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Arthur’s Pass, Canterbury, New Zealand
Social Dimensions of National Park Use:
a case study of summertime visitation to
Arthur’s Pass National Park

A thesis
submitted in partial fulfilment
of the requirements for the Degree
of
Master of Parks, Recreation and Tourism Management
at
Lincoln University

by
S.R. Espiner

Lincoln University
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Abstract

Abstract of a thesis submitted in partial fulfilment of the requirements for the Degree of M.P.R.& T.M.

Social Dimensions of National Park Use:
a case study of summertime visitation to Arthur’s Pass National Park

by S.R. Espiner

The visits people make to national parks are products of their various social characteristics, early and current experiences, motivations, perceptions, and attitudes. These visits, however, also occur within a broader social context, the identification of which is an important feature in terms of understanding national park use.

This study examines contemporary social dimensions of national park use, and assesses the degree to which the relationship between preservation and use has altered since a study of the same location was undertaken by Simmons in 1980. Through the use of both quantitative and qualitative techniques, the research explores the characteristics, motivations, perceptions, attitudes and activities of summertime visitors to Arthur’s Pass National Park in 1994.

The results of the research show that a number of dimensions have remained stable over time. Consistent with the findings of Simmons (1980), visitors to Arthur’s Pass National Park are young, predominantly male, well-educated, and from professional occupational backgrounds. Additionally, family and friends continue to act as strong socialising agents which direct and shape Park use. Notable among the studies’ differences include: an increased proportion of overseas visitors; a reduction in the length of visit; and a diversification and intensification of recreational use.
This thesis contends that, owing to a diverse set of technological and socio-political developments, the use of Arthur's Pass National Park is in a process of transition. Elements of this have important implications for the management paradox concerning preservation and use. New styles of recreation, and increasing numbers of overseas visitors can be seen as challenges to the traditional conceptions of national parks, and will require careful management in order to conserve the opportunities and experiences they offer.

Key words
Arthur's Pass National Park, national parks, conservation, preservation, use, outdoor recreation, social change, multi-sport, tourism, motivations, characteristics, satisfactions, perceptions, attitudes, socialisation, life-cycle, time-deepening.
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...the interrelations of man and land change from time to time according to the economic and social objectives of the people...and the technology at their command (McCaskill, 1966, in Gray, 1971:7).

1.1 Socio-political context
Within western society, the rate of social, environmental, political, economic, and technological change has never been greater. Twenty-five years ago, Toffler (1971:12) proposed that the rate of such change was so great that the inhabitants of the world were undergoing "future shock". He described future shock as the "...shattering stress and disorientation that we induce in individuals by subjecting them to too much change in too short a time". This rate of change leaves people in a state similar to the culture shock sometimes reported by people travelling away from home. Familiar cues that help us to function are removed suddenly and replaced by new cues that are incomprehensible to us (Toffler, 1971). Future shock is culture shock in one's own society, but without the opportunity to return to familiar ways.
Through the use of his concept of lifetimes, Toffler illustrated that a dramatic amount of change had occurred in a very short space of time. Dividing the last 50,000 years of human existence into lifetimes of approximately 62 years each, Toffler concluded that the majority of all the material goods used at the time had been developed within the present - the eight hundredth lifetime.

As Toffler has indicated, the vast majority of social and technological change has occurred since about 1950, and most certainly since the industrial revolution. Since this time, the philosophy of capitalism - the pivotal feature of modernity - has found its way into each and every sphere of life. Capitalism has facilitated and allowed technological development, which is one of the central proponents of change in the recreational use of natural areas. The widespread availability of motor cars, access to jet aircraft, and developments in durable fabrics and high-tensile materials, have all led to changes in the way natural areas are utilised. Popular examples of these effects include: ready access to many previously remote areas through the increasing and cost-effective use of the motor car; burgeoning international tourism, and the consequent demand for new, natural, and authentic experiences; and the benefits to recreationists of light-weight, durable and comfortable accessories which create new opportunities in demanding environments. The theme of the past two or three decades, consistent with the current liberal democratic society is "further and faster, more efficiently".

Compatible with rapid social change is the concept of time-deepening. It is argued by social theorists (Thompson, 1982; Brubaker, 1984; Godbey and Jung, 1991), that the Puritan ideals which gave birth to capitalism and the industrial revolution, also fundamentally altered the western concept of time. The ultimate consequence of this shift in conception is that time is perceived as a scarce resource.

When time is perceived as scarce, individuals attempt to increase the "yield" on their time and thus demonstrate the characteristics of time-deepening. According to Kelly and Godbey (1992), this is manifested in the current tendency for people to undertake a given activity in less and less time; undertake more than one activity at a time; and undertake activities more precisely with regard to time. Time-deepening is the direct result of a consumption-oriented society, where need is created and separated from production. In the same way that two televisions are
better than one, two leisure activities must also be better than one. Individuals faced with massive consumer choices feel compelled to "do it all" and to "have it all" (Linder, 1970, cited in Kelly and Godbey, 1992). Within this "rush to experience", lies the basis of time deepening.

This thesis suggests that the style of change occurring in wider society is clearly reflected in the recreational visitation to natural areas of New Zealand, and in particular, national parks. The extent to which future shock or time-deepening are occurring in any one individual or place, however, is not the subject of this thesis. The use of these concepts serves to illustrate that social and technological change has been rampant in recent decades, and that the effects of this change are far-reaching and penetrating.

1.1.1 Social change, recreation and environment in New Zealand

In the case of New Zealand, social and economic change has been especially significant during the last decade. It is worth considering the effects of what has been described as the most dramatic programme of restructuring in western society (Bührs and Bartlett, 1993; Castle and Haworth, 1993). Recreation participation and administration have been significantly affected by elements of the modern condition, characteristics of which include ongoing mechanisation and commercialisation, increased urbanisation, greater opportunities for women (Perkins et al., 1993), and changes in the conditions of workers and the relationships with their employers (Mitchell and Wilson, 1993). According to Green, Hebron and Woodward (cited in Labone and Wearing, 1994), leisure, too, is undergoing a process of radical restructuring.

Accompanying this societal restructuring, is the suggestion that a new environmental paradigm has emerged. Partly based on the growing support for post-materialist values, and "green" political parties, a shift in culture or social paradigm is proposed (Dunlap and Van Liere, 1978). The New Environmental Paradigm incorporates several themes and acknowledges: "... the intrinsic value of nature; the need to use and develop environmentally benign technologies; limits to industrial growth; support for non-hierarchical social structures; and cooperation with, rather than domination over nature" (Wilkerson and Edgell, 1993:57). These beliefs constitute the antithesis of the Dominant Social Paradigm of western culture.
Amid what may be dramatic social changes, natural environments have remained fundamentally unchanged for millennia. However, the way in which these areas are conceptualised and used has been modified throughout time and clearly reflects the social attitudes and values of wider society. Through a process of social and technological facilitation, for example, the outdoor recreationist has become more active and experience demanding. As Vogt and Jones (1991:2) note, "the traditional backpacker, camper, fisherman, hiker and horseback rider has become the downhill skier, snowmobiler, dirt biker, water skier and wind surfer". It is useful, then, to examine the development in thinking about the natural areas of New Zealand in order to appreciate the current situation.

1.1.1.1 Eras in natural area attitudes
Several authors (Roche, 1979; 1984; Shultis, 1989a; 1991; Kearsley, 1990; Park, 1991; Perkins et al., 1993;) have identified broad eras in the attitudes held towards natural areas in New Zealand. An initial phase, dating from the earliest European arrivals in the colony, was one in which unmodified areas were considered dangerous and to be avoided (Shultis, 1991). This fear of the unknown wilderness soon developed into a need to conquer and tame nature, as evidenced by the rapid deforestation of much of New Zealand for the purposes of farming (Biihrs and Bartlett, 1993). Visits into the wild and untamed areas of the colony were not generally seen as recreation at this time. As Perkins et al. (1993:174), point out, there was "...little about the natural environment that excited people's recreational imaginations". Rather, visits were for the purposes of surveying, discovery and development.

From a time close to the turn of the century, a new attitude of nature appreciation seemed to emerge, expressed in the establishment of two national parks (Tongariro National Park in 1887, and Mt Egmont National Park in 1900). However, the extent to which the development of national parks can be seen as part of a trend towards environmentalism is disputed. The observation has been made that only those areas which had no agricultural value seem to have been set aside (Pearce and Richez, 1987). Furthermore, according to Devlin (1993), the creation of Tongariro National Park was based more on a cultural rationale than one of ecology. In addition, Biihrs and Bartlett (1993) suggest that the establishment of New Zealand’s second national park at Mt Egmont was inspired more by human interest than concern for environmental protection. Farmers were apparently anxious about the levels of
excess run-off if forests on the slopes of the mountain were cut. In contrast, however, it is likely that land set aside for national park purposes at Arthur’s Pass in 1901 was more the result of ecologically motivated concern largely inspired by Leonard Cockayne.

Despite the lack of a clear environmental mandate, the designation of lands as protected natural areas can be seen as the beginnings of a new era. In the late 1920s and again in the early 1950s, specific legislation was formulated in order to define the purpose of national parks. This culminated in the National Parks Act (1952) which was eventually rewritten in 1980, one result of which was increased recognition of the recreational role of national parks (Perkins et al., 1993).

In the 1970s, a time of social liberalism and the clear rise of environmental movements absent from the preceding decades (Bührs and Bartlett, 1993), a “back-country boom” was identified (Mason, 1974). Commonly associated with social indicators such as population increase, more leisure time, more disposable income, and greater mobility (Aukerman and Davison, 1980), the use of back-country areas seemed to rise dramatically, causing governing agencies to react by providing further facilities and opportunities. Since this time, the relative use of the back-country may well have declined (Booth, 1989; Simpson, Pers.-Comm., 1993). This is not the case, however, in the front-country, or amenity regions of many national parks. Improved access, developments in technology, and the growth in overseas visitors to New Zealand, have led to an increased use of these areas.

1.2 National parks reconceptualised

During the last decade, the way in which natural environments are conceptualised, may have changed. However, this is not intended to imply the emergence of a new environmental paradigm. On the contrary, it is suggested here that growing awareness of the environment has increased and intensified its recreational use, to the extent that some natural areas are now valued more for reasons of consumption than may have been the case in the 1970s and early 1980s. National parks are increasingly being justified in terms of economic, rather than ecological values. This is partly evidenced by the growth in commercial use of national parks and their use as venues for activities and events, rather than as destinations in their own rights.
A true environmental paradigmatic shift would result in reduced utilisation of natural environments.

Although New Zealand's National Parks Act (1980) implies that an equal relationship exists between preservation and use (see Chapter 3), it appears as though this rationale has altered somewhat as use, rather than preservation has become dominant. This is largely due to the current political need for economic justification, and the fact that natural environments are now more easily accessed by an increasing proportion of the population.

Furthermore, people no longer view wilderness environments as places to fear. Rather, they are seen as places of challenge and excitement insulated by the existence of a series of safety nets which reduce the level of risk now involved with recreation in the wilderness. For example: the availability of aircraft searches in the event of missing persons or accidents; satellite location devices; radio contact with national park staff; cell-phones; pocket-sized thermal blankets; and freeze-dried food.

This does not mean that encounters with highly natural environments are without challenge or risk. However, unlike the early encounters, one's chances of survival in the outdoors are very good. This fact, in combination with direct technological developments, has not only led to increased use of national parks and other natural areas, but also to a variety of new uses. For instance, minimally equipped recreationists now run in organised endurance events over mountain peaks and passes, safe in the knowledge that in the event of error they can be winched to safety.

The proposed shift in the balance of use and preservation was fundamental to the decision to undertake this research, and is part of a thesis which suggests that national parks are in the process of a reconceptualisation. National parks continue to reflect the values of a wider society which stresses the need for cost effectiveness and profit. In some cases parks are becoming venues of action and places through which the nation as a whole is marketed to potential overseas visitors.
1.3 The present study

Over the past three decades, many studies have undertaken to examine social aspects of natural area use. The majority of these works have emanated from the North American research institutions. Among other things, researchers have sought to understand what motivates people to visit natural areas; what people do during these visits; and what their attitudes are to various elements of change. While results and theories are often relevant to the New Zealand situation, little replaces culturally-specific research and the subsequent development of theory and application.

Since the early 1970s, a range of outdoor recreation research projects has been undertaken in New Zealand (see Peebles, forthcoming; and Devlin et al., forthcoming). While this development is encouraging, there is little in the form of longitudinal or replicative study in this area. Often, studies have been one-off case examples that add to the big picture, but do not follow up on previous findings. This is the essential difference with the present research. In an attempt to consider the contribution of longitudinal research, this study examines the case of summertime visitors to Arthur’s Pass National Park. Comparisons and contrasts are made with Simmons’ (1980) study of the same area.

Through his study of visitors to Arthur’s Pass National Park, Simmons was able to make a significant contribution to the "...sociological investigation of national park use in New Zealand" (Simmons, 1980:279). He acknowledged the need to understand national park use if sound park and conservation policies were to be developed. Furthermore, Simmons (1980:282) remarked that, "...for a growing understanding of National Park use, the description and analysis of the changing realities of Park use must continue".

It is from this sentiment, and an interest in the way that use of Arthur’s Pass National Park may have been reconceptualised, that the current study stems. The aim has been to replicate some of the key questions used by Simmons, almost fifteen years ago, and to review some of his findings in a longitudinal time-frame. In addition to this, recent developments, such as the popularity of endurance events (the Coast to Coast race, and the Avalanche Peak Challenge), and increases in...
international visitors, provide intriguing avenues for research. The interest in endurance events, in particular, is of considerable significance. Such activities represent a major change in Park use from the traditional small group, passive pursuits, to mass-recreation of a relatively active nature.

1.3.1 The importance of the study
The current study is important for several reasons. For instance: (1) use-monitoring is a fundamental part of successful and informed outdoor recreation management; (2) longitudinal research is a notable omission in the New Zealand literature; and (3) the study adds to growing body of social research on recreation in natural environments.

1.3.1.1 The value of use-monitoring
At its most basic level, this study of summertime visitors to Arthur's Pass National Park has value as a use-monitoring tool. Many authors have emphasised the need to understand more about the outdoor recreationist (Devlin, 1976; Jackson, 1980; Simmons, 1980; Bignell, 1984; Rea, 1984; Lucas, 1989; Booth and Peebles, forthcoming). At a time when there is increasing pressure on resource-based recreation areas, due to growth in visitation and a diversification of use, it is vital that managers and planners are aware of changing patterns of national park use. In his study of Tongariro National Park, Devlin (1976:17) noted:

At a fundamental level park managers must know who their clients are, why they come to the park, what they get from their visit, their behaviours and impact while there and the relationships, if any, between these variables. Such information is seen as basic to policy decisions and management strategies if the preservation-use dilemma is to be resolved without undue compromise of either dimension.

1.3.1.2 The value of longitudinal research
One of the aims of the present study is to provide a comparison of the same recreation site over time. There is little doubt that the social, political and economic contexts in which outdoor recreation occurs, have changed significantly since Simmons (1980) produced the results of his study. Examples include major economic and social restructuring; a new management agency; the introduction of user charges; increased commercial use; and changes in nature of families and the role of women.
Additionally, national parks are large investments in terms of money, time and effort. A great deal occurs within their boundaries, of which we may know relatively little. A continued understanding is required in order to ensure that legislation is appropriate, and that the ideals of those to whom natural parks have been, are, and will be important, are successfully met.

Finally, the research has academic value in that it adds to a growing body of social research on people interacting with natural environments. The study considers the theoretical concepts of socialisation, time-deepening and modernity, while the range of disciplines from which the study draws includes sociology, geography, and psychology. This multi-disciplinary and inter-disciplinary feature, adds richness to the understanding of recreation in resource-based areas, and can help in locating lateral solutions to the complexity of problems which occur at the human-land interface.

1.3.2 The research problem

The fundamental research problem of the present study is based on the need to assess shifts in the balance between preservation and use in the context of broader social change. The conservation of natural areas also used for recreation requires a delicate balance between the polarised concepts of use and preservation.

In addressing this issue, the study examines the characteristics, motivations, satisfactions, perceptions, attitudes, and activities of summertime visitors to Arthur's Pass National Park in 1994. To this end the research objectives are to assess:

1. who visits the Park, when, how, and with whom;
2. why people visit the Park and what they do while there;
3. what attitudes and perceptions are held towards conservation, development, and other recreationists;
4. the sociological and psychological features which lead to, and develop from national park use; and
5. how the above dimensions have altered since Simmons' (1980) study.
In addition to these objectives, the study considers several wider issues. For instance:

* the nature and scope of change at a macro societal level, and its effect on the recreational use of Arthur’s Pass National Park;
* the concept of time-deepening as it relates to the use of resource-based recreation areas;
* the increasing challenges associated with growing numbers of overseas visitors to New Zealand’s national parks;
* the possible reconceptualisation of national parks as evidenced by new and innovative recreation activities, decreasing length of stays, increased commercialisation, and other effects of a recently restructured society.

1.4 Chapter summary and overview of the thesis

The ...use of protected areas in New Zealand [is] in the process of experiencing dramatic but as yet unknown changes as a result of structural and behavioural perturbations in the domestic and international tourist markets, severe, rapid social disturbances, new management and new managerial policies (Shultis, 1989b:343).

The inter-related nature of all aspects of human existence means that social, economic, political and environmental change inevitably leave no life-sphere unaffected. This chapter has proposed that, owing to a rapid and diverse set of technological and socio-political developments, the way in which national parks are conceptualised is in transition.

Against this back-drop of change, the present study seeks to replicate Simmons’ (1980) study, and review summertime visitation to Arthur’s Pass National Park. To this end, the research focuses on the characteristics, motivations, satisfactions, perceptions, attitudes, and activities of visitors during the summer of 1994. These features, of a relatively specific case study, are intended to inform the broader issue of preservation and use in protected natural areas of New Zealand, and address the new challenges with which its managers are now presented.

Following an introduction to the research site (Chapter 2), the literature review commences. This review comprises four chapters which include: national parks:
origins, development, and change (Chapter 3); uses and users of national parks
(Chapter 4); motivations and satisfactions (Chapter 5); and perceptions and attitudes
(Chapter 6). Following a detailed Methods section (Chapter 7), the Results and
Discussion (Chapter 8) incorporate both quantitative and qualitative data. An
integrative summary and synthesis precedes the final conclusions (Chapter 9).
Chapter 2

Background to the study site: Arthur’s Pass National Park

2.1 Introduction

This brief chapter provides an outline of the study location. After a short description of the history, landscape, and climatic features, the National Park is introduced. This is followed by a discussion on recreation in the Park. The remainder of the chapter considers factors affecting the National Park since Simmons’ (1980) study.

2.1.1 History

Located 153 kilometres northwest of Christchurch (by road), and approximately 100 kilometres southeast of Greymouth, Arthur’s Pass dissects the southern alpine chain at its mid-point. The European discovery of the Pass in 1864, and its subsequent development, was largely the result of enthusiastic attempts to link the South Island’s east coast towns with the gold-rich rivers of the west coast. Arthur’s Pass was considered by its namesake - surveyor Arthur Dobson (1841 - 1934), as the
most feasible and direct route over which to build a road between the two points. Since European arrival, the most significant human-induced developments in the area have included the completion of the West Coast Road (now State Highway 73) in 1865, and the Midland Railway, including the Otira Tunnel, in 1923.

2.1.2 The landscape

... a land of jagged skylines, tall snowy peaks and snowgrass-clad ridges, deep gorges, steep, bush-covered hillsides, sheer cliffs of angular black rock, high waterfalls, wide shingle riverbeds and rushing torrents (Burrows, 1974:7).

Arthur’s Pass is located at 920 metres above sea level. There are 21 peaks over 1800 metres in height within the Park’s boundaries, the highest of which is Mt. Murchison (2400m).

The vertical scale of the Arthur’s Pass region, impressing artists, mountaineers and roadside excursionists alike, is the result of on-going geological cycles of rock formation, uplift and erosion. One of the earth’s major plate boundaries (the Alpine Fault) lies just to the west of the Park, causing relatively frequent earthquakes in the area, the most memorable of which was in 1929. In addition to this, much of the basic shape of the land today is a direct legacy of the last ice age and many large glaciers grinding out of the main valleys of the area. Straight, u-shaped valleys are a feature of this region. A large part of the area’s scenic value is also the effect of deposits and eroded material (Dennis, 1986). Scree, river fans, flood plains and terraces are all characteristic of the eastern parts of the Arthur’s Pass region in particular.

2.1.3 The climate

Mountain ranges both attract and help to produce "bad" weather, and Arthur’s Pass is no exception. The prevailing winds are from the west and northwest and are usually accompanied by rain or snow. Easterly and southerly winds bring fine weather. While rainfall is high throughout the region, the west is wetter than the east. For example, Otira (16km northwest of Arthur’s Pass), receives 5000...

