

# Sea-kayaker satisfactions, impact perceptions, and attitudes toward management options in Abel Tasman National Park

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### **Great Walks visitor research programme**

This report is the fifth from the Great Walks visitor research programme. Reports from other track samples are published through the same series. While data were collected predominantly during January-February 1994, the sea-kayaker responses still provide valid indications of visit experiences and evaluations. Any significant management or use-pattern changes since 1994 can be interpreted in the light of these results. The main change in sea-kayaking activity in the vicinity of Abel Tasman National Park has been a rapid increase in the commercial provision of sea-kayaking equipment and guiding. The number of sea-kayaking companies has increased from two to five. Management reports indicate that there is now greater potential for congestion to influence experiences in sea-kayaking activities.

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# Abstract

Sea kayakers in the Abel Tasman National Park were surveyed in January-February 1994 as part of a wider study of track users in New Zealand. Their visit evaluations were highly positive, suggesting little dissatisfaction or any need for urgent management action. Other results indicated that further improvements to visit quality would be best achieved through addressing minor physical impact concerns, and improving the use of campsites. Perceptions of crowding appeared high for this type of activity, and assessment of social and physical impacts highlighted perceptions of campsite congestion, conflict with motorboats, littering, and uncertain water hygiene as the main perceived problems. Given the likelihood of increasing levels of use, further visit-experience problems appear likely to emerge, particularly relating to campsite congestion. Kayakers favoured information-based management to address increasing use-pressures rather than more regulatory controls, and indicated a preference for limits and controls on motorboat activities. Current high perceptions of crowding suggest that while some time may be available for information-based approaches to be applied to achieve long-term control, more immediate attention to campsite congestion and motorboat conflict issues may be required. Rapid growth in sea-kayaking activity since the survey may have exacerbated some of these issues.

# Executive summary

This report summarises key results from a survey in 1994 of 210 sea-kayakers in the Abel Tasman National Park. The survey was undertaken to complement results of a broader study of people doing overnight trips on tracks managed as Great Walks (the associated Abel Tasman Coastal Track in this park is one of these: see *Science for conservation: 76*). It provides information about visitor satisfactions with their visit experiences, about which aspects of visits may be detracting from the quality of these experiences, and about management options to address these issues.

## **Evaluation**

Evaluations of the visit were very positive. Overall satisfaction scores were high, and few visitors considered the experience was in any way below their expectations. However, crowding perceptions were higher than might be expected for this type of activity, being of a similar level to those reported by walkers on the Great Walks overall. This indicated kayaking visit-experiences were being compromised, and the crowding scores were found to have some association with impact perceptions related to social campsite congestion. In general, crowding scores appear to represent a more sensitive measure of compromises to visit experiences, although they should be viewed in the context of the particular visit experience being assessed.

## **Satisfaction with facilities and services**

Satisfactions with specific facilities and services were high, and no substantial sources of dissatisfaction were apparent. Some responses indicated attention to campsite water supplies and rain shelters may be particularly important if improvements to facilities and services for kayakers became a management priority. Other responses suggested that Department of Conservation information services from visitor centres and hut wardens may not be prominent resources for kayakers. There were no links between these specific satisfactions and overall evaluations of the visit. And there were no significant differences in satisfaction responses between kayakers according to crowding perceptions, age-group, gender and nationality. Overall, these results suggest no immediate need for significant management interventions. Should use pressures increase, campsite facilities and services appears the main areas where attention may first be required.

## **Impact perceptions**

Most visitors noticed physical impacts related to uncertain water hygiene, littering of campsites and beaches, and inadequacies of toilet and water facilities. They also noticed social impacts related to conflict with motorboats, seeing too many others at campsites and kayaking on the water each day. Of the widely noticed social impacts, the most negative were related to uncertain water hygiene, conflict with motorboats, and littering at beaches/campsites. For many of the other impacts identified, considerable impact tolerance is suggested by the proportions of kayakers who were not bothered by them. This was

particularly apparent for most social impacts, apart from motorboat disturbance, and for all impacts arising from perceptions of facility over-development. Any compromises to the quality of current visit experiences appear most likely to be related to the more negative impact sources identified in the survey. Understanding the distinctions between an impact being 'noticed', being 'tolerated', and it actually 'bothering' visitors is important.

