

3.4.9 Why the Craft?

Why did you choose to use a sea-kayak/motorised watercraft, instead of another craft, for this trip?

Table 12 (p.14) summarises the responses of sea-kayakers and motorised watercraft users regarding their choice of craft. The main reasons stated by sea-kayakers were that sea-kayaking was something different, was preferable and faster to walking, and was recommended to them. Other reasons included: sea-kayaking was considered peaceful, it is a challenge and an
adventure, sea–kayaking allows close contact with nature, the sea–kayak trip constituted a holiday, sea–kayaking provides a way to escape the crowds on the coastal track, and because it provides some physical fitness for the participant.

Motorised watercraft users chose their craft because it enables them to transport people and equipment to the beaches and because they owned the craft. Other reasons included: individuals possessed a passion for boating, it made for easy access to the coastline, the belief that boat travel was better than walking, the enjoyment of being on the water, it enabled one to collect scallops, the craft was a new toy, and to get away from the crowds at Kaiteriteri Beach.

### Table 12

<table>
<thead>
<tr>
<th>SK reasons</th>
<th>%</th>
<th>MWC reasons</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Something different</td>
<td>34</td>
<td>Own one</td>
<td>27</td>
</tr>
<tr>
<td>Better/faster than walking</td>
<td>25</td>
<td>Transport</td>
<td>32</td>
</tr>
<tr>
<td>Best way to see coastline</td>
<td>18</td>
<td>Participate in other water activities</td>
<td>19</td>
</tr>
<tr>
<td>Recommended</td>
<td>20</td>
<td>Speed</td>
<td>16</td>
</tr>
<tr>
<td>Fun</td>
<td>12</td>
<td>Other</td>
<td>28</td>
</tr>
<tr>
<td>Other</td>
<td>40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 3.4.10 Trip Highlights

*What did you like about your trip?*

Many sea–kayakers enjoyed the scenery (Table 13). The most common response from motorised watercraft users was the favourable weather conditions. Some respondents from both groups stated that they enjoyed everything about their trip. Other responses from sea–kayakers included: peace and quiet, learning about kayaking and the Abel Tasman coastline, that it was an easy paddle, the water, atmosphere and freedom to travel at one’s own pace. Other responses from motorised watercraft users included: food, sunbathing, speed of the craft, the peaceful nature of the trip and the area, water–skiing, and the area is good for children.

### Table 13

**Positive aspects of the trip**

<table>
<thead>
<tr>
<th>SK</th>
<th>%</th>
<th>MWC</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenery</td>
<td>53</td>
<td>Weather</td>
<td>47</td>
</tr>
<tr>
<td>Everything</td>
<td>23</td>
<td>Water</td>
<td>24</td>
</tr>
<tr>
<td>Weather</td>
<td>20</td>
<td>Everything</td>
<td>18</td>
</tr>
<tr>
<td>Relaxing</td>
<td>16</td>
<td>Scenery</td>
<td>17</td>
</tr>
<tr>
<td>Other</td>
<td>33</td>
<td>Relaxing</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Company</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>31</td>
</tr>
</tbody>
</table>

### 3.4.11 Negative Aspects of the Trip

*What did you dislike about your trip?*

Table 14 (p.15) illustrates the negative aspects of the trips for both groups and shows that some sea–kayakers did not like motorboats. Motorised watercraft responses were extremely varied, to the extent that a category could not be formed. Other responses for both groups included: the smell of the toilets, presence of wasps and rubbish in the area, rough water conditions and cloudy overhead conditions, getting wet, being sunburnt and jet–skis. However jet–skiers were mentioned only by three percent of sea–kayakers and one percent of motorised watercraft users.
Table 14

Negative aspects of the trip

<table>
<thead>
<tr>
<th>SK disliked</th>
<th>%</th>
<th>MWC disliked</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motorboats</td>
<td>18</td>
<td>Other (no category formed)</td>
<td>40</td>
</tr>
<tr>
<td>Other</td>
<td>29</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.4.12 Conflict on the Water

Did the actions of other people on the water concern you, annoy you, or make you worry about your safety? If yes, please describe.

This was the primary question used to identify the presence of conflict between the groups. Both sea-kayakers and motorised watercraft users experienced conflict (Table 15). Forty-four percent of sea-kayakers experienced conflict on the water. Of those, most were bothered by motorboats. Complaints included: boats travelling too close to shore and sea-kayaks, the high number of boats in the area, water-skiers taking too much room, and the noise and danger of such craft. In addition, some were bothered by other motorised watercraft which were jet-skis and water taxis, for the same reasons above. Some of these respondents considered the high pitch noise of jet-skis to be more annoying than the noise of motorboats.

Table 15 also demonstrates that forty-nine percent of motorised watercraft users experienced conflict. Of those, most were annoyed with other motorboat users. One respondent mentioned sea-kayakers as an interfering group. Based on information from this question (3.4.12), an asymmetrical conflict is evident between sea-kayakers and motorised watercraft users and an intra-group conflict persists between motorised watercraft users. Interestingly, more motorised watercraft users experienced conflict than sea-kayakers. Complaints by motorised watercraft users included: people water-skiing in the wrong direction, people wearing no life jackets, overloaded craft, breaching the recreational boating regulations, and general reckless boat handling. Some were also annoyed with other craft, which were jet-skis and water taxis. The high pitch noise of the jet-skis was of concern to some motorboat users.

Table 15

Interfering groups causing conflict

<table>
<thead>
<tr>
<th>SK Conflict on water</th>
<th>Interfering group: motorboats</th>
<th>90</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Interfering group: other watercraft</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MWC Conflict on water</th>
<th>Interfering group: motorboats</th>
<th>72</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Interfering group: other watercraft</td>
<td>36</td>
</tr>
</tbody>
</table>

T-tests were conducted to test for contributing factors to conflict for sea-kayakers (Table 16). Conflict on the water (whether people experienced conflict or not) was the variable against which all other variables in the table were tested. All tests were statistically significant, thus each variable tested is a contributing factor to conflict, that is: age, visits to the Abel Tasman National Park, sea-kayak trips, group size, duration of the trip and knowledge of the recreational boating regulations. These results are consistent with the demographic and socio-economic characteristics of sea-kayakers (see section 3.5).
Table 16
Summation of paired–samples t–tests conducted (with conflict) for sea–kayakers

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>mean</th>
<th>df</th>
<th>t–value</th>
<th>p (2 tailed sig.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>110</td>
<td>2.85</td>
<td>47</td>
<td>12.46</td>
<td>p&lt;0.001</td>
</tr>
<tr>
<td>Visits to ATNP</td>
<td>110</td>
<td>1.5</td>
<td>47</td>
<td>–4.66</td>
<td>p&lt;0.001</td>
</tr>
<tr>
<td>SK trips</td>
<td>110</td>
<td>1.5</td>
<td>47</td>
<td>–4.55</td>
<td>p&lt;0.001</td>
</tr>
<tr>
<td>Group size</td>
<td>110</td>
<td>3.2</td>
<td>47</td>
<td>–11.46</td>
<td>p&lt;0.001</td>
</tr>
<tr>
<td>Duration of trip</td>
<td>110</td>
<td>2.9</td>
<td>47</td>
<td>–8.17</td>
<td>p&lt;0.001</td>
</tr>
<tr>
<td>Knowledge of regs.</td>
<td>110</td>
<td>2.5</td>
<td>47</td>
<td>9.72</td>
<td>p&lt;0.05</td>
</tr>
</tbody>
</table>

T–tests were also conducted on the motorised watercraft sample to determine contributing factors to conflict on the water (Table 17). As above, conflict on the water was the common variable. All six tests were statistically significant, demonstrating that each factor contributes to conflict, that is: age, visits to the Abel Tasman National Park, the length of time a person has been using a motorised watercraft, how long the person has been using the Abel Tasman National Park coastline, group size and duration of the trip. These results are also consistent with the demographic and socio–economic characteristics of motorised watercraft users (see section 3.5). Furthermore, chi–square analysis indicated that there was no statistical difference between how often people drove the motorised watercraft, and who experienced conflict. Thus, there is little difference in the perception of conflict between passengers of craft and those who drive the craft.

Table 17
Summation of paired samples t–tests conducted (with conflict) for motorised watercraft

<table>
<thead>
<tr>
<th>Variable (x conflict)</th>
<th>n</th>
<th>mean</th>
<th>df</th>
<th>t–value</th>
<th>p(2 tailed sig.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>103</td>
<td>3.28</td>
<td>49</td>
<td>15.07</td>
<td>p&lt;0.001</td>
</tr>
<tr>
<td>Visits to ATNP</td>
<td>103</td>
<td>3.4</td>
<td>49</td>
<td>–22.45</td>
<td>p&lt;0.001</td>
</tr>
<tr>
<td>How long MWC user</td>
<td>103</td>
<td>4.18</td>
<td>49</td>
<td>–13.84</td>
<td>p&lt;0.001</td>
</tr>
<tr>
<td>How long ATNP user</td>
<td>103</td>
<td>3.72</td>
<td>49</td>
<td>12.50</td>
<td>p&lt;0.001</td>
</tr>
<tr>
<td>Group size</td>
<td>103</td>
<td>3.68</td>
<td>49</td>
<td>–19.37</td>
<td>p&lt;0.001</td>
</tr>
<tr>
<td>Duration</td>
<td>103</td>
<td>1.2</td>
<td>49</td>
<td>–1.43</td>
<td>p&lt;0.001</td>
</tr>
</tbody>
</table>

3.4.13 Conflict on the Beach

Did the actions of other people on a beach concern you, annoy you, or make you worry about your safety? If yes, please explain.

Table 18 indicates that few sea–kayakers and motorised watercraft users experienced conflict on the beach, although more motorised watercraft users were concerned than sea–kayakers. Those who did experience conflict were disturbed by the smell of toilets, presence of sandflies and wasps, rubbish on the beach, and people lighting fires on the beach.

Table 18
Conflict on the beach

<table>
<thead>
<tr>
<th>SK Conflict on beach</th>
<th>%</th>
<th>MWC Conflict on beach</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>5</td>
<td>Yes</td>
<td>12</td>
</tr>
<tr>
<td>No</td>
<td>95</td>
<td>No</td>
<td>88</td>
</tr>
</tbody>
</table>

3.4.14 How Safe is the Abel Tasman Coastline and Why?

How safe do you think the Abel Tasman coastline is for sea–kayakers/motorised watercraft users?

Most sea–kayakers considered the Abel Tasman coastline to be safe for sea–kayaking, and one quarter felt it was very safe (Figure 8, p.17). In comparison, almost half the motorised watercraft
users stated that the coastline was safe for motorised watercraft usage, while over one third mentioned that it was very safe.

Table 19 summarises the responses provided by sea-kayakers and motorised watercraft users to explain their perception of safety of the Abel Tasman coastline. Both groups stated that the volume of traffic and shelter of the coastline were the main reasons for the area being considered safe or very safe. Other reasons were extremely varied and included: the belief that nothing would happen to them, the fact that some users had visited the coastline for many years without any problems, that they understood, and could accurately read and anticipate the weather patterns along the coastline, and some sea-kayakers felt they had been adequately prepared through good instruction. However, some experienced motorised watercraft respondents also noted that weather and water conditions can turn quickly in the area, that the Mad Mile can be dangerous, and that participants need to possess knowledge of the coastline.