1 Arthur’s Pass was preferred over Harper Pass which Maori travellers and traders had used for at least the 500 years before European arrival (Johnston, 1977; Burrows, 1974).
millimetres of rain annually; Arthur’s Pass village, 4000 millimetres; and Bealey Spur (12km east of Arthur’s Pass), 1500 millimetres (Dennis, 1986). Temperatures in Arthur’s Pass village follow the extremes characteristic of mountain environments with the average daily minimum in July (winter) -2.5 degrees celsius, and the average daily maximum in February (summer) 17.5 degrees celsius (ibid.).

2.2 A national park at Arthur’s Pass

Although approximately 70 000 hectares of land in the Arthur’s Pass region was set aside for national park purposes in 1901 (Roche, 1984), the establishment of the Park did not occur until 1929. The official designation finally came about through the committed efforts of several key individuals and organisations, including: the ecologist Leonard Cockayne; founding Canterbury Mountaineering Club member, G.N. Carrington; lawyer and Arthur’s Pass resident Guy Butler; and the Christchurch Beautifying Association. In different ways, and for slightly different reasons (both recreational and preservational), these persuasive visionaries gained public and political support for New Zealand’s third national park.

At the time of the study (January, 1994), Arthur’s Pass National Park comprised approximately 95 000 hectares of rugged and mountainous land. The most significant additions to the area originally set aside in 1929, include the Otehake catchment and the Taramakau River (1938), and the Poulter and Hawdon regions (1950) (Dennis, 1986). The boundaries of the Park include the Taramakau River in the north, the Barron Range in the west, the Waimakariri River in the south, and the Poulter Range in the east (please refer to Figure 2.1).

2.2.1 Recreation in the Park

Perhaps in no other New Zealand national park is there such varied and readily-accessible opportunity for mountain enjoyment. From the icefalls and perpetual snow of the high peaks to the bush and river flats of the lower levels, there is endless scope for physical endeavour or quiet appreciation. Sealed roads on both sides of the mountains, a good rail service and well-maintained foot tracks put the beauties of the [Arthur’s Pass National] Park within everybody’s reach (Burrows, 1974:82)

2A recent addition (August, 1994) has included the Cox-Binser area into the National Park.
Figure 2.1: Arthur’s Pass National Park Map (Source: Dennis, 1986)
Arthur's Pass National Park is a highly accessible recreation destination, the key determinant of which is the combination of road and rail links to the area. In particular, the advent of the railway made the mountains much more accessible. As Dennis (1986:76) remarks "coaches had been bumping their way across the summit of Arthur's Pass for 25 years before anyone thought about ascending the surrounding peaks".

Following the development of improved transportation links, the recreational use of Arthur's Pass National Park increased. John Pascoe, a writer and early recreationist in the area, described the Easter of 1930 as a "Waimakariri invasion" (Dennis, 1986:78). During the 1930s, both the Christchurch Tramping Club and the Canterbury Mountaineering Club developed their memberships and use of the Park. Through the construction of several basic huts in the region, these clubs were instrumental in the development of what is now appreciated as a system of huts throughout Arthur's Pass National Park. However, most of the huts in the Park were not built for the purposes of recreation. Rather, the Arthur's Pass National Park Board built many of the huts during the 1950s and 1960s as part of its strategy to control noxious animals. The period of construction was continued and intensified by the Forest Service when it assumed responsibility for this control. The disbanding of the Forest Service has left the current land management agency (the Department of Conservation) with a network of seventeen huts, and ten bivouacs within the Park's boundaries. The most recent of these was constructed in 1981. In addition, there are several privately owned lodges in the Park. These include the ski-lodges at Temple Basin Ski Field and education lodges in the Hawdon Valley (DOC, 1995).

Tramping, climbing, and skiing have been the foremost active uses during the Park's recreation history. While the first ascents of peaks in the area occurred in the 1890s, the majority of activity has occurred since 1920. A small skifield with limited access has existed within the Park since 1933. In addition to these uses, the region is popular with visitors who have more passive intents. A range of short walks and day trips are the most frequently used areas today. A comprehensive visitors' centre, which includes a small museum, complements the spectrum of recreation opportunity in Arthur's Pass.
2.3 Recent background to the study site

Owing to the replicative component of the current case study, it is useful to outline the key features of development and change since 1980 which may have affected the site. These changes have been legislative, technological and recreational.

2.3.1 Legislative change

Since the study undertaken by Simmons (1980), the legislation which governs national parks has been revised. For instance, the National Parks Act (1980) has replaced the 1952 Act of the same name. While the purpose of the Act has not changed, the revision appears to have placed an increased emphasis on aspects of use (Perkins et al., 1993). Following more recent legislative changes (the Conservation Act (1987) and the Conservation Law Reform Act (1990)), the management and advocacy of conservation land has become the function of the Department of Conservation. This department comprises the conservation functions previously held by the New Zealand Forest Service, the Department of Lands and Survey, and various other government agencies.

The implications of legislative change for natural area management are likely to be broad ranging. Simpson (Pers. Comm., 1993) notes that managers now have a more diverse range of responsibilities which include ecology, recreation, and fire-fighting. On another level, Corbett (Pers. Comm., 1995) suggests that, as far as the new Department is concerned, the value of national parks has been reduced because they are only one small part of the agency’s mandate. Under the previous administration (Department of Lands and Survey), national parks had a higher profile with a separate National Parks and Reserves Division. The Department of Conservation is now responsible for national parks, conservation parks, reserves, and other conservation lands.

In 1980 (under the Department of Lands and Survey), the Park Headquarters at Arthur’s Pass had only the National Park to manage. The same base, now the Waimakariri Field Centre, is responsible for not only the National Park, but also the conservation lands in the Wilberforce Valley, Waimakariri Basin and Castle Hill, as well as Craigieburn Forest Park.
2.3.2 Economic and commercial developments

Economic and commercial developments affecting the Park’s use are several. For example, congruent with New Zealand’s recent economic ethos, a "user pays" policy has been adopted by the Department of Conservation. The consequences of this have included the introduction of increased charges for hut accommodation and route guides, as well as charges for (and the contracting out of) summer interpretation programmes.

Another development in the Park involves changes to the rail system - a consequence of increasing overseas visitation to New Zealand. Until the early 1980s, the train which travelled from Christchurch to Greymouth through Arthur’s Pass was a relatively inexpensive mode of transport used by many outdoor recreationists (Simmons, 1980). Since this time, the train service, now called the Alpine Express, has developed a commercial emphasis and, as such, reflects a more expensive, tourist opportunity. As Simpson (Pers. Comm., 1993) notes,

...what was the rattly old NZR [New Zealand Rail] train, which used to bring freight and The Press to Arthur’s Pass, is now marketed as a tourist train. Up to six hundred people at a time get off and spend time here.

Burgeoning international tourism to New Zealand during the 1980s and 1990s has meant an increase in national park visitors. In particular, this has led to greater use of front-country and amenity areas (Simpson, Pers. Comm., 1993). Figure 2.2 (overleaf) illustrates the growth in visitation to the Waimakariri Field Centre (National Park Headquarters and Visitors’ Centre) over the last decade. While the graph does not include visits recorded at other sites in the Park, the trend is thought to be representative of front-country areas in general.

Another consequence of increased overseas visitation has been recent development in Arthur’s Pass village. Although not in the National Park itself, the availability or absence of certain facilities and services in the village is likely to affect the number and type of visitors to the area. Developments since 1980 include the addition of a small liquor outlet, two cafe/restaurants, a craft shop, three small guiding companies, and a back-packers’ hostel. Two tourist developments are also planned
at locations directly adjacent to the eastern boundary of the Park\textsuperscript{3}. Charles (Pers. Comm., 1993) notes that tourism "...is now the major supporter of the village. Everything you look at here is supported by tourists or the travelling public in general".

Additional developments affecting Arthur’s Pass National Park relate to the changes to State Highway 73, which links the area with the major population centres of Christchurch and Greymouth. Realignment of the road is a continuous process which allows traffic to move at a faster rate. Furthermore, plans are well-advanced for the building of a viaduct through the Otira Gorge, eliminating the use of the current route which is subject to erosion and slips (Works Consultancy Services, 1991). Alterations such as these, as well as the changes to the rail system, continue to increase the accessibility of the Park.

2.3.3 Developments in recreation style

An important development since 1980 has been the emergence of multi-sport and endurance events within the Park. While "mountain running" events were held in the Park during the 1970s, these were generally club activities (Charles, Pers. Comm., 1993) and cannot be compared with the modern day spectacles which have become a feature of the recreational use of Arthur’s Pass National Park. The most

\textsuperscript{3} In addition to converting the homestead for accommodation, the developers of Grassmere Mountain Village plan to build a motel, ski lodge, and campervan park. The adjacent Cora Lyn Station will become a nature centre with a forty bed wilderness lodge.
well-known of the current endurance events is the *Coast to Coast* race, part of which takes place within the boundaries of the Park.

The *Coast to Coast* race has been held annually since 1983. As part of a contest which begins at Kumara Beach on the West Coast and finishes at Sumner Beach in Christchurch, approximately six hundred competitors traverse Goat Pass (between the Deception and Mingha Valleys) in February each year. Over the course of a decade, this particular event has developed from fewer than eighty runners "...wearing rugby shorts, ripped tee-shirts and riding Healing ten-speeds" (Simpson, Pers. Comm., 1993), into a specialised multi-sport race in which hundreds of competitors from around New Zealand and the world, employing sophisticated training and stamina techniques and advanced, light-weight equipment, vie for lucrative prizes. Other similar sporting events held in the National Park and surrounding regions include the *Avalanche Peak Challenge*, the *Temple Basil1 Triathlon*, and the *Awesome Foursome*. Pre-event training runs for both the *Coast to Coast* and the *Avalanche Peak Challenge* occur between the months of October and February.

In addition to the growth in numbers of people using the Park, the aforementioned events have increased awareness of the area and added a new dimension to the way back-country areas are used for recreation. The events include a commercial element not seen before in Arthur's Pass National Park. Participation also reflects a change from relatively passive, small group recreation, to one of high intensity and mass nature. These changes in use, like all new "technologies" have created debate about their appropriateness, safety, and impact. Some of these concerns are evident in the findings of the present study.

### 2.4 Chapter summary and conclusions

European interest in Arthur's Pass was initiated over 130 years ago by the desire to link Canterbury with the gold-rich regions of Westland. Since that time Arthur's Pass has witnessed many significant changes. Key features of its economic, political and social history have included the completion of the west coast road, the Otira road tunnel, and its designation as a national park. Since Simmons' (1980) study of
the area, developments within the legislation, commercial use, as well as innovations in recreation style have occurred.

The interest in, and concern over, the transport route of which Arthur's Pass is part, continues as plans unfold for another adventurous engineering feat. As an important road and rail link between the South Island's east and west coasts, a popular recreation and tourism site, and a region well-respected for its ecological value, Arthur's Pass typifies the balance implicit in New Zealand's National Parks Act (1980). The challenge of preservation, while allowing for access and use is a constant one for management and an underlying theme of this study.

Chapter Three specifically considers the dilemma of preservation and use in the context of the development of national parks in New Zealand.
3.1 Introduction

New Zealand's protected natural area system has provided for a wide range of uses for more than one hundred years. Over this period of time, with increased access, information, income, and leisure time, the use of national parks, in particular, has continued to grow.

Although national parks have a relatively high profile in conservation, recreation, and tourism in New Zealand, they are only one part of a much wider protected natural area system. In terms of a spectrum of opportunity in recreation, the system is well suited to the variety of needs and desires that recreationists typically hold. In addition to this, the system ensures that particular areas are maintained at a high level of naturalness.
This chapter begins with a brief outline the national park concept, and is followed by a specific examination of the New Zealand situation. This includes an introduction to the national park legislation and administration, and a discussion on recent developments in national park use.

### 3.2 Origins of the national park concept

The concept of national parks has its origins in the United States of America with the declaration of the Yellowstone National Park in 1872 (Thom, 1987; Shultis, 1989a). The concept was soon exported to New Zealand, and in 1887 Tongariro National Park was established. During the one hundred years that have since passed, twelve other areas of New Zealand have been set aside as national parks, representing approximately ten per cent of the country's total land area (for detailed descriptions of protected natural area development in New Zealand see Roche, 1979; Dingwall, 1981; Pearce and Richez, 1987; Shultis, 1989a; 1991; Devlin et al., 1990).

The underlying rationale behind the initial designation of national parks in the United States and in New Zealand is in dispute. For instance, some maintain that the American parks were part of a trend towards environmentalism, "...part of man's [sic] reaction to his own ruthless exploitation of nature" (MacEwan and MacEwan, 1982:3). Alternatively, others see the creation of national parks as less of a change in direction towards environmental protection, and more as monumentalism, or a search for national identity (Runter, 1979, cited in MacEwan and MacEwan, 1982). There is some support for this side of the argument, especially if one looks at the areas typically nominated for national park status. Often national parks were those areas that were thought to be worthless for any other type of use. For example, areas of potential exploitation for minerals, water or forestry, were excluded from consideration (MacEwan and MacEwan, 1982; Shultis, 1989a). Further, Shultis (1989a:91) observes that designated areas in America were dominated by mountains, hot pools, geysers and waterfalls, all of which were "...aesthetically favored by the public and most amenable to tourist development".

In New Zealand, the designation of areas as national parks does not seem to have been altogether different. Dingwall (1981), for example, suggests that ecological considerations played a secondary role in the establishment of national parks.
Certainly, only those areas which had no agricultural use were set aside (Pearce and Richez, 1987; Kearsley, 1990; Bührs and Bartlett, 1993). As was the case in both Canada and the United States, the tourism potential of hot pools as spa resorts served as a catalyst for the creation of national parks. Thus, according to Shultis (1989a), a major justification for the creation of the first national parks was the anticipated revenue generated by tourism.

On the whole, New Zealand’s national parks are not representative of all ecosystems and landscapes. Only some of a possible range of natural areas have been protected. For instance, nine of New Zealand’s thirteen national parks are in the South Island, and most national parks are in mountainous areas (Pearce and Richez, 1987; Kearsley, 1990). In addition to this, it is evident in the current legislation that extractive uses maintain predominance over national park and conservation principles. For example, the Crown Minerals Act (1991) has legislative superiority over the National Parks Act (1980), leaving New Zealand’s national parks potentially vulnerable to some forms of development.

3.3 The legislation: the source of the preservation and use paradox

Although the initial legislation indicates that national parks were established for public enjoyment and recreation (Shultis, 1989a), the current rationale behind the development of national parks in New Zealand is best summed up by the legislation which verifies their existence. Accordingly, The National Parks Act (1980, 4:1)

... shall have effect for the purpose of preserving in perpetuity as national parks, for their intrinsic worth and for the benefit, use, and enjoyment of the public, areas of New Zealand that contain scenery of such distinctive quality, ecological systems, or natural features so beautiful, unique or scientifically important that their preservation is in the national interest.

According to Davies (1987:77), the national parks of New Zealand "...are quite clearly to be preserved as far as possible in their natural state first, and provide for public enjoyment second". Despite Davies’ assertion, it is evident that the motives behind the National Parks Act are several and, to some extent, contradictory. For example, the use of the words preservation and use has been the topic of many debates about the dualistic purpose of national parks in New Zealand. However,
the two roles can also be seen as complementary. While it may be disputed by some preservationists, neither "preserving in perpetuity", nor public "benefit, use, and enjoyment" can stand alone. "Without preservation the asset will cease to exist and there is no benefit to the public in the future. Without the second, there is no point in the preservation" (Barrowclough, 1987:3).

The national park legislation demonstrates that the justifications behind the existence of national parks are several. The inclusion of scientific and intrinsic principles, alongside those of public use and enjoyment, are an example of the broad nature of intentions. The challenge that this presents to those responsible for the management of national parks is significant, but not unique to New Zealand (Jackson, 1987; Stankey and Schreyer, 1987). In particular, Dunn (1980, cited in Jackson, 1987:235) has noted that

... achieving a balance between preservation and utilization is one of the most difficult challenges confronting leisure resource managers.... The problems and issues are fundamental, profound, interrelated, and international.

3.3.1 The Department of Conservation

The organisation currently responsible for the management of the Conservation Estate is the Department of Conservation (DOC). This public agency came into existence in 1987, and is a product of the significant government department reorganisation of the 1980s. Legitimated under the Conservation Act (1987), the Department administers all public land and property that is protected for natural, scientific, historic and recreation purposes. The extent of its mandate is well summarised by Shultis (1989b:330).

The scope of [DOC's] domain includes national parks, maritime parks, conservation parks..., wilderness areas, stewardship areas, reserves, all indigenous flora and fauna, rivers, lakes, seabed to the 12 mile international limit, and historic places.

These responsibilities combined equate to approximately 30 per cent of New Zealand's total land area.

3.4 Developments in national park use

Adding to the established challenge of balancing both the use of national parks and their preservation, are new and rapid developments in recreational use. Of
particular relevance to the present study is the growth in tourism to national parks, and their use as venues for commercial sporting events.

3.4.1 Tourism in national parks

In 1993, international visitor arrivals to New Zealand passed one million for the first time (Collier, 1994). In 1994, this number had increased to 1.3 million (NZTB, 1994), and the New Zealand Tourism Board (NZTB) projection is two million international visitors by the year 2000 (NZTB, 1993).

More than half of all international visitors to New Zealand visit a national, forest or maritime park during their stay (NZTB, 1993). Furthermore, it is the southern national parks which appear to be most popular. According to Kearsley (1990:131) "...national parks in the southern part of the South Island dominate visitor number statistics and durations of stay for the entire national and forest park system of New Zealand". The New Zealand Tourism Board (1993), supports this claim, reporting that approximately half of the recorded visits to these protected natural areas occurred in the national parks of Fiordland, Mount Cook and Westland.

In terms of the proportions of overseas visitors at any particular national park site, figures obviously vary across time and locality. In his study of Arthur's Pass National Park, Simmons (1980) found that 25 per cent of visitors originated from outside New Zealand. Furthermore, Pearce (1982, cited in Shultis, 1989b), suggested that international visitors to Westland National Park comprised 60 per cent of total visits. Likewise, Kerr et al. (1986, cited in Shultis, 1989b), studying Mount Cook National Park, reported that 66 per cent of visitors were from overseas. A recent report issued by the New Zealand Tourism Board and the Department of Conservation (1993) indicated that the proportion of international visitors to several natural attractions (including Milford Sound, Mt Cook, and the glaciers at Franz Josef) comprised between 60 and 75 per cent of total visits. Shultis (1989b) suggests that high ratios of international visitors to domestic visitors, could lead to the displacement of the latter to other areas or seasons.

New Zealand's national parks appear to have become a focus for both recreation and tourism. Fitzharris and Kearsley (1987) claim that the needs of commercial tourism are outstripping the popularity of informal domestic recreation. The
traditional mountain land recreationist "...has been supplanted by a booming sector of the overseas tourist..." (Fitzharris and Kearsley, 1987:209). Importantly, the experiences sought by the new recreationists are often no longer satiated by passive observation from the roadside. Many overseas visitors seek action, adventure, excitement, and independence. As Shultis (1989b:334) notes, international visitors "...will engage in a greater percentage of active recreational activities, particularly those that are commercially organized". National parks, and other natural areas contain the opportunities for such experiences.

Given the mandate explicit in the Conservation Act (1987), and the balance implicit in legislation governing national parks, the Department of Conservation faces a difficult task. Faced with reduced budgets and working under an economic structure which increasingly demands cost recovery and profit making, DOC may be under pressure to compromise its role as an environmental protection agency.

Many authors have expressed opinions about the compatibility of tourism and conservation, both in New Zealand (Lucas, 1976; 1992; Davies, 1987; Fyson, 1992; Sage, 1995;) and overseas (Cohen, 1972; Budowski, 1976; Copock, 1982; Veal, et al., 1991; Valentine, 1993). Although this issue is simply an extension of the preservation and use paradox, viewpoints tend to be more strongly held because of the commercially oriented, organised, mass nature of some tourism to natural areas. Furthermore, in the New Zealand legislation a distinction is made between recreation and tourism. The Conservation Act (1987: 6e) directs the Department of Conservation with the responsibility to foster the use of natural and historic resources for recreation, and to allow their use for tourism. Fyson (1992:22) believes that DOC has gone

\[
\text{beyond its statutory role into what could be construed as encouraging tourism, by giving equal weight to tourism and conservation, and by looking at conservation from the point of view of tourism, rather than the other way around.}
\]

Similarly, Sage (1995:22) believes that increased cooperation between the Department of Conservation and the private sector to provide more hotels, lodges,
and activities on conservation land "... suggests a fundamental shift from the recognition of nature for its own sake and the protective ethos which established parks and reserves in the first place".

The way in which the Department of Conservation is interpreting its role is consistent with the government's interest in tourism, and current pressures to make up funding shortfalls. Recent collaboration with the New Zealand Tourism Board in producing a document outlining strategies for increasing the visitor capacity of the Conservation Estate, reemphasises the new direction of land management in New Zealand.