While overall impact perceptions highlighted a variety of social and physical impact issues, the significant differences identified between the impact perceptions of different visitor groupings highlighted issues relating to crowding perceptions (uncrowded/crowded) and the interaction of gender (male, female) and age-group (under and over 40). In summary, crowded visitors were significantly more bothered by impact perceptions related to social/campsite congestion and water/toilet/hygiene conditions. More specifically, these featured particularly greater perceptions of social impacts from seeing too many other people at campsites and other kayakers on the water, and physical impacts from perceptions of inadequate water supplies. Other analyses also indicated a link between higher social/campsite congestion impacts and higher crowding scores. Older male visitors were distinctly more bothered by perceptions of overdeveloped facilities, specifically over-developed huts and signs.

These results indicate that any detrimental effects on future visit experiences will arise first among the perceptions of social congestion associated with increasing pressure on campsite conditions (including water supplies), and from on-water encounters with motorboats. While on-water encounters with other kayakers was a widely noticed impact, most kayakers appeared tolerant of them. Management actions to minimise any future compromises to visit-experience quality should focus first on campsite conditions, as should any related monitoring. Attention to motorboat conflict issues will also be required.

### **Attitudes toward management options**

Visitors were most positive toward the use of information to encourage better choices of trip timing and appropriate behaviour on them; controlling motorboat use, and promoting alternative kayaking opportunities elsewhere. Attitudes were relatively evenly split for options involving more camping facilities, guided trip options using separate facilities, hut booking systems and permit systems, and making options in alternative areas cheaper. The management options most strongly opposed included discouraging use through facility removal or higher pricing at peak times, imposing campsite booking systems, increasing the bunk capacity of huts, and encouraging camping through more freedom to camp on any beaches.

While no significant differences were identified between the attitudes toward management of different kayaker groupings, some findings suggested particular distinctions. Crowded kayakers were more tolerant than uncrowded kayakers of most management options; and New Zealand visitors were more opposed than overseas visitors to manipulating use-conditions, but less opposed to developments that increased accommodation capacity. While additional investigation is required before more conclusive statements are appropriate, these points highlight areas where attitudes to management options may be

most variable, and distinguish the kayaker groupings which may be more resistant to management options.

## **Recommendations**

While there was no current problems needing immediate management action, the most productive directions for action to minimise future compromises to the quality of visit experiences appear to be:

- Identifying and reducing any physical impact hot-spots (e.g., beach and campsite littering)
- Reviewing and improving the provision of water supplies, particularly at campsites
- Providing information on water hygiene conditions
- Providing general information about the features of kayaking at Abel Tasman National Park
- Providing information approaches which forecast visitor numbers and hut loadings in advance, accompanied by suggestions on visit timing and operation to minimise 'crowded' and 'conflict' experiences (with other kayakers, walkers and motorboats).

Most short term gains could be made by concentrating upon physical changes to campsite facilities and their operation. These would be complemented by more long-term promotion of beneficial changes through information approaches. Appropriate research and information back-up, not necessarily confined to the Abel Tasman National Park system, could include:

- Identification of visitor preferences for facility standards at campsites, including attitudes to facilities such as rain-shelters
- Assessing the effectiveness of information-based techniques in influencing visitor use
- Investigating how sea-kayakers use information services, and the roles of departmental visitor centres and seasonal hut-based staff
- Investigating the social and physical experience expectations of visits to Abel Tasman National Park by sea-kayakers, how information and promotion may be influencing these, and how crowding scores vary for different types of activity and expected visit experiences
- Investigating the tolerance distinction between 'noticing' impacts and 'being bothered' by them
- Investigating conflict issues between kayakers and motorboat users in general, and specifically, the conflict issues in Abel Tasman National Park
- Investigating the more negative visitor attitudes to direct management options, the role of perceived freedom in recreation experiences, and the possible differences in attitudes toward management options between crowded and uncrowded visitors, and New Zealand and overseas visitors
- Identifying the patterns of visitor use in Abel Tasman National Park for sea-kayaking, motorboat use, overnight walking, and day trips