Table 19
Reasons for perception of safety

<table>
<thead>
<tr>
<th>SK Reasons</th>
<th>%</th>
<th>MWC reasons</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>High volume of traffic</td>
<td>25</td>
<td>High volume of traffic</td>
<td>22</td>
</tr>
<tr>
<td>Protection and shelter of coastline</td>
<td>26</td>
<td>If people are sensible, it is fine</td>
<td>25</td>
</tr>
<tr>
<td>It was calm on the trip</td>
<td>24</td>
<td>Shelter</td>
<td>18</td>
</tr>
<tr>
<td>Other</td>
<td>24</td>
<td>Closeness to shore</td>
<td>12</td>
</tr>
<tr>
<td>Other</td>
<td>31</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.4.15 Witnessed Incidents or Accidents on this or Previous Trips
Have you witnessed any incidents or accidents on your current trip, or on previous trips, along the Abel Tasman National Park coastline involving other watercraft users?
Only four percent of sea-kayakers, and twenty-eight percent of motorised watercraft users had witnessed an incident or accident. The difference was expected as motorised watercraft users had been visiting the area for longer than sea-kayakers. The incidents generally involved irresponsible motorised watercraft users and potential accidents, such as: boats hitting rocks, boat sinkings, anchors breaking, breaching of the recreational boating regulations, and near miss situations with other craft.

3.4.16 Advantages of Motorised Watercraft
What are the advantages of motorised watercraft users being in the same area as sea-kayakers along the Abel Tasman National Park coastline?
Table 20 (p.18) shows that many sea-kayakers felt that the main advantage of motorised watercraft users interacting with sea-kayakers was safety. They considered that motorised watercraft users could help them in an emergency. Other responses included: it was good to see other users, that motorised watercraft were quicker than sea-kayaks, they could transport more equipment, the speed of the craft, they go home at the end of the day, and create waves for sea-kayakers. It is interesting to note that many more sea-kayakers saw no advantages of jet-skis, compared to motorboats, indicating sea-kayakers had different views regarding jet-skiers and
motorboaters. However, motorboaters were considered more problematic regarding conflict than jet–skiers, as there were more motorboat users in the area.

<table>
<thead>
<tr>
<th>Table 20</th>
<th>Advantages of motorised watercraft</th>
</tr>
</thead>
<tbody>
<tr>
<td>SK responses</td>
<td>re: motorboats %</td>
</tr>
<tr>
<td>Safety</td>
<td>64</td>
</tr>
<tr>
<td>Equal rights to use the area</td>
<td>16</td>
</tr>
<tr>
<td>No advantages</td>
<td>18</td>
</tr>
<tr>
<td>Other</td>
<td>23</td>
</tr>
</tbody>
</table>

3.4.17 Disadvantages of Motorised Watercraft

*What are the disadvantages of motorised watercraft users being in the same area as sea–kayakers along the Abel Tasman National Park coastline?*

Two questions about the disadvantages of sea–kayakers and motorised watercraft users mixing in the same area, this section and 3.4.19, were designed as another measure of conflict and to identify reasons for conflict. When kayakers were prompted by this question, more reported their annoyance with the noise of motorboats and jet–skis, the wake of motorboats, and the danger of jet–skis, than stated they experienced conflict with motorised craft in a previous question (see section 3.4.12).

Sea–kayaker responses to this question (3.4.17) are provided in Table 21 and are typical of those reported in the literature. Sea–kayakers mentioned their annoyance with the noise, wake, pollution, the number of motorised watercraft and danger of boats, especially those towing water–skiers. Jet–skiers were perceived to be “idiots.” In addition, ‘other’ responses included: the dislike of the speed of motorised watercraft, the problem posed by boats travelling too close to them, the concern that the motorised watercraft user may not see the kayaker or be more focused on the water–skier than where they were driving their craft. Furthermore, the recklessness of motorised watercraft users was of concern, the fact that some boats were disrespectful to sea–kayakers was also problematic, boats created a loss of enjoyment for some sea–kayakers, and some kayakers mentioned that jet–skiers should be banned from the area.

<table>
<thead>
<tr>
<th>Table 21</th>
<th>Disadvantages of motorised watercraft</th>
</tr>
</thead>
<tbody>
<tr>
<td>SK responses</td>
<td>re: motorboats %</td>
</tr>
<tr>
<td>Noise</td>
<td>57</td>
</tr>
<tr>
<td>Wake</td>
<td>48</td>
</tr>
<tr>
<td>Danger of craft to SK</td>
<td>43</td>
</tr>
<tr>
<td>Idiots</td>
<td>–</td>
</tr>
<tr>
<td>Pollution</td>
<td>16</td>
</tr>
<tr>
<td>Add to traffic/congestion</td>
<td>14</td>
</tr>
<tr>
<td>No disadvantage</td>
<td>8</td>
</tr>
<tr>
<td>Other</td>
<td>20</td>
</tr>
</tbody>
</table>

3.4.18 Advantages of Sea–kayakers

*What are the advantages of sea–kayakers being in the same area as motorised watercraft users along the Abel Tasman National Park coastline?*

One third of motorised watercraft users stated that everyone shared equal rights to use the area (Table 22). In addition, motorised watercraft users recognised that they would be useful to sea–kayakers in an emergency. Other responses included: that it was nice to see sea–kayakers along the coastline and that one could see and appreciate different recreational use along the coastline, and that sea–kayakers add to the atmosphere of the area. Motorised watercraft users also noted
that the presence of sea–kayakers may increase their awareness of the smaller craft, resulting in better driving of their craft by motorised watercraft users.

<table>
<thead>
<tr>
<th>Table 22</th>
<th>Advantages of sea–kayakers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Responses</strong></td>
<td><strong>%</strong></td>
</tr>
<tr>
<td>Equal rights</td>
<td>33</td>
</tr>
<tr>
<td>Safety (for SK)</td>
<td>24</td>
</tr>
<tr>
<td>No advantages</td>
<td>25</td>
</tr>
<tr>
<td>Other</td>
<td>29</td>
</tr>
</tbody>
</table>

**3.4.19 Disadvantages of Sea–kayakers**

*What are the disadvantages of sea–kayakers being in the same area as motorised watercraft users along the Abel Tasman National Park coastline?*

This question identified the reasons why motorised watercraft users may dislike sea–kayakers. The result further demonstrates the benefit of implementing two different questions on conflict. Responses to this question indicate that motorised watercraft users did experience conflict with sea–kayakers whereas the primary conflict question did not (see section 3.4.12). This result is interesting as section 3.4.12 indicates that the inter–group conflict is almost entirely asymmetrical in the direction predicted by the literature. This section (3.4.19) demonstrates that the asymmetrical conflict changes when motorised watercraft users are prompted (as in this question) with the result that a more symmetrical situation becomes evident.

Table 23 shows that motorised watercraft users considered sea–kayakers to be a hazard, to be difficult to see and that there were too many of them. Many respondents who stated that sea–kayakers are difficult to see also mentioned that kayaks ought to have a flag mounted on the back to increase their visibility. In addition, motorised watercraft users stated that people needed to be aware of sea–kayakers. Other reasons included: sea–kayakers crowd the beaches, the fact that sea–kayakers do not accept that motorised watercraft users will be participating in water–skiing, the belief that sea–kayakers are inexperienced with their craft and the coastline, and that sea–kayakers are more vulnerable than motorised watercraft users.

<table>
<thead>
<tr>
<th>Table 23</th>
<th>Disadvantages of sea–kayakers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Responses</strong></td>
<td><strong>%</strong></td>
</tr>
<tr>
<td>Difficult to see</td>
<td>21</td>
</tr>
<tr>
<td>Hazard</td>
<td>25</td>
</tr>
<tr>
<td>Too many of them</td>
<td>16</td>
</tr>
<tr>
<td>Potential danger to SK</td>
<td>32</td>
</tr>
<tr>
<td>Need to be aware of SK</td>
<td>25</td>
</tr>
<tr>
<td>Everyone has rights</td>
<td>20</td>
</tr>
<tr>
<td>Other</td>
<td>39</td>
</tr>
</tbody>
</table>

**3.4.20 Involvement With the Other Activity**

*Have you used a motorboat or jet–ski for recreation? If yes how would you describe yourself?*

Table 24 (p.20) indicates that many sea–kayakers had used a motorboat, and some had used a jet–ski. Of those sea–kayakers who had used a motorboat or jet–ski, the majority considered themselves either a sea–kayaker or classified themselves as neither a motorised watercraft user or sea–kayaker. This information did not alter how the recreationist was classified for the purposes of this study.
Table 24

Sea–kayak involvement with other activity

<table>
<thead>
<tr>
<th></th>
<th>SK used a motorboat</th>
<th>Used a jet–ski</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe as:</td>
<td>n=60</td>
<td>n=24</td>
</tr>
<tr>
<td>Sea–kayaker</td>
<td>25</td>
<td>41</td>
</tr>
<tr>
<td>Motorboat / jet–ski</td>
<td>18</td>
<td>6</td>
</tr>
<tr>
<td>Both</td>
<td>12</td>
<td>–</td>
</tr>
<tr>
<td>Neither</td>
<td>46</td>
<td>5</td>
</tr>
</tbody>
</table>

Have you used a sea–kayak for recreation? If yes, how would you describe yourself?
Table 25 shows that just under one third of motorised watercraft users had used a sea–kayak. Of those, the majority considered themselves motorised watercraft users.

Table 25

Motorised watercraft involvement with other activity

<table>
<thead>
<tr>
<th>Used a sea–kayak</th>
<th>n=32</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe as:</td>
<td></td>
</tr>
<tr>
<td>MWC user</td>
<td>88</td>
</tr>
<tr>
<td>Sea–kayaker</td>
<td>–</td>
</tr>
<tr>
<td>Both</td>
<td>6</td>
</tr>
<tr>
<td>Neither</td>
<td>6</td>
</tr>
</tbody>
</table>

3.5 Demographic and Socio–economic Characteristics of Users

This section presents the demographic and socio–economic characteristics of respondents. It focuses on age, sex, country of origin, ethnicity, city or town of residence, education, and occupation of sea–kayakers and motorised watercraft users.

3.5.1 Age

What is your age group?
Sea–kayakers were generally younger than motorised watercraft users (Figure 9). A statistically significant difference in age was found between the two groups: \( \chi^2 (5, 213) = 53.41, p<0.001. \)

3.5.2 Sex

Are you male or female?
Females dominated the sea–kayak and motorised watercraft samples (Table 26). Cessford (1998) found a similar female to male ratio for sea–kayakers in his study (51% female and 49% male). The figures may not represent the actual motorised watercraft user population. Only those people sitting on beaches were selected to participate in the study and at the time males were often driving the boat or water–skiing. According to the 1996 census, 50.9 percent of the population are females (Department of Statistics, 1996c). Thus, the gender balance for motorised watercraft users is different to the general population. The implications of this imbalance for this study are believed to be minor as the study sought the views of the general boating population. Furthermore, chi–square analysis indicates no statistical difference between males and females and whether they experienced conflict. Thus, there was little difference in the perception of conflict between males and females.
Table 26
Sex of respondents

<table>
<thead>
<tr>
<th></th>
<th>Sea–kayak</th>
<th></th>
<th>Motorised watercraft</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>52</td>
<td></td>
<td>Female</td>
<td>62</td>
</tr>
<tr>
<td>Male</td>
<td>48</td>
<td></td>
<td>Male</td>
<td>38</td>
</tr>
</tbody>
</table>

3.5.3 Country of Origin
Which country are you from?

Table 27 shows that there was an even split of overseas visitors and New Zealanders in the sea–kayak sample. The countries with the highest representation of overseas sea–kayakers were Germany and the United Kingdom. Overseas kayakers from the ‘other’ category included: Sweden, Denmark, Holland, South Africa, Austria, Brazil, Singapore and Israel. This study differs from Cessford’s (1998) study as 44% of the sea–kayakers in his study were from overseas (his data were collected in 1994). The difference in country of origin between the two studies may reflect tourism trends.