3.4.2 Sporting events in national parks

Another recent development contributing to the preservation and use dilemma, concerns the introduction and rise of sporting events in national parks. As part of a broader ethos of commercialism, there is evidence of a new theme in the use of national parks. Large scale, organised, profit-oriented sporting events are becoming familiar aspects of national park (and other natural area) use in New Zealand.

Of particular relevance to this study, is the development of the Coast to Coast race and the Avalanche Peak Challenge, both of which have sections which incorporate Arthur's Pass National Park (see Chapter 2). These events are multi-sport events which comprise a series of endurance activities such as mountain running, road cycling and river kayaking. While in 1983 the Coast to Coast race was one of the first events of its kind, other similar events are now held throughout the country. Examples include the: Mountains to the Sea; Xerox Challenge; Kepler Challenge; Tuatapere Wild Challenge; Wilmot Pass Mountain Run; Abel Tasman Coastal Classic; and the Abel Tasman Adventure. The Freshup Ironman event ran for ten years between 1980 and 1990.

Accompanying the rise in popularity of these events has been a degree of concern over their associated impacts. In particular, the physical impacts of large numbers of people using fragile environments over a short space of time has led to the introduction of some limitations as well as the implementation of impact monitoring. Although in developmental stages, the impact assessments have thus
far revealed few major problems (Thompson, 1988; Norton, 1989; Preston, 1993). However, the potential for damage has been noted.

Even less understood are the social impacts that these events may create. Given that back-country visitors may wish to experience some sense of solitude or privacy (dependent on avoiding large numbers of other users), the advent of large scale, intensive and competitive use has the potential to create significant dissatisfaction among traditional visitors. The extent to which this is occurring has been difficult to determine given the small number of studies and the variations in methods used.

On the whole, the brief assessments of social impact indicate that user concern is not high. However, studying the effects of the Coast to Coast race in Arthur’s Pass National Park, both Thompson (1988) and Norton (1989) noted an unexpected drop in tramper numbers on the Mingha - Deception route during the time of the event. This may indicate that some people are being displaced to other areas or different times. Following a survey of visitors who had previously used the route, Corbett and Espiner (1993) reported that 94 per cent of visitors knew the event was on, and 16 per cent claimed to have changed their recreation plans because of it.

Multi-sport and endurance events represent innovative uses of protected natural areas. On the one hand this style of use is simply an expression of the freedom such areas allow, and does not contravene the legislation that protects them. On the other hand, mountain running is typically associated with competition, commercialism and high numbers - concepts which strike at the heart of the values held strongly by many traditional users.

3.5 Chapter summary and conclusions

National parks are one component of a protected natural area system which has evolved over more than one hundred years. Within this period, the recreational use of national parks has developed significantly from the risky exploits of a small number of intrepid mountaineers, to include the more passive, scenic experiences enjoyed by hundreds of thousands.
According to the legislation, national parks have been set aside for the dual and purposes of preservation and use. This contradiction presents an awkward challenge to management, and one which is constantly developing as new and innovative styles of recreation enter national parks.

Part of the present study examines the new forms of use in Arthur's Pass National Park. In order to do this, it is first necessary to understand outdoor recreation participants in greater detail. Chapter Four describes national park use and users, and presents two approaches to understanding outdoor recreation participation.
Chapter 4

National Parks: use and users

National Parks have been created because it is in the interest of the Nation that they should exist. This presupposes that their benefits must extend to the nation as a whole (Barrowclough, 1987:1).

4.1 Introduction

National parks have a number of benefits. These include their capacity to help provide a sense of identity for those who use them. For instance, national parks can give us knowledge of who we are, what the country was like before us, what happened to it, and why (Park, 1991). But are these benefits shared by the nation as a whole? Who are the users, and just as importantly, who are the non-users of national parks?

Kelly (1980) identifies two waves in the research efforts directed at analysing recreation participation. The first of these has been to examine social demographic variables of visitors and relate these to levels and styles of use. A second wave, emerging in the 1970s, has attempted to identify socialisation and life-cycle factors which influence participation in recreation. Following a brief analysis of how use is
distributed across time and space, the remainder of this chapter will consider these
two broad approaches in the literature and review some of the general findings.

4.2 Distribution of national park use: where and when do people visit?

4.2.1 Spatial distribution of national park use
The North American research data suggest that outdoor recreation use is unevenly
distributed across time and space. For instance, Lucas (1989) found that 61 per cent
of user groups studied entered the area through only ten of the possible 87 entry
points. Two of the entry points accounted for 25 per cent of all groups entering the
area.

In New Zealand, the visitation to many conservation and recreation areas is also
concentrated into specific areas (Aukerman and Davison, 1980; Booth, 1989; Booth
and Peebles, forthcoming). These areas include visitors' centres, short walks, road­
ends, and amenity areas (such as day-shelters and picnic spots). In comparison,
"...far fewer visitors venture into back-country areas accessible via the track and hut
network, and fewer still reach the wilderness areas which contain no facilities at all"
(Booth and Peebles, forthcoming). This feature of natural area visitation is likely to
continue with projected increases in international visitors.

In addition to this, it is evident that particular parks and other natural areas attract
greater numbers of people than others. The reasons for differential drawing power
are poorly understood, but it is likely that one of the primary determinants of use is
the proximity of the area to urban centres (Lucas, 1989; Booth and Peebles,
forthcoming). Other factors, including ease of access, physical characteristics and
the proportion of international visitors are likely to influence levels of use (Booth
and Peebles, forthcoming). Additionally, Lucas (1989) suggests that publicity, the
number and range of attractions available, and the accessibility of recreational
opportunities will also result in different levels of use across national parks and
similar areas. Furthermore, he proposes that the "designation effect" may play a
part in visitation levels. Although evidence is scant, it is speculated that assigning
an area a name and/or identifying it as a "national park" or "wilderness" can
labelling an area as wilderness could draw visitors to the area whose experiences could have been satisfied in a much wider range of environments. In this way, labelling can concentrate visitors and their associated impacts in what are the most sensitive areas (ibid.).

4.2.2 Temporal distribution of national park use

National park visitation, and outdoor recreation participation in general, is also spread unevenly over time. Typically, studies reveal that use is heavily concentrated over the summer months, weekends and holidays. Simmons (1980), in his study of Arthur’s Pass National Park, found that one third of respondents visited the Park during the summer only. The Wellington Regional Recreation Study (Tourism Resource Consultants, 1988) reported that 63 per cent of activity participation occurred during the weekends and the holidays. Manning (1986) reports a virtually identical pattern in the North American literature, with the three summer months, weekends and holidays attracting the majority of use.

It is not surprising that the majority of recreation occurs during non-work times and when weather conditions are likely to be more stable. This is especially the case in some of New Zealand’s national parks where the extreme changes in weather, and the cold and dangerous nature of climatic and snow conditions dictate the styles of recreation possible.

4.2.3 Interim summary

The distribution of use and visitation to national parks is far from uniform in either a spatial or a temporal sense. Use is largely confined to a relatively small proportion of the available recreation area and to selected times of the week and year. The nature of use distribution has several implications which require the consideration of managers and planners of outdoor recreation places and experiences. For instance, when a large proportion of visitors is concentrated in the same place at the same time, the potential for crowding and conflict, as well as environmental impact is increased. Furthermore, recreation facilities which have been designed to cope with peak demand times, will generally be under-utilised at other times - resulting in inefficient resource use (Manning, 1986).
4.3 Social characteristics and other dimensions of use

Following a population-based study of Christchurch, New Zealand, Booth (1986) reported that 80 per cent of respondents had visited a national park at some stage of their lives. Furthermore, nearly 50 per cent were categorised by Booth as users of New Zealand’s national parks.\(^1\) Two nation-wide surveys undertaken around the same time report slightly lower visitation rates. For example, one study (Colmar and Brunton Research Ltd., 1988, cited in Shultis, 1989a) found that 32 per cent of the sample had visited a national park in the previous two year period, while the other (Shultis, 1987, cited in Shultis, 1989a) reported a 35 per cent visitation rate in the preceding one year. Cushman et al. (1991) report that 17 per cent of respondents to a national-wide survey had visited a national or forest park in the previous four weeks. These studies indicate that a substantial proportion of the New Zealand population use national parks.

The value of national parks and other natural environments is not limited to people who actively use these areas. For instance, Lucas (1989:356-358), identifies three varieties of indirect use of wilderness. He suggests that millions of people who may never visit natural areas, nevertheless gain satisfaction from experiencing such areas vicariously. His three types of value include option value, existence value, and bequest value. After surveying residents in Colorado, Walsh (1986, cited in Lucas, 1989) concluded that these three types of value were greater than the estimated value of all direct recreation use.

Although national parks and other protected natural environments may be of significant value to many people who never visit them, the majority of research has focused on those people who do visit. Many of the studies indicate that there are common characteristics demonstrated by participants in outdoor recreation. The next section reviews some of these findings.

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\(^1\) To qualify for user status, respondents were required to have visited a national park at least once during the past two years.
4.3.1 Social-demographic variables: the first wave

Predominantly used in the 1950s and 1960s, but still used today, the collection of demographic information was thought to be useful in predicting outdoor recreation behaviour. As Jackson (1980:193) states:

Essentially, the procedure has been to identify and describe groups according to participation in recreation in general and in specific recreational activities,... The groups have then been described according to significant differences in variables such as income, education, occupation... and so on, the ultimate aim being to predict future demand and participation rates more accurately.

The following characteristics contribute in some ways to the development of a national park-user profile.

4.3.1.1 Age

Many national park users tend to occupy the younger age categories. This is especially true of those who participate in more active outdoor recreation activities such as tramping, climbing, mountain biking, and kayaking. As age increases, the level of participation in active pursuits declines (Kelly, 1980). In a review of North American research, Manning (1986) reports a strong presence of "young to middle aged adults" at outdoor recreation sites. Lucas (1989) reports that between 30 and 57 per cent of North American wilderness users are 25 years of age or younger. A review of the various New Zealand studies reveals that the majority of (active) visitors to national parks and other outdoor recreation areas are aged between 18 and 35 (Devlin, 1976; Simmons, 1980; Booth, 1986; Cessford, 1987; Barker, 1989; Harris and Orams, 1990; Ward, 1993; Horn, 1994). Some New Zealand studies suggest that anglers, hunters and guided walkers extend the upper limits of the age spectrum by five or so years (Booth and Peebles, forthcoming).

While early studies (Neighbour, 1973; Mercer, 1976, cited in Simmons, 1980) concluded that age was the most important factor affecting outdoor recreation participation, more recently this view has been challenged. As will become evident later in this chapter, it is increasingly likely that it is life-cycle stage rather than age per se that is the important factor in determining outdoor recreation participation.

4.3.1.2 Sex

Although specific ratios vary between activities, it is clear that men out-number women in outdoor recreation. This is especially the case in national parks, and in
particular, active pursuits. Lucas (1989), writing about the North American wilderness, reports that, although once a male domain, now 25 per cent of visitors are female. Reviewing the New Zealand literature, Booth and Peebles (forthcoming) report that more than 90 per cent of hunters, and 80 per cent of anglers and jet boaters are male. A number of studies of trampers have reported a slightly more even representation of women (approximately 30 or 40 per cent) (Devlin, 1976; Simmons, 1980; Booth, 1986; Barker, 1989; Ward, 1993; and Horn, 1994). Visitation in general, rather than participation in specific activities, demonstrates an almost even representation of men and women.

Booth and Peebles (forthcoming) conclude that women may well be participating in as many outdoor recreation pursuits as men, but not in such large numbers. They also draw attention to possible methodological biases in the collection of gender data, suggesting that women may be under-represented in user surveys because of the male leader bias. This is a field-related issue which has been raised by Manning (1986) in his review of studies undertaken in North America. Researchers have noted that on-site studies tend to focus almost exclusively on the group "leader". This was found to have significant consequences in one study (Jubenville, 1971, cited in Lucas, 1989), where it was demonstrated that party leaders were more likely than other group members to be male, highly paid and educated, and from professional and technical occupations. In New Zealand, Devlin (1976) suggested that some women visitors surveyed gave their questionnaires to their male partners to complete, therefore creating a male leader bias.

4.3.1.3 Income

Income is a factor often thought to be positively related to participation in recreation. However, research suggests that the relationship is curvilinear (Lucas, 1964, cited in Manning, 1986). It is postulated that, once an income level is reached sufficient to support most recreation activities, it becomes less important relative to other variables (Manning, 1986). It should also be considered that high income is related to high occupational status and educational attainment, factors which may be stronger determinants of outdoor recreation participation than income per se. As Lucas (1964, cited in Manning, 1986) suggests, money does not form taste, but rather, limits or allows its expression. Furthermore, Bultena and Field (1978), examined elements of socio-economic status and found that while education and
occupation retained their statistically significant relationship with national park visits, income did not (Bultena and Field, 1978; Bultena and Field, 1980).

Visitors to national parks and wilderness areas in New Zealand and the United States may well have higher than average incomes (Simmons, 1980; Barker, 1989). However, this does not imply that income in any way defines the outdoor recreationist. Participation is more likely to be influenced by related factors such as occupation and education. As Burdge (1969, cited in Jackson, 1980:194) has suggested, "...education tends to broaden one's perspective, and the income from better paying jobs allows opportunities to explore a variety of leisure pursuits". The ambiguity surrounding the influence of income on outdoor recreation participation has led some researchers (Jackson, 1980; Kelly, 1980) to conclude that "...it is only when the distance separating potential users from specific resources represents significant monetary and time costs that socio-demographic variations appear" (Jackson, 1980:194). In many cases, researchers do not request information about income. It is felt that more can be understood from requesting information on education and occupation, than the sensitive issue of personal income details. Furthermore, the ambiguity which surrounds the differences between personal income and household income can distort the findings.

4.3.1.4 Occupation

People in professional and technical occupations, as well as students, are over-represented among users of resource-based recreation areas. This is true of both the findings in North America (Bultena and Field, 1978; 1980; Manning, 1986) and in New Zealand (Devlin, 1976; Simmons, 1980; Barker, 1989; Harris and Orams, 1991; Ward, 1993). One study (Burdge, 1969, cited in Manning, 1986) found that people classified in the two highest occupational levels, had significantly higher participation rates in 87 per cent of the outdoor recreation activities studied. Lucas (1989) reports that 20 to 40 per cent of working age visitors are in professional or technical occupations.

In New Zealand, both Barker (1989) and Ward (1993) classified 40 per cent of respondents as being from professional occupations, and Harris and Orams (1990), using occupation as the sole indicator of socio-economic status, found that parks use was dominated by those of middle and upper socio-economic status. Earlier studies
in New Zealand also found an over-representation of professional and semi-professional employees, and an under-representation of those classified as "unskilled" or "working class" (Neighbour, 1973; Devlin, 1976; Simmons, 1980; Booth, 1986). For instance, Simmons (1980), in a site-specific study of visitors to Arthur's Pass National Park, found that nearly 65 per cent of respondents were of professional or semi-professional occupational status. This group represented just 20 per cent of New Zealand workforce at the time. Conversely, while "skilled" and "unskilled" workers constituted 78 per cent of the New Zealand workforce, this occupational group comprised less than 17 per cent of the respondents in Simmons' study.

4.3.1.5 Education
Highly educated people are over-represented in use studies of outdoor recreation areas. For example, Booth and Peebles (forthcoming) review New Zealand studies in which as many as 50 per cent of outdoor resource users have full or part time tertiary qualifications. In addition, Ward (1993), in a study of Tongariro National Park reports that approximately 70 per cent of visitors had completed, or were completing, tertiary education. In his study of Arthur's Pass National Park, Simmons (1980) found that 46 per cent of his respondents had full or part university degrees. At the time, such educational attainments represented approximately six per cent of the general population (Simmons, 1980). These findings led Simmons to conclude that "...educational level is the factor which distinguishes park users most strongly from the rest of society" (Simmons, 1980:212).

These findings tend to mirror the North American research experience (Bultena and Field, 1978; White, 1975, cited in Jackson, 1980; Lucas, 1989; Manning, 1986). In his outdoor recreation review, Manning (1986) presents 15 studies undertaken between 1964 and 1980, 13 of which classify educational attainment as "high".

4.3.1.6 Visitor origin
Finally, one visitor characteristic, which some New Zealand studies have monitored, is originating region or country. This is a variable of increasing relevance as overseas visitors to New Zealand continue to arrive in large numbers. According to statistics, over half of all international visitors to New Zealand visit a national, forest or maritime park while in New Zealand (NZTB, 1993). Research has demonstrated
that the relative proportion of overseas visitors in some national parks and other resource-based recreation sites, now exceeds that of local visitors (Pearce, 1982, cited in Shultis, 1989b; Kerr et al, 1986, cited in Shultis, 1989b; NZTB and DOC, 1993). The New Zealand Tourism Board estimates a doubling of current international visitor arrivals by the year 2000 (NZTB, no date). Given the priority of natural areas on the itineraries of many visitors, national parks and other protected areas may well be placed under pressure over the next five to ten years.

4.3.1.7Summary and interim conclusion

A significant amount of attention has been given to the socio-demographic characteristics of visitors to recreation areas. Despite their descriptive value, they have not been very successful in helping explain or predict recreation behaviour (Kelly, 1980). Findings indicate that factors such as age, gender, occupation, education and income all contribute to levels and types of participation, but only explain about 30 per cent of the variance (Mueller and Gurin, 1962, cited in Manning, 1986). As Booth and Peebles (forthcoming) suggest,

"...although users with certain demographic characteristics may dominate an activity or make more visits to an area than others, these users are not the only visitors to outdoor recreation areas".

Certain age, occupation, education, and income characteristics, which typify the outdoor recreationist in many studies, are also typical of thousands of people who never visit such areas (Devlin, 1976).

The dissatisfaction with socio-economic and demographic information has led to a change in emphasis in many studies. More recent work has focused on elements of life-cycle, socialisation, the influence of the social group, and culture as fundamental contributors to understanding the behaviour of users and patterns of use. A consideration of these social contextual elements, combined with knowledge of individual attributes, may well be the most appropriate and successful in explaining recreational behaviour.

4.3.2Socialisation and life cycle stage: the second wave

This section will consider the research associated with what Kelly (1980) has termed the "second wave". This research represents an attempt that first emerged in the late 1960s and early 1970s, to identify socialisation and personal history variables
that contribute to an understanding of individual differences in recreation participation. To this end, the section discusses the possible influences of social group, culture, and life-cycle stage on leisure and recreation behaviour.

4.3.2.1 Socialisation

Socialisation is a term primarily used by sociologists to describe the process through which individuals become functioning members of a social group. Common themes include reference to the learning of norms, values, and appropriate behaviour (Elkin, 1960; Berger, 1963; White, 1977; Bilton, et al., 1981). The process, however, is not one which ends with childhood. For instance, White (1977:1) emphasises the on-going nature of the process and suggests that socialisation "...is more than just formal education for it includes the acquisition of attitudes and values, behaviours, habits and skills transmitted not only in schools, but through the family, the peer group and the mass media". The institutions identified by White are generally accepted as the four primary agents of the socialisation process. While these agents may have their most profound effect on us as children, there is an element of continuity likely as new social situations, life stages and circumstances develop.

In the same way that socialisation has been used to describe the way in which people internalise values and beliefs about religion and work, the concept can also be applied to how individuals develop their leisure and recreation preferences. Kelly (1974:182), for example, states that "acquiring the skills, experiences, relational norms, equipment, attitudes and frequently the taste required for participation in many kinds of leisure activities is part of the socialisation process". The importance of socialisation in specific recreation settings is further emphasised by Simmons (1980:152) when he suggests that,

\[\ldots\text{once instilled, users both act by these norms and pass them on to subsequent users. Thus the establishment of 'environmentally protective' norms becomes crucial as Park use rises.}\]

Various researchers have attempted to study the effect of childhood experience on adult participation in leisure and recreation (Patrick, 1945; Burch, 1969; Yoesting and Burkhead, 1973; Kelly, 1974; Yoesting and Christensen, 1978; Carlson, 1979; Crawford, Godbey, and Crouter, 1986; Colton, 1987; McGuire, et al., 1987). The
majority of these concluded that leisure time activities of adults correlated with those of their childhood.

In addition to developing attitudes and values towards leisure in general, researchers have attempted to demonstrate how individuals are socialised into specific activities (Hoff and Ellis, 1992). While levels of participation in recreation and leisure appear to be related between childhood and later life, the activities pursued do not necessarily remain the same. Studies have shown that as little as 40 per cent of activities participated in as adults are carried over from childhood (Yoesting and Burkhead, 1973; Kelly, 1974; Yoesting and Christensen, 1978). These findings have led subsequent researchers (Kelly, 1982; McGuire et al., 1987) to believe that a childhood determination model is too simplistic. The suggestion that leisure skills are learnt in the early years of life and then maintained into adulthood has given way to a life career model which views leisure development as continuous. Throughout the life cycle, leisure and recreation activities are adopted and deleted on the basis of a variety of factors or events occurring during specific life stages.