Any monitoring of visit experience quality should concentrate first upon social congestion conditions at campsites, and conflict perceptions with motorboat use. Emphasis should be on a variety of approaches, because simple measures of overall satisfaction are unlikely to provide a useful means of monitoring changes in these conditions. Monitoring of crowding perceptions should take account of the visit experience conditions expected by participants in sea-kayaking. Some assessment and periodic monitoring of sea-kayaking activity patterns and facility loadings should be undertaken in the Abel Tasman National Park, and should be comparable with surveys of other activity patterns (e.g., overnight walks, day trips, motorboat use).

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# 1. Introduction

The Abel Tasman sea-kayaker survey was undertaken within a broader study of people doing overnight trips on the Great Walks. For the Abel Tasman National Park, while overnight walking trips on the Great Walks are the main visitor activity, sea kayaking has become an important secondary activity. Sea kayakers interact with Great Walk visitors at the huts and campsites they share, and on the beaches during the day.

Tracks classified and managed as Great Walks are the primary locations for multi-day walking trips in the New Zealand backcountry. They are of high scenic and recreational value, and are characterised by high and increasing use-levels. On the Abel Tasman Great Walk, increasing use levels have also involved an increased diversification of use, mainly increases in day use by foot and by boat, and the development of sea-kayaking. This increasing and diversifying pressure of use, and the need to provide for quality outdoor recreation experiences, requires that these tracks be specifically managed to provide high levels of facility and service provision, without compromising the quality of the visit experience. To achieve this outcome, managers require information about visitor satisfaction with their visit experiences, and what aspects of visits may be detracting from these experiences. These information needs also apply to sea-kayakers. On this basis, the objectives of this study were to:

- Provide brief description of sea-kayakers in Abel Tasman National Park
- Identify kayaker satisfactions with the facilities and services provided
- Identify kayaker perceptions of crowding and use-impacts
- Identify kayaker attitudes towards management options

Departmental staff administered standardised questionnaires to visitors on each track<sup>1</sup> on their last trip night. For this study, questionnaires were administered in the offices of sea kayaking companies when the kayakers completed their trips and returned their rented equipment. Overall, 210 sea kayakers completed the survey questionnaire. After data coding and entry, preliminary results were initially presented to managers as percentage tables. These descriptive results are summarised here in the questionnaire format (refer Appendix 1).

Other analyses were carried out on the database, and this report summarises the main findings derived from these descriptive and analytical results. The report presents overall evaluations by visitors of their visit experiences, and then

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<sup>1</sup> A standardised questionnaire (Appendix 1) was developed for overnight walkers on the Great Walks system, which comprises the Abel Tasman, Heaphy, Kepler, Milford, Rakiura, Routeburn, Tongariro, and Waikaremoana tracks, and the Wanganui River journey. Surveys of the Travers-Sabine and Dart-Rees track circuits were also included, although flooding prevented any work being possible on the latter. A sample of sea-kayakers was also collected in Abel Tasman National Park. Some site-specific questions were used where required, particularly for questions related to boat use on the Lake Waikaremoana, in Abel Tasman National Park, and on the Wanganui River. Some non-applicable questions were omitted on the Milford Track; and it was possible to survey at Easter on the Tongariro, Heaphy, and Kepler Tracks. German and Japanese translations were provided.

investigates the specific aspects of facility and services satisfactions, social and physical impact perceptions, and attitudes toward different management options. Analyses are undertaken which assess how these specific responses vary between different groups of kayakers, and how they relate to the overall evaluations. This approach enables any significant current or potential compromises to the quality of visit experiences to be clearly identified.