Most motorised watercraft users were New Zealanders (Table 27). Motorised watercraft users from overseas countries came from the United Kingdom, South Africa and Australia.

Table 27
Country of origin for sea–kayakers and motorised watercraft users

<table>
<thead>
<tr>
<th>Sea–kayakers</th>
<th>%</th>
<th>Cessford</th>
<th>%</th>
<th>MWC</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overseas visitors</td>
<td>51</td>
<td>44</td>
<td>Overseas visitors</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>6</td>
<td>4</td>
<td>United Kingdom</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>6</td>
<td>6</td>
<td>Australia</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>12</td>
<td>11</td>
<td>South Africa</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>10</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>4</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Zealanders</td>
<td>49</td>
<td>56</td>
<td>New Zealanders</td>
<td>95</td>
<td></td>
</tr>
</tbody>
</table>

3.5.4 Ethnicity
If you are a New Zealander, with which ethnic group do you belong?

Table 28 indicates that almost all New Zealand sea–kayakers and motorised watercraft users in the sample were New Zealand European/Pakeha.

Table 28
Ethnicity of NZ sea–kayakers and motorised watercraft users

<table>
<thead>
<tr>
<th>Ethnicity NZ Sea–kayakers (n=54)</th>
<th>%</th>
<th>Ethnicity NZ MWC (n=98)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>NZ European / Pakeha</td>
<td>98</td>
<td>NZ European / Pakeha</td>
<td>98</td>
</tr>
<tr>
<td>Maori</td>
<td>2</td>
<td>Maori</td>
<td>2</td>
</tr>
</tbody>
</table>

3.5.5 City / Town
If you are a New Zealander, in which city or town do you normally live?

New Zealand sea–kayakers in the sample generally came from Auckland, Christchurch and Wellington (Table 29, p.22). New Zealand sea–kayakers from other places were from Nelson, Palmerston North, Blenheim, Greymouth, Kumeu, and Dunedin. New Zealand motorised watercraft users predominantly resided in Christchurch and some were from Nelson. Others came from Dunedin, Wellington, Auckland, Motueka, Timaru, Riwaka, Greymouth, Ashburton,
and Taupo. The motorised watercraft sample was generally comprised of people from the Canterbury region, whereas the sea–kayak sample represented a more national sample.

<table>
<thead>
<tr>
<th>City/town of residence</th>
<th>SK n=54</th>
<th>%</th>
<th>MWC n=98</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auckland</td>
<td>26</td>
<td></td>
<td>Christchurch</td>
<td>63</td>
</tr>
<tr>
<td>Christchurch</td>
<td>26</td>
<td></td>
<td>Nelson</td>
<td>16</td>
</tr>
<tr>
<td>Wellington</td>
<td>24</td>
<td></td>
<td>Other</td>
<td>21</td>
</tr>
<tr>
<td>Other</td>
<td>24</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 3.5.6 Education

What is the highest level of education you have attained?

Sea–kayakers generally held higher educational qualifications than motorised watercraft users (Figure 10). A statistically significant difference was found regarding educational attainment for sea–kayakers and motorised watercraft users: $\chi^2(4, 213) = 41.68, p<0.001$.

### 3.5.7 Occupation

Please state your current occupation.

The occupational classifications used in this section are based on the New Zealand Standard Classification of Occupations (NZSCO–90) (Department of Statistics, 1991 & 1996a & b). Students and homemakers have been added as they do not appear in the classifications. Table 30 (p.23) shows the occupational status of the respondents. Almost double the number of sea–kayakers were employed in professional occupations than motorised watercraft users. More than double the number of motorised watercraft users than sea–kayakers were managers. Furthermore, almost double the number of motorised watercraft users than sea–kayakers were employed in trade occupations. Another difference was the number of motorised watercraft users who classified themselves as homemakers, or mothers perhaps reflecting the higher percentage of females in the motorised watercraft sample. There were many people still studying as students from both groups. A statistically significant difference was found in the occupational classification of sea–kayakers and motorised watercraft users: $\chi^2(10, 213) = 28.50, p<0.05$. 
### Table 30

<table>
<thead>
<tr>
<th>Occupation</th>
<th>SK %</th>
<th>MWC %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers/administrators/legislators</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>Professionals</td>
<td>38</td>
<td>17</td>
</tr>
<tr>
<td>Technicians and associate professionals</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>Clerical work</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Sales and service</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Agricultural/fishery</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Trade workers</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Plant and machine operators and assemblers</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Elementary occupations</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Unemployed</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Student</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>Home maker</td>
<td>1</td>
<td>10</td>
</tr>
</tbody>
</table>

### 3.6 Presentation of Qualitative Data

This section presents the results of the qualitative data and has two parts: observations and brochure analysis. Many of the points raised here are discussed further in part four. In–depth interviews were a key data collection method in this study but owing to the nature of interview analysis, interview data are not presented in this section, but rather directly integrated into part four.

#### 3.6.1 Observations

This section presents the findings of the participant observation data and has four components: boat behaviour/travel patterns, factors leading to potentially dangerous situations, an accident, and anecdotal remarks. Anecdotal remarks included those comments made by questionnaire respondents, after the completion of their questionnaire. Anecdotal remarks form part of the observational data as they were collected in a qualitative manner.

##### 3.6.1.1 Boat Behaviour/Travel Patterns

During the study period, travel patterns/boat behaviour of sea–kayakers and motorised watercraft users were observed. Clear differences between the groups were noted. One difference was the pattern of use. After completing a safety briefing, sea–kayakers departed from Marahau beach (on the first day of their trip) at approximately 9.00am. They generally paddled through the Astrolabe Roadstead between 9.30am and 2.00pm. Day trip kayakers either paddled directly from Marahau out around Adele and Fisherman Islands and then back to a beach for lunch, or they paddled directly to a beach in the Astrolabe Roadstead and then ventured out and around the Islands. These groups often hoisted sails in the afternoon and sailed back, arriving at Marahau Beach between 3.00pm and 5.30pm. Overnight sea–kayakers often stopped in the Astrolabe for a break, some overnight, before traversing the Mad Mile and moving to Anchorage and further north.

Motorised watercraft users generally drove their craft straight from Kaiteriteri to their favoured beach in the Astrolabe Roadstead. The same groups of people were often observed on the same beach, even with their boat anchored in the same location in the water. This was especially true for the people at Stilwell Bay. Motorised watercraft users arrived at the beaches at around 9.00am during the extreme peak use period (26 December 1998 to 9 January 1999), but arrived later, approximately 11.00am, towards the end of the study period when visitor numbers were lower. During the extreme peak use the beaches (particularly Stilwell Bay) looked somewhat like a parking lot as boats were not only lined up along side each other, but were also anchored.
behind and in front of other boats. In addition, boats were anchored fore and aft to avoid swinging into neighboring craft. Motorised watercraft users who travelled north of the Astrolabe area drove their craft close to Adele Island and avoided the beaches of the Astrolabe Roadstead.

Further observations of the two groups included: the difference between the trip and the destination, the experience sought by each group, and the type of accommodation used. Sea–kayakers can travel much closer to shore than motorised watercraft users because of the draft of their boat. Sea–kayakers often paddled into caves and tidal lagoons, and generally explored the area more thoroughly. Thus, the trip itself appears as important as the destination for sea–kayakers. Paddling forms as much a part of their experience as activities on the beach. The type of activities in which sea–kayakers participated on their trip (see section 3.4.4) and their trip highlights (see section 3.4.10) suggests they sought a nature/wilderness experience. On the other hand, motorised watercraft users travelled directly to their preferred beach and generally sat on that beach, or participated in water–skiing activities. These people sought a thrill/excitement experience gained through water–skiing and associated activities. Thus, they appeared to be more focussed on the activities in which they participated once arriving at the beach (the destination) than on their trip.

Whilst sea–kayakers sought a nature/wilderness experience, some also enjoyed meeting new people and relaxing. This was obvious from observations along the beaches during the day and at Anchorage and Mosquito Bay around dinner time. People were observed mingling with other groups of kayakers and trampers. Socialisation and relaxation were also important for motorised watercraft users who often travelled to the beaches in large groups (there was often more than one boat per party). Children accompanied many of these groups. Upon arrival at the beaches motorised watercraft users placed umbrellas in the sand under which they sat for much of the day. They also had cooler bins full of food and beverages. These people participated in beach/water activities, such as Frisbie, cricket, swimming and water–skiing and also lazed around, listened to the radio and read a newspaper.

Accommodation is different for the two groups. Day trip sea–kayakers leave the area at the end of the day, but overnight kayakers often assess each beach as a possible campsite for the night. Basic amenities are provided at such sites. Motorised watercraft users generally stayed at the Kaiteriteri Motor Camp for the duration of their holiday where they enjoyed the use of many home comforts such as hot showers and electricity.

Another observation of operator behaviour was that many of the motorised watercraft users who water–ski at Stilwell Bay, appear to be highly specialised in their activity (the skiers and the drivers), compared to people observed water–skiing at other beaches. In fact, three motorised watercraft respondents reported that Stilwell Bay was where the skilled skiers congregate. Stilwell Bay is considered by many motorised watercraft users to be an informal ski–lane.

Some observations of the majority of users at Stilwell Bay are that people driving boats use clear hand signals to indicate the direction in which the boat will be steered, they ski in the same direction as the majority of other users (clockwise), and the water–skier has progressed from simply holding the rope behind the boat to be able to ski with only one ski, and to perform various patterns across the water. In addition, these users appear to be specialised with the area, as they have their preferred beach from which their activities occur, and understand the intricacies of the area, such as the areas of the bay subjected to the sea breeze, the best anchoring position in a certain bay and the location of rocks within the area. Many of these users were clearly agitated at the behaviour, which they considered to be inappropriate, of other users. People were often overheard commenting on inappropriate, and in some cases dangerous, behaviour of other motorised watercraft users, and kayakers, in the area. When asked, these
people indicated that they considered the offenders to be performing behaviour not appropriate to their craft or the area. They considered these people to be less specialised in the activity (and area) than they perceived themselves to be. Examples of inappropriate behaviour included: boats towing skiers in the wrong direction (anti–clockwise), breaching the regulations, not wearing life jackets, driving a boat too fast close to shore, and kayakers paddling through an area where water–skiing was in progress.

### 3.6.1.2 Factors Leading to Potentially Dangerous Situations

Potentially dangerous situations were observed during the study period, some of which could have resulted in, or led to, a serious accident. Many of these near miss incidents involved motorised watercraft users driving their craft too close to sea–kayakers, motorised watercraft users towing water–skiers in the wrong direction, young people driving motorboats and jet–skis, and motorised watercraft users breaching the recreational boating regulations. Despite the negative attention jet–skiers often received, their behaviour was no worse than motorboat users. In fact, in many cases it was better. However, some jet–skiers were observed breaching the regulations.

We also observed motorboats being towed to shore by water taxis (due to mechanical failure), overloaded motorboats, and motorised watercraft users not wearing life jackets. The latter issue was observed more frequently than the other two. We often witnessed two family groups who were piled into a single motorboat. The two males generally sat in the front seat without lifejackets while the women and children sat in the back wearing life jackets. Alternatively, some craft were loaded with people and only the adults donned lifejackets, for other groups the opposite was true as children were the only people wearing life jackets. In some overloaded craft none of the occupants wore life jackets.

