

# Canoeist satisfactions, impact perceptions, and attitudes toward management options on the Whanganui Journey

SCIENCE FOR CONSERVATION: 90

Gordon Cessford

Published by  
Department of Conservation  
P.O. Box 10-420  
Wellington, New Zealand

## Great Walks visitor research programme

This report is the ninth from the Great Walks visitor research programme. Reports from other track samples are published through the same series. The programme included the Whanganui journey which, although being a multi-day canoeing experience on the Whanganui River, is administered and managed as a Great Walk. The main management distinction from the track Walks is that the Whanganui River, itself, is not part of the surrounding Whanganui National Park. It is not managed by the Department of Conservation, which manages the riverbanks and surrounding lands. The data while collected predominantly during January-February 1994, still provides valid indications of visit experiences and evaluations. Any significant management or use-pattern changes since then can be interpreted in light of these results. The main changes since 1994 have been the operation of Tieke Hut/campsite as a marae by the local iwi, some campsite upgrading, and improvement of water supplies. Management reports also indicate use-levels have shown some decline, the mix of international visitors has become more diverse, and more trips are being commenced at the half-way entry point.

*Science for Conservation* presents the results of investigations by DoC staff, and by contracted science providers outside the Department of Conservation. Publications in this series are internally and externally peer reviewed.

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ISSN 1173-2946  
ISBN 0-478-21743-9

This publication originated from work done under Department of Conservation Investigation no. 1758, carried out by Gordon Cessford, Science & Research Unit, Department of Conservation. It was approved for publication by the Director, Science & Research Unit, Science Technology & Information Services, Department of Conservation, Wellington.

### Cataloguing in Publication

Cessford, Gordon R. (Gordon Robert), 1962-  
Canoeist satisfactions, impact perceptions and attitudes toward  
management options on the Whanganui Journey / Gordon Cessford.  
Wellington, N.Z. : Dept. of Conservation, 1998.  
1 v. ; 30 cm. (Science for conservation, 1173-2946 ; 90.)  
ISBN 0478217439  
1. Recreation--Research--New Zealand- -Whanganui River. 2.  
Recreational surveys--New Zealand- -Whanganui River. 3. National  
parks and reserves--New Zealand- -Whanganui National Park--Visitors.  
4. Canoes and canoeing--New Zealand- -Whanganui River. I. Title.  
II. Series: Science for conservation (Wellington, N.Z.) ; 90.  
790.099352 20  
zbn98-055702

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# Abstract

Canoeists on the Whanganui journey through Whanganui National Park were surveyed during January-February 1994, as part of a wider study of track users in New Zealand. 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 physical impact concerns from littering, improving campsite options, investigating the condition of some landing sites, and improving water supplies. Perceptions of crowding were low, but assessment of social and physical impact perceptions indicated that visit-experience problems would gradually emerge with any future increase in use-levels, particularly due to difficulties from greater campsite congestion and on-river encounters with other canoeists and motorboats. Visitors favoured information-based management to address these increasing use-pressures rather than more regulatory controls, although controls on motorboats and provision of more camping opportunities were also highly favoured. Current low crowding levels suggest that time is available for information-based approaches to be applied as the main means for achieving long-term control, without more direct measures being required.

# Executive summary

This report summarises key results from a survey of 559 canoeists on the Whanganui River. The survey was undertaken to complement results of a broader study of people doing overnight trips on walking tracks managed as Great Walks. It provides information about visitors satisfaction 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. The overall satisfaction measure was not linked to any other variables in the survey, which limits its practical value as a possible tool for any monitoring of visit-experience quality. Low crowding perceptions indicated visit experiences were not being substantially compromised, but were found to have some association with impact perceptions, and social congestion. In general, crowding scores appear to represent a more sensitive measure of compromises to visit-experiences.