McGuire et al. (1987) provide further explanation of the relationship between childhood activity and adult leisure participation. They suggest that, while some individuals strongly reflect childhood activities in their current participation, others continue to alter and replace patterns as new activities are learned. The results of this study imply that both a childhood determination model and a life career model can exist in parallel as partial explanations of the effects of socialisation on leisure behaviour.

4.3.2.2 Culture, class and community

Inextricably linked to socialisation, culture plays a significant part in determining recreation styles and preferences. As Godbey and Jung (1991:39) point out, "...the meaning, use, and incidence of "free time" varies systematically with various aspects of culture and with stages of cultural development".

Studies undertaken overseas have found that people from some cultures visit national parks and other natural areas more often than others. For instance, Cheek et al. (1978, cited in Lomax, 1988) reported that white people were twice as likely as
black people to have visited a national park. Meeker (1984), attempting to interpret such findings, suggests that national parks are western expressions of cultural values that are not necessarily shared by other ethnic groups. Moreover, he suggests that owing to associations between the land and slavery, the land is seen by some as "...a place of punishment and imprisonment..., not the source of liberation that white settlers found" (Meeker, 1984:132). Furthermore, Lee (1972) has suggested that people whose experiences are limited to "the urban ghetto" may perceive highly natural settings as disordered, frightening places.

New Zealand studies have also identified some cultures as under represented in national parks. Lomax (1988), in her population-based research, found that fewer Maori respondents visited a narrower range of national parks than the general population findings reported by Booth (1986). In addition, Harris and Orams (1990:67) found an "...apparent under-representation of Polynesians using regional parks". By suggesting that poor access to information and certain modes of transport (on foot and by bus) not included in the sample may have contributed to their result, the researchers imply that the explanation may lie in socio-economic circumstances. Conversely, Lomax (1988) implies that the low level visitation rates associated with Maori are culturally bound and attributed to heritage. In a similar vein, others (Park, 1991; Bührs and Bartlett, 1993) suggest that Maori people have a different conception of the land, as they do not see the land as separate from other parts of their lives or themselves.

The type of community in which one lives has also been shown to have an influence on outdoor recreation participation. For example, Bultena and Field (1980) examined structural effects in national park visitation and found that working class people living in a predominantly middle class area were more likely to visit national parks than their class counterparts living in a predominantly working class area. Conversely, middle class people were found to have less frequent visitation behaviour if they lived within a working class population. Thus, irrespective of income, educational status and occupation, people recreated in a similar fashion to those around whom they were living. Writing on the family and recreation, Carlson (1979:444) provides further support when he states that "class differences result in qualitative as well as quantitative differences in leisure patterns. The life-styles of various classes strongly influence their forms of recreation".
Culture, class and community are likely to be significant components shaping recreation choice and opportunity. For instance, according to Lee (1972:82), the extent to which national parks are seen as areas where individuals can be at leisure, be "themselves" and feel "free", may depend on the extent to which "... a scheme of order is shared with others similar enough to themselves to be able to take for granted many everyday normative constraints". Lee's (1972) study demonstrated that areas reserved for outdoor recreation are not necessarily perceived as free spaces by all social groups. Rather, this perception typifies the views of those with higher mobility and income who take for granted the normative order they share.

4.3.2.3 The influence of specific social groups

The process of socialisation plays an important part in determining both levels and styles of participation in recreation. More specifically, there are key social agents which assume this role at various life stages. These groups include the family, friends (peers), and the school. This section will review the significance of such groups and demonstrate that the social group is an important influence in the formation and on-going development of recreation styles and choices.

Individual behaviour is clearly influenced through the mediums of culture and community and the process of socialisation. Thus, people typically visit outdoor recreation sites in groups rather than alone (Cheek, 1971, in Yoesting and Burkhead, 1973; de Joux, 1985; Kelly and Godbey, 1992). In New Zealand, a survey of Wellington's regional parks (Tourism Resource Consultants, 1995) reports that 75 per cent of visitors were not alone in their recreation. The most prominent groups were "family" and "family and friends".

The social context in which individuals carry out their lives should not be ignored when attempting to explain leisure preference and participation. As Bultena and Field (1980:222) point out, earlier researchers often adopted "...atomistic perspectives in which 'individual-level' variables have been emphasized as causes of participation to the virtual exclusion of contextual or 'system-level' variables". Burch (1969) was one of the earliest writers to put forward a concise thesis on the specific influence of social groups on individual recreation patterns. In his personal community hypothesis he suggested that outdoor recreation participation is largely a function of the groups in which one operates. Burch's work was based on research
on wilderness and auto campers and was recognition of the fact that recreation activity is "...significantly filtered and re-directed by the social circles of workmates, family and friends" (Burch, 1969:138).

The influence of family and friends on individuals' recreation participation is strong (Burch, 1969; Carlson, 1979; Kelly, 1980; Holman and Epperson, 1984; Colton, 1987; Labone and Wearing, 1991; 1994). The strength of these agents is articulated by Kelly (1980:133) when he suggests that understanding a family's leisure history "...may predict adult participation better than family income, social status, and employment". In an earlier study, Kelly (1974:187) found that about 70 per cent of recreational activities were learned with the family, while Stankey and Schreyer (1987), reviewing wilderness research, report that half of all participants visit with families.

In an Australian study Veal (1991, cited in Labone and Wearing, 1991) found that families were the largest users. Thirty-seven per cent of respondents were visiting parks with their families only, while a further 25 per cent were with family and friends. According to Labone and Wearing (1994), family use of national parks will continue to dominate as women develop stronger roles in family leisure decisions and choose national parks as destinations in which their preference for social interaction can be accommodated.

In addition to the family, friends have an important influence over recreation choices. For instance, Burch (1969) found that a large percentage of campers in all styles had close friends who participated in similar activities. Although he does not suggest a causal or directional relationship, Burch believes that it is "...reasonable to assume that this circle of close friends constrains an actor to remain within a given style of leisure. To opt out of a leisure style may also mean leaving a particular circle of close friends" (Burch, 1969:142). Hendee (1968, cited in Colton, 1987) also found that many wilderness users had other wilderness users as close friends. Colton (1987:354) concludes that "through interaction with these friends, wilderness meanings and normative behaviour patterns could be reinforced for continued wilderness use and support".
The research in New Zealand supports the notion that family and friends are important socialising agents in the adoption of recreation styles. A review of the literature in both New Zealand and overseas led de Joux (1985:33) to conclude that "... the family is the most important leisure group in Western Societies for those who live in families...". Furthermore, de Joux (1985:38) points out that if socialisation for leisure is a life-long process, then this socialisation "...is significantly influenced by the family... at most stages of the life cycle".

Specific New Zealand case studies are not abundant, yet the patterns are clear. In a survey of tramping club members, Craig (1980, cited in de Joux, 1985) found the family, and particularly the father, to be the primary influence in initiating the activity among members. While family was the most influential in introducing individuals to outdoor recreation activities, both Simmons (1980), and Simmons and Devlin, (1981) found that friends were the most influential on continued use of specific national and forest parks.

4.3.2.4 The influence of life-cycle stage
In addition to the various influences on recreation participation identified above, an individual's position in the life-cycle is also believed to be important. Around the three foundation themes of the "life course" (preparation, establishment, and culmination) (Kelly and Godbey, 1992), the human life-cycle can be segmented into various significant stages, each of which is identified by physiological and or psychological changes or developments. For example, a typical life course for an individual could comprise infancy, childhood, adolescence, young adulthood, middle age, later maturity and old age (Atchley, 1975). In Western society, each of these stages is synonymous with particular roles and expectations such as school, marriage (or similar commitment), and retirement from paid employment. Within the life course model identified by Kelly and Godbey (1992), there is a variety of concurrent and intersecting careers, some of which have important implications for leisure and recreation and are discussed below.

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2 These major periods do not divide neatly into equal numbers of years. However, prolonged education, earlier retirement and longer life-spans have meant that the three periods are becoming more equal in length. The life cycle can be "... roughly divided into 20 - 30 years of preparation, 30 - 40 years in the workforce, and 25 - 35 years of "official" later life" (Kelly and Godbey, 1992:254).
The most influential work on life cycle stage and leisure patterns is that of Rapoport and Rapoport (1975). These researchers were particularly interested in the influences of the family in the "...individual’s ‘life line’ of development, and in the way different spheres of influence interact at different times in the cycle" (Rapoport and Rapoport, 1975:19). Of particular interest to the Rapoorts were the interrelationships between the three life spheres of work, leisure, and family. According to the Rapoorts, individuals combine these elements in characteristic ways to form whole life-style patterns (ibid.).

The family life cycle is characterised by significant events or "critical passages" (Witt and Goodale, 1981) through which many families pass. Examples of such events include marriage, childbirth and children leaving home. These life phases are thought to have important effects on leisure and recreation. Different stages in the family life cycle bring different expectations and provide both opportunities and constraints. Although not causal, there is likely to be a correlation between position in the family life cycle and the leisure activities undertaken. From their study of the relationship between barriers to leisure enjoyment and family stages (Witt and Goodale, 1981:47) conclude that the data "...reinforce the potential value of family stage as an explanatory and predictor variable".

In particular, the family stages of marriage and early parenthood seem to be the most influential on leisure styles and recreation participation. For example, Horna (1989:233) found that "...the major turning point in married people’s recreation and leisure pursuits occurs... with the arrival of the first child". Furthermore, Holman and Epperson (1984) claim that marriage and parenthood move most leisure activities into the home. This is especially true for women who, according to Horna (1989) are more involved in the family domain than their male counterparts who tend to make more time for their individual recreational pursuits. Bollman et al. (1975, cited in Holman and Epperson, 1984), claim that the presence of a pre-school child is a greater inhibitor of recreational activity than financial resources.

In general terms, the findings from the New Zealand research tend to corroborate the findings from overseas studies. For example, a Wellington study which examined the transition of young women between school, work, and marriage to the first year of motherhood, concluded that "...no other transition had such a major

Furthermore, studies undertaken in national parks have often found that there are distinct differences between active and passive users with respect to the presence of children. For example, while Devlin (1976) found that most visitors to Tongariro National Park were with family groups, only one quarter of those using the huts (trampers) were with families, and there were very few children. Simmons (1980) reports that although 60 per cent of visitors to Arthur's Pass National Park had come with their families, there was a noticeable absence of "very young" children. Additionally, Cessford (1987) in a study of the Greenstone and Caples valleys in New Zealand's South Island, found that couples with pre-school children comprised only five per cent of his tramper sample. Finally, in a population based study of national park use, Booth (1986) found that, overall, there was no difference between users and non-users in the presence of children in the home. However, the most active users were less likely to have children in the home.

4.4 Chapter summary and conclusions.
Chapter Four has examined a variety of aspects associated with leisure and recreation participation, with an emphasis on national park use. Two "waves" of research have been reviewed, including simple social demographic studies and the multi-dimensional concepts of socialisation and family life cycle. From this review it can be stated that participants in outdoor recreation are predominantly young, often male, and of high socio-economic status. However, these factors alone do not distinguish national park visitors from non-visitors. More recent research has examined aspects of life-cycle and socialisation and their influences on outdoor recreation participation. Consideration of these social contextual elements, combined with knowledge of individual characteristics, may well be the most appropriate and successful approach to explaining outdoor recreation behaviour.

While this chapter has reviewed some of the sociological features of national park use, Chapter Five considers psychological aspects. In particular, motivations, satisfactions, and expectations are examined.
5.1 Introduction

The motivations and satisfactions of individual recreationists have been studied in an attempt to further the understanding of leisure and recreation behaviour. In this section the concepts of motivations and satisfactions will be introduced, their applicability to the subject matter will be discussed, and the relevant findings described.

5.2 Defining motivations

Motivation is the term given to the stimulus or drive that precipitates an action or a behaviour. The study of motivation has been described as both basic and controversial in psychology (Iso Ahola, 1989). This is because motivations cannot be observed, and because no single theory can explain all human motivation. However, psychologists do agree that a motive is a factor that arouses and directs human behaviour (ibid.).
5.2.1 Intrinsic and extrinsic motivations

It is important to distinguish between intrinsic and extrinsic motivations. Intrinsic motivation refers to the engagement in an activity for its own sake rather than any extrinsic reward. That is, "for the fun of it". Extrinsic motivations refer to behaviours initiated by the expectation of some "end", or external reward. For example, "...I have to play this game to get the trophy" (Iso Ahola, 1989:255).

According to Iso Ahola (1989:255), "...intrinsically motivated or self-determined behaviors constitute the core of what is called leisure...".

Pearce (1993:121) also differentiates between the two sources of motivation. He describes intrinsic motivation as "... behaviour conducted for its own sake whereas extrinsic motivation is behaviour under the control of outside rewards". The source of motivation (that is, from within or from the outside) has important implications for the enjoyment or satisfaction achieved from participation in recreation activities. Fielding, Hughes and Pearce (in Press, cited in Pearce, 1993:122) illustrate this point in a study of visitors to Ayers Rock in Australia. Over three hundred people who had climbed the Rock were classified as either intrinsically or extrinsically motivated on the basis of a panel of questions.

Those who were extrinsically motivated were highly satisfied if they reached the summit and very disappointed if they failed to make it all the way. Intrinsically motivated climbers were equally satisfied with the climb whether they made it to the top or only completed a small segment of the total climb.

The distinction between intrinsic and extrinsic motivations is an important part of understanding the different reasons why people recreate in the outdoors. In the present study such a distinction will be used to illustrate the differences between participants in traditional and new activities in Arthur’s Pass National Park.

5.3 Motivation research and outdoor recreation

A significant influence in the development of motivations related to outdoor recreation has come from the Behavioural Approach within psychology. This approach maintains that most human behaviour is goal-directed or aimed at the specific satisfaction of need (Manning, 1986; Pearce, 1993; Collier, 1994). The most commonly used example of this approach is Maslow’s (1943) hierarchy of human needs, in which needs range from lower level physiological and safety requirements
through to higher order needs of belonging, esteem and self-actualisation. According to this approach, the impetus behind all behaviour is unsatisfied needs.

The factors that direct behaviour, which, depending on the theory applied, may be drives (drive theory), instinct (instinct theory), attempts to achieve an optimal level of arousal (Iso Ahola, 1989), or to reduce tension (psychodynamic theory), are not necessarily conscious processes (Moore, forthcoming). In fact, it appears as though we have little control over motives in that they are either physiological mechanisms employed to correct a temporary imbalance in the body (such as hunger or thirst), inherited behaviours, or "forbidden" desires which have been repressed and therefore produce psychological tension (ibid.). The suggestion that much of what directs human behaviour may be subconscious has significant implications for those interested in studying the motives of outdoor recreationists. If the people themselves cannot explain why they are participating in particular activities or experiences, how can researchers make any assessments?

In a pure psychological sense, motivations refer to deep, long-term factors which determine a broad range of behaviours (Moore, forthcoming). For the majority of outdoor recreation researchers, the aim has not been to elucidate these. In fact, according to Iso Ahola (1989) there are no leisure "needs" in the same sense that there are needs for hunger and thirst. However, on the basis that leisure provides an important role in balancing and in improving the quality of people's lives, it can be argued that there is a social need for leisure.

Rather than motives or needs, outdoor recreation researchers usually examine the reasons for visiting a particular area or taking part in an activity. Reasons can be considered as "...consciously held beliefs, often of short term duration and specific in nature, about the causes of one's behaviour" (Moore, forthcoming). Although the majority of recreational research is clearly focused at this level, the tendency is to refer to "motivations". Other terms (such as "needs", and "expectations") are also often used interchangeably, and without acknowledgement of their distinct meanings in the psychological literature (ibid.). For the sake of consistency, both within this review and within the comparison of the present research and Simmons (1980), the term "motivations" will continue to be used. This is done only after the
acknowledgement that in most cases it is not strictly motivations about which researchers are reporting.

5.4 Specific findings of the motivation research

In his review of motivations for outdoor recreation, Manning (1986) notes that an integration of the many studies is made difficult by the variation in approach and methods of analysis. Nevertheless, Manning does believe that as a whole, the studies demonstrate that leisure activities do have underlying meanings to those participating. Furthermore, in their discussion of wilderness motivations, Stankey and Schreyer (1987:254) conclude that, although specific motivations will vary by individual, place and activity, "...the collective package of motives identified in research is most striking in terms of its similarity rather than its difference". The following section provides a brief review of the central results of recreation motivation research.

In an early study of the motivations underpinning outdoor recreation Bultena and Taves (1961, cited in Stankey and Schreyer, 1987) found that visitors were seeking opportunities to struggle with the elements, to get away from artificial settings, and to explore new experiences. Furthermore, the Outdoor Recreation Resources Review Commission's (1962) study reported a wish to escape from the routines and crowds of daily life ("exit civilisation"), and a desire to enjoy the beauties of nature ("aesthetic/religious") as the strongest motivations (Manning, 1986).

Similarly, Gray (1970, cited in Collier, 1994:247), writing on motivations for pleasure travel, notes that the central motivating force is "...the desire to be elsewhere and to escape, however temporarily, the routine constraints and stresses of everyday life". These comments might also apply to explaining participation in some outdoor recreation activities, although in these cases the type of escape is usually more specific (for example, to escape the urban environment).

The importance of "escape" to many pleasure travellers and to recreationists is to be expected. According to Iso Ahola (1989:259), the notion of escape is a fundamental aspect of leisure motivation. "As long as we formally and structurally separate leisure from work..., we automatically build the escape dimension into leisure".
Another commonly reported motivation in studies of North American Wilderness users is the need for solitude and/or privacy (Lucas, 1964; Catton, 1969, cited in Stankey and Schreyer, 1987). The studies reviewed by Stankey and Schreyer suggest that the need for solitude in wilderness means more than simply being alone. As Twight and others (1981, cited in Stankey and Schreyer, 1987:252) have noted, people seeking solitude may well be "...in the presence of others but seeking seclusion, anonymity, or shared intimacy". Hammitt and Madden (1989:300), studying wilderness dimensions of privacy, found that while being "together alone" may appear paradoxical, it emphasises that solitude has multiple or varied dimensions. In their study, Hammitt and Madden (1989:296), found that for wilderness users, "...tranquillity and peacefulness of the remote environment and an environment free of human-generated noises...", were the two most important privacy items. The least important dimension of privacy was the individualism form of privacy. A more recent Canadian study (Friedrich, et al., 1992), reports similar results.

While people may value sharing the wilderness experience with others, social reasons for wilderness visitation are often not high in priority in the North American research (Stankey and Schreyer, 1987). The clearest reasons for wilderness use appear to be based in escapism, appreciation of the natural environment and the pursuit of solitude. Although some motivations are reported more often than others, it is important to note that most behaviour (and recreation participation included) is multi-motivated, or over-determined (Stankey and Schreyer, 1987; Pearce, 1993). People will often have more than one motive operating in a particular social setting.

Although motivations and satisfactions for outdoor recreation have rarely been the focus of research projects in New Zealand (Moore, forthcoming), the findings available do tend to reflect the North American research. According to Moore, researchers in New Zealand "...have repeatedly reported 'escape', 'nature', 'relaxation' and 'social' reasons for recreation in a variety of settings and activities". For example, Aukerman and Davison (1980:76), following focus group discussions with trampers conclude that "...the prime need fulfilled was contrast to or escape from, everyday working or urban life". Devlin (1976) and Simmons (1980) both draw parallels with the findings of the ORRRC Study (1962) in North America,
reporting the motives of "exit civilisation" and "aesthetic/religious" as ranking highly.

In addition to these findings, Neighbour (1973), in a study of the outdoor recreation patterns of Christchurch residents, found that the most commonly reported motives were "escapist", attractions in the country", "relaxation", and "social". Cessford (1987) found that experiencing nature and visiting new areas were two of the top four motivations for trampers in the Greenstone and Caples Valleys, and Sutton (1992) reported a very strong nature appreciation element in his examination of visitation to Kapiti Island. Reviewing the range of relevant New Zealand studies, Moore (forthcoming) notes that, although many years have passed since the earliest New Zealand studies reported recreation motivations, recent studies continue to mirror these findings.

5.4.1 Interim summary

Overall, New Zealand studies incorporating a motivation dimension, appear to reflect the findings of their North American counterparts, with one exception. Whereas solitude was a prominent motivation for wilderness visitation in North America, it does not appear to be a high priority motive for outdoor recreationists in New Zealand. It has been suggested (Stankey and Schreyer, 1987; Hammitt and Madden, 1989; Moore, forthcoming) that the prominence of "solitude" in North American motivation research is related to direct reference to this concept in the legislation defining national parks in the that country. Furthermore, the relative crowdedness of North America compared with New Zealand may have contributed to the difference in the findings.