Whilst the issues above were prominent in observations, most problems or near miss incidents occurred when sea–kayakers were interacting with motorboats towing skiers. We commonly observed sea–kayakers paddling close to shore and into the middle of a bay where water–skiing was in progress. Stilwell Bay was the most congested bay and therefore where most of the incidents were observed. Some motorised watercraft users became agitated with sea–kayakers getting in the way and drove their craft close to sea–kayakers. The kayakers simply rafted together and waited until the boats had passed. Another problem was kayakers crossing from the beaches across the Astrolabe Roadstead to Adele and Fisherman Islands.

A related issue to kayakers interrupting water–skiing is that sea–kayaks are difficult to see. Managers, operators, and recreationists all mentioned this so time was purposely spent observing kayaker visibility. In general, we found kayaks very difficult to see as they sit so low on the water and are produced in many colours with white, yellow and orange being the most visible. Red, blue, grey, and green all fade into the background. Their visibility is also dependent on weather conditions; they are more difficult to see when white capped waves are present. The paddle is the most clearly visible part of the kayak as it is the highest piece and often glistens in the sun light. Furthermore, kayaks in large groups are more easily spotted than one or two kayakers paddling together. Some motorised watercraft respondents noted that a flag mounted on the back of a kayak may improve its visibility to other craft. One kayak was seen in Kaiteriteri Bay with a flag and it was more visible than kayaks without a flag.
3.6.1.3 **Accidents**
During the study only one accident was observed by the researchers which involved a motorboat at Watering Cove. The boat was towing two children who were sitting in biscuits. The driver circled too closely to an anchored boat and flung the children into it. The children were unharmed.

3.6.1.4 **Anecdotal Comments**
The remainder of this section presents information from anecdotal remarks of respondents. Two parts are discussed: expectations and licensing issues.

Some sea–kayakers stated that they were disappointed to be met with conditions/situations that differed from what they expected to encounter. Fifteen sea–kayak groups mentioned that they were disappointed with the presence of motorised watercraft in the area, as they believed the entire area to be a national park, and therefore motorised craft ought to be banned. These respondents stated that such views were influenced by what they had read in promotional material.

Approximately thirty motorised watercraft respondents were asked if they thought operating licences for boat drivers should be implemented. Most of these respondents favoured the change. Future boating studies ought to focus on attitudes of boat users towards legislative change of the regulations.

3.6.2 **Brochure Analysis**
We now present the four prominent themes that emerged from the analysis of brochures. These were: the natural beauty of the coastline, sea–kayaking is the best way to see the area, the lack of other craft, and the safety of the Abel Tasman coastline.

As the Abel Tasman is a coastal park, many of the pictures in brochures illustrate the natural beauty of the area. Golden sand beaches, clear blue water, and lush green bush all feature in brochures. In addition, readers may interpret the entire area (including the water) to be a national park, based on descriptions provided in some of the commercial sea–kayak brochures and brochures promoting the Nelson/Marlborough region.

Sea–kayaking is portrayed as the best, and most natural, way to see the Abel Tasman coastline. Readers are told that sea–kayaking is a natural way to experience the attractions of the area, and brochures show sea–kayakers paddling close to shore, and sometimes close to wildlife such as seals.

Another image in brochures is that of seclusion. Most pictures show only a few people on a beach and very few, if any, kayaks or boats in the background. There are no motorised watercraft pictured in sea–kayak brochures.

The Abel Tasman coastline is promoted to visitors as a safe adventurous place. Brochures generally show flat and unthreatening water conditions. Readers are told of the safety equipment used by commercial sea–kayak companies and their compliance with safety standards set by the Sea–kayak Operators’ Association of New Zealand (SKOANZ).

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8 A biscuit is an inflatable ring in which one or two people can sit. The biscuit has a ski rope tied to its front and the other end is attached to the ski pole of a motorboat.
3.7 **Summary of Results**

This section has presented the results from the study questionnaires, observations and brochure analysis. Sea–kayakers were inexperienced kayakers and users of the Abel Tasman coastline and their craft, whereas motorised watercraft users were experienced with the coastline and their craft. Day trips were the most common type of trip for both groups. Sea–kayakers generally travelled in smaller groups than motorised watercraft users. Both groups participated in similar activities on the beach, although almost double the number of sea–kayakers than motorised watercraft users participated in walking and sightseeing.

Sea–kayakers were influenced to visit the Abel Tasman coastline by word–of–mouth, brochures, and the Internet, whereas motorised watercraft users chose the coastline because of the natural attractions, and many visit the area annually. Sea–kayakers chose to sea–kayak on their trip as it was something different and it enabled them to see more of the coastline in less time than walking the coastal track. Motorised watercraft users chose to use their craft due to its speed, its ability to transport people and equipment to a beach quickly, and for water–skiing.

The two groups differed in their demographic and socio–economic characteristics. Sea–kayakers were a mixture of overseas visitors and New Zealanders, whereas motorised watercraft users were mostly New Zealanders. Sea–kayakers were generally younger, held higher educational qualifications and were employed in more professional occupations than motorised watercraft users.

Furthermore, this study identified two conflict situations. The first was an inter–group conflict between sea–kayakers and motorised watercraft users. Sea–kayakers stated that they disliked the noise, wake and pollution created by motorised watercraft, and were disturbed by the high numbers of such craft along the coastline. Sea-kayakers were also concerned at the potential danger posed by motorised watercraft and their drivers. Motorised watercraft users mentioned that sea–kayakers were a hazard to them, difficult to see and that the number of sea–kayakers was problematic.

The second conflict identified was an intra–group conflict between motorised watercraft users. Motorised watercraft users were annoyed by other motorised watercraft users, mainly motorboaters who were towing water–skiers in the wrong direction, did not wear lifejackets, overloaded their craft, breached the recreational boating regulations and acted recklessly towards other craft. Jet–skiers and water taxi drivers were mentioned by both sea–kayakers and motorised watercraft users as interfering groups, although motorboaters are by far the main problem at present.

Information collected during observations within the study area included: behaviour/travel patterns of recreationists, factors leading to potential accidents, accidents, and anecdotal remarks of recreationists. Four prominent themes advertised in commercial sea–kayak brochures were then outlined. These were: the beauty of the coastline, that sea–kayaking is the best way to experience the Abel Tasman coastline, the lack of other craft/people, and the safety of the activity and the coastline.
Two types of conflict have been identified: an inter–group asymmetrical (one sided) conflict between sea–kayakers and motorised watercraft users, and an intra–group conflict between motorised watercraft users. The purpose of this section is to discuss the factors that contribute to these conflicts.

Jacob and Schreyer’s (1980) theory of goal interference is considered by many authors (see for example Blahna, Smith & Anderson 1995; Manning 1986; Ramthun, 1995; Ruddell & Gramann, 1994; Watson, Williams & Daigle, 1991) to be the most substantial theoretical basis for understanding recreational conflict. Thus, the current study uses this theory to examine conflict along the Abel Tasman coastline. Jacob and Schreyer (1980) define conflict as “goal interference attributed to another’s behaviour” (p. 369) and suggest that four factors produce conflict in outdoor recreation: perception of difference amongst recreationists, the definition of appropriate behaviour within an activity, and in a certain place, and how people perceive the natural environment. Each of these are discussed in relation to this study. Factors identified in this study, but not discussed by Jacob and Schreyer (1980), are then outlined and include: recreational trends, the setting, commercialisation/place promotion, and the influence of recreation area managers. Both quantitative and qualitative data are discussed in this section.

4.1 Differences Between the Two Groups

Perception of difference is an important determinant of recreational conflict (Jacob & Schreyer, 1980; Manning, 1986). There are differences which contribute to the inter–group conflict between sea–kayakers and motorised watercraft users, regarding the characteristics of the craft they use and type of person involved in the activity. These differences are discussed here.

The main difference between sea–kayaks and motorised watercraft is the size and speed of the craft (speed relates to the presence or absence of a motor). Non–motorised craft are generally smaller, slower, quieter, and more environmentally friendly than motorised craft. In comparison, motorised craft are generally bigger, faster, create noise and pollution and have the potential to be a danger to non–motorised users. Motorised watercraft also create a wake or waves which impact on sea–kayakers. Size and speed of craft also determine which group will experience conflict, and the reasons for such conflict. In all previous motorised versus non–motorised conflict studies the non–motorised user group experienced an asymmetrical conflict relationship with motorised users. This is not surprising given the significant differences in the attributes of the craft (see Bury, Holland & McEwan, 1983). Non–motorised users generally dislike the noise, pollution, speed, the potential danger caused by motorised craft and find their presence inappropriate. Of these, noise is often the main complaint (see Butler, 1974 & 1982; Jackson & Wong, 1982; Knopp & Tyger, 1973). The present study found similar results, as sea–kayakers disliked the noise, wake, number of motorised craft, pollution created, and danger posed, by motorised watercraft and their users.

4.1.1 Mechanical Noise / Pollution

The most common complaint from sea–kayakers in the sample was their agitation at the noise of motorised watercraft. Such mechanical noise is often considered inappropriate as it destroys the naturalness or ‘natural quiet’ of an area. Sea–kayakers often identified jet–skis as causing more noise than motorboats. Some motorboat users were also annoyed at the high pitch of the jet–ski motors. Sea–kayakers also disliked the pollution created by motorised craft. Noise and pollution...
disrupt kayakers’ expectations of their experience (discussed later). The large numbers of motorised watercraft in the area accentuated the noise and pollution problems.

4.1.2 Water Safety
Motorised watercraft and their drivers are a potential danger to sea–kayakers and thus water safety is a major facet of the conflict issues between the groups. There was widespread fear amongst sea–kayakers in the sample that they may be capsized, suffer an injury or even death, as the result of a near miss or collision with a motorised watercraft.

Sea–kayakers were also concerned that some motorised watercraft users drove their craft too close to them. The unpredictability of motorised watercraft, especially those towing skiers, was of concern to sea–kayakers as they believed that the driver may be more focussed on the water–skier than where the craft was travelling. These factors increase the perception of risk to the sea–kayaker as they believe there is more chance of an accident occurring.

Sea–kayakers in the sample seldom identified jet–skiers as a problem, as there were few jet–skiers in the area during the study period. Throughout the study period we observed only ten jet–skiers. However, when seen, jet–skiers were described as ‘idiots’ and ‘more crazy’ than motorboat drivers. Motorboat users also identified jet–skiers as being dangerous to other craft. Jet–skis can be driven at high speeds very close to shore whilst maintaining manoeuvrability.

The comments in this section demonstrate that, whilst there are characteristics of a motorised watercraft that are potentially dangerous to a sea–kayaker, such as the potential speed of the craft and the wake from the motor, it is the behaviour of the driver that exacerbates such characteristics and increases the threat to sea–kayakers. When the two groups interact, the level of perceived risk is far greater for the sea–kayakers as they are the smallest craft on the water, making them more vulnerable as they are unable to move quickly out of the path of bigger, faster craft. If a motorised watercraft collided with a sea–kayak, the sea–kayaker could be killed. The motorised watercraft user may be injured, but they will be less physically affected by the accident. Clearly, motorised watercraft and their drivers are a threat to sea–kayakers, and have more control of the situation, and the outcome of interaction, due to the bigger size and faster speed of the craft. Thus, sea–kayakers are reliant upon motorised watercraft users being able to see them and avoid hitting them. However, sea–kayakers also add to the problem by placing themselves in hazardous places, such as paddling into the middle of a bay where water–skiing is occurring.