## **Satisfaction with facilities and services**

Satisfaction with specific facilities and services was high, and apart from around a quarter of visitors being dissatisfied with landing areas, no substantial sources of dissatisfaction were apparent. There were no links between these specific satisfactions and overall evaluations of the visit. In addition, there were no notable differences between the satisfaction responses of different visitor groupings. These findings suggest that on the basis of satisfaction results, there is no immediate need for significant management interventions beyond normal maintenance activities. Should use pressures increase, the spacing and capacity of campsites appears to be the main area where attention may first be required.

## **Impact perceptions**

Most visitors noticed physical impacts related to uncertain water hygiene, and insufficient water and toilet facilities, and social impacts related to encountering motorboats and guided groups on the river. However the proportions of visitors bothered by these impacts were much lower, indicating considerable impact tolerance. The only impacts bothering more than 20% of visitors were related to uncertain water hygiene, water and toilet facilities, littering, and motorboats on the river. Any compromises to the quality of current visit experience appear likely to be related only to these physical impact sources. While many visitors were bothered by motorboats on the river, direct management control of this aspect is limited. Overall, these impact perceptions do not indicate any priority need for current management action beyond normal maintenance programmes, although identifying any physical impact 'hot-spots' may indicate where maintenance programmes should focus in the short term.

While overall impact perceptions highlighted physical impact issues, the significant differences identified between the impact perceptions of different visitor groupings highlighted issues relating to crowding perceptions (uncrowded/crowded). In summary, crowded visitors were significantly more bothered by most types of impact perceptions, particularly those related to social congestion. This related most to overall congestion impacts, based on seeing too many people at campsites, too many on the river, and too many big groups. While these negative perceptions of overall congestion impacts were not notably high overall, they were linked with greater perceptions of crowding. These results indicate that any detrimental effects on future visit experiences will arise first among the perceptions of overall congestion associated with increasing pressure on campsite conditions and on-river encounter levels and types (e.g., numbers, big groups, motorboats). These results also emphasise that management actions to minimise any future compromises to visit-experience quality should focus first on campsite congestion, and on the encounter-levels and conflict perceptions on the river, as should any related monitoring.

### **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. Support was also high for increasing camping facilities, developing alternative options and controlling motorboat access. Attitudes were mostly negative toward options involving rationing or manipulating-use to channel or reduce visitor numbers (e.g., booking systems, permits, peak pricing, reduce facilities). For many other management options, visitor attitudes were more evenly split, for or against.

While overall visitor attitudes favoured information management options, the significant differences identified between the attitudes toward management of different visitor groupings highlighted issues relating to nationality (New Zealand/overseas), and age-group (under and over 40 years). In summary, New Zealand visitors were more opposed than overseas visitors to manipulating use conditions; overseas visitors were more opposed than New Zealand visitors to increasing accommodation options; and younger overseas visitors were distinctly most opposed to increasing accommodation options. While a quite simplified summary of complex interactions, these points highlight areas where attitudes to management options were most variable, and distinguish the visitor groupings more resistant to management options.

### **Recommendations**

While there was no urgent need for immediate management action to address current problems, the most productive directions for preventative actions to minimise future compromises to the quality of visit-experiences appear to be:

- Identifying and reducing any physical impact hot-spots (e.g., litter, water, toilet)
- Identifying any problems with landing sites along the river
- Improving water supply at any campsites where difficulties remain

- Evaluating opportunities for dispersing camping (and hut) options for different group sizes and trip patterns
- Provision of general information about the features of the Whanganui journey, and for planning visits to it
- Promote river trips by smaller groups where possible
- Provision of information approaches which forecast visitor numbers and but loadings in advance, prepare visitor expectations for encounter levels with big groups and motorboats, and provide suggestions on visit timing, operation, behaviour to minimise 'crowded' experiences.