5.5 Satisfactions, expectations, and the role of experience

The concepts of motivations, satisfactions, expectations and experience are closely linked. According to the Behavioural Approach, the satisfaction of a need or motivation is the outcome of all behaviour. Satisfaction is a relative index dependent on the "... discrepancy between expectations and the actual situation. Un-met expectations give rise to dissatisfaction" (Francken and van Raaij, 1981:338). Expectations are derived from the individual's previous experience (either of the
specific activity or another sphere of life), or the perceived level of satisfaction others have derived from the activity.

Achieving high levels of visitor satisfaction has long been an important measure of success for outdoor recreation management (Manning, 1986). Owing to its multi-dimensional nature, attempts to measure visitor satisfaction, however, have been difficult. Visitor satisfaction appears to be influenced by a number of factors - only some of which are under management's control (Manning, 1986; Moore, forthcoming). For instance, Propst and Lime (1982, cited in Manning, 1986) have suggested three basic factors upon which satisfaction is dependent. These include the physical characteristics of the recreation site, the type and level of management, and the social and cultural characteristics of the visitor.

Despite difficulties, research into aspects of recreation visitor satisfaction, expectation, and experience has been undertaken. In particular, the research in North America has focused on the importance of density and crowding as contributors to satisfaction and dissatisfaction. For instance, Alldredge (1973, cited in Manning, 1986) developed and hypothetically tested a satisfaction model measuring the effects of increasing use on recreation experience. Based on the economic concept of marginal utility, Alldredge proposed that as visitors were added to a recreation area, the marginal satisfaction of each individual visitor would decline progressively due to crowding. The end point of this model implies that a social carrying capacity has been reached, at which point marginal satisfaction equals zero (Manning, 1986).

Since Alldredge's hypothetical testing, the satisfaction model has been applied in the field on a number of occasions. Manning (1986) reviews twelve such studies which cover a variety of natural settings and span the years 1977 to 1984. From this review it is evident that in most of the cases the relationships between density and satisfaction are very minor, casting considerable doubt on the satisfaction model.

Explanations for such an inconclusive relationship between density and satisfaction may lie in an understanding of the varying motivations, perceptions, expectations, and previous experiences of visitors. For example, the visitor who uses a recreation site motivated by a need for solitude, will be dissatisfied if he or she is constantly
within earshot of another visiting group. Meanwhile, the "other" group, motivated
by a need for social contact and excitement, may not be affected by the presence of
several other groups. The different motivations, accompanied by the associated
expectations of the experience are likely to determine the extent to which visitors
interpret a particular level of density as dissatisfying.

Likewise, the previous experience of visitors will affect levels of satisfaction in
relation to density. Manning (1986) states that the majority of North American
evidence supports the notion that experienced visitors are more sensitive to higher
use densities. Those users visiting a site for the first time are more likely to accept
what they find as "normal", and relate subsequent experiences to these "base-line"
conditions.

Despite concern over increasing levels of use in natural areas among some
managers and recreationists, most New Zealand studies report high levels of visitor
satisfaction (Moore, forthcoming). For instance, Simmons (1980) examining
summertime visitation to Arthur's Pass National Park, reported that the visits of
nearly 85 per cent of respondents were up to, or better than their expectations.
Groome et al. (1983, cited in Moore, forthcoming) also found very high levels of
satisfaction among all types of forest recreationists. In addition, Cessford (1987)
found that 98 per cent of trampers reported expectations as either "mostly" or
"completely" met.

5.6 Chapter summary and conclusions

Although it is clear that certain motivations for outdoor recreation are more
prominent than others, it is important to note that they are also diverse and related
to the attitudes, preferences and expectations of the recreationist, and the setting in
which the activity takes place. Participation in the same activity may stem from
quite different motivations for two individuals, in just the same way that the same
motivation may be satisfied by quite different activities.

Motivations and satisfactions are useful concepts through which to better
understand the individual processes which shape recreation choice and
participation. The concepts themselves are inter-connected and interwoven with
other factors such as expectations and experience. While motivations and satisfactions do vary between individuals and activities, the research in both North America and New Zealand has indicated some common findings. The most prevalent of these is that people visit wilderness areas for reasons of escape, viewing natural environments and to seek solitude. Satisfactions, although not found to be strongly linked to user density levels, are linked to a variety of other factors such as the motivations for use, the expectations of the visitor, the levels of previous experience, and the type, nature and size of other groups encountered during the visit. While satisfaction levels at many sites are reportedly high, this may reveal more about the way in which recreationists evaluate their own satisfaction than it does about the quality of management or the experience itself.

In considering crowding, carrying capacity, and attitudes of recreationists, the following chapter (Chapter 6) re-visits some of the components which contribute to the satisfaction levels discussed above.
Chapter 6

Perceptions and Attitudes

6.1 Introduction

This chapter introduces the outdoor recreation research associated with perceptions and attitudes. In particular, the concepts of crowding, carrying capacity, and coping behaviours are examined. Research on the attitudes of outdoor recreationists is also considered, with an emphasis on conservation, development, and activities.

6.2 Crowding

Crowding occurs at recreation sites when the number of people (the density) reaches a point at which it is perceived to interfere with the values, activities, or intentions of visitors (Manning, 1986). Crowding has been one of the most researched aspects of outdoor recreation (Shelby, et al., 1989). Interest in the concept is largely based in concerns over the increased use of outdoor recreation areas since the 1950s, and its effect on traditional back-country recreation experiences.

In particular, questions were raised over the possibility of reduced satisfaction due to crowding. Attempts to test this possibility have met with mixed results, largely revealing low levels of perceived crowding, and weak relationships between density and levels of satisfaction (Palmer, 1979; Simmons, 1980; Manning, 1986; Cessford,
1987; Stankey and Schreyer, 1987; Westover and Collins, 1987; Shelby, et al., 1989; Ward, 1993). Attempts to explain why this has been the case include reference to coping strategies and normative definitions of crowding. A brief review of these theories follows.

6.2.1 Coping strategies
One explanation for limited success in crowding research is that recreationists develop coping behaviours in order to adjust to the undesired effects of visitor contacts. There are three such commonly identified behaviours.

6.2.1.1 Displacement
Displacement refers to a process which occurs when recreationists become dissatisfied with the current number of visitors, and eventually move away from the area to less popular areas. In this manner, those more tolerant of higher encounter levels replace them (Manning, 1986; Hammitt and Patterson, 1991).

6.2.1.2 Product shift
Product shift involves a redefinition of the encounter, rather than the direct avoidance behaviour associated with displacement (Hammitt and Patterson, 1991). Faced with high numbers of other visitors, the privacy-seeking-recreationist may re-evaluate the experience and decide that the current visit is not going to be a wilderness experience as initially expected (ibid.).

6.2.1.3 Rationalisation
Rationalisation is a concept based on cognitive dissonance theory (Festinger, 1957, cited in Manning, 1986; Hammitt and Patterson, 1991). It suggests that, as many outdoor recreationists have voluntarily chosen their activity and location, they will rationalise and report a satisfying experience regardless of the conditions. Substantial investments of time, money and effort are also likely to lead to a positive evaluation of the experience (Manning, 1986; Hammitt and Patterson, 1991).

These three coping strategies used by recreationists, may have contributed to the lack of relationship between levels of density and reported satisfaction. In addition, normative definitions of crowding are important to consider.
6.2.2 Normative definitions of crowding
The normative approach suggests that crowding is a subjective evaluation of a specific density of people and, therefore, cannot be universal across recreationists, activities or sites. Conversely, density is a neutral, physical concept, describing the number of people per unit of space.

The point at which crowding occurs depends on the tolerance levels of the individual recreationist. This tolerance is determined by a variety of personal characteristics such as motivations for the visit, previous experiences, and expectations. Furthermore, the characteristics of others encountered have been found to affect the perception of crowding. Factors such as the type and size of encountered groups, their behaviour, and the extent to which they are perceived to be alike are thought to be influential. For instance, Lucas (1964, cited in Manning, 1986:69) found that although paddling canoeists "...disliked encountering motorboats, they were less resentful of encountering motorised canoes, and were relatively tolerant of encountering at least some other paddled canoes". The presence of motorboats increased the likelihood that canoeists would perceive the site as crowded.

The specific behaviour of encountered groups can also affect levels of perceived crowding. This may be related to the inconsiderate actions of other visitors, or simply the nature of the activity. For example, river bridge bungy jumping is unlikely to be compatible with fishing. "When others are encountered who are viewed as inappropriate or different in unfavorable ways, crowding is perceived at relatively low levels of contact" (Manning, 1986:70).

Finally, the objective site characteristics (as perceived by the visitor), such as the physical conditions and the actual level of use, are likely to influence the degree to which crowding is reported (Westover and Collins, 1987).

6.3 Carrying capacity
Following the suggestion that increases in outdoor recreation activity could lead to problems of crowding and resource damage that might detract from visitor enjoyment, the determination of a recreational carrying capacity was suggested...
The notion of carrying capacity has its origins in range management where there are generally accepted limits to the number of stock it is possible to sustain on a given area of land (Shelby and Heberlein, 1986). Once this numerical point has been reached, the addition of further animals is likely to compromise the viability of the entire herd. Similar principles have been applied to recreation management, where it was believed that carrying capacities could be established for particular recreation sites.

The existence of a social carrying capacity for recreation has been the topic of much debate and controversy in outdoor recreation research (Stankey and Schreyer, 1987). The central difficulty with its establishment lies in the implication that people seek recreational activity in order to satisfy certain needs. The extent to which these needs are affected by external factors such as crowding, is unequal. In reality, the motivations, needs, expectations, and perceptions of recreationists vary to such an extent that establishing a social carrying capacity based on levels of visitor satisfaction is both difficult and inappropriate.

According to Stankey and Schreyer (1987:279), it is universally agreed that there is no single carrying capacity for an area. "Rather, there are many possible capacities, depending on resource goals, visitor distribution and behaviour, and environmental characteristics". Researchers have moved away from attempting to define single carrying capacities for recreation areas, towards defining limits of acceptable change. As Shelby and Heberlein (1986:10) note, "...capacities cannot be established in the absence of management objectives. The real fight is over which objectives to use".

The Limits of Acceptable Change planning system is a recently developed tool which attempts to cope with the issues of setting measurable standards. This planning system implies a degree of participation in the establishment of objectives and limits from affected or interested parties.

6.4 Interim summary
So far, Chapter 6 has reviewed the concepts of crowding and carrying capacity in recreation settings. In general, attempts to establish agreement on the points at which visitors experience crowding, have not been successful. The explanations for this outcome are based in the belief that crowding is a normative concept,
dependent upon a variety of personal, situational and other (group) characteristics. Furthermore, it is likely that "crowding sensitive" recreationists adopt coping strategies, such as displacement, product shift, or rationalisation, in order to reduce dissatisfying experiences.

Carrying capacity is a concept initially introduced to recreation management following concerns that certain aspects of recreation sites and associated experiences were being degraded through over-use. Despite intuitive appeal, the concept has been frustrating to apply. This has largely been due to the varied perceptions of carrying capacity indicators such as crowding. These problems, however, have not led to the dismissal of the concept. Rather, researchers have acknowledged that recreation areas may have more than a single recreation capacity, and that the emphasis is perhaps not "how much is too much", but "how much is acceptable".

6.5 Attitudes

... the promotion of outdoor recreation should not extend beyond preserving existing use areas, and providing freedom of access to other suitable lands, especially near urban populations. Unlike most other sports and recreations, over-promotion of an adventure resource will destroy it (Mason, 1974:29).

Recreation visitor attitudes, like the attitudes of all members of social groups, are naturally diverse and indefinite. The focus of this short review is limited to visitor attitudes towards development within natural recreation settings (including tourism), conservation of natural areas (including limitations on use), and other users and uses of natural areas (including appropriate behaviours and activities).

6.5.1 Development in natural areas

Following increased use of natural resource areas in New Zealand since the 1970s, there has been pressure to develop further facilities for recreationists and opportunities for tourism. Within national parks and other natural settings, such developments have been met with some resistance. However, attitudes towards the development of natural areas for recreation and tourism purposes vary for the same reasons that perceptions of crowding vary, as discussed above. Attitudes towards development will be influenced by individual conceptions of "natural" or "wilderness". For example, Kearsley (1990) reports that while trampers do not believe it possible to have wilderness where there is any evidence of people, the
general public believed there was no inconsistency between a wilderness experience and the existence of facilities such as huts, tracks, swing bridges, toilets and picnic sites. In addition, attitudes toward tourist development, for example, will vary depending on the stake that individual respondents have in such developments. In some cases, owing to a poor economic situation, tourism may gain support from those who see it as a method of economic revival.

The challenge of finding an acceptable compromise between the development of land for recreation and its preservation for ecological, scientific, cultural, historical, and aesthetic reasons, is complicated by the fact that the public is unlikely to agree on the appropriate extent of development and preservation. Although the level of agreement may not be high among recreationists as a whole, Jackson (1987) hypothesised that the views may vary between people who differ in their recreation activities. Jackson (1987:247) reports that public support for resource preservation over development did vary according to recreational activity preferences.

Recreationists whose satisfaction depends more on relatively unspoilt natural environments prefer that resources be maintained in their unaltered state. Mechanized recreationists more strongly support the development of resources for recreational purposes...

Kearsley (1982, cited in Kearsley 1990) undertook a study of visitors to Fiordland National Park in which subjects were asked about their expectations of national parks. A large number of respondents "...stated quite categorically that the promotion of tourism and the provision of relaxing holidays were definitely not park functions" (Kearsley, 1990:135). Furthermore, Kearsley (1990:136) remarks that there is little support "...for those developments that would commercialise or 'open up' the park". This study re-emphasises the attitude that developments in national parks or similar natural settings should be of a limited scale.

Although the literature in this area is limited, there are several studies which can help provide an insight. For example, Keogh (1990) suggests that while some research has revealed that tourism development can contribute to improved outdoor recreation opportunities for local users, tourists may also impinge on the recreation experiences of local residents. "Generally, an increase in visitors requires greater sharing among users and may result in congestion of facilities" (Keogh, 1990:72). Keogh's research examined outdoor recreationists' attitudes towards a proposed
tourism development. He hypothesised that those already using the area would have more negative attitudes towards the development than non-participants. While negative impacts such as infrastructure development, the increase in traffic and noise, and concern over the restriction of rights to use the park were frequently mentioned, overall Keogh found no significant difference between the two groups. Keogh (1990) attributes this to the recreationists' perception that the development of the park will protect the environment from indiscriminate visitor use and natural erosive forces.

Another recent study sought to investigate resident recreationists' attitudes towards tourism development and environmental conservation. Dowling (1992) reports that the majority of residents agreed that protection of the environment was just as important as the economic benefits of tourism. Respondents were evenly split over whether tourists diminished their enjoyment of the area and whether tourism was a burden on the local infrastructure. Interestingly, as many as 60 per cent felt that tourism harms the environment. However, of the area's four main commercial activities (tourism, pastoralism, mining, and fishing), tourism was seen as the most environmentally compatible.

6.5.2 Attitudes towards conservation

Support for conservation among the general public has been shown to be high (Jackson, 1987; Dowling, 1992; Heylen Research Centre, 1992). In a recent New Zealand survey of public opinion, the Heylen Research Centre (1992:5) found that, "without prompting, one-third of all adult New Zealanders consider that 'the environment' or 'conservation' (in some form) is amongst the most important issues for people today". When the topic of conservation was initiated, 98 per cent of respondents considered that it was at least a 'quite important issue'. While these expressions of support do not equate with a commitment to conservation, they do indicate that members of the New Zealand public have pro-conservation attitudes. Jackson (1987:237), reviewing previous North American studies of public attitudes to conservation, reports that "...the studies have consistently elicited high levels of public support for preservationist purposes, coupled with weaker support for recreational resource development...". Overall, a strong sense of concern for environmental conservation was conveyed.
Given the strong public support for conservation, it stands to reason that outdoor recreationists also hold strong conservation attitudes. Concomitant with this, in his review of the North American literature, Manning (1986) found that studies of backcountry visitor attitudes indicate that most favour use limitations. Lucas (1985, cited in Altman and Zube, 1989) also reports considerable support for direct limitations on use in areas of specific value to wilderness recreationists.

However, while support for limitations is high, visitors' perceptions of recreational impacts have generally been found to be low. With the exception of litter, Manning (1986:36) reports that visitors to North American recreation sites "...rarely complain about site conditions and usually rate the environmental conditions... as good or better".

6.5.3 Attitudes towards other uses and users

Various researchers have reported distinct attitude patterns among certain user groups. For example, Stankey and Schreyer (1987:281), reviewing a number of relevant North American studies, note that recreationists "...travelling on foot or by paddling are highly sensitive to, and distressed by, contacts with persons travelling by other means...". In New Zealand, Aukerman and Davison (1980:87) found that at the "...top of the trampers' list of activities inappropriate to mountain lands...", were trail bikes and four-wheel drive vehicles. The authors imply that such an attitude is based in the trampers' desire to escape the sights and sounds of the urban environment. Motorised activities represent the urban scene and are disturbances to the peace and solitude. Furthermore, Aukerman and Davison (1980) report that trampers hold negative attitudes towards commercial tourist activities including helicopter and light aircraft flights, and jet boat trips. Although Aukerman and Davison (1980) have not quantified the extent to which these attitudes are held, their research provides a broad indication of the presence of such attitudes. It seems likely that the existence of negative attitudes towards other recreation uses and users, often expressed as conflict in the outdoor recreation literature (Bryan, 1979; Jacob and Schreyer, 1980; Devall and Harry, 1981; Schreyer, 1990; Horn, 1994), will have their basis in the motivations of the visitors, and the extent to which they perceive their values, intentions or experiences as compromised by the actions or behaviours of others.
6.6 Chapter summary and conclusions

This chapter has examined literature relating to aspects of visitor perception and attitude. More specifically, the concepts of crowding and carrying capacity have been explored. In general, attempts to determine precise numerical values for crowding and/or carrying capacity have been unsuccessful. This is largely due to the normative nature of crowding and the probability that recreationists adopt a range of coping strategies in order to minimise dissatisfying experiences.

In addition to visitor perception, several specific visitor attitudes were reviewed. In particular, the focus has been on attitudes toward development and conservation in natural areas, and the activities of other visitors. Although some attitudes, such as a high level of support for conservation, are widely held, it should not be inferred that attitudes lead to behaviours. Ajzen and Fishbein (1977, cited in Wilkerson and Edgell, 1993), for example, argue that there is a very weak association, and in some cases, no association between attitudes and actions.

There is some support for the suggestion that particular user groups have distinct attitudes towards the development of resources for recreation purposes. More significantly to the present study, there is also evidence to suggest that the method of travel within natural areas is the source of negative attitudes held by one group towards another.
Summary of the literature reviewed
The development of research objectives

Chapters 3, 4, 5, and 6 have reviewed material relating to a range of social dimensions of natural area use. Subject areas included a description of the origin, development and change in New Zealand's national parks; and the social characteristics, life-history variables, motivations, satisfactions, perceptions and attitudes of outdoor recreationists. In this short summary section, the contribution of the literature review to the research questions is considered.

National parks: origins, development and change (Chapter 3)
National parks serve dual purposes and are popular, but not necessarily common destinations for New Zealanders in recreation. The literature has suggested that visitation to particular park areas is increasing, and that there are new uses occurring. The present study seeks to determine:

1. the summertime visitation patterns to Arthur’s Pass National Park, and how these may have changed since 1980 (for example, the frequency of visits, activities undertaken, and location of use).

National parks: use and users (Chapter 4)
Social characteristics has been a dominant area of study in outdoor recreation research. The literature reviewed indicated that while visitors may fall into a relatively narrow range of socio-demographic categories, these alone do not explain participation. Nevertheless, socio-demographic data are useful in describing current visitation composition. One objective of the present study is to determine:

2. Arthur’s Pass National Park user profiles, and how they have changed since 1980 (for example, visitors’ age, gender, occupation, education, and origin).

Furthermore, the literature reviewed has suggested that an understanding of socialisation agents, life-cycle stages, and social groups is more successful than socio-demographic data in explaining recreation behaviour. The current research seeks to establish:

3. the primary agents of socialisation for visitors to Arthur’s Pass National Park, and the relative importance of these; and
4. the effects of specific life-cycle stages on visitation to Arthur's Pass National Park.

Motivations and satisfactions (Chapter 5)
Motivations and satisfactions appear to be diverse and inter-related. Nevertheless, the literature indicates that there are patterns among outdoor recreationists and visitors to natural areas. Further objectives of the current research are to determine:

4. what the motivations (reasons) for, and satisfactions from visiting Arthur's Pass National Park are; and how these differ from the findings of Simmons (1980);

5. whether different activities exhibit either intrinsic or extrinsic motivation; and

6. whether satisfactions and expectations have been met.