## 2. Visitor information

In summary, visitor characteristics were representative of a young and international group of people, many with previous experience of Abel Tasman Track, but generally inexperienced at the sea-kayaking activity. Campsite use predominated in the 2 or 4 day trips. Some summary findings included: (refer Appendix 1 for details)

- An approximately equal proportion of males (47%) and females (53%)
- Most (56%) were from New Zealand, with some German (11%), American (10%), British (6%), and Canadian (6%)
- Most (85%) were aged between 20–40 years, with 59% aged between 20–29 years, and 3% over 50 years
- Most (61%) were on a repeat visit to Abel Tasman National Park
- Most (60%) were on their first sea-kayaking trip, 30% had done from 1 to 5 sea-kayaking trips, and only 5% had done more than 20 such trips
- Group sizes averaged around 4.5 people
- Trip durations were mostly 2 nights (23%) or 4 nights (46%)
- Almost all (87%) stayed only at campsites

New Zealand visitors came in larger groups, had more previous experience of Abel Tasman National Park, and did longer kayaking trips. Overseas visitors came in smaller groups (mean of 3.7 *vs* 5.3 for New Zealand kayakers), were more often on first-visits to the track (84% *vs* 58% for New Zealand kayakers), and came on shorter trips (2.9 *vs* 3.5 nights for New Zealand kayakers).

Comparisons were also made of the characteristics of visitors who indicated they were either 'crowded' or 'uncrowded'. (Refer to Section 3.2 and Appendix 3 for descriptive discussion of this crowding distinction.) The only notable difference was that uncrowded kayakers were more often on a first kayaking trip than were crowded kayakers (74% *vs* 49%). Apart from this, the crowded and uncrowded kayakers could not be distinguished from each other on the basis of their descriptive characteristics, and no other notable differences were apparent between other visitor groupings.

### 3. Evaluation of the quality of visit experiences

Overall evaluation of the quality of visit experiences was assessed through four questions related to overall satisfaction and perceptions of use-levels (refer Appendix 1 for question details).

#### 3.1 EVALUATION OF OVERALL SATISFACTION

Two questions allowed visitors to evaluate the quality of their overall visit experiences:

- An *overall satisfaction* score (how satisfied or dissatisfied with the trip — Question 5)
- An *expectation fulfilment* score (was the trip better or worse than expected — Question 4)

Positive responses from visitors to these questions represented their evaluation that they had achieved high quality recreation experiences on their visit. Figures 1 and 2 show that kayaker satisfaction in Abel Tasman National Park was very high (95%), and most experiences were as good as had been expected, or better (96%).

For the majority of kayakers (62%), the experience was better than they expected. Virtually nobody surveyed indicated they were dissatisfied with their trip. The main conclusion drawn from these overall evaluations is that at the time of the survey, the kayakers were achieving quality experiences in Abel Tasman National Park.

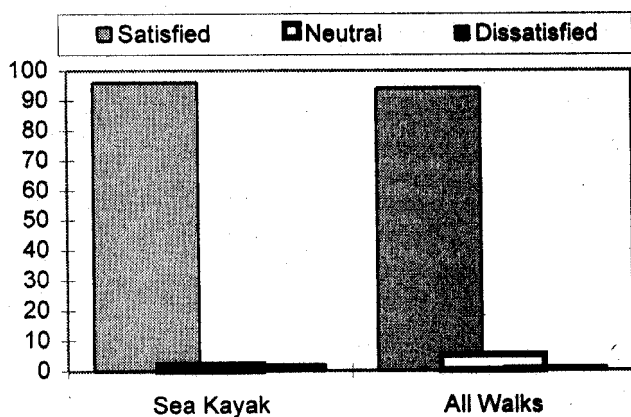


Figure 1. Overall satisfaction.

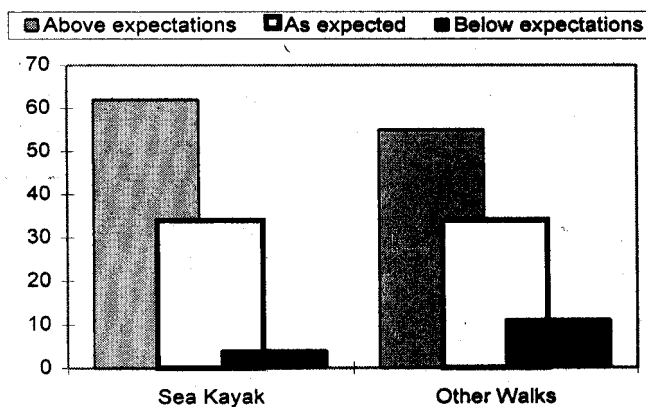


Figure 2. Fulfilment of trip experience expectations.