4.1.3 Problems With Sea–kayakers
Many studies have investigated conflict between motorised and non–motorised users and many reasons are presented why non–motorised users dislike meeting motorised users (above). However, the only reason presented in the literature for a motorised user to dislike a non–motorised user is reciprocation where motorised users begin to dislike non–motorised users because they themselves are disliked (see Adelman, Heberlein & Bonnicksen, 1982).

Responses from motorised watercraft users indicated three main concerns or problems with sea–kayaks and sea–kayakers previously not identified in the research literature. Firstly, sea–kayakers are a hazard or nuisance to motorised watercraft users as their presence jeopardises water–skiing and general boat operation. Secondly, sea–kayaks are difficult to see. Thirdly, motorised watercraft users found the number of sea–kayakers in the area to be problematic.

Sea–kayakers are a potential hazard or nuisance to motorised watercraft users as they obstruct boating activity. Most problems occur when sea–kayakers are interacting with motorboats towing water–skiers. At the time of this study, there were no formal ski–lanes along the Abel Tasman coastline, so motorised watercraft users, under the recreational boating regulations,
were obliged to interrupt their water–skiing activities and alter their course to give way to, and avoid, sea–kayakers. Commonly motorboaters would swerve to miss the sea–kayaker. This can create new risks, especially the water–skier hitting the sea–kayaker, or the skier being thrust into the path of another motorboat. Sea–kayakers are unable to move out of the path of a motorised watercraft quickly because they are slow.

In order to avoid a sea–kayaker, motorised watercraft users must be able to see them. Sea–kayaks sit low on the water and can be difficult to see, often the paddle being the most visible sign of their presence. Sea–kayakers are also more easily seen when they paddle in groups, rather than if they are widely dispersed. Furthermore, sea–kayaks are produced in many colours, with some more difficult to see than others. For example, light blue, green, grey and even red kayaks are difficult to see against the sea and the coastline. White, yellow and orange are the most clearly visible colours. Rough sea conditions, the presence of white capped waves, and bright sun also considerably reduce the visibility of sea–kayakers as boats move into troughs of the waves.

Many motorised watercraft users considered the number of sea–kayakers in the area to be problematic, as they increase the chance of an accident occurring. This suggests that crowding is a problem. The number of sea–kayakers in the area results in less available beach space for motorised watercraft users. Sea–kayakers use a considerable area of beach space with their craft and gear pulled up on the beach. In contrast, motorised watercraft users anchor their craft offshore and only the gear they require is taken ashore.

4.1.4 Severity of the Impact
Whilst reasons have been presented suggesting why motorised watercraft users may dislike sea–kayakers, the severity of the impact the groups cause on each other is an important consideration to this conflict. The inter–group conflict is based upon nuisance versus threat. At most sea–kayakers may be a nuisance to motorised watercraft users due to their slow speed and small size. In particular they obstruct boating activity, especially water–skiing. However, motorised watercraft users create a more serious impact upon, and threat to, non–motorised users for two reasons. The first is the threat to the sea–kayakers’ experience due to the noise of the motorised watercraft. The noise pollution is intrusive to sea–kayakers as they are able to hear the noise from numerous motorised watercraft at once. Motorised watercraft users often only hear the noise of their own craft whilst travelling and therefore may not notice the presence of other craft. The second reason relates to the threat to the lives of non–motorised users. As mentioned earlier, motorised users are a potential threat and could kill a non–motorised user if the two collided, due to the bigger size and faster speed of the craft they operate.

4.1.5 Perception of Safety
As water safety is an important facet of the conflict, so is perception of safety along the coastline. Most sea–kayakers and motorised watercraft users viewed the coastline as safe or very safe, their reasons being the volume of traffic and the shelter of the coastline.

Whilst the main conflict issues concern negative views of motorised watercraft users, they were also seen positively, as a potential safeguard in adverse conditions for sea–kayakers and other motorised watercraft users. In addition, motorised users mentioned that the human element was an important safety consideration and that “if people are sensible, then everything is fine.” This suggests that it is humans who make the area unsafe through mis–reading weather conditions and reckless boat handling. Such reckless boat handling may reduce sea–kayakers’ perception of safety of the Abel Tasman coastline.
4.1.6 Socio–economic and Demographic Differences Between the Groups

We now discuss the socio–economic/demographic characteristics of the recreationists, their experience with the Abel Tasman coastline and their recreational craft, and nature of the experience sought by each group. The purpose of this discussion is to demonstrate further differences between sea–kayakers and motorised watercraft users. Sea–kayakers and motorised watercraft users are different types of people. Section three demonstrated that sea–kayakers were a mixture of New Zealanders and overseas tourists whereas motorised watercraft users were mostly New Zealanders, the majority from Christchurch. In addition, sea–kayakers were generally younger and held higher educational qualifications than motorised users. Furthermore, sea–kayakers tended to be more represented in professional occupations than motorised watercraft users who were more represented in managerial and trade occupations.

The inexperience of sea–kayak respondents and the experience of motorised watercraft users in the sample, with both their craft and the Abel Tasman coastline, contribute to the conflict in this study. In fact, the inter–group conflict is about an inexperienced, and perpetually changing, group of sea–kayakers versus the same experienced motorised watercraft users. Motorised users have been visiting the area for more years than sea–kayakers and have had time to adjust to the changes in the type and volume of boat traffic using the coastline. They have become familiar with such change and have learned to accept it. Sea–kayakers do not have time to become accustomed to such change as most are on their first visit to the coastline, and are first time sea–kayakers.

Sea–kayakers and motorised watercraft users also sought different experiences from their trip. This was highlighted by the type of accommodation used, the experience groups sought on the water and the distinction between the trip and the destination.

Accommodation is very different between the groups. Part of the experience for overnight sea–kayakers is evaluating each beach as a possible campsite for the night. Most overnight sea–kayakers camped in a Department of Conservation campground, and some stayed in a hut. The amenities at each camp site are basic – only some of the toilets are the flush–type, water must be boiled, people cook over small burners that they have carried in the sea–kayak and generally sleep in a small tent, which must be erected at each new camp site.

The majority of motorised watercraft users in the sample stayed at Kaiteriteri Motor Camp. Here most sites are powered enabling the use of many home comforts, such as a fridge, lighting at night, instant hot water, and washing machines. Also, the campsite has ablution blocks with hot showers and flush toilets. The campground also has a shop and a restaurant. In effect, motorised watercraft users return ‘home’ after their day along the coastline.

Sea–kayaking lends itself to small, independent groups and sea–kayakers in the study sought two types of experience: a nature–adventure wilderness experience, and to relax. The presence of numerous noisy, motorised watercraft compromised such a ‘wilderness’ experience.

Motorised watercraft users sought a thrill/speed/excitement experience from water–skiing and other similar activities such as kneeboarding and wakeboarding. Motorised watercraft users also sought to relax and socialise as many participated in relaxing–type activities on the beach, such as sunbathing. Socialising was an important part of their trip as many travelled in large family groups many of which included children.

Another distinction between the groups is the difference between the trip and the destination. The trip seems as important as activities on the beach (the destination) for sea–kayakers. They spend more time than motorised watercraft users travelling to their destination. Thus, a major
part of the sea–kayaking experience occurs whilst paddling. Paddling itself is new for many sea–kayakers.

Alternatively, motorised watercraft users spend less time travelling to, and appear to be more focussed on, their destination. They do not have to physically power the craft themselves, rather they sit in a powered vessel that carries them to a beach. The speed of their craft across the water enables them to reach beaches in much less time than sea–kayakers. Motorised watercraft users then compete with other motorised watercraft users for their favoured beach, for their preferred position on that beach, and also a good anchoring position. (It was common to see the same people on the same beach on several days). The focus on the destination was illustrated during the extreme peak season. In order to reach their favoured location, motorised watercraft users began to arrive at the beaches and begin water–skiing around 9.00am. However, towards the end of the study period people were not arriving at the beaches until 11.00am as fewer people were in the area and there was less competition for favoured spaces.

4.2 Inappropriate Behaviour

This section discusses contributing factors to the conflict between motorised watercraft users. Many motorised watercraft users demonstrated a high level of specialisation with not only their craft and water–skiing but also the coastline. In addition, many motorised watercraft users expressed some level of emotional attachment to the Abel Tasman coastline. In fact, many talked of the coastline as ‘their’ area.

Examples of recreational specialisation abound along the Abel Tasman coastline, particularly with regard to water–skiing in the Astrolabe Roadstead area, but also to general boat handling capabilities along the coastline. The commitment of many motorised watercraft users to both their craft and to the Abel Tasman coastline over many years suggests their attachment to and specialisation with both the coastline and their craft. As many motorised watercraft users have been visiting the coastline for many years, they have their preferred beach on which to sit. They also have an understanding of the intricacies of the place, as they understand such things as the most sheltered location on a particular beach, the best anchoring position along the beach, and the position of rocks in a certain bay. Many motorised watercraft users have the latest water–skiing equipment, perhaps even a new boat, demonstrating their status in the activity. Furthermore, Stilwell Bay in the Astrolabe Roadstead is where many water–skiers congregate. Here these people water–ski in a clockwise direction and the drivers of the boats use hand signals to indicate where they intend to drive the craft. The water–skier may also be specialised in their activity. They have progressed from simply holding the ski rope behind the boat and perform various ‘moves’ or skiing patterns across the water, some may water–ski with only one ski, whilst others may ski ‘barefoot.’ This behaviour suggests that some of the users of the coastline are highly specialised, not only with their craft, but also the coastline.

Examples of attachment to place were common amongst respondents. A manager summarised the attachment to the area of motorised watercraft users: “it’s very permanent groups in Kaiteriteri, it’s almost as if they take streets from Christchurch and pin them to the Park. They’re here all the time and come back every year.” A selection of brief comments from motorised watercraft users expresses their attachment to the coastline, for example:

“The Abel Tasman is a wonderful piece of paradise in our back lawn.”

“[We’ve been] coming here for 40 years and wouldn’t go elsewhere. This is the best. [We have] travelled overseas and this place is unique. We see it as ours, [as] recreational and inspirational. It’s like being in paradise.”

“I’ve been coming here all [my] life, since childhood. It’s a beautiful part of New
Zealand and the world, I’ve been all around the world, and I think the Abel Tasman is great.”

The concepts of attachment and recreational specialisation lead to strongly–held definitions of appropriate behaviour with one’s craft and the coastline. Motorised watercraft users, who experienced an intra–group conflict, were annoyed by the inappropriate behaviour of other users with their craft and along the coastline. They became annoyed with the manner in which other users operated their craft and the way other people used ‘their’ place. Respondents who were annoyed by inappropriate behaviour of other users, considered those people to be less specialised in the activity (and area) than they perceived themselves to be. The main concerns were people breaching the recreational boating regulations, motorboaters towing water–skiers in the wrong direction, and people not wearing life jackets.

Breaching the regulations demonstrates inappropriate behaviour with one’s craft. The most common breach of the regulations was craft exceeding five knots within 200 metres of shore. This occurs whenever water–skiing takes place and was not considered a problem by most users. The absence of structured ski–lanes is the reason for this breach of regulations. Ski–lanes allow craft to exceed five knots within two hundred metres from shore. DoC and TDC purposely do not patrol this rule as they have had no problems to date. An associated breach of regulations, which did contribute to conflict, was the lack of a ‘spotter’ or third person to watch the water–skier. During water–skiing, or an associated activity, the regulations state that three people must be used: a skier, a driver and a spotter (s. 9 Water Recreation Regulations, 1979).