Perceptions and attitudes (Chapter 6)
The literature reviewed in Chapter 6 examined the perceptions and attitudes of outdoor recreationists. Crowding has been an important part of previous research and, although it has not been possible to develop clear relationships between density of visitation and perceived crowding, the concept is still a useful one for managers who intend to maintain quality experiences. One objective of the present study is to determine:

7. whether visitors to Arthur's Pass National Park perceive crowding to exist.

Furthermore, the literature review has described several specific aspects of visitor attitudes. On the whole, while it appears as though support for conservation is high, attitudes towards development and the activities of other users vary. The current study endeavours to determine:

8. the attitudes held towards conservation, development and the activities of other visitors; and

9. which, if any, uses are considered as inappropriate or unsuitable in the national park setting.

The literature reviewed in the preceding chapters provides both a baseline with which the present study may be compared, and a foundation from which it can extend. Using the above objectives, the broad aim is to consider how changes since
1980 can be attributed to wider processes such as changes to the social structure, commercialisation, time-deepening, and other socio-political shifts.

The considerable comparative element of this study requires that a quantitative survey is used as the primary research tool. However, the diverse range of objectives, and the complex nature of the dimensions under study, necessitate the use of an additional, qualitative component. Chapter 7 provides a discussion of the research methodology and a detailed outline of the research tools used.
Chapter 7

Methodology

7.1 Introduction
This chapter is divided into several broad sections. It commences by considering the theoretical foundation upon which specific research strategies and tools are based. A description of the research area is then given, including the influence of terrain and weather, to provide insights to the unique aspects of social research in natural environments. This is followed by a detailed explanation of the specific methods and tools used in this study. Finally, a discussion of intervening factors and biases is provided.

7.2 Theoretical under-pinnings of the research methods
[One's research methods should be] a choice made according to the requirements of our problems, not a necessity that follows from an epistemological dogma (C.Wright Mills, 1959:74).

All social theories imply some conception of the individual and society, and the relationship between the two. This has consequential implications for the method of
studying social life. Research methods are dependent upon the researcher's
commitment to a particular theory, as well as the nature of the material to be
studied. Ackroyd and Hughes (1981:9) acknowledge the interdependence of
method and ontological and epistemological assumptions in saying that "...methods
should not be regarded as atheoretical tools which do their job independently of
any other consideration. They do their job because of other justifications which
serve to underpin them".

Research methods of any kind are the means through which researchers endeavour
to learn more about a particular topic, situation, or circumstance. In choosing the
appropriate method, more than mere technicalities are at stake. Research methods
are strongly embedded within theoretical viewpoints, and the associated ontological
and epistemological assumptions. Although it is not possible to be completely free
of connotations affiliated with particular methods, it is possible to be aware of the
assumptions of each, allowing one to achieve the richest material possible. Such an
awareness is part of what Bell and Newby (1977) have described as methodological
pluralism, which rejects the exclusiveness, imperialism, and certainty of specific
research paradigms. This is not an attempt to claim that there should be no method,
but, rather, an attempt to dispel the belief that there can only be one method that is
to be the method.

The idea of integrating methods is regularly employed and has a great deal of
appeal. The range of objectives in this study necessitates the adoption of a number
of methods. To this end two research tools were used. The integration of methods
provides a useful range of quantitative information to adequately analyse use and
user trends since 1980, while the qualitative information clarifies aspects of
socialisation, life-cycle, motivation, and attitude.

7.3 The nature of the study site

One of the attractions of undertaking site-specific research is that the physical
parameters of the study are clearly defined. In this case, the boundaries of Arthur's
Pass National Park constituted the geographic limits of the research (Figure 2.1,
Chapter 2). However, the collection of quantitative data in highly natural areas is
often not straightforward.
In many outdoor recreation situations, the researcher is dealing with a geographically challenging area in which people are widely dispersed through both space and time. The central problem, in terms of the quantitative element of the research, is to obtain a representative sample from what is often an unspecified or unknown population. This is especially true of the back-country regions of Arthur's Pass National Park. A loose system of approximately 20 main tracks and routes absorb what amount to no more than several thousand visitors during January of each year (the study period). This is about seven per cent of the total recorded national park visitation for the period\(^1\). There is no fool-proof method of monitoring these visitors even though they are encouraged to leave an intentions card (detailing intended movements within the Park), and complete track-end and hut log books. Many tracks within the Park also have track-counters which are of varying reliability.

The fundamental problem and frustration associated with back-country sampling is that movement around such areas takes a great deal of time on foot. When setting aside time for sampling, the researcher must carefully determine whether the lengthy time periods are justified given the comparatively low levels of visitation to these areas. However, although a great deal of effort is expended, these respondents represent an important, and intensive use of the Park resource. Failure to sample in remote settings may overlook significant sections of the Park visitor population.

In addition to the demanding terrain and consequent access difficulties, the weather in alpine areas can limit the use of prepared research schedules. Several hours of heavy rain can deny access to the back-country. There is clearly no point in attempting to survey the back-country when there will be no one to survey.

Another element of compromise in the back-country is the issue of representativeness. This fundamental aspect of quantitative research is highly dependent on either relatively large numbers of visitors or unlimited time. As previously indicated, visitors to the back-country can be few and far between. For this reason, the researcher can ill-afford to count off four trampers before

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\(^1\) These figures are based on the available track-counter data for 1991 and 1992.
distributing a questionnaire to the fifth visitor encountered. In some areas, the researcher can walk all day and not count more than three back-country visitors. This feature suggests that compromise must be accepted if researchers are to remain within the resource limits normally incumbent upon them.

There are however, several things which the researcher can use to his or her advantage. For instance, in Arthur’s Pass, most tracks or routes begin from road ends or the confluence of two rivers. This narrows down the possible points of entry to tracks, and increases the chances of intersection with users. The available track-counter and intentions information can also help the researcher to judge where and when use is likely to occur.

7.4 Specific explanation of research tools

As previously stated, this research comprised two complementary research techniques. The most significant of these, in terms of relative contribution to the results, was the survey questionnaire. Details of this will follow the somewhat briefer explanation of the qualitative technique deployed.

7.4.1 Qualitative interviews

During the period between October 1993 and July 1994, ten in-depth interviews were undertaken. Interviewees were selected through a process of introduction (that is, meeting in the field) and key informants. In addition to these semi-structured meetings, the qualitative data have been supplemented by more informal contacts and discussions, especially those contacts established while in the field.

Attempts were made to interview people from a range of age groups and activity types, including visitors to the front-country and back-country, and those running, tramping or both. Owing to resource constraints, interviews taking place after the quantitative data collection in January were restricted to those people living in the South Island of New Zealand. Interviewees, where not contacted directly in the field, were contacted through the use of the questionnaire which asked interested respondents to leave a contact name and telephone number.
Interviews were semi-structured and approximately one and a half hours in length. Aspects of the respondents' natural area experiences, motives, and attitudes were discussed. In particular, there was a focus on introductions to, and experiences of national park use, and attitudes towards development and other uses. Interviews were recorded by audio tape and later transcribed onto a word processor.

7.4.2 Quantitative method

A questionnaire was used to assess the characteristics, motivations, satisfactions and attitudes of visitors to Arthur's Pass National Park during the summer period of January 7, 1994 and February 4, 1994. This survey questionnaire was especially important in terms of the longitudinal objectives. To this end, the format and many of the specific questions asked of respondents retained the underlying structure of Simmons' (1980) survey. For example, his distinction between those who use the Park on an amenity (or front-country) level, and those who visit the more distant, back-country areas of the Park was also replicated in this study. This section outlines the questionnaire design, the sampling strategies used, the process of implementation, and the methods of analysis.

7.4.2.1 Questionnaire design

The two questionnaires designed focused on (1) the front-country; and (2) the back-country. Although largely identical, the questionnaires differed in terms of detail in several areas. The front-country questionnaire targeted those visiting the fringe areas of the National Park. That is, those using the Visitors' Centre, the day shelters, short walks, and day-walks near the main roads. Such visitors constitute the majority of Park users and have previously been described as "headquarters" or "facilities" users (Simmons, 1980). The back-country questionnaire was used to survey those people who venture further afield. Typically, such visitors include trampers, climbers, and mountain runners who use the back-country huts and/or river systems.

The questionnaires were distributed as A5 booklets within a sealed, lightweight plastic bag. For the benefit of the researcher and assistants, the front-country questionnaire was printed on yellow paper, and the back-country questionnaire on green paper.
7.4.2.2 Questionnaire format and content

The questionnaires were constructed using five general categories. The first series of questions focused on the frequency, location and duration of visits, the activities undertaken, the groups with which people were visiting, and how repeat visitors' use patterns may have changed over time. The second section attempted to assess visitor attitudes to the use of national parks. For example, questions related to the possibility of inappropriate uses of national parks, levels of use and conservation, and the need for limitations in national parks. Perceptions of crowding were also a feature of this section. The third series of questions considered the motivations (or reasons) for Park visitation, the most and least enjoyable aspects of visits, and the extent to which expectations of visitors were met. The next section addressed respondents' processes of introduction to natural areas, and the past and present influences on national park use. This included questions on the constraints and strategies associated with the presence of children. The fifth and final series of questions focused on social demographic information such as age, gender, and occupation of visitors. Respondents were also invited to leave a contact name and telephone number if they were interested in further assisting with the research through participation in an interview.

The questionnaires, which were designed to be self-administered, used a combination of closed and open-ended questions. Likert scales were used in cases where a continuum was appropriate, and respondents were asked to rank some choices in order of importance. Respondents were advised that the questionnaire took between five and ten minutes to complete. (For copies of the two questionnaires, please consult the Appendices).

7.4.2.3 Sampling design

The sampling for this study was based on the available use figures for Arthur's Pass National Park. The total number of distributed questionnaires was not seen as especially important, but rather their rational dispersal over the research period. To this end, an examination of the 1991 and 1992 Waimakariri Field Centre visitor statistics was undertaken. These statistics, collected using track and visitor centre counters, allowed for visitation to be broken down in the following manner.
Table 7.1: Recorded visitors at APNP (1991-1992)

<table>
<thead>
<tr>
<th></th>
<th>1991 Visitors</th>
<th>%</th>
<th>1992 Visitors</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visitors' Centre</td>
<td>87183</td>
<td>54.9</td>
<td>86298</td>
<td>55.3</td>
</tr>
<tr>
<td>Front-country</td>
<td>60728</td>
<td>38.3</td>
<td>58248</td>
<td>37.4</td>
</tr>
<tr>
<td>Back-country</td>
<td>10854</td>
<td>6.8</td>
<td>11385</td>
<td>7.3</td>
</tr>
<tr>
<td>Total</td>
<td>158765</td>
<td>100</td>
<td>155931</td>
<td>100</td>
</tr>
</tbody>
</table>

Although each of these categories is not exclusive, it does demonstrate that not less than 55 per cent of recorded visitors use the Visitors’ Centre. For the purposes of this study, the Visitors’ Centre and the front-country visitors constitute the same sample. Thus, approximately 93 per cent of visitors are located in the front-country, and only seven per cent in the back-country.

Using the counter statistics as a guide, a research schedule was designed to allow for data collection sessions in each of the three areas identified in the table above. The front-country and back-country zones were then broken down into specific areas, tracks and routes and allocated data collection sessions on the basis of use frequency. The process of stratification was an attempt to cover the Park’s dispersed use effectively. Although compromises had to be made in order to allow for the time taken to access some back-country areas, allocation of data collection sessions was generally based on the known levels of use.

For each of the broad sampling zones (visitors’ centre, front-country and back-country) a slightly different sampling fraction was used. These were determined largely by the density of use. The sampling fractions were:

- Front-country Visitors’ Centre: one questionnaire per five visitors
  - Short walks etc: one questionnaire per two visitors
- Back-country: one questionnaire per one visitor
  - Trampers: one questionnaire per one visitor
  - Mt. Runners: one questionnaire per five visitors
7.4.3 Survey implementation

Primarily, one researcher was involved in the implementation of the survey, although several field assistants were deployed at points throughout the period. These assistants were incorporated into the research schedule. All personnel associated with the study were issued with identification labels and given a clear set of guidelines relating to the process of distribution (available in the Appendices).

Following the sampling procedures outlined above, visitors were approached and offered a questionnaire. Each questionnaire and "freepost" envelope was wrapped in a sealed plastic transparent cover to protect it from the rain. Independent of whether a questionnaire was accepted, distributors were instructed to complete a Field Encounter Card (see Appendices) which recorded brief and approximate data on the potential respondent. For example, this card recorded: the questionnaire number (if questionnaire was accepted); the location of distribution; the main activity apparent; the gender and approximate age of the person; the number of people in the group; and a reason for refusal (if applicable). This information was collected in order to serve as an indication of the total possible respondent population. From this it is possible to ascertain the representativeness of the sample. Field Encounter Cards were also completed when visitors did not accept a questionnaire. This was intended to give an indication of non-response.

Implementation of the survey is discussed under the heading of each sampling zone.

7.4.3.1 The Visitors' Centre

The majority of time was spent at this location. This was especially necessary in the first half of the research period given the poor weather conditions and the consequent level of the rivers. The researcher was stationed on the outside of the second set of double doors accessing the Visitors' Centre. Every fifth person (judged to be over the age of fifteen years) was approached as he or she left the Visitors' Centre\(^2\). The interval of one person in every five was based on an attempt

\(^2\) It was important that respondents be approached as they left the Centre. Consistency is important, but it was also felt that less congestion was likely as people left the Centre than when entering. Often people enter as groups and leave independently. Accessing respondents upon departure is also an advantage as, by this stage, they had time to consider what they might undertake within the Park and may be more inclined to comply with the researcher's wishes.
to typically survey no more than one person from each group, to keep the sample down to a manageable, yet representative size, and to give the researcher (or assistant) time to explain the purpose of his or her work as well as complete a field encounter card between contacts. If the fifth person through the exit was under the required age of fifteen, the very next eligible person was approached. In the case of refusal to cooperate with the survey (that is, the approached leaves the scene without a questionnaire), a time interval of one minute was allowed to elapse before the next person was approached. This served the dual purpose of providing the researcher time to record the contact on the field encounter card as well as avoiding a "cascade of refusal."

7.4.3.2 Short walks, day walks and other amenity areas
When surveying on the short walks, day walks and in other amenity areas (with the exception of the Visitors’ Centre), one questionnaire was distributed per every two visitors. On short one-way walks, researchers remained stationary, generally surveying people as they returned from their walks. On longer, multi-entry walks, researchers were encouraged to move about more freely, in order to maximise the opportunity for contacts.

7.4.3.3 The back-country
Owing to the very small numbers of users, it was decided that a questionnaire be given to each and every back-country visitor over the estimated age of fifteen years. Attempts were made through the use of the research schedule to represent most areas adequately - ensuring that a systematic element was retained.

The only exception to the above sampling strategy occurred when back-country endurance runners (multi-sport trainees) were surveyed. Owing to the nature of the activity in which these visitors were participating, it was not practicable to stop them on the track and offer them a questionnaire. The majority of these visitors were training for the Coast to Coast race and were focused on reducing time and the amount of equipment carried. It was considered inappropriate to offer these visitors a questionnaire while on the route itself. For this reason, these visitors were

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3 This is the term I have given to the effect generated by social conformity to refuse something when the preceding people have refused.
intercepted at the entry point of their visit (the footbridge near the confluence of the Otira and Deception Rivers). It was easier to approach these visitors as they arrived in their cars and prepared themselves for their runs, than approach them as they completed the route. In this way, runners could leave the questionnaire with a member of the support group or in his or her car to complete at a later stage.

Runners were surveyed on a basis of one per group, which approximated to one in five visitors. The nature of runners' arrival precipitated the need for such a sampling technique. Previous observation had demonstrated that, typically, runners arrived in car-loads of about five people between the times of 7.30am and 11.00am. Very often, several groups would arrive simultaneously, and attempts to give each runner a questionnaire would have been fruitless. As the group was usually approached as a whole, and could not be selected on a "next to pass" basis, the member of the group was selected on the basis of the nearest birthday.

7.4.3.4 Supplementary mail out of questionnaire
Owing to the low number of possible back-country contacts, the questionnaire was also mailed out to appropriate recent visitors to Arthur's Pass National Park. For the purposes of this exercise, the research period was back-dated to the 26 of December. These visitors were selected from those completing intentions cards at the Park Headquarters. The intentions cards for the entire research period were collected and sorted into those living in New Zealand and those living overseas. The New Zealand visitors' cards were then examined and only those with complete address information used. The number in each group and genders of all members were recorded so questionnaires could be addressed to a representative proportion of both male and female visitors. This was an attempt to reduce the chances of "male leader bias" common in outdoor recreation research (Manning, 1986).

7.4.3.5 Limitations of the implementation process
Despite attempts to follow the research schedule closely, this was sometimes not possible. At times, heavy rain and high river levels made it impossible for visitors to access many back-country areas and, therefore, it was unnecessary for the researcher to attempt data collection. Specific back-country trips had been timetabled into the schedule, many of which were impassable during the first two weeks, and more importantly, no-one was using these areas. Visits to the "intention
stations" at road ends revealed, in one instance, that not a single person had entered or left the Mingha River valley between January 6 and January 17. This route is extremely popular at this time of year, thus demonstrating the extent to which the weather can alter use.

7.4.4 Response rate and representativeness

In terms of interpreting and understanding the results, it is necessary to highlight the general rate of compliance. This information comprises Table 7.2 below.

Table 7.2: Response rate for APNP visitor survey (1994)

<table>
<thead>
<tr>
<th></th>
<th>Front-country</th>
<th>Back-country</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approached</td>
<td>443</td>
<td>247</td>
<td>690</td>
</tr>
<tr>
<td>Accepted</td>
<td>400</td>
<td>235</td>
<td>635</td>
</tr>
<tr>
<td>Responded</td>
<td>251 (62.8%)</td>
<td>129 (54.9%)</td>
<td>380 (59.8%)</td>
</tr>
</tbody>
</table>

Of those who accepted a questionnaire, 62.8 per cent of the front-country sample, and 54.9 per cent of the back-country sample responded. This equates to an overall response rate of 59.8 per cent. Considering the expected response rate for postal return questionnaires of approximately 50 per cent, this result is reasonable and more than adequate for analysis and reporting (Babbie, 1989). This good response rate can be partly attributed to the personal distribution of questionnaires, the freepost envelope, and the clear identification of the researcher and assistants with an emphasis on the independent nature of the study. Simmons, in his 1980 study, had similar response rates of 51.8 per cent for the Headquarters sample, and 56.8 per cent for the Trampers’ questionnaire. This combined to an overall response rate of 53.4 per cent.

Excluding those who received a questionnaire via post, it was possible to obtain a reason for one aspect of non-compliance. Of the 617 people approached within the Park, 45 did not accept a questionnaire. Most commonly (44.4%) the reason given for refusal was the inability to use the English language to a sufficient extent. A further 31.1 per cent did not accept a questionnaire because they already had one. Other, less common, reasons for non-compliance included having a "lack of time" and feeling "uneasy about questionnaires".
An examination of the data from the Field Encounter Cards, reveals that respondents in this study are representative of the sample at least in terms of origin, sex and group size. It is more difficult to assess the representativeness of more approximate data such as age and activity. However, the estimated age profile does match that of those who responded.

7.5 Analysis of the data

Following the collection of the data, and the subsequent post-coding of open-ended questions, the data were entered into an EXCEL 4.0 spreadsheet before being transferred to SPSS (Statistical Package for Social Scientists) for analysis. Since the majority of the data are nominal, most of the analysis is descriptive. Comparisons are made both between the front-country and back-country response groups and between the present study and the work of Simmons (1980). Some statistical tests (chi square) have been used, but only in the analysis of front-country and back-country responses where the data collection techniques are believed to support this. Too many intervening factors were thought to be present for a similar analysis to be applied between the studies (Young, Pers. Comm., 1994).

In order for descriptive comparisons to be made with the work of Simmons (1980), the data were weighted. This allowed the development of an overall visitation category - a combination of the various groups (back-country, front-country and visitors’ centre). Weighting factors were applied which represented the sampling fractions used in the four different locations of data collection. Weighting was calculated using the point of distribution rather than the activity, since it is the point of distribution which determines the sampling fraction.

7.6 Intervening factors and their effects on the research

There are several ways in which Park visitation may have been affected during the research period. For instance, because of the wet weather\(^4\), the activities of users were typically front-country oriented. People spent their time on the very short walks (in the heavy rain) and on the day walks (if the weather was clear enough), or just stopping at the visitors’ centre. From observation of visitors to the Park and

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\(^4\) Rainfall recorded at Arthur’s Pass township for January 1994 was 951mm. This far exceeds the average monthly (January 1961 - 1990) rainfall of 380mm (McGill, Pers.Comm., 1995).
from discussions with them, it was clear that some users may normally have fitted into the "back-country" sample. Owing to the weather conditions, these people were only able to experience the front-country. Even when the weather did become fine for a few days during the second week, many rivers remained too high to be forded safely. In order to cope with the restrictions the weather put on their recreation, many people visiting Arthur’s Pass went 25 kilometres east of the Pass to escape the rain and flooded rivers. Department of Conservation staff advised many trampers, for example, to use Craigieburn Forest Park or the Cass-Lagoon Saddle route during such conditions. This route was outside of the study area.