Most initial gains should be made by concentrating upon short-term physical changes at campsites along the river, complemented by more long-term promotion of beneficial changes through information approaches. Appropriate research and information back-up, not necessarily confined to the Whanganui journey, could include:

- Identification of visitor preferences for facility standards at campsites and huts
- Identifying the use patterns along the river, and assessing options for optimising the use of different campsites and other accommodation options
- Assessing the effectiveness of information-based techniques in influencing visitor use
- Investigating the information services used by Whanganui journey visitors in planning and undertaking visits, and the role of visitor centres
- Investigating differences in the expectations and evaluations of visits by different visitor groups, particularly relating to distinctions between hut and campsite users
- Investigating the greater perception of social but congestion impacts by crowded visitors
- Investigating the distinction between noticing and tolerating impacts, and being bothered by them
- Investigating the more negative visitor attitudes to direct management options, the distinctions between attitudes of New Zealand and overseas visitors, and the distinctions between the attitudes of crowded and uncrowded visitors

Any monitoring of visit-experience quality should concentrate first upon campsite congestion conditions and encounter levels/characteristics on the river. Emphasis should be on a variety of approaches as simple measures of overall satisfaction are unlikely to provide a useful means to monitor changes in these conditions. Some assessment and periodic monitoring of activity patterns and facility loadings should be undertaken on the Whanganui River, and should include motorboat and large group use.

# Acknowledgements

The Great Walks study covered a wide variety of different track and recreation situations, and raised a number of large operational and analytical challenges. Help and advice on statistical approaches to these analyses was provided at various times by Margaret O'Brien and Ian West of Science & Research Unit, Department of Conservation, and Roger Wilkinson of Landcare Research. Data entry for the project was carried out very effectively by the Tourism Green project team of Michael Chan, Victor Keo and Sulia Aumua. Ian Mackenzie of Science & Research Unit provided the editorial assistance for final production of the reports. Thanks are also due to other Department of Conservation staff who viewed the draft reports and made useful suggestions on their overall approach and contents.

For this specific report, overall co-ordination was managed by Stephen Hormann of Whanganui Conservancy. Staff of Whanganui Field Centre and Pipiriki Field Centre co-ordinated field operations, particularly Ridgway Lythgoe (Whanganui) and Dennis McDonnell (Pipiriki). The actual application of the survey in the field was carried out by Rex Head and David Allerby as part of the Tourism Green project team.

# 1. Introduction

The Whanganui journey is a 'wilderness' canoe trip of around 3-6 days duration. This survey was undertaken as part of a broader study of people doing overnight trips on the Great Walks. 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. These characteristics are comparable to those on Whanganui Journey canoeing experiences. As a result, the management status of the river trip is equivalent to a Great Walk, although the river surface itself is not included as part of Whanganui National Park and is not managed by the Department of Conservation. Growing use pressure, and the need to provide for quality outdoor recreation experiences, requires that these Great Walks 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 satisfactions with their visit experiences, and what aspects of visits may be detracting from these experiences. On this basis, the objectives of the Great Walks study were to:

- Provide brief description of overnight visitors to the Great Walks
- Identify visitor satisfactions with the facilities and services provided
- Identify visitor perceptions of crowding and use-impacts
- Identify visitor attitudes towards management options

Departmental staff at key huts or campsites administered standardised questionnaires to visitors on each track' on their last trip night. Overall, 559 Whanganui journey canoeists 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 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 visitors, 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.

<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 Whanganui 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 Whanganui River and the Lake Waikaremoana and Abel Tasman Tracks; 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.

## 2. Visitor information

In summary, visitor characteristics were representative of a diverse-aged group of New Zealanders, largely unfamiliar with the Whanganui journey and generally inexperienced in backcountry activity. Over-night stays were predominantly at campsites. Some summary findings (refer Appendix 1 for details) included:

- A majority of males (60%) compared with females (40%).
- Most (87%) were from New Zealand, with a few German (5%) and British (0%).
- Many (57%) were aged between 20-40 years, although 29% were aged under 20, and 14% over 50.
- Most (80%) were on a first trip down the river
- Few opportunities exist for similar canoeing trips elsewhere, so visitors were asked about their general back country experience of overnight walks-26% had not done any overnight walking trips, 34% had done from 1 to 5, and 19% had done more than 20 such trips.
- Group sizes were diverse and often very large, averaging 15 people, although these comprised numerous smaller groups and a few very large groups (over 30 people).
- Trip durations (90%) were between 3-5 nights, with most on trips of 4 nights (43%).
- Few (5%) stayed only in huts, some others (27%) used a combination of huts and campsites, but most (60%) used only campsites.