People water–skiing in the wrong direction were problematic to many motorised watercraft users. Currently, no formal ski–lanes are present along the Abel Tasman coastline, rather a code of conduct exists, a water–skiing etiquette, by which many motorised users abide. There is confusion amongst water–skiers along the Abel Tasman coastline, as it is not clear in which direction people should water–ski. In accordance with Maritime Rule Part 22, the general code of conduct for water–skiing is that it should be undertaken in an anti–clockwise direction, unless otherwise stated (Maritime Transport Act, 1994). However, at Kaiteriteri Beach a sign states that water–skiing should occur in a clockwise manner within Kaiteriteri Bay. Most users interpret this as meaning clockwise skiing should occur along the entire Abel Tasman coastline. Motorised watercraft users who tow skiers anti–clockwise are considered annoying by other users, and not only demonstrate inappropriate behaviour with their craft (as they are opposing the behaviour of all other users in the area), but also inappropriate behaviour in the area. They create problems for other users, such as increasing the chance of a collision.

Other problems identified by motorised watercraft users included overloaded craft, and recklessness by other motorised watercraft operators. The number of other craft and the speed with which some motorised watercraft users approached the shore, were also of concern if swimmers were in the water nearby. Some people became annoyed when other motorboat users anchored too closely to their boat, thus creating the possibility of a boat swinging on its anchor and hitting their craft.

Jet–skiers were not often considered to be a problem by motorboat users. However, some motorboat users stated that jet–skis should be banned from the area, and other motorboaters did not wish to be considered in the same recreational user group as jet–skiers. They acknowledged the higher noise pitch of jet–skis and the general recklessness of jet–ski operators as their main concerns.
4.3 Environmental Perception
Differences in environmental perception are often a source of conflict (Jacob & Schreyer, 1980; Schreyer, 1990). Jacob and Schreyer (1980) formed a continuum ranging from focused individuals to unfocused individuals. Focused recreationists often have a strong emotional attachment to a place and perform a detailed examination of that place. Unfocused individuals view the place merely as a backdrop in which their activity occurs. Both groups in this study appear to be focussed on the setting. The nature-related experience sought by many sea-kayakers demonstrates their focus on the setting. Sea-kayakers may experience conflict as they perceive motorised watercraft users to be more focussed on their activity and some display little regard for the environment. This is evident where sea-kayakers mentioned they disliked the noise and pollution of motorised watercraft (see section three).

A large part of the attachment to the coastline for most motorised watercraft users was the natural attractions of the Abel Tasman. Such attractions included the beauty, scenery, beaches, wildlife and water, thus demonstrating their focus on the setting. However, some motorised users are more focussed on their activity. As these motorised watercraft users become more attached to, and specialised with, the coastline, their focus may change from activity to setting.

4.4 Recreational Trends
Recreational trends along the Abel Tasman coastline add to the conflict in this study. The trend tends to be towards an increase in day use of the coastline (DoC, 1996 & 1998a). Whilst the coastline is a holiday destination and relaxation is the prime focus for many people, the efficient use of leisure time is important, especially to first time, international sea-kayakers who may not visit the area again. They aim to see as much of the coastline as possible in the limited time available to them. The boom of day trip sea-kayaking, the increase in water taxi and ferry services and the steady increase of motorised watercraft users all illustrate the popularity of day use of the Abel Tasman coastline.

The duration of a trip determines how far people travel along the coastline. Almost all day trip sea-kayakers stayed south of the Mad Mile (an exposed headland at the northern end of the Astrolabe Roadstead, see Figure 2, page 2) because they could not paddle further than that in the one day, and return to Marahau or Kaiteriteri. Overnight sea-kayakers travelled north of the Mad Mile and were dispersed across many beaches. Motorised watercraft users generally travelled directly to a beach in the Astrolabe Roadstead and remained there all day. As day visitors increase, more pressure is placed upon the Astrolabe Roadstead. More people enter the area creating more chances of conflict and an accident between the groups.

Another recreational trend is the use of more efficient and faster ways of seeing the coastline. Many sea-kayakers paddle only one way along the coastline and a water taxi then retrieves the kayaker and the kayak and transports them back to where the trip began (often Marahau). This use of water taxis is popular for many sea-kayakers and means they are able to see more of the coastline. The use of water taxis adds to the congestion and conflict as they travel at regular scheduled times through the Astrolabe Roadstead, bringing more people into the area.

Water taxis enable people to be simply dropped at a beach and picked up at a later time. Thus, the ‘type’ of person using the coastline may be changing from the typical outdoor recreationist to people who do not often frequent natural areas.

4.5 Layout of the Land
The geography, or layout of the land, is a contributing factor in conflict situations as it determines where people travel, congregate and interact. The land space remains the same size, but often the number, and diversity, of users increase. The Astrolabe Roadstead is where most
interaction and conflict situations arise along the Abel Tasman coastline, because all water–borne users departing from Kaiteriteri or Marahau traverse this part of the coastline. It is also the quickest route to the northern part of the coastline and is close to Kaiteriteri and Marahau.

The Astrolabe Roadstead is a popular area for recreation (Dennis, 1985), and most day users of the coastline remain in the area due to the shelter from the predominant north east wind resulting in calm sea conditions, and favourable paddling and water–skiing conditions. Furthermore, the Mad Mile forms a natural barrier to craft. It is an exposed headland restricting many users, especially day trip kayakers, from travelling further north from the Astrolabe area. Thus, most water–borne users of the Abel Tasman coastline who depart from Kaiteriteri or Marahau congregate and therefore interact in the Astrolabe Roadstead thereby creating more chances of conflict, and an accident, occurring between, or within, the two groups.

4.6 Commercialisation and Place Promotion
The Abel Tasman coastline has become commercialised in the past fifteen years, and sea–kayaking is now a popular adventure tourism activity along the coastline (DoC, 1998a). Part of the reason for the success of sea–kayak companies is due to the promotion of the coastline. Place promotion is about selling idyllic images of a place to prospective customers. It creates expectations of what one may hope to see and experience in a certain place (Britton, 1991; Cohen, 1995; Perkins & Thorns, 2000). Place promotion material includes brochures, Internet pages, postcards and more.

The Abel Tasman coastline is portrayed primarily through its coastal attractions, namely the crescent shaped golden sand beaches and the clear blue/turquoise water. Sea–kayaking is marketed to the domestic and international tourist alike as the best, and most natural, way to see such attractions. The effectiveness of place promotion draws more people to the coastline and simultaneously increases the potential for conflict to occur between the groups, particularly in the Astrolabe Roadstead.

Furthermore, the way in which the coastline is portrayed to tourists creates images of what they can expect to see on their visit. If these expectations are unfulfilled visitors may experience conflict. Brochures are perhaps the main promotional material used by commercial companies and depict ideal images of the Abel Tasman coastline, including secluded beaches, the absence of motor craft, and calm water and weather conditions. Such images are rarely evident in reality during the peak use period.

4.7 A Numbers Game
The Abel Tasman National Park coastline has become a mecca for water–based recreationists since the mid–1980s. From 1990, the number of people using the coastline has increased dramatically, and the type of use has changed. During the ‘extreme’ peak period in summer, water–borne and track users are almost equal in number and each summer day there are around 3,000 visitors to the Park and coastline. These figures exclude Totaranui10, where numbers are thought to exceed 2,000 per day (DoC, 1996). Of all the visitors to the area, more than 90 percent use the coastal environment and over 50 percent access the Park via the water (DoC, 1998a).

The increase in use of the coastline is due in part to the commercialisation of the Abel Tasman based around the visitor/tourist ‘industry.’ Commercial companies have proliferated in the area. In 1986, the first commercial sea–kayak companies, Abel Tasman Kayaks and Ocean River

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10 Totaranui is at the northern end of the Abel Tasman National Park Coastal Track. It is one of three main entrances to the Abel Tasman National Park.
Adventure Company, were established along the Abel Tasman National Park coastline. At this time there was also one water taxi company and one ferry company, each with only one boat and each running one trip per day (Greenaway, 1998). Caradus (2000) reports that there are currently fourteen commercial sea–kayak companies licensed to hire kayaks for use along the Abel Tasman coastline. The number of commercial water taxi companies has not increased since 1998 when Greenaway (1998) reported that five water taxi companies, with 12 boats between them, run numerous trips per day along the coastline.

Sea–kayak companies are the predominant commercial operators along the coastline and have expanded more rapidly than any other type of commercial venture, reflecting the demand for this type of activity. Over the past five to six years the number of sea–kayakers along the coastline has doubled. The rise in the number of overnight facility passes obtained by sea–kayakers illustrates the increase in sea–kayakers. In 1990, 2,000 passes were purchased; this slightly increased to 2,484 in 1992, but almost doubled to 4,187 in 1994 (DoC, 1996 & 1998a). There are now between 300–400 kayak seats\(^{11}\) in use each summer day along the coastline, 90 percent of which are hired from commercial companies. The number of sea–kayakers are expected to double again within the next ten years if no limits are placed on companies (DoC, 1998a).

Motorised watercraft users have also steadily increased in number along the coastline, although the number of craft on the water per day is difficult to determine. During the peak season in 1998/99 the Kaiteriteri Recreation Board issued 255 season passes to motorised watercraft users for the use of the Kaiteriteri boat ramp. A further 20 day passes were allocated each day during the extreme peak period for motorboat users (Launch Warden, Kaiteriteri Boat Ramp, personal communication, 19 January, 1999).

Some recreation area managers and commercial operators fear that the high usage, particularly in the Astrolabe area, increases the potential for an accident to occur. Such sentiments were shared by recreationists in the sample as both sea–kayakers and motorised watercraft users were concerned that the high number of craft in the Astrolabe Roadstead increases the chance of an accident occurring.

The ‘numbers issue’ is a result of the popularity of the Abel Tasman coastline and the limited control on water–borne users by recreation area managers. Part of the problem appears to be the dual management of the coastline with two different management agencies controlling different parts of the coastline. DoC have jurisdiction over the terrestrial Abel Tasman National Park to the mean high water mark and do not control the foreshore (land/sea interface). Thus, DoC have limited control on water–borne users. The Tasman District Council (TDC) control the foreshore. TDC are reluctant to implement controls on people entering the foreshore via the sea unless DoC place controls on recreationists entering the area via the Abel Tasman National Park Coastal Track (see the Tasman Resource Management Plan, 1998), which they have not done. Thus, the management of the foreshore (DoC, 1998a) is an underlying issue relevant to the current study and is a topic currently under debate.

4.8 Duration of the Conflict

The conflict observed in this study is temporal in two respects: the duration over the year and time during the day. At present the conflict is most intense for the three weeks from Boxing Day (December 26) until mid to late January (the extreme peak season). However, due to the increase in the number of users, an increasing diversity of use, the extension of the shoulder season and

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\(^{11}\) Seats refers to the actual number of people kayaking, not the number of kayaks on the water. The term ‘seats’ is used because some sea–kayaks carry only one person while others carry two.
limited control by management, the conflict in this study may persist over a longer period of time than the extreme peak season in the future.

