

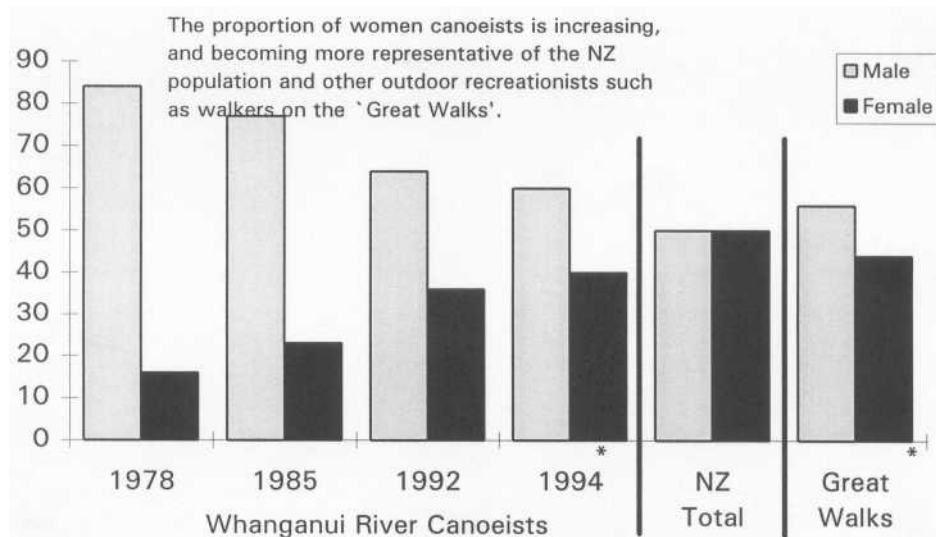
**Figure 3 Changing age distributions.**

notable changes in the composition of Whanganui River canoeists, with a broadening of age ranges (Figure 3), and an increasing proportion of women (Figure 4).

Further indication of use change is apparent from the increase in commercial operators guiding people down the river from two in 1978 (Devlin *et al.*, 1980), to 7 in 1992 (Hormann, pers. comm.). Increased provision of guiding and equipment rental services has made the trip opportunity more available to a wider range of people, particularly to those not normally engaged in such trips, and those from overseas who lack time, personal contacts and equipment. Manager estimates suggest that the volume of commercial trip business (hireage and guiding) has been growing recently at a rate of over 10% per year (McGill, DoC, pers. comm.).

### 3.4 Discussion points

Canoeists on the Whanganui River displayed the distinctive characteristics of most outdoor recreation groups (when compared with the national population). These included an over-representation of younger participants, of males, and of occupation types dominated by professionals, students and urban dwellers. While similar to other outdoor recreation groups, Whanganui canoeists were distinct in a number of ways. They tended to have more older participants, included children on a higher proportion of trips, and travelled in average party sizes larger than those found on walking tracks. These distinctions do suggest that the Whanganui River experience is something appreciated by a wider variety of people than is usually the case for the more common tramping activities on conservation lands.



**Figure 4 Changing gender balance.**

\* NZ Total data, Dept. of Statistics (1992); 'Great Walks' data Cessford (in press), NZ Total figures from 1992 census.

Comparison with earlier studies undertaken on the Whanganui River indicated that the characteristics of visitors have also been changing over time. In particular, it appears that more females are now participating, and a wider range of age groups are present. In addition to these changes, craft type has shifted toward more use of Canadian canoes, and more overseas visitors are coming to the river. Overall, the visitors to the river appear to have become more diverse.

An important finding was the 12% of canoeists who were from overseas. Earlier studies recorded no such visitors. However, recent comments by managers and commercial operators indicate that this group of visitors is increasing. It is probable that any future significant increase in use-levels will comprise mostly overseas visitors. This is a key point when it is recognised that the current proportion of overseas visitors on the Whanganui is low relative to other popular outdoor sites, and the overall number of overseas visitors to New Zealand is also increasing rapidly.

Given the high level of commercial provision of hire equipment (79% of canoes were hired), transport links and guiding services (22% were on guided trips), there are now few barriers to rapid increases in overseas visitors doing this trip. It would appear that lack of awareness is the only limiting factor remaining. In these circumstances, considerable increase in canoeing use of the Whanganui River by overseas visitors in particular is anticipated.