Patterns of use may also have been affected in terms of who visited the Park. It is possible, for instance, that potential visitors from Christchurch or other South Island regions, avoided visiting the Park because of their knowledge of the north-west weather pattern the area was experiencing. Those living closer to the Park have other opportunities in which to visit and may have postponed their visits or spent their recreational time enjoying the north-westerly as it had its opposite effect on the east coast. This explanation is unlikely, however, to befit overseas visitors to the area. Those travelling around New Zealand are less aware of the implications of various weather patterns and less disposed to alter their plans because of them. The lack of flexibility in the travel itineraries of many visitors may have meant that tourists came to the Park regardless of the weather. This was confirmed through various discussions with overseas visitors who arrived in the Park hoping to get out into the back-country only to find that the weather did not permit this. Many of those who arrived via the train (intending to spend) several hours walking in the Park) were quite taken aback by the heavy rain.

Another factor which may have influenced the number of overseas visitors in Arthur’s Pass over this period was the condition of the road between Wanaka and Haast. One of the more popular "tourist circuits" in the South Island involves the trip from Queenstown through Wanaka, over Haast Pass and up the West Coast visiting the two glaciers at Fox and Franz Josef (or the same route in reverse). The heavy rain and flooding experienced in South Westland closed the Haast road (among others) for almost a week. This closure is likely to have had an affect on the visitation to Arthur’s Pass National Park. Travellers south of Haast who wanted to see the glaciers were forced to take a detour of several hundred kilometres which
included Arthur's Pass. The same was true for those people who wanted to visit Queenstown after spending time on the West Coast. Several informal field contacts indicated that they were only visiting Arthur's Pass as a function of their detour. In other words, the road closure at Haast led to an increase in people who could be described as incidental visitors to Arthur's Pass.

The high river levels also affected those people who typically use this time of the year to train for the annual Coast to Coast race. Weekend days are the most popular days on which to visit and of eight such days during the research period, there were five on which conditions were not suitable for multiple river crossings. Those keen on training for the kayaking were also frustrated by the flow of the Waimakariri River. The conditions in the Park meant that on those days during which the rivers were passable, use was paramount.

Ten days into the research period, following heavy rain and swollen rivers, a soldier on New Zealand Army manoeuvres went missing in the Park. The disappearance of the soldier resulted in one of the largest land searches ever mounted in the South Island. Poor visibility and dangerous rivers obviously hindered the searchers but did not stop multiple helicopter landings each day and the overt presence of army personnel throughout the central areas of the Park. The army created a search headquarters at the Visitors' Centre and accommodated searchers in the Julia Hut, near where the soldier went missing. Army trucks and scores of personnel waited for instructions in several of the public shelters close to the village.

It is difficult to assess how this event may have affected use of the Park, but the situation certainly looked serious enough to deter people from embarking on back-country trips. The army presence may well have discouraged potential campers from setting up in some areas. During this time Park Headquarters staff, as well as radio and television reports were advising people not to travel into the high-country because of dangerous river levels. Such conditions may be considered less than ideal for the implementation of a visitation survey.
7.7 Bias

Although there are various sources of potential bias, attempts have been made to reduce these to the greatest possible extent. For example, a research schedule was developed from the available use statistics and followed as closely as conditions would allow. Respondents were, in the majority of cases, chosen on a systematic and random basis using pre-identified sampling fractions. Furthermore, when selecting candidates for the mail-out version of the questionnaire, careful consideration was given to the retention of the gender balance so that it would reflect the use patterns accurately. It is, however, acknowledged that using the intentions cards themselves imposes a bias by neglecting those who do not complete these cards.

One particular area of bias was not overcome. This relates to the probable under-representation of overseas visitors to the Park, and is a source of bias for a number of reasons. Firstly, if an overseas visitor accepted a questionnaire, he or she may have had difficulty understanding and completing the questionnaire in full, especially if his or her first language was not English. For this reason, it is likely that Japanese and other Asian visitors, although present in the sample, are highly under-represented. Further, overseas visitors are under-represented due to the fact that they were not included in the additional mail-out questionnaire, or the formal, in-depth interviews.

7.8 Chapter summary and conclusions

Research methods are more than simply ways of getting things done. Rather, the use of particular tools reflect certain beliefs about how knowledge can be obtained. Reflecting the researcher's assumption that a combination of research methods is valuable, efforts were made in this study to use more than a single research strategy. To this end, both qualitative and quantitative research tools were employed.

Following a description of the study site, in which attention was drawn to some of the unique aspects and difficulties associated with social research in sparsely populated natural areas, a specific explanation of the research strategies was presented. The majority of the Chapter focused on the questionnaire and the way in
which it was designed, implemented and analysed. Emphasis has been given to the sampling techniques used since these have important implications for how the data can be used in the results. In addition, considerable space was devoted to a discussion of intervening factors and their effects on the research. Possible sources of bias were also noted.

Despite various field-related factors which made data collection difficult, efforts were made to ensure that data collection remained systematic and representative. It is acknowledged that there are limitations in the extent to which the data can be subjected to statistical tests - especially comparisons between the present study and Simmons (1980). However, the available descriptive data, in conjunction with the qualitative information, are still felt to be sufficient to provide a good understanding of the current situation as well as some useful comparisons with the work of Simmons (1980).
Chapter 8

Results and Discussion

8.1 Introduction
This chapter is presented under five main sections which include: characteristics; socialisation and life-cycle influences; motivations and satisfactions; perceptions and attitudes; and activities. While the results are discussed within each of these sections, an integration of the main themes is provided in the conclusion to the Chapter.

All tables and figures refer to the front-country (FC), the back-country (BC) as well as the combined (Total) sample. The total column represents the response of the whole sample, which has been weighted on the basis of the sampling fractions used (see Chapter 7). Where available, tables in this section include a column within which the findings of Simmons (1980) are detailed for easy comparison. Where relevant, comparison with the New Zealand Census (1991) (NZC) is also made. Owing to the high proportion of overseas visitors, an additional column provides the responses of the New Zealand sample independently (NZ only).
8.2 Characteristics of visits to Arthur's Pass National Park

In this first section of the Results, the basic characteristics of Park visitors will be presented and analysed. This includes information on visitors' regions of origin, how long they stay, with whom they visit, and how often they visit the Park. The latter part of this section assesses the social demographic characteristics of visitors to Arthur's Pass National Park.

8.2.1 Trip characteristics

The trip characteristics section of this report examines visitors' region of origin, how they travelled to the Park, and the length of their stays.

8.2.1.1 Visitors' region of origin

Table 8.1 demonstrates that Christchurch is the single most common origin of visitors to Arthur's Pass National Park. This is not unexpected considering the city's close proximity, and its large resident population. The prevalence of Christchurch visitors among the Park users was also evident in Simmons' (1980) study.

Table 8.1: Region of origin for visitors to APNP

<table>
<thead>
<tr>
<th></th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
<th>Simmons %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christchurch</td>
<td>25.5</td>
<td>51.2</td>
<td>31.9</td>
<td>46.6</td>
</tr>
<tr>
<td>Other South Island</td>
<td>12.3</td>
<td>17.8</td>
<td>13.7</td>
<td>11.0</td>
</tr>
<tr>
<td>North Island</td>
<td>9.4</td>
<td>6.2</td>
<td>8.5</td>
<td>17.4</td>
</tr>
<tr>
<td>Overseas</td>
<td>53.0</td>
<td>24.8</td>
<td>45.8</td>
<td>25.1</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100.1</td>
</tr>
<tr>
<td>n=374 (98%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The most striking difference between the studies is the proportion of overseas visitors in the Park. In 1980, visitors from overseas accounted for one quarter (25.1%) of the total visitors to the Park. In 1994, this proportion has increased to 45.8 per cent. More than half (53.0%) of all visitors to the front-country (amenity and headquarters) areas originated from countries overseas.
This increased proportion of overseas visitors is also reflected in the statistics gathered at other national park sites and natural attractions around New Zealand. For instance, Milford Sound, Mt Cook National Park, and the Fox and Franz Josef Glaciers, each attracts between 60 and 70 per cent international visitation (NZTB and DOC, 1993).

It is interesting to note the specific originating regions of the various overseas visitors in this study. Figure 8.1 illustrates this distribution.

**Figure 8.1: Origin of overseas visitors to APNP (1994)**

Figure 8.1 highlights the predominant presence of Australians in the Arthur's Pass sample. Australians comprised 14.7 per cent of the overall sample (or 33.7% of the overseas respondents), equivalent in volume to those visiting from South Island areas other than Christchurch. Simmons (1980) also reported a strong Australian component in his overseas category, citing 80 per cent of all overseas visitors as such.

The relative decline in the proportion of Australians visiting the Park reflects the diversification of the New Zealand tourism "industry". In the year ending January 1994, 31 per cent of all visitors to New Zealand were from Australia, 12 per cent were American, nine per cent were from the UK, and five per cent were from Germany (Collier, 1994). The diversification of the New Zealand tourism market
has meant that New Zealand is no longer dependent upon Australia to the extent that it was in 1980, when approximately 60 per cent of international visitors were of Australian origin (ibid.).

While the proportion of overseas visitors has increased dramatically, those visiting from the North Island of New Zealand appear to have diminished since 1980. If overseas visitors are removed from the analysis, the clear difference between the studies lies in the proportions of visitors originating from the North and South Islands. While the percentage of visitors from Christchurch has remained stable at about 60 per cent, the relationship between those visiting from the North and South Islands has been inverted. In 1980, 23 per cent originated from the North Island and 15 per cent from the South (other than Christchurch). In the present study 25 per cent of visitors come from "other" South Island areas and only 15 per cent from the North. This may reflect a tendency for New Zealanders to stay closer to home during less prosperous times.

The lower proportions of North Island visitors may also reflect the evident downturn in the domestic travel market during the late 1980s and 1990s. Collier (1994) notes that, in recent years, domestic tourism has shown little, if any, real growth. He suggests that this downturn can be attributed to the rising costs involved, and a relative increase in interest by government agencies in the more economically lucrative international tourism.

There are also differences between the front-country and back-country segments of the visitor sample ($x^2=79.4, df=3, p<.001$). For instance, the majority (53%) of front-country visitors originate from overseas, while less than one quarter (24.8%) of the back-country visitors come from regions outside of New Zealand. The back-country is dominated by Christchurch visitors, with over half (51.2%) of such visitors originating from there.

8.2.1.2 Method of travel to the Park

The way in which people travel to the Park is also a notable trip characteristic. As Table 8.2 (overleaf) indicates, since 1980 there have been changes in the travel modes of those visiting the Park.
Table 8.2: Method of travel to APNP

<table>
<thead>
<tr>
<th></th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
<th>Simmons FC %</th>
<th>Simmons BC %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private car</td>
<td>69.0</td>
<td>72.1</td>
<td>69.8</td>
<td>72.9</td>
<td>50.5</td>
</tr>
<tr>
<td>Train or bus</td>
<td>25.9</td>
<td>15.5</td>
<td>23.3</td>
<td>17.2</td>
<td>40.0</td>
</tr>
<tr>
<td>Other</td>
<td>5.1</td>
<td>12.4</td>
<td>6.9</td>
<td>9.8</td>
<td>9.5</td>
</tr>
<tr>
<td>Total %</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>99.9</td>
<td>100.0</td>
</tr>
</tbody>
</table>

n=375 (98%)

The majority (69.8%) of people visiting the Park do so through the use of private cars. Approximately one quarter (23.3%) visit using the train or bus, while the remainder (6.9%) use other modes of transport such as cycling or hitch-hiking. This is especially the case for those visiting the back-country.

In comparison with Simmons' (1980) study, it is clear that the combined (total) proportions of the visitor groups is largely unchanged in terms of mode of transport to the Park. However, there does seem to have been a change in the way in which use is made of various transportation modes. The relationship between front-country respondents and back-country respondents with respect to the "train or bus" category appears to be the inverse of that found by Simmons in 1980. Contrary to the findings of Simmons, this study indicates that front-country visitors are more likely (25.9%) than back-country visitors (15.5%) to use the train or bus. This compares with 17.2 per cent and 40 per cent in 1980.

The shift that seems to have occurred in mode of travel to the Park can probably be explained by two factors. Firstly, the high proportion of back-country visitors utilising the train in the 1970s and 1980s has been stemmed due to significant changes in the rail service. For example, as several informants have noted, the train used to depart Christchurch on Friday nights at times more suitable to trampers intending to begin walking early the next morning. Furthermore, the train would typically stop at the main road (State Highway 73) and track-ends to allow such

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1 The terms "front-country" (FC) and "back-country" (BC) were not used by Simmons in his study. Rather, he referred to the "headquarters" sample (HQ) and "trampers". No "total" sample data was available for this variable.
visitors to disembark. As Simmons (1980: 200) noted: "For trampers especially the railway is important, disembarking passengers at any of five places in or adjacent to the Park". This service has now ceased and, perhaps as a consequence, back-country visitors now rely more heavily on private cars.

The second factor that is likely to have affected the way in which the rail is now used is the increased overseas visitation to the area and the subsequent development of the "Trans-alpine Express" service. These related factors have led to a change in the type of visitor who uses the rail service. For example, the image projected, and the pricing structure and timetable used, implies that the rail trip is now an end (or an attraction) in itself rather than an affordable means of transport as it may have been in the past.

The significant proportion of front-country visitors found to originate from overseas, helps explain the greater front-country use of the train and bus services. A cross-tabulation of origin and mode of transport variables revealed a statistically significant result ($\chi^2=107.8$, $df=2$, $p<.01$). Of those respondents travelling to the Park by car, 74 per cent were from New Zealand. Conversely, of those travelling by train or bus, 87.8 per cent were overseas visitors. Additionally, overseas visitors comprise the majority (72.4%) of those travelling to the Park by "other" means. Most commonly this includes "hitch-hiking" and "cycling".

Simmons (1980: 200) suggested that the rail service was "...both important and likely to increase in the short term". The present study confirms this speculation but emphasises the fact that the role and focus of the rail service has changed significantly from that described fifteen years ago.

8.2.1.3 **Length of stay in the Park**

All respondents were asked how long they were staying in the Park on this particular visit. The results of this question are reported in Table 8.3 (overleaf).

The pattern of visit duration is clear. By far the majority (69.6%) of visitors spend between one and six days in the Park. While this was also the case in 1980, there has been a shift at the two extremes of Park use. For example, fewer people stay in the Park for long periods of time. At the same time, greater numbers are visiting
Table 8.3: Length of stay in APNP

<table>
<thead>
<tr>
<th></th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
<th>Simmons %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than one day</td>
<td>30.7%</td>
<td>3.1%</td>
<td>23.8%</td>
<td>NA</td>
</tr>
<tr>
<td>One day</td>
<td>21.8%</td>
<td>19.4%</td>
<td>21.2%</td>
<td>22.7%</td>
</tr>
<tr>
<td>Two days</td>
<td>21.2%</td>
<td>24.0%</td>
<td>21.9%</td>
<td>27.5%</td>
</tr>
<tr>
<td>Three - six days</td>
<td>21.8%</td>
<td>40.3%</td>
<td>26.5%</td>
<td>34.3%</td>
</tr>
<tr>
<td>One week or more</td>
<td>4.5%</td>
<td>13.2%</td>
<td>6.6%</td>
<td>15.5%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>n=374 (98%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

the Park for less than one day\(^2\). Overall, visits to Arthur's Pass National Park are becoming shorter in duration.

There are some significant differences between the front-country and back-country settings ($x^2=110.36$, $df=4$, $p<.001$). For instance, approximately one third (30.7\%) of front-country respondents, and one quarter (23.8\%) of all respondents, reported spending less than one day in the Park. Similar proportions of the front-country and back-country visitors were spending one or two days visiting the Park, which corresponds almost exactly to the figures reported in 1980. As might have been expected, a higher proportion of back-country visitors than front-country visitors report spending between three and six days in the Park (40.3\% and 21.8\% respectively). This reflects the types of activities typically undertaken in each of the settings. A greater proportion of back-country visitors (13.2\%) than front-country visitors (4.5\%) claim to have spent one week or more in the Park. Overall, this "one week or more" category accounted for 6.6 per cent of the sample. This is only half of the proportion reported by Simmons in 1980. Possible explanations for this change include a reduction in multiple-day "breaks" from work, and the inclement weather noted in Chapter 7.

8.2.1.4 Previous visits to the Park

In addition to information about where visitors are coming from, and how long they spend in the Park, they were asked how often they visit, and when. Tables 8.4 and 8.5 address the characteristics of previous visits.
Table 8.4: Frequency of visits to APNP in previous 12 months

<table>
<thead>
<tr>
<th></th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
<th>Simmons %</th>
</tr>
</thead>
<tbody>
<tr>
<td>One - two times</td>
<td>62.0</td>
<td>45.7</td>
<td>56.6</td>
<td>55.1</td>
</tr>
<tr>
<td>Three - four times</td>
<td>17.6</td>
<td>21.0</td>
<td>18.7</td>
<td>13.8</td>
</tr>
<tr>
<td>Five - ten times</td>
<td>15.8</td>
<td>14.8</td>
<td>15.5</td>
<td>20.8</td>
</tr>
<tr>
<td>More than ten times</td>
<td>4.6</td>
<td>18.5</td>
<td>9.2</td>
<td>10.2</td>
</tr>
<tr>
<td>Total %</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>99.9</td>
</tr>
</tbody>
</table>

n=189 (95% of those who have visited the Park previously)

The majority (56.6%) of "returning" visitors, in both the front-country and back-country categories, have visited the Park once or twice in the last twelve months. The proportions of visitors coming to the Park three or more times declines in a linear fashion.

There are several findings which require comment. For instance, it was expected that the proportion of visitors in the "more than ten" visits category would be lower than those in other less frequent categories. On the whole, this was the case. However, when the back-country and front-country responses are compared a significantly different pattern emerges ($\chi^2=29.1$, $df=3$, $p<.001$). Almost one fifth (18.5%) of repeat back-country respondents had visited the Park more than ten times in the last twelve months. This compares with 4.6 per cent of the front-country respondents for this visitation rate. This difference between front-country and back-country visitors can be explained by the introduction of various endurance and multi-sport events in the area. When frequency of visits was cross-tabulated with activity, some statistical support was found ($\chi^2=33.1$, $df=3$, $p<.01$). Of those respondents who had visited the Park ten or more times in the last twelve months, half (50%) were either runners, kayakers, or multi-sport trainees\(^3\). This group otherwise represents 14.7 per cent of all respondents in the Park.

Finally, although the specific data for the equivalent back-country and front-country categories are not available for Simmons' (1980) study, the combined figures (Table 8.4) indicate relative stability between 1980 and 1994 on the frequency of Park visitation variable.

\(^3\)This information was compiled using Q6 which asked respondents to indicate which three activities were most important to them at time. For the purposes of this analysis, those reporting "running", "Kayaking" or "Multi-sport" were included.
8.2.1.5 Previous visits to the Park by season

The other aspect of repeat visitation explored in this study is the seasonal nature of previous visits to the Park. Because of the variation in weather and conditions in alpine areas, seasons play an important part in determining the use of the Park. As Table 8.5 implies, summer and winter provide different opportunities for the different visitor settings.

Table 8.5: Season of the majority of previous visits to APNP

<table>
<thead>
<tr>
<th></th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
<th>Simmons %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer</td>
<td>47.3</td>
<td>45.7</td>
<td>46.8</td>
<td>32.1</td>
</tr>
<tr>
<td>Winter</td>
<td>11.0</td>
<td>2.5</td>
<td>8.2</td>
<td>8.5</td>
</tr>
<tr>
<td>Summer &amp; winter</td>
<td>41.7</td>
<td>51.8</td>
<td>45.0</td>
<td>59.4</td>
</tr>
</tbody>
</table>

Total % 100 100 100 100.0

n=191 (96% of respondents who had visited the Park previously)

Corroborating the findings in both New Zealand (see Booth and Peebles, forthcoming) and North America (see Manning, 1986) this study found that use is concentrated over the summer. Table 8.5 shows that almost half (46.8%) of repeat visitors visit the Park "mostly" during the summer months. An equally large proportion of respondents report visiting the Park during both the summer and winter months. A very small proportion (8.2%) claim to visit mostly in the winter. A chi square test indicates that there is a statistically significant difference between the front-country and back-country responses ($x^2=12.3, df=2, p<.01$). For instance, front-country visitors are more likely to visit during the winter than their back-country counterparts. This is likely to be due to the constraint that difficult conditions place on the activities associated with the back-country.