The conflict has a diurnal pattern. Motorised watercraft users arrive at the beaches around 9.00am and leave between 3.00pm and 5.00pm. Sea–kayakers arrive at the beaches between 10.00am and 1.00pm. Day trip sea–kayakers are often off the water by 3.30 to 4.30pm. Thus, the main interaction between the groups occurs during a three week period of the year and during the hours of 10.00am until around 3.00pm.
Chapter 5
Recommendations for Management of the Abel Tasman Coastline

Two forms of conflict have been identified in this study – conflict between sea-kayakers and motorised watercraft users and conflict between motorised watercraft users. These have management implications for recreation area managers of the Abel Tasman National Park coastline.

An underlying problem appears to be the number of users in the area during the extreme peak use season, leading to greater interaction of the groups. This, in turn, increases the likelihood of conflict arising, or an accident occurring, between the two groups. The ‘numbers problem’ is accentuated by the limited controls on the number of watercraft using the coastal environs by recreation area managers.

The most obvious mitigation strategy for both types of conflict is to separate the groups, by implementing formal ski-lanes through the Astrolabe Roadstead. Based on our observations during the research period, if a ski-lane were to be implemented, Stilwell Bay seems the most appropriate place for it. However, separating the groups may create new problems. The idea behind the formation of formal ski-lanes would be to reduce the potential for a sea-kayaker being hit by a motorised watercraft user. But, the formation of ski-lanes along the Abel Tasman coastline may increase the chance of a sea-kayaker being hit by a motorised watercraft user, as sea-kayakers still have to paddle past each of the beaches in the Astrolabe Roadstead and thus past the ski-lane. Furthermore, this study has found that conflict is occurring between motorised watercraft users. It appears that a ski-lane would exacerbate this conflict at the site of the ski-lane, and increase the chances of a collision between motorised watercraft users.

If a ski-lane were to be implemented sea-kayakers may need to be advised to travel close to Adele Island, around the ski-lane, to avoid the concentration of motorised watercraft users, and thus reduce the possibility of being hit. Further problems may arise from marking the ski-lane. Two large black and orange striped poles mark an official ski-lane. Such poles may detract from the beauty of the beaches.

Education is a favourable option for dealing with conflict, and could occur on a number of levels. Motorised watercraft users need to understand the impact they have on sea-kayakers, and the vulnerability and inexperience of sea-kayakers with the activity and the coastline. A code of conduct could be encouraged amongst motorised watercraft users where they remain more than, say, 100 metres away from sea-kayakers when passing, rather than the required minimum distance of 30 metres.

It is also necessary that sea-kayakers understand the needs of motorised watercraft users, and the requirements of a motorboat towing a water-skier. These include room to maneuver, and the focus of the driver on other motorised watercraft users rather than on sea-kayakers. Thus, each group requires reciprocal understanding of the other group’s needs. In addition, sea-kayak operators could help decrease potential conflict situations by launching their craft earlier in the morning during peak season, and by showing their clients on a map exactly where the greatest concentration of motorised watercraft users normally congregate. Sea-kayakers could then be informed of how to avoid the craft.

Signage is another form of education that could be implemented to reduce conflict situations. A large sign could be placed at the end of the Kaiteriteri and Marahau Boat Ramps with (for example) a picture depicting a motorboat colliding with a sea-kayak, thereby illustrating the risk that motorised watercraft users pose to sea-kayakers. Brochures/information sheets could be
presented to motorised watercraft users as they purchase their launch ramp pass at Kaiteriteri. Such brochures could contain information about the recreational boating regulations (as TDC have done in the past: see TDC, 1998 [although these brochures were not presented to people]), and also show pictures of, say, a boat creating a large wake and capsizing a kayaker. However, we acknowledge such signage may be detrimental to tourism in the area and thus meet resistance.

Sea–kayaks are difficult to see and a flag may help them to be more clearly visible. Although commercial sea–kayak operators have expressed their disapproval of this suggestion, owing to potential difficulties if the kayak capsized, further consideration needs to be given to a spring–mounted flag on the back of a sea–kayak, to help make the kayak more visible. Further to this, recommendations could be made to manufacturers regarding the most clearly visible colour on the water of kayaks. This could be extended to the colour of the paddles and lifejackets. Fluorescent colours may help sea–kayaks and sea–kayakers be more easily identified.

Further enforcement of the recreational boating regulations is needed in order to reduce the level of negligent behaviour by motorised watercraft users. The issue is not who enforces the regulations (DoC or TDC), rather that the regulations need to be enforced more often.

A wider solution to this issue is the implementation of more stringent recreational boating regulations and legislation, pertaining to all motorised watercraft users. Legally the responsibility of adhering to the regulations rests with the motorised watercraft users as they are the larger, faster and more maneuverable craft. Such change in regulations could include compulsory operator licensing, craft identification and registration, compulsory craft and engine maintenance and the compulsory carriage of safety equipment. These are options suggested by the Pleasure Boat Safety Advisory Group (PBSAG) (1998). The Water Recreation Regulations 1979 are to be reviewed in 2003 and this research provides support for regulatory change suggested by the PBSAG (1998).
Chapter 6
Conclusions and Future Research

This study has identified many reasons for the conflict between sea–kayakers and motorised watercraft users found along the Abel Tasman coastline. The main reasons are centred on water safety issues leading not only to a loss of enjoyment for some users, but the potential for people to suffer an injury or fatality. Thus, this conflict is a serious issue for all involved.

This study contributes to the literature on asymmetrical conflict relationships between motorised and non–motorised user groups. First, this study identifies reasons, other than reciprocation, which suggest why motorised users may dislike non–motorised users. These are: first, that motorised watercraft users perceive sea–kayakers to be a hazard as they obstruct boating and water–skiing; second, that sea–kayakers are difficult to see thus making them difficult to avoid; and, third, that there are too many sea–kayakers in the area. This is a crowding concern. Furthermore, crowding contributes to this conflict. The number and diversity of users means that recreationists frequently encounter each other, thus increasing the chance of conflict.

Second, the study identified an intra–group conflict between motorised watercraft users, as well as an inter–group conflict between sea–kayakers and motorised watercraft users. Finding two types of conflict in one study is uncommon in the literature. The intra–group conflict was attributable to water safety issues (such as breaching the recreational boating regulations), attachment to place, and recreational specialisation. It is often the behaviour of recreationists, not just the craft they operate, that contributes to conflict. The intra–group conflict demonstrates that the behaviour of some people results in conflict regardless of the activity in which they are involved. The inter–group conflict between sea–kayakers and motorised watercraft users was based on differences in the characteristics of recreationists who comprise the two groups, and differences in their craft.

This study suggests four additional factors that contribute to conflict, other than those identified in the literature (see Jacob & Schreyer, 1980). The first is recreational trends, which primarily relates to the short term use, particularly day use, of the coastline. In this study we found that this increase in day use is placing more pressure upon the Astrolabe Roadstead, resulting in more interaction between users and therefore more potential for conflict and accidents.

The second factor is the layout, or geography, of the land. Conflict is based upon interaction, thus the layout of the land will determine where people interact and congregate and therefore where the highest interaction between the groups occurs. Along the Abel Tasman coastline the Astrolabe Roadstead is the main interaction area for sea–kayakers and motorised watercraft users, due to its attractive beaches, close proximity to launching sites, and its sheltered position.

The third factor is that recreational sites are increasingly open to commercialisation. Place promotion is a major form of advertising for commercial operators and thus contributes to the potential for conflict. Place promotion creates images of a place and simultaneously creates expectations of what one could hope to see and experience at that place. Place promotion contributes to this conflict in two ways. First, it draws more people to the area, creating more interaction, congestion, and potential for conflict and accidents, especially in the Astrolabe Roadstead area of the Abel Tasman coastline. Second, if the expectations of visitors are not met upon arrival to the area, conflict may emerge.

The fourth factor contributing to the conflict found in this study, and not commonly reported in other studies of conflict, is the influence of the recreation area management regime. DoC and TDC manage different parts of the coastline. The numbers issue described in this report is the
result of limited control on water–borne users by both management agencies. Both DoC and TDC are concerned that an accident may occur between a sea–kayaker and motorised watercraft user. DoC do not control the foreshore environment and thus have limited control on water–borne users. TDC, who do control the foreshore, are reluctant to implement controls on people entering the area via the sea without DoC placing concomitant controls on recreationists entering the area via the Abel Tasman National Park Coastal Track. Thus, the lack of coherent management along the coastline adds to the conflict. The foreshore issue appears to be critical to this study.

Further research opportunities are suggested by this study, including:

• A longitudinal study to the conflict identified first by Cessford (1998) and then this study. This may help formulate mitigation measures to the conflict.
• An investigation of the plausibility, and potential impacts, of implementing a ski–lane in the Astrolabe Roadstead.
• Further analysis of water safety issues such as the awareness of motorised watercraft users of the recreational boating regulations, the equipment carried on board craft (and if people can locate it and know how to operate it), and how often people maintain their craft and engine.
• Jet–skiers are an emerging user group in the area and may pose problems for other users in the future. A study should focus solely on this user group in order to understand their needs, and the impact they cause on other users.
• The number of users in the area was shown to be problematic. Future studies should examine crowding concerns amongst users of the beaches of the Astrolabe Roadstead more thoroughly.
• Watercraft users’, particularly sea–kayakers’, satisfaction with their trip and whether they would visit the area again.
• An environmental impact study to determine the level of impact of the high recreational use on the environment and wildlife along the coastline.
References

For a full list of references relevant to this study, please see Hawke (2000).


Personal Communication References


Five commercial water taxi operators running trips along the Abel Tasman National Park coastline (October, 1998 and January, 1999).

Harbourmaster, Tasman District Council (August 18, 1998).


Manager, Kaiteriteri Campground (January 2, 1999).

Motueka Area Office workers, Department of Conservation (August 19, 1998).

Seven commercial sea–kayak operators running trips along the Abel Tasman National Park coastline (October, 1998 and January, 1999).

Technical Support Officer, Nelson/Marlborough Conservancy, Department of Conservation (August 18, 1998).
Appendix 1 – The Questionnaires
A visitor survey for sea–kayakers and motorised watercraft along the Abel Tasman National Park coastline

Sea–kayaker questionnaire
A. Abel Tasman National Park visits

1. How many times have you been to the Abel Tasman National Park before?
   1. This is my first time
   2. 2–5 times
   3. 6–20 times
   4. More than 20 times

1.a. If this is your first time proceed to question 2. If this is not your first time, state the main activities you have participated in on previous trips.

_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

B. Sea–kayaking experience

2. Including this trip, how many sea–kayaking trips have you ever been on?  
   Tick one
   1. This is my first trip
   2. 2–5 trips
   3. 6–20 trips
   4. More than 20 trips

3. How many of your sea–kayaking trips have been along the Abel Tasman National Park coastline?  
   Tick one
   1. This is my first trip
   2. 2–5 trips
   3. 6–20 trips
   4. More than 20 trips

4. What equipment is/was on your sea–kayak for this trip?  
   Tick as many boxes as appropriate
   1. I don’t know what equipment is/was on my sea–kayak for this trip
   2. Life jacket
   3. Spray deck
   4. Bilge pump
   5. Hand held radio or cellphone
   6. Equipment to help in rescue situations
   7. Other

   Please specify ________________________________________________
5. Have you ever participated in a sea–kayak instruction course, other than the safety briefing before this trip?

☐ Yes  ☐ No

5.a If yes, what was the course about?