## 4. FEATURES OF THE TRIP EXPERIENCE

Canoeists were asked why they chose to do the Whanganui River, how important were various features of the river trip on the Whanganui, and how satisfied they were with each of these features.

### 4.1 Reasons for choice of river

Common generalisations about the Whanganui River are that it can be considered a good beginners' river which provides an introduction to the activity, allows multi-day trips, has low technical difficulty, and is in a 'wilderness' setting (Devlin *et al.* 1980; Baxter and Sandrey 1986; Department of Conservation 1989). These generalisations were reinforced by the reasons given by canoeists for choosing to do this trip (Table 4).

The source question for these reasons was open-ended, and allowed for up to 3 reasons per person. The table shows the percentage of the canoeists who gave each of the reasons listed. Clearly there was a wide variety of reasons given, as demonstrated by the descriptive response categories listed on the left. The categories listed on the right are generalised descriptions.

In general terms, up to 40% of canoeists gave a reason associated with features of the canoeing experience available on the river. In addition, over 40% gave a reason associated with setting features. When more specific reasons are considered, 26% of canoeists gave reasons related to the river being good for beginners and easy. This was

**Table 4 Reasons for river choice. (n = 331).**

Reasons given for doing trip	%	Summary categories	% of Total
Good beginners river/easy	26	Canoeing features	40%
Good Canadian canoeing river	9		
Multi-day canoe trip	5		
Wilderness river/remote	11	Setting features	42%
Scenery/views/nature	9		
Peace/quiet/escape	6		
Historical associations	6		
Cultural associations	10	Social features	19%
Came with others	7		
Commercial trip	4		
Showing/guiding others	4		
Outdoor education trip	3		
Friends/family have been	11		
Have heard good things	7	Motivation factors	22%
Always wanted to visit	4		
Close to home	10	Convenience factors	16%
Can hire gear/get pickups	5		
Other	12		

the predominant reason given, with the others being as listed in the table. There were no major differences in these reasons according to trip season or entry point.

## 4.2 Importance scores for river trip features

Another perspective on visitor motivation and the relative importance of different features of river trips, was provided by the importance scores given to listed river trip features in Table 5. The top 5 features all related to the existence of a relatively undisturbed natural setting. A strong emphasis on the importance of natural "wilderness" values was consistent. This suggested that the physical attributes of "wilderness" on the river may have been of more importance to visitors' enjoyment of their trip than were some social attributes of a wilderness experience (e.g., solitude).

An important finding for managers is that the 6th and 7th highest scored features represented a much more practical requirement for management services and facilities, specifically for access to clean and safe water, and to good toilets. Another point to note related to accommodation facilities, where opportunities for informal camping were given higher importance scores than were developed campsites or huts. This perhaps

Table 5 Scores for the importance of river trip features.

River trip features (in order of importance)	Not important		Moderately important		Extremely important	Mean score
	1	2	3	4	5	
<b>Scenery/views</b>	1	1	10	31	57	4.43
<b>Being in natural places</b>	1	3	11	27	58	4.37
<b>Peace/quiet</b>	2	3	15	31	49	4.23
<b>Get away from it all/escape</b>	4	4	13	35	45	4.13
<b>Wilderness feelings</b>	5	5	19	31	40	3.96
Safe water/collection points	7	9	14	22	48	3.93
Toilets at huts/campsites	7	8	16	25	44	3.92
Whitewater/running rapids	3	9	22	27	39	3.88
Physical exercise/challenge	3	7	26	33	31	3.82
Being with family/friends	8	6	25	25	35	3.73
Multi-day river trip	12	8	19	36	25	3.51
Informal camping opportunities	11	9	27	31	22	3.43
Solitude	10	10	34	23	23	3.38
Learning river history	9	14	29	27	21	3.37
Developed campsites	10	16	29	27	19	3.28
DOC river patrols	18	13	23	20	27	3.24
Relaxed easy water	12	17	37	24	11	3.04
Walking on riverside tracks	15	23	28	23	11	2.92
DOC wardens in huts	24	16	26	18	16	2.85
Having huts to stay in	31	20	18	17	14	2.62
Exploring sidestreams/tributaries	21	24	36	13	6	2.61
Meeting others	28	21	27	14	10	2.57
Contact with Maori culture	30	23	23	15	9	2.49
Living it up/partying in evenings	53	17	16	6	8	1.98

further reflects a tendency for canoeists to prefer a more wilderness oriented experience when given the choice. Canoeists are certainly not interested in a wild time however, with the lowest importance scores being given to 'living it up/partying in evening'.