New Zealand visitors represented a broader age-range, came in larger groups, and had more previous experience of the Whanganui Journey. Overseas visitors were more often in the 20-40 year age-range (58% vs 30% for New Zealand visitors), had many fewer aged below 20 (11% vs 32% for New Zealand visitors), came in smaller groups (mean of 6.8 vs 16.2 for New Zealand visitors), and were more often on first-visits to the river (89% vs 79% for New Zealand visitors).

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.) However, the only notable difference was that crowded visitors were on longer river trips (mean of 4.3 vs 3.8 trip nights), indicating they were more likely to be doing the full river trip rather than starting at the half-way access point of Whakahoro. Overall, apart from trip duration, the crowded and uncrowded visitors could not be distinguished from each other on the basis of their profile characteristics. Crowding perceptions were not notably different between but users and camp users.

Comparisons were also made of the characteristics of visitors who indicated they were predominantly but users (10%) or camp users (70%), with each group being inclusive of 1 night spent in the alternative accommodation site. Camp users came in bigger groups (mean of 15.8 vs 6.3 for but users), were on longer trips (mean of 4.0 vs 3.5 nights for but users), and included more New Zealand visitors (91% vs 77% of overseas visitors). No other notable distinctions in their profile characteristics were apparent.

# 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 satisfaction on the Whanganui journey (and other tracks) was very high (92%), and most experiences were as good as had been expected, or better (91%).

Satisfaction responses were consistent with those from other tracks. Virtually nobody indicated they were dissatisfied with their trip. The main conclusion drawn from these evaluations is that visitors on the Whanganui journey are achieving quality experiences, which are frequently better than they expected.

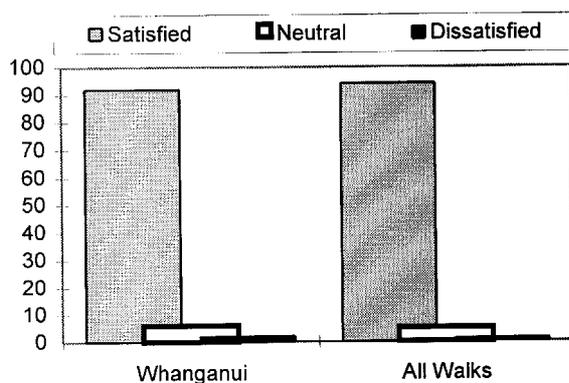


Figure 1. Overall satisfaction.

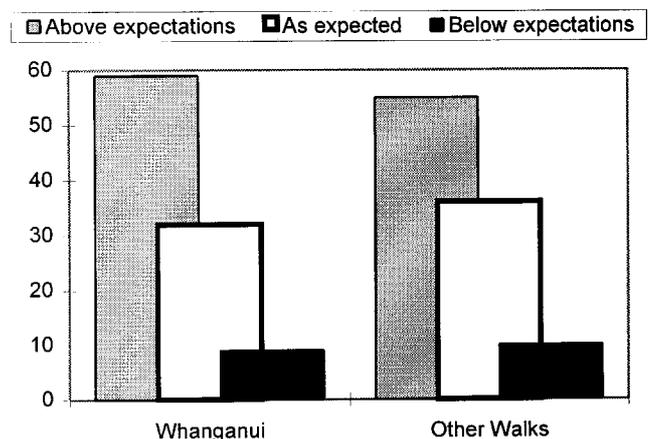


Figure 2. Fulfilment of trip experience expectations.