____________________________________________________________________
____________________________________________________________________

6. Are you a member of a sea–kayak club or organisation?

☐ Yes  ☐ No

7. How competent at sea–kayaking do you consider yourself to be?

Tick the box that best represents you

1  ☐ Beginner– for example:
Need guidance from others
Unable to help myself if in trouble
Only comfortable in flat water

2  ☐ Average

3  ☐ Advanced– for example:
Capable of leading others
Able to perform self–rescues
Comfortable in most sea conditions

8. How much knowledge do you have of the main recreational boating regulations?

1  ☐ No knowledge

2  ☐ Some knowledge

3  ☐ Full knowledge

(Examples of regulations: The legal distance a motorised craft can pass another boat at full speed. The legal distance from shore that a motorised craft can go full speed).

C. Information about your trip

9. What is/was the duration of your sea–kayaking trip?  

Tick one

1  ☐ 1 day (not overnight)
2  ☐ 1 night
3  ☐ 2 nights
4  ☐ 3 nights
5  ☐ 4 nights
6  ☐ More than 4 nights
9.a If you stayed overnight in the Abel Tasman National Park, what type of accommodation did you use?

1. I stayed in a hut
2. I stayed in a tent at a camping ground
3. Other

Please specify _______________________________________

10. How many people are/were there in your group for this sea–kayaking trip

Tick one

1. 1
2. 2–3
3. 4–5
4. 6–7
5. More than 8

11. What activities did you participate in during your sea–kayaking trip, other than sea–kayaking?

Tick as many boxes as appropriate

1. Walking
2. Picnicking
3. Sunbathing
4. Swimming
5. Sightseeing
6. Fishing
7. Other

Please specify _______________________________________

12. Where did your sea–kayaking trip begin?

1. Kaiteriteri beach
2. Marahau beach
3. Other

Please specify _______________________________________
13. Please mark on the map where you traveled on your sea-kayaking trip, including where your trip began.

Abel Tasman National Park coastline
14. Did a guide go with you for all of your sea-kayaking trip?
   □ Yes  □ No

14.a If yes, please explain why
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

15. Why did you choose the Abel Tasman National Park coastline for your sea-kayaking trip?
   (Prompt – What does the ATNP coastline mean to you? How do you feel about the ATNP coastline?)
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

16. Why did you choose sea-kayaking instead of another activity for this trip?
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

17. What did you like about your sea-kayak trip?
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

18. What did you dislike about your sea-kayak trip?
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

19. Did the actions of other people on the water concern you, annoy you, or make you worry about your safety?
   □ Yes  □ No

19.a If yes, please describe
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

20. Did the actions of other people on a beach concern you, annoy you, or make you worry about your safety?
   □ Yes  □ No
20. a If yes, please describe
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

21. How safe do you think the Abel Tasman coastline is for sea–kayaking?
Tick one
1. I don’t know
2. Not safe at all
3. Neutral
4. Safe
5. Very safe

21. a Please explain your reasons
(Prompt – Anything influencing your perception of safety such as brochures, word of mouth)
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

22. Have you witnessed any incidents or accidents on your current trip, or on previous trips along the Abel Tasman National Park coastline, involving watercraft users?
1. Yes
2. No

22. a If yes, please explain
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

23. What are the advantages of motorboats being in the same area as sea–kayakers along the Abel Tasman National Park coastline?
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

24. What are the disadvantages of motorboats being in the same area as sea–kayakers along the Abel Tasman National Park coastline?
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

25. What are the advantages of jet–skiers being in the same area as sea–kayakers along the Abel Tasman National Park coastline?
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
26. What are the disadvantages of jet–skiers being in the same area as sea–kayakers along the Abel Tasman National Park coastline?

_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

27. Have you used a motorboat for recreation?
   1 [ ] Yes   2 [ ] No

27.a. If yes, would you describe yourself as:       Tick one
   1 [ ] Mainly a sea–kayaker
   2 [ ] Mainly a motorboater
   3 [ ] Both a sea–kayaker and a motorboater
   4 [ ] Neither a sea–kayaker or a motorboater

28. Have you ever used a jet–ski for recreation?
   [ ] Yes     [ ] No

28.a. If yes, would you describe yourself as:       Tick one
   1 [ ] Mainly a sea–kayaker
   2 [ ] Mainly a jet–skier
   3 [ ] Both a sea–kayaker and a jet–skier
   4 [ ] Neither a sea–kayaker or a jet–skier

28. b. If you answered mainly a motorboater for question 27. a and mainly a jet–skier for question 28. a, would you describe yourself as:       Tick one
   1 [ ] Mainly a motorboater
   2 [ ] Mainly a jet–skier
   3 [ ] Both a motorboater and a jet–skier (a motorised watercraft user)

D. Demographics

29. Tick your age group:
   1 [ ] 15–19
   2 [ ] 20–29
   3 [ ] 30–39
   4 [ ] 40–49
   5 [ ] 50–59
   6 [ ] 60+

30. Are you:
   1 [ ] Male   2 [ ] Female
31. Which country are you from?

1. New Zealand
2. Australia
3. Canada
4. Germany
5. Japan
6. United Kingdom (UK)
7. United States
8. Other

Please specify _______________________________________

31.a If you are a NEW ZEALANDER, please answer questions 32 and 33. If you ARE NOT a New Zealander proceed to question 34.

32. Are you:
1. NZ European/Pakeha
2. Maori
3. Other

Please specify: _______________________________________

33. In which city or town do you normally live? ______________________________

34. What is the highest level of education you have attained?
1. 3 years secondary school education
2. 4 or more years secondary school education
3. Technical or trade qualification
4. University degree/diploma
5. Other

Please specify _______________________________________

35. Please state your current occupation

____________________________________________________________________

You have completed the questionnaire, thank you for your assistance.

Nathan Hawke
Lincoln University
A visitor survey for sea–kayakers and motorised watercraft along the Abel Tasman National Park coastline

Motorised watercraft questionnaire
A. Abel Tasman National Park visits

1. **How many times have you been to the Abel Tasman National Park before?**

   1. This is my first time
   2. 2–5 times
   3. 6–20 times
   4. More than 20 times

1.a. *If this is your first time, proceed to question 2. If this is not your first time state the main activities you have participated in on previous trips.*

   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

B. Motorboating experience

2. **How long have you been a motorised watercraft user?**  *Tick one*

   1. Less than one year
   2. 1–2 years
   3. 3–5 years
   4. 6–10 years
   5. 11–19 years
   6. More than 20 years

3. **How long have you been using a motorised watercraft along the Abel Tasman National Park coastline?**  *Tick one*

   1. Less than one year
   2. 1–2 years
   3. 3–5 years
   4. 6–10 years
   5. 11–19 years
   6. More than 20 years

4. **What equipment is/was on your craft for this trip?** *Tick as many as appropriate*

   1. I don’t know what equipment is on my craft
   2. Life jacket
   3. Flares
   4. Fire extinguisher
   5. Auxiliary motor
   6. Paddles
   7. Bilge pump
   8. VHF radio
   9. Depth finder
   10. Other
5. Do you have a boating certificate?
   1  Yes   2  No

5.a If yes, which certificate? ____________________________________________________________

5.b How many years have you had the certificate? _____________________________________________

6. Do you belong to a boating club or organisation?
   1  Yes   2  No

7. How much knowledge do you have of the main recreational boating regulations?  
   Tick one
   1 2 3 4 5
   No knowledge  Some knowledge  Full knowledge

(Examples of regulations: The legal distance a motorised craft can pass another boat at full speed.  
The legal distance from shore that a motorised craft can go full speed).

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C. Information about your trip

8. What is/was the duration of your motorboat or jet–ski trip?  
   Tick one
   1 1 day (not overnight)  2  1 night  3  2 nights  4  3 nights  5  4 nights  6  More than 4 nights

8. a. If you stayed overnight in the Abel Tasman National Park, what type of accommodation did you use?
   1  I stayed in a hut  2  I stayed in a tent at a camping ground  3  I anchored my craft and slept on it  4  Other
   Please specify________________________________________________________

9. How many people are/were there in your group for this motorboat or jet–ski trip?  
   Tick one
   1  1  2  2–3  3  4–5  4  6–7  5  More than 8
10. What activities did you participate in during your motorboat or jet–ski trip?

1. Waterskiing, kneeboarding, biscuit use, etc.
2. Walking
3. Picnicking
4. Sunbathing
5. Swimming
6. Sightseeing/ cruising
7. Fishing/ scalloping
8. Other

Please specify_____________________________________

11. Where did your motorboat or jet–ski trip begin?

1. Kaiteriteri beach
2. Marahau beach
3. Other

Please specify_____________________________________
12. Please mark on the map where you traveled on your motorboat or jet-ski trip, including where your trip began.

Abel Tasman National Park coastline
13. Why did you choose the Abel Tasman National Park coastline for your motorboat or jet-ski trip?
(Prompt– What does the ATNP coastline mean to you? How do you feel about the ATNP coastline?)
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

14. Why did you choose to use a motorised watercraft, instead of another activity, for this trip?
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

15. What did you like about your motorboat or jet-ski trip?
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

16. What did you dislike about your motorboat or jet-ski trip?
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

17. Did the actions of other people on the water concern you, annoy you, or make you worry about your safety?

1  Yes   2  No

17.a If yes, please describe
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

18. Did the actions of other people on a beach concern you, annoy you, or make you worry about your safety?

1  Yes   2  No

18.a If yes, please describe
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

19. How safe do you think the Abel Tasman coastline is for motorised watercraft users?

   Tick one

1  I don’t know
2  Not safe at all
3  Neutral
4  Safe
5  Very safe
19.a Please explain your reasons
(Prompt– Anything influencing your perception of safety such as brochures, word of mouth)
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

20. Have you witnessed any incidents or accidents on your current trip, or on previous trips along the Abel Tasman National Park coastline involving watercraft users?

1 □ Yes  2 □ No

20.a If yes, please explain what happened
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

21. What are the advantages of sea–kayakers being in the same area as motorised watercraft along the Abel Tasman National Park coastline?
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

22. What are the disadvantages of sea–kayakers being in the same area as motorised watercraft along the Abel Tasman Park coastline?
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

23. Have you used a sea–kayak for recreation?

1 □ Yes  2 □ No

23.a If yes, would you describe yourself as:  Tick one

1 □ Mainly a motorised watercraft user
2 □ Mainly a sea–kayaker
3 □ Both a motorised watercraft user and a sea–kayaker
4 □ Neither a motorised watercraft user or a sea–kayaker

D. Demographics

24. Tick your age group:

1 □ 15–19
2 □ 20–29
3 □ 30–39
4 □ 40–49
5 □ 50–59
6 □ 60+
25. Are you:
1  [ ] Male  2  [ ] Female

26. Which country are you from?
1  [ ] New Zealand  2  [ ] Australia  3  [ ] Canada  4  [ ] Germany  5  [ ] Japan  6  [ ] United Kingdom (UK)  7  [ ] United States  8  [ ] Other

Please specify __________________________________________

26 a. If you are a NEW ZEALANDER answer questions 27 and 28. If you ARE NOT a New Zealander please proceed to question 29.

27. Are you:
1  [ ] NZ European/Pakeha  2  [ ] Maori  3  [ ] Other

Please specify __________________________

28. In which city or town do you normally live? __________________________

29. What is the highest level of education you have attained?
1  [ ] 3 years secondary school education  2  [ ] 4 or more years secondary school education  3  [ ] Technical or trade qualification  4  [ ] University degree/diploma  5  [ ] Other

Please specify __________________________

You have completed the questionnaire, thank you for your assistance

Nathan Hawke
Lincoln University