### **4.3 Discussion points**

When asked what reasons were most important for choosing to do a trip on the Whanganui River, the unique features of the canoeing experiences possible, and of the setting itself, were given by up to half the canoeists. Of these, 26% considered that they visited the river because it was easy to travel on, and was good for beginners. These results suggested that the Whanganui River experience is seen by many as being unique. These results also reinforced the findings of previous studies, that the river was considered a good beginners' river providing an introduction to the activity, on multi-day trips of low difficulty, and all in a wilderness setting.

The trip features enjoyed most on the Whanganui river related to the existence of a natural and relatively undisturbed natural setting. Values associated with 'wilderness' were generally important, apart from 'solitude' itself. It would appear that a more 'purist' definition of wilderness was being applied to the physical conditions of the setting, but less so to some of the social conditions often associated with a 'wilderness' definition (e.g., solitude).

Adequate water and toilet facilities were the next features considered most important. This represented a signal to managers of the need for ongoing provision and maintenance of facilities in this area. Less importance was attributed to provision of huts or campsites.

Apart from learning river history and the enjoyment of being with family and friends, social and cultural elements of the river trip were not considered very important for trip enjoyment. This reinforced the general finding that the physical features associated with a perception of naturalness and wilderness were the most important trip features. Social features of these trips appeared generally to be considered more incidental.

## 5. SATISFACTIONS

### 5.1 Overall satisfactions

Canoeists were asked to indicate how satisfied they were with each of the river trip features listed, along a scale from 1 (Very dissatisfied) to 5 (Very satisfied). The summarised results are presented in Table 6, with features listed in order of highest to lowest overall satisfaction scores. Overall, satisfaction scores were high. Dissatisfaction was not expressed at high levels with any of the features listed.

The top five satisfaction features related to the benefits derived from a relatively undisturbed natural setting. These features were also highly rated for importance, which suggests that canoeist's experiences were fulfilling and satisfying. Overall, the pattern of satisfaction scores reflected that of the importance scores (Section 4.2). These were cross-tabulated to check response patterns, which in the main indicated that those who attributed high importance to a feature, also expressed high satisfaction. Few canoeists with high expectations appeared to have been disappointed by their experiences. A key point for manager attention was that most canoeists expressed satisfaction with the

Table 6 Satisfaction scores.

Satisfactions with trip features (%)	Very dissatisfied		Neutral/ doesn't matter		Very satisfied	Mean score
	1	2	3	4	5	
<b>Being in natural places</b>	1	0	6	32	62	4.55
<b>Scenery/views</b>	1	1	5	32	61	4.51
<b>Get away from it all/escape</b>	1	2	17	25	55	4.32
<b>Peace/quiet</b>	1	4	12	29	54	4.31
<b>Wilderness feelings</b>	1	3	13	37	46	4.27
Physical exercise/challenge	0	3	20	29	48	4.22
Being with family/friends	2	4	17	29	48	4.15
Toilets at huts/campsites	2	10	14	24	50	4.10
Multi-day river trip	2	3	26	26	44	4.07
Solitude	2	6	31	24	37	3.88
Developed campsites	2	10	27	26	35	3.83
DoC wardens in huts	5	3	39	19	34	3.75
Having huts to stay in	6	4	36	18	37	3.74
Whitewater/running rapids	3	14	19	35	29	3.71
Safe water/collection points	6	8	27	28	31	3.70
Relaxed easy water	7	6	26	33	28	3.69
Informal camping opportunities	4	7	33	30	26	3.68
Walking on tracks beside river	2	9	38	26	25	3.64
DoC river patrols	6	6	39	20	29	3.61
Meeting others	4	6	41	24	25	3.60
Learning river history	3	12	38	24	23	3.52
Living it up/partying in evenings	10	1	45	16	23	3.35
Exploring side streams/tribs	3	13	48	20	16	3.31
Contact with Maori culture	9	11	53	13	14	3.11

facilities provided, or were neutral in their responses. A small minority (under 15%) expressed dissatisfaction with some facilities (e.g., toilets, campsites, huts and water provision).