### 3.2 EVALUATION OF USE-LEVELS

Two further questions allowed visitors to evaluate the quality of their visit experiences in relation to use-levels:

- A score for perception of *crowding* (overall, did they feel crowded on the trip—Question 2)
- An evaluation of *expected visitor numbers* (seeing more/same/less than expected—Question 3)

Positive responses from visitors indicating low levels of crowding, and not seeing more people than expected, would have reinforced overall evaluations of achieving high quality visit experiences. However, Figures 3 and 4 show that crowding perceptions were relatively high, and were comparable with those of surveyed walkers on the Abel Tasman Coastal Track, and the other Great Walks overall. Compared with visitors to the Great Walks, more kayakers indicated they expected to see fewer other visitors than they actually experienced (32% vs 23% for walkers). Such results appear more negative than might be expected when the dispersed nature of the sea kayaking experience is considered, and

may reflect different patterns of visit expectations and experiences. These crowding and expected use-level evaluations were also weakly correlated with each other ( $r = .31$ ), indicating those who experienced higher use-levels than they expected generally tended to have higher crowding scores<sup>2</sup>.

Other questions asked were aimed at identifying any focal points for crowding perceptions on the Abel Tasman Track (Question 3). Overall, 82% of sea-kayak

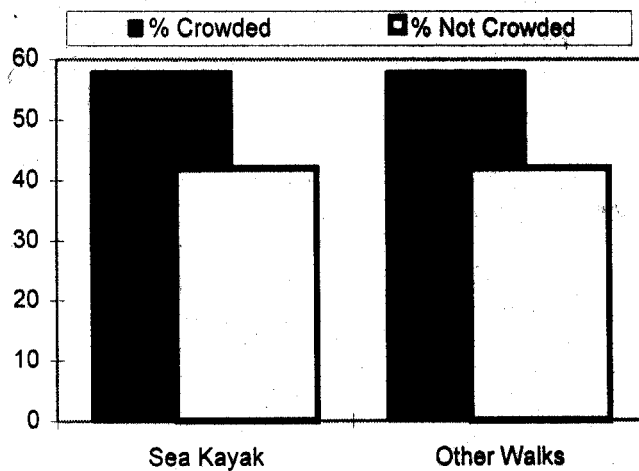


Figure 3. Crowding perception summary.

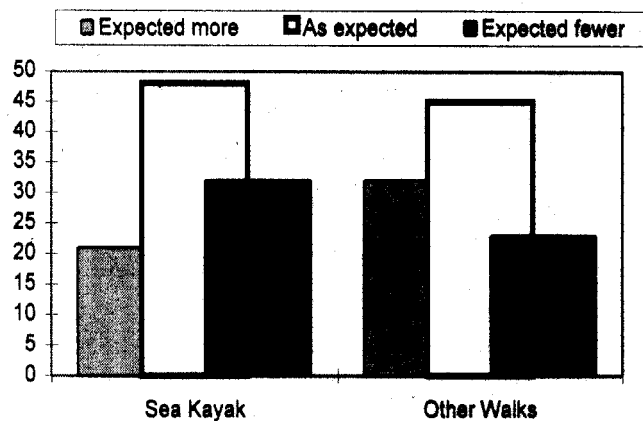


Figure 4. Fulfilment of visitor number expectations.

<sup>2</sup> In addition, an ANOVA test ( $F(2,192) = 10.82$ , signif.  $F = .000$ ) showed mean crowding scores increased from those expecting more people (2.48), through those expecting the numbers seen (3.02), to those expecting fewer people (4.09). Similar analyses found no significant differences with overall satisfaction mean scores.