2 These responses were similar in degree, although only moderately correlated with each other ( $r = 0.47$ ).

### 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. Figures 3 and 4 show that crowding perceptions were not great, and that few visitors saw more others than they expected. These crowding and expected use-level evaluations were weakly correlated with each other ( $r = .32$ ), indicating those who experienced higher use-levels than they expected generally tended to have higher crowding scores'. Levels of reported crowding were much lower on the Whanganui journey (42%) than on other tracks (60%).

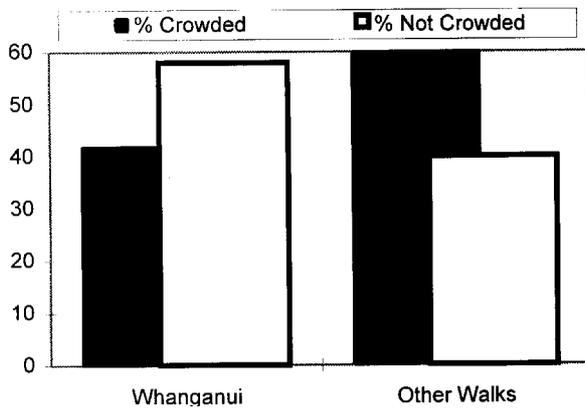


Figure 3. Crowding perception summary.

Other questions were asked which aimed to identify any focal points for crowding perceptions on the Whanganui Journey (Question 3). Overall, 59% of visitors ( $n = 325$ ) indicated that some places were more crowded than others, and of these visitors, 60% included but sites in their examples while 42% included campsites. Appendix 1 summarises other crowding information from Question 3, which indicates that visitors who indicated a focus for but crowding ( $n = 194$ ) specified John Coull Hut (71%); and visitors who indicated a focus for campsite crowding ( $n = 137$ ) specified Mangapurua campsite (43%). Only 6% indicated any sections on the river

were notably crowded. These results indicated issues related to both but use and camp use were the key to crowding perceptions, while issues related to congestion on the river were not apparent.

These low crowding perceptions (42% crowded) could be interpreted as representing use-levels which are only at 'low normal conditions' (refer Appendix 3) suggesting there is not a problem with perceptions of excessive use-levels at this time. These low crowding scores were not significantly linked with overall satisfaction. In other words, lower crowding perceptions were not associated with higher evaluations of satisfaction with the trip, or it being considered better than expected. While only a minority of visitors indicated they did experience crowding, and many experienced lower use-levels than

3 In addition, an ANOVA test ( $F(2,473) = 30.30$ , signif.  $F = .000$ ) showed mean crowding scores increased from those expecting more people (2.00), through those expecting the numbers seen (2.45), to those expecting fewer people (3.70). Similar analyses found no significant differences between use-level expectations and overall satisfaction mean scores.

they expected, this did not appear to affect how they felt about their overall trip.

These low crowding and high satisfaction evaluations suggest that the quality of visit-experiences is not being compromised by conditions associated with current use-levels (refer Appendix 3). Subsequent sections in this report present analyses which indicate where future compromises may occur in relation to satisfactions with particular facilities and services (refer Section 4.2), or with perceptions of particular social and physical impacts (refer Section 5.2).

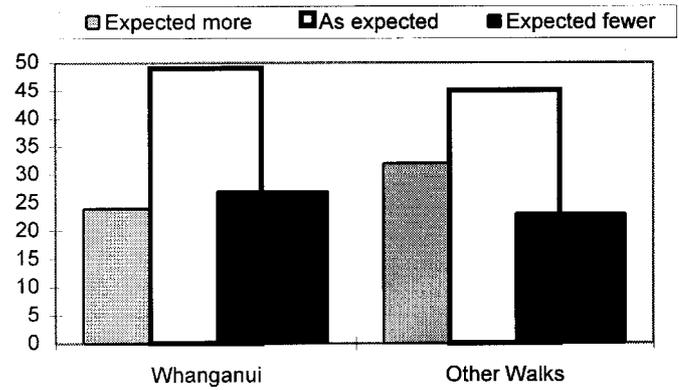


Figure 4. Fulfilment of visitor number expectations.