## 5.2 Summer and Easter canoeist satisfactions

Some satisfaction differences were found between canoeists based upon trip season (Table 7). In summer, canoeists gave higher satisfaction scores for their experiences of peace and quiet, solitude, and wilderness feelings. Scores for these were also high in Easter, but to a lesser extent. Satisfaction with some facilities was also higher in summer, where the developed campsites and toilet facilities received higher scores. Some suggestion of greater toilet facility problems in Easter was apparent from the lower Easter satisfaction scores. Summer canoeists gave higher satisfaction scores for the developed campsites, which they were more inclined to use on their trips (refer Appendix 4 for site-use details). They were also more positive toward DOC river patrols.

These findings indicated that summer canoeists appeared more likely to achieve 'wilderness' oriented satisfactions, and were generally more satisfied with facilities.

## 5.3 Discussion points

Levels of satisfaction were high with the features of river trips, and the facilities and services provided. High degrees of dissatisfaction were not expressed at all. The pattern of satisfactions followed that of trip feature importance, with the highest levels of

**Table 7 Satisfaction differences between summer and Easter.**

Satisfactions by season		Very Dis-satisfied	Dis-satisfied	Neutral	Satisfied	Very satisfied
Peace/quiet **	Summer canoeists	1	2	10	30	56
	Easter canoeists	0	13	21	26	39
Solitude *	Summer canoeists	2	4	33	24	36
	Easter canoeists	0	13	45	18	24
Wilderness feelings *	Summer canoeists	1	3	11	35	50
	Easter canoeists	0	0	24	47	29
Riverside tracks *	Summer canoeists	2	9	34	25	29
	Easter canoeists	0	5	57	30	8
Developed camps **	Summer canoeists	2	10	22	26	39
	Easter canoeists	3	8	49	27	13
Toilets *	Summer canoeists	2	10	13	21	54
	Easter canoeists	0	8	21	39	32
DOC river patrols *	Summer canoeists	6	5	36	20	33
	Easter canoeists	6	9	54	23	9

Chi square significance  $p < .05$  (\*),  $.01$  (\*\*)

satisfaction being given for those features related to a natural and undisturbed natural setting. Overall it appeared that canoeist experiences on the river were fulfilling and satisfying. Few canoeists with high expectations of experiencing important features indicated they were less than satisfied with them.

Some statistically significant differences in satisfaction scores were found between canoeists during different seasons. Canoeists on the river in summer were more highly satisfied with their experiences of peace and quiet, solitude, and wilderness feelings. Satisfaction with campsite and toilet facilities was also higher in summer. These results indicated that summer canoeists were more likely to fulfil 'wilderness' types of trip experiences than were Easter canoeists. Some suggestion of facility problems at Easter was apparent from the lower satisfactions given for toilet facilities at that time. Easter canoeists were also relatively less satisfied with DoC river patrols, although the reasons for this were not apparent. However, these differences were not great, and overall, the satisfactions were generally high.



## **6. IMPACT PERCEPTIONS**

### **6.1 Overall impact scores**

Canoeists scored their perceptions of use impacts associated with their trip. Some potential impacts they may not have noticed, others they may have noticed but were not bothered by them, while others they noticed and did perceive them as negative impacts. These scores are summarised in Figure 5 (refer Appendix 5, Table A5.1 for data).

The main negative impact was the perception of pollution problems in the river water, with a total of 73% of canoeists indicating they were bothered by this. This represented a widely perceived problem based on past conditions, however, water standards had been improved considerably by the time the survey was done. The other 'top-five' negative impacts were litter in the river (41%) and at campsites (40%), meeting jetboats (32%), and seeing dead animals (29%).

Other impacts from use were also perceived at high levels, but were generally tolerated. The most prominent of these were the 71% who noticed goats alongside the river, but were not bothered by them. Other impact sources which received high tolerance included meeting jetboats (57%), perceptions of over-development (55%), too many other users (44%), having to share campsites (41%), and lack of adequate toilets/water (41%).

The remainder of the impacts are discussed briefly below under descriptive headings, where summer and Easter differences are also described (Figure 6). In general, where differences in perceptions occurred, these involved more negative perceptions at Easter.

### **6.2 Physical impact perceptions**

These impacts comprised water pollution, health problems from water, litter at campsites and in the river, vegetation damage, and human waste toilet paper. As shown in Figure 5, perceived water pollution problems were those seen most negatively, although few actual health problems were indicated (health problems were noticed by 18%, including 12% who were bothered by these; Figure 5). Almost half the canoeists noticed litter on their trip, and almost all of these canoeists were bothered by it. This suggests very little tolerance for litter on the river trip. By contrast, visitors appeared less negative toward damage to vegetation, with only half those noticing it being bothered by the impact.

Differences between summer and Easter perceptions were minor, with only litter at campsites being perceived differently (Figure 6). Against the general pattern, this was perceived significantly more negatively in summer. Although daily use levels were lower than for the high-use Easter period, it is possible that the accumulation of visitor effects over the longer duration summer season may have resulted in more evident physical impacts.

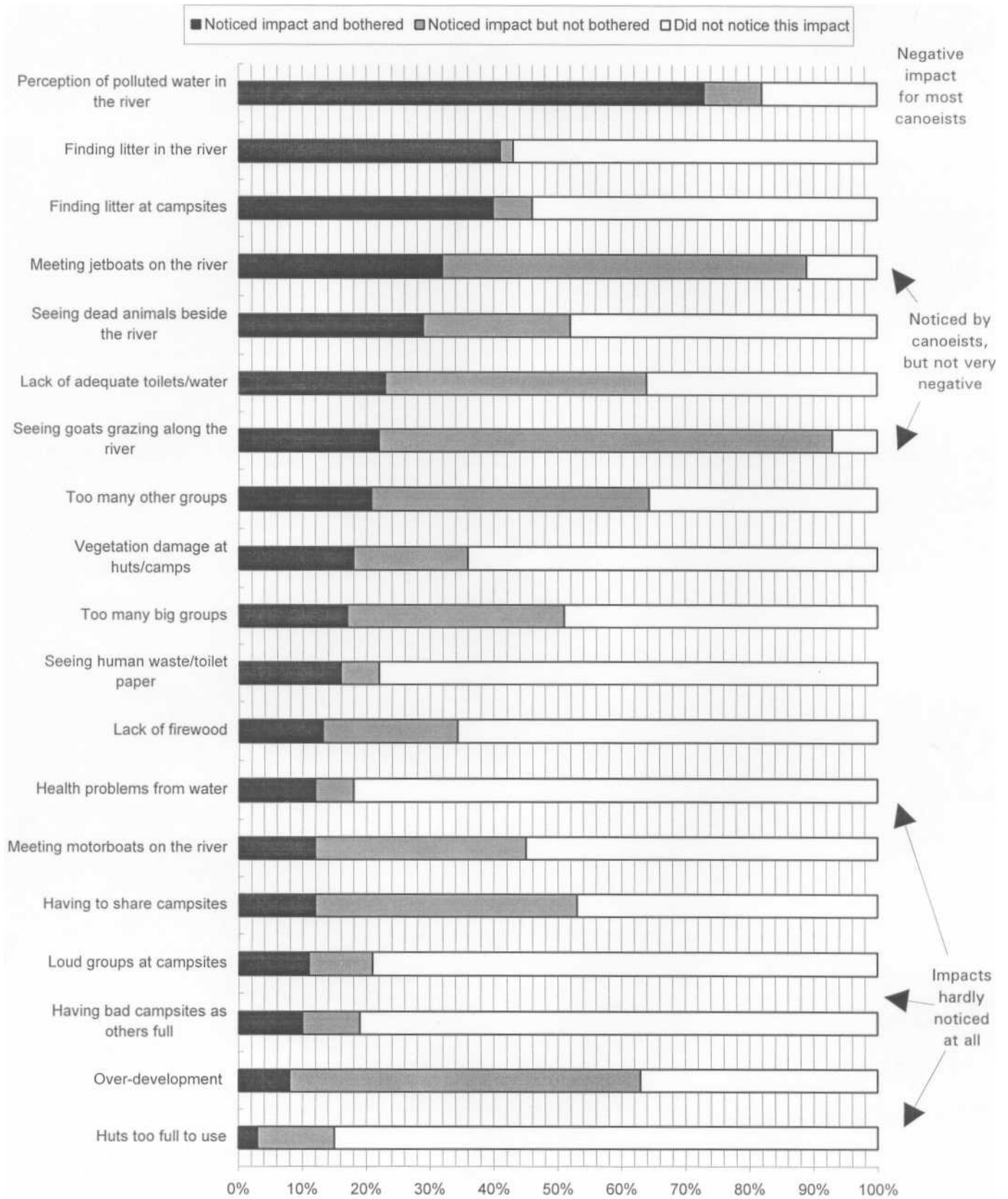


Figure 5 Canoeist perceptions of impacts.