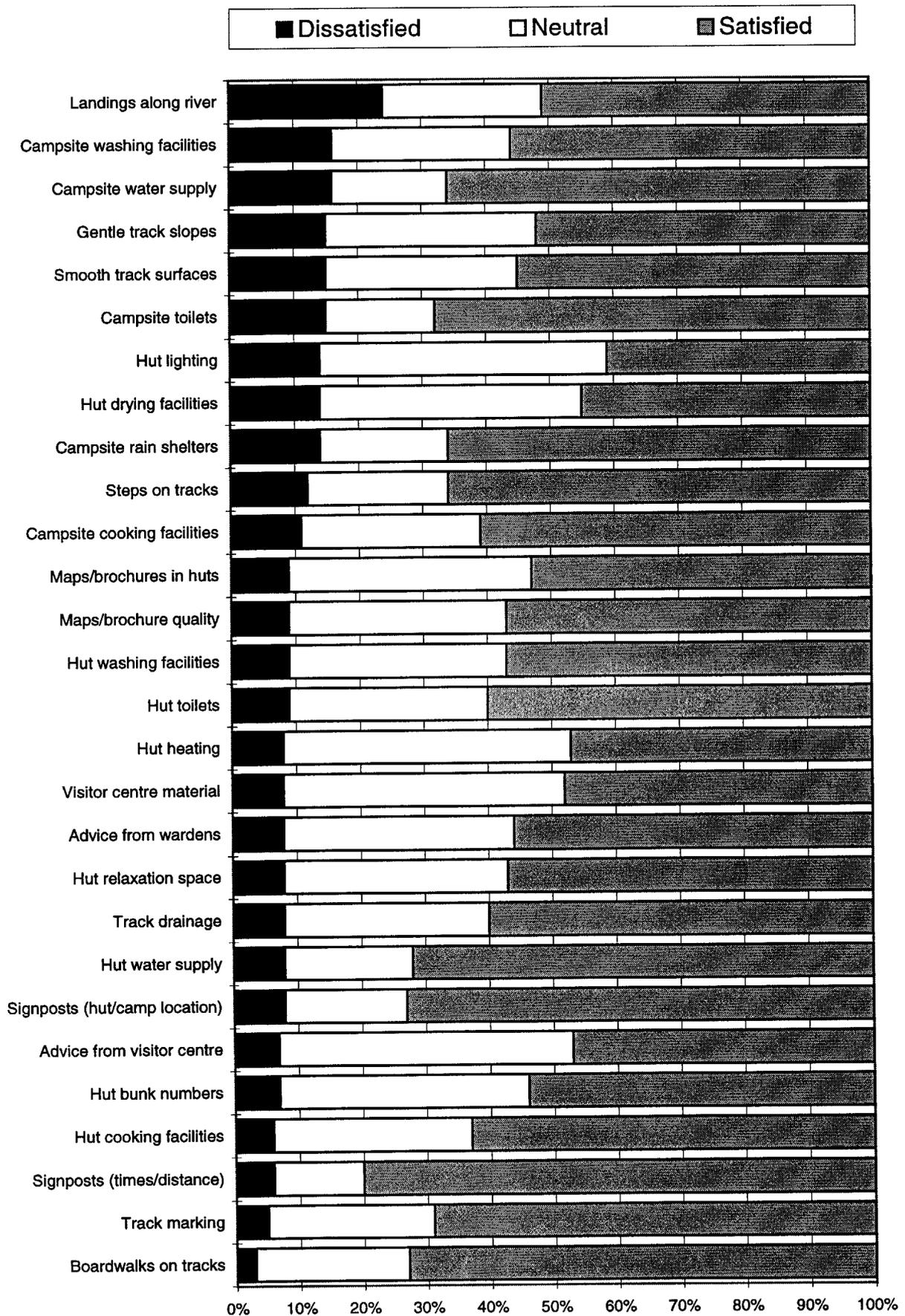


FIGURE 5. SATISFACTIONS WITH THE FACILITIES AND SERVICES PROVIDED.

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