When the results of the present study are compared with those of Simmons (1980), some interesting differences are evident. There appears to have been a decrease in the proportion of people visiting in "both the summer and winter", while there has been an increase in those visiting "mostly in the summer". This may reflect a change in the type of people using the Park, or a decrease in interest in winter-dependent activities (for example, snow skiing and some aspects of climbing). It is

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Summer visitors are over-represented in the sample as the survey took place over the summer months.
of particular significance that the Coast to Coast race is held annually in February. Training for this event occurs most heavily from October until this time.

8.2.2 Size and composition of visitor groups

This section of the Results examines visitor group size, group composition and family group configuration.

8.2.2.1 Group size

As was reported in Simmons (1980), a definite preference exists among respondents for visiting in small groups.

Table 8.6: Sizes of groups visiting APNP

<table>
<thead>
<tr>
<th></th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
<th>Simmons %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 person</td>
<td>16.4</td>
<td>11.8</td>
<td>15.2</td>
<td>6.5</td>
</tr>
<tr>
<td>2 people</td>
<td>36.8</td>
<td>42.5</td>
<td>38.2</td>
<td>30.1</td>
</tr>
<tr>
<td>3 people</td>
<td>14.8</td>
<td>19.7</td>
<td>16.0</td>
<td>19.1</td>
</tr>
<tr>
<td>4 people</td>
<td>14.8</td>
<td>6.3</td>
<td>12.8</td>
<td>19.6</td>
</tr>
<tr>
<td>5 or 6 people</td>
<td>9.6</td>
<td>11.8</td>
<td>10.1</td>
<td>14.8</td>
</tr>
<tr>
<td>7 people or more</td>
<td>7.6</td>
<td>7.9</td>
<td>7.7</td>
<td>9.8</td>
</tr>
<tr>
<td>Total %</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>99.9</td>
</tr>
</tbody>
</table>

The majority (69.4%) of respondents reported that they were visiting the Park in groups of three people or fewer. Simmons (1980) also reported a majority (55.7%) in this category. The group size profiles are, on the whole, unchanged from the profiles of 1980, with one notable exception. The proportion of visitors who reported being alone in their visit seems to have increased since Simmons' (1980) study. The single person category in Simmons' (1980) study accounted for 6.5% of the visitor groups. The present study shows that this component of the visitor group spectrum has more than doubled in proportion. This may reflect an increasing number of overseas users, many of whom travel alone. A cross-tabulation of the two variables revealed a significant difference between the group sizes of New Zealand and overseas visitors ($\chi^2=31.7$, $df=2^5$, $p<.01$). Of overseas

5 The categories have been condensed from six into three.
respondents, almost one quarter (23.3%) travelled to the Park alone. Only 8.2 per cent of New Zealand respondents described themselves in this manner.

8.2.2.2 Visitor group composition

Reflecting patterns found elsewhere (Burch, 1969; Devlin, 1976; Kelly, 1980; Simmons, 1980; Holman and Epperson, 1984; Colton, 1987; Labone and Wearing, 1994; Tourism Resource Consultants, 1995), the most notable group composition characteristic is the family-orientation of many groups. A significant proportion (46.8%) of those visiting the Park were doing so "with family" or with "spouse/partner." A further 8.7 per cent indicated that they were visiting with "family and friends".

Table 8.7: Group composition of visitors to APNP

<table>
<thead>
<tr>
<th>Group Composition</th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
<th>Simmons FC %</th>
<th>Simmons BC %</th>
</tr>
</thead>
<tbody>
<tr>
<td>With family</td>
<td>52.0</td>
<td>31.5</td>
<td>46.8</td>
<td>51.2</td>
<td>22.3</td>
</tr>
<tr>
<td>Alone</td>
<td>16.9</td>
<td>11.8</td>
<td>15.2</td>
<td>5.6</td>
<td>5.7</td>
</tr>
<tr>
<td>With friends</td>
<td>17.8</td>
<td>48.8</td>
<td>25.7</td>
<td>27.0</td>
<td>53.9</td>
</tr>
<tr>
<td>With family &amp; friends</td>
<td>8.7</td>
<td>7.9</td>
<td>8.7</td>
<td>11.2</td>
<td>7.8</td>
</tr>
<tr>
<td>With club/school</td>
<td>4.6</td>
<td>0</td>
<td>3.6</td>
<td>5.0</td>
<td>10.1</td>
</tr>
<tr>
<td>Total %</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100.0</td>
<td>99.8</td>
</tr>
</tbody>
</table>

While the influence of family is pervasive in the combined visitor population, when the front-country and back-country visitor populations are compared some significant differences are apparent ($\chi^2=94.5, df=4, p<.001$). For instance, those visiting with their families accounted for over half (52.0%) of all front-country visitors, while less than one third (31.5%) of the back-country visitors reported the family as the group in which they were visiting. The inverse of this relationship is found if those visiting with friends are examined. Nearly half (48.8%) of the back-country respondents indicated that they were visiting the Park primarily with friends, while less than one fifth (17.8%) of the front-country respondents fell into this category. Although the precise proportions may be slightly different, a virtually

---

It was decided that "spouse/partner" does, in many instances constitute a family. It is, however, recognised that there will be some couples who do not see themselves as such.
identical pattern was reported by Simmons (1980). Two notable departures from the pattern in Simmons' work are the increase in those visiting the Park alone, and the present study's complete lack of club or school group members in the back-country sample. While it is acknowledged that club membership in New Zealand is declining, it is likely that other factors are also responsible for this finding. One explanation is that the poor weather conditions may have dissuaded organised and "accountable" groups from venturing into the back-country. Club members were certainly encountered by the researcher but were typically undertaking short day trips within the front-country. Simmons reported that one in ten respondents was a member of a school or club group.

8.3 Social demographic characteristics of visitors to Arthur's Pass National Park

The following section of the Results provides information on the age, sex, relationship status, occupation and education of respondents. In all cases, findings from the present study are compared with both the results of Simmons (1980), and relevant New Zealand demographic information, obtained from the 1991 Census of New Zealand (NZC). In order to allow for meaningful comparison with the Census, an additional column (NZ only) excludes the overseas responses.

8.3.1 Age

Respondents were asked to indicate their ages according to categories provided. These categories parallel those used in the New Zealand Census (1991).

The most important feature of the results presented in Table 8.8 (overleaf) is the prevalence of those aged between 20 and 34 years old. The three groupings within this range account for 53.5 per cent of all visits to the Park. When the overseas respondents are removed (NZ only), this figure is reduced to approximately 46 per cent. New Zealand Census (1991) data (NZC) clearly demonstrates that those aged between 20 and 34 are over-represented in the Park, with the corresponding national figure for this sector 24.2 per cent. Overall, these findings support the outdoor recreation research both in North America (Kelly, 1980; Manning, 1986; Lucas, 1987), and New Zealand (Devlin, 1976; Simmons, 1980; Booth, 1986; Cessford, 1987; Barker, 1989; Harris and Orams, 1990; Ward, 1993; Horn, 1994). Many
Table 8.8: Ages of visitors to APNP

<table>
<thead>
<tr>
<th>Age (yrs)</th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
<th>NZ Only%</th>
<th>Simmons %</th>
<th>NZC %</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 15</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>23.4</td>
</tr>
<tr>
<td>15 - 19</td>
<td>3.3</td>
<td>5.9</td>
<td>3.9</td>
<td>5.2</td>
<td>16.7</td>
<td>8.4</td>
</tr>
<tr>
<td>20 - 24</td>
<td>11.3</td>
<td>24.4</td>
<td>14.5</td>
<td>13.7</td>
<td>19.4</td>
<td>8</td>
</tr>
<tr>
<td>25 - 29</td>
<td>17.6</td>
<td>21.0</td>
<td>18.5</td>
<td>15.1</td>
<td>20.3</td>
<td>8.1</td>
</tr>
<tr>
<td>30 - 34</td>
<td>21.5</td>
<td>17.6</td>
<td>20.5</td>
<td>17.0</td>
<td>}</td>
<td>8.1</td>
</tr>
<tr>
<td>35 - 39</td>
<td>8.0</td>
<td>8.4</td>
<td>8.1</td>
<td>12.3</td>
<td>}</td>
<td>7.3</td>
</tr>
<tr>
<td>40 - 44</td>
<td>11.3</td>
<td>12.6</td>
<td>11.6</td>
<td>14.2</td>
<td>26.4†</td>
<td>7</td>
</tr>
<tr>
<td>45 - 49</td>
<td>6.7</td>
<td>5.9</td>
<td>6.6</td>
<td>9.0</td>
<td>}</td>
<td>5.5</td>
</tr>
<tr>
<td>50 - 54</td>
<td>8.0</td>
<td>1.7</td>
<td>6.4</td>
<td>5.7</td>
<td>}</td>
<td>4.7</td>
</tr>
<tr>
<td>55 - 59</td>
<td>6.7</td>
<td>.8</td>
<td>5.3</td>
<td>3.8</td>
<td>}</td>
<td>4.1</td>
</tr>
<tr>
<td>60+</td>
<td>5.5</td>
<td>1.7</td>
<td>4.6</td>
<td>4.0</td>
<td>17.2‡</td>
<td>15.4</td>
</tr>
<tr>
<td>Total %</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

† Ages 30 - 44 inclusive
‡ Ages 45+ inclusive

There are significant differences between the front-country and back-country visitors to the Park ($x^2=55.5$, df=9, $p<.001$). For example, those in the 20 - 29 year old age group dominate the back-country, with 45.4 per cent of all visits to this area undertaken by those in this group. Only 4.2 per cent of back-country visitors are over the age of 50 years, compared with over 20 per cent of front-country visitors.

Other groups within the sample are broadly representative of the New Zealand population, with the notable exception of the "60+" category. As Table 8.8 illustrates, a very small proportion (4.6%) of visitors to Arthur’s Pass National Park is 60 years of age or older. This is especially true of visitors to the back-country, where only 1.7 per cent of respondents were of this age. New Zealand Census data suggest that this group is under-represented at the Park, with the corresponding national figure currently 15.4 per cent.

Although generally corroborating the findings of Simmons (1980), one difference is clear. While over 16 per cent of respondents in Simmons’ study were aged between
15 and 19 years, the present study records just 5.2 per cent in this category. One explanation for this may be found in the aforementioned changes to the rail service, which used to provide an inexpensive form of transport for Park visitors. Teenagers, who are less likely than other groups to have access to private transport, have been most significantly affected by this change.

8.3.2 Sex
As Table 8.9 demonstrates, the male:female ratio in this visitor study is approximately 60:40. This ratio is similar to that indicated in other outdoor recreation visitor surveys undertaken in New Zealand (Devlin, 1976; Simmons 1980; Booth, 1986; Cessford, 1987; Barker, 1989; Ward, 1993; Horn, 1994).

<table>
<thead>
<tr>
<th></th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
<th>NZ only %</th>
<th>Simmons %</th>
<th>NZC %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>56.3</td>
<td>68.8</td>
<td>59.4</td>
<td>62.4</td>
<td>63.0</td>
<td>49.3</td>
</tr>
<tr>
<td>Female</td>
<td>43.7</td>
<td>31.2</td>
<td>40.6</td>
<td>37.6</td>
<td>37.0</td>
<td>50.7</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

According to the Census of 1991, New Zealand society\(^7\) has an almost even ratio of males to females. This demonstrates that males are over-represented in the Park.

Back-country and front-country responses show statistically significant differences ($\chi^2=12.5$, $df=1$, $p<.001$). Clearly, women are poorly represented in the back-country areas of the Park. Here, the male:female ratio is approximately 70:30 - a slight reduction of the 75:25 ratio reported by Simmons (1980). Supporting the research reviewed in Chapter 4, front-country sex ratios are more even (56:43).

8.3.3 Marital status
The issue of marital status is difficult to deal with in this study for two reasons. First, as this is a replicative study, it is necessary to make comparisons with the work of Simmons (1980). The concept of marital status in the 1970s and 1980s was not as ambiguous as it is today. For this reason Simmons (1980) used the categories

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\(^7\) Only those over the age of 15 years are included here.
of "single", "married" and "other". It is neither appropriate, nor meaningful, in the present study to ask questions related to being "married" or "single". Today, a great many people live in relationships which are not marriage, but, for the purposes of this study constitute largely the same thing. It is the existence of a "significant other" that is the important factor, not the status of the relationship. Researchers are interested in the "marital" status of outdoor recreationists because relationships can provide information about what constrains and allows recreation in life-styles. To this end, respondents were asked if they were married or in some similar, permanent relationship.

A second factor which has made the issue of "marital status" difficult to deal with in this study, is the rigidity with which the New Zealand Census has retained traditional definitions of relationships. Data from the 1991 Census refers to the categories of "married" and "never married", without including "de facto", "living with partner" or the like.

Notwithstanding these difficulties, it is still possible to report some relevant data from the visitors survey of Arthur’s Pass National Park. Table 8.10 details the dyadic relationship status of Park respondents.

### Table 8.10: Dyadic relationship status of visitors to APNP

<table>
<thead>
<tr>
<th></th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
<th>NZ Only %</th>
<th>Simmons %</th>
<th>NZC %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married or similar</td>
<td>67.9</td>
<td>60.6</td>
<td>66.0</td>
<td>70.0</td>
<td>46.8</td>
<td>52.5</td>
</tr>
<tr>
<td>Single</td>
<td>32.1</td>
<td>39.4</td>
<td>34.0</td>
<td>30.0</td>
<td>47.5</td>
<td>35.7</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.6</td>
<td>11.8</td>
</tr>
<tr>
<td>Total n=373 (98%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>99.9</td>
<td>100</td>
</tr>
</tbody>
</table>

Two thirds (66%) of all visitors to the Park were married or in a "similar permanent relationship". When the overseas responses are removed, the married (or similar) proportion increases to 70 per cent. These figures are higher than the marriage status reported due to the very subjective assessment requirements. Many people in relationships may well view them as 'permanent' but not actually have the same commitment, and "life-shaping" potential which "marriage" holds for many people.
statistics for the New Zealand population as a whole. Possible explanations for this difference include the way in which "marriage or similar permanent relationship" was interpreted by respondents, and the family and group orientation of many Park users identified earlier (Table 8.7).

The results from this study also demonstrate a greater "married or similar" rate than Simmons (1980). Again, the interpretation of the category may be responsible for this. Furthermore, Simmons reported a higher proportion of respondents in the under 20 year old age category. Those in this age group are less likely to be married.

8.3.4 Education

Confirming previous research (White, 1975, cited in Jackson, 1980; Devlin, 1976; Bultena and Field, 1978; Simmons, 1980; Lucas, 1987; Ward, 1993), this study suggests that level of education is a strong determinant of Park visitation. Table 8.11 (overleaf) demonstrates the predominance of highly educated visitors and compares the results of the present study with those of Simmons (1980) and the educational achievements of New Zealanders on the whole (NZC).

The single most important aspect of Table 8.11 is the dominance of those visitors to the Park who have a university education. The majority of total Park respondents (61.9%), and New Zealand Park respondents (56.4), were found to have either part or complete degrees. The prevalence of highly educated visitors is apparent in both the front-country and back-country of the Park. From an examination of the New Zealand Census data, it is clear that the 1994 results signify an over-representation of those with high educational achievements. Only 6.6 per cent of the population over the age of fifteen have attained this level of education. This finding was also the central feature of Simmons' (1980) socio-demographic results in which 46.1 per cent of visitors indicated that they had part or complete university degrees.

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9 The NZC figures also include only those people aged 15 years and over.

10 Figures adapted from Table 10a "Tertiary Qualifications and Sex by Age Group for population resident in New Zealand aged 15 years and over", 1991 Census, New Zealand Social Structure.
Table 8.11: Highest educational attainment of visitors to APNP

<table>
<thead>
<tr>
<th></th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
<th>NZ only %</th>
<th>Simmons %</th>
<th>NZC %</th>
</tr>
</thead>
<tbody>
<tr>
<td>No tertiary</td>
<td>18.3</td>
<td>18.4</td>
<td>18.3</td>
<td>22.3</td>
<td>28.1</td>
<td>60.5</td>
</tr>
<tr>
<td>qualification</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tech. or trade</td>
<td>8.8</td>
<td>12.0</td>
<td>9.6</td>
<td>9.5</td>
<td>9.4</td>
<td>12.1</td>
</tr>
<tr>
<td>qualification</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University degree</td>
<td>62.0</td>
<td>61.6</td>
<td>61.9</td>
<td>56.4</td>
<td>46.1</td>
<td>6.6</td>
</tr>
<tr>
<td>(part or complete)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other tertiary</td>
<td>8.4</td>
<td>5.6</td>
<td>7.7</td>
<td>8.5</td>
<td>16.4</td>
<td>10.8</td>
</tr>
<tr>
<td>Other qualification</td>
<td>2.5</td>
<td>2.4</td>
<td>2.5</td>
<td>3.3</td>
<td>-</td>
<td>10.0</td>
</tr>
<tr>
<td>Total %</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

In terms of education, large sectors society are under-represented in the Park. For example, Table 8.11 demonstrates that over 60 per cent of New Zealanders (aged over 15 years) have no tertiary qualification. Only 22.3 per cent of the New Zealand visitors to Arthur's Pass National Park reported having no tertiary qualification.

The differences in the educational level of Park visitors and the general population, may be partially explained by the age structure of the sample. For instance, an over-representation of younger visitors can skew the results towards the highly educated. Owing to a number of factors, including rising unemployment and the recent emphasis on the importance of education, younger people have been encouraged to remain longer in the education system.

The above findings pose an important question: does advanced education somehow develop an interest in the natural world, and primitive recreation? Or are certain types of people drawn to both university education and wilderness? (Lucas, 1989). There are various explanations for why education seems to be an important factor influencing participation in outdoor recreation. One such explanation refers to the influence of university as the significant feature. While at university, students are exposed to a wider range of contacts and opportunities than may the case in many employment situations. Furthermore, at university, there is a unique availability of unstructured time as well as relatively long recess periods during which students have the opportunity to try new activities and environments. It is likely that people carry these recreation styles into later life (Simmons, 1980).
Other explanations for the predominance of highly educated people in outdoor recreation areas relate to methodological issues associated with on-site studies. For instance, it is possible that those with higher levels of educational attainment are more capable of, and likely to, complete and return questionnaires. As Devlin (1993:93) has suggested, "those with degrees would either be academically interested, feel obliged towards the researcher, or be motivated by strategic interest in the belief that their response may influence management".

Another factor to consider is that many of the studies have been implemented during the summer months of the year. Although this generally corresponds with peak use anyway, it is also the time during which the maximum numbers of students, school teachers, academics and "professionals" will be away from their places of work. Of course, many sectors of the work force take their holidays during this time, but not to the extent of the above groups. In a general population study, Cushman et al. (1991) provide partial support for this. They found a positive association between education and recreation participation during holidays and weekends. Participation was greatest for those with "post-secondary" education. These factors are possible sources of bias in on-site studies which have examined education or occupation as a social characteristic of use.

Speculation over the degree to which such methodological factors have affected results is partly reduced by the findings of Booth (1986). In a population-based study in Christchurch, New Zealand, which considered use and non-use of national parks, Booth confirmed several of the previous site-specific findings. For example, following statistical tests, Booth's data revealed significant differences between users and non-users on the variables of gender, occupation, and education. According to Booth, non-users of national parks were more likely to be women; from service or primary production occupations; and of lower educational status.
8.3.5 Occupation

The occupations specified by respondents were reviewed and classified into more general occupation categories\(^1\). An examination of the occupations of visitors to Arthur's Pass National Park reveals some clear patterns (Table 8.12).

**Table 8.12: Occupations of visitors to APNP**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
<th>NZ only %</th>
<th>NZC%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>11.3</td>
<td>24.4</td>
<td>14.6</td>
<td>15.1</td>
<td>NA</td>
</tr>
<tr>
<td>Unemployed</td>
<td>6.9</td>
<td>4.7</td>
<td>6.3</td>
<td>4.7</td>
<td>10.2</td>
</tr>
<tr>
<td>Houseperson</td>
<td>5.7</td>
<td>2.4</td>
<td>4.9</td>
<td>5.2</td>
<td>NA</td>
</tr>
<tr>
<td>Professional</td>
<td>34.7</td>
<td>33.9</td>
<td>34.5</td>
<td>34.4</td>
<td>10.8</td>
</tr>
<tr>
<td>Technical/Managerial/Admin</td>
<td>14.1</td>
<td>9.4</td>
<td>12.9</td>
<td>13.7</td>
<td>20.1</td>
</tr>
<tr>
<td>Clerical/Service/Sales</td>
<td>11.6</td>
<td>12.6</td>
<td>11.9</td>
<td>14.2</td>
<td>22.3</td>
</tr>
<tr>
<td>Production/Tpt/Labour/Trade</td>
<td>1.6</td>
<td>5.5</td>
<td>2.6</td>
<td>1.9</td>
<td>33.3</td>
</tr>
<tr>
<td>Other</td>
<td>14.1</td>
<td>7.1</td>
<td>12.3</td>
<td>10.8</td>
<td>1.4</td>
</tr>
<tr>
<td><strong>Total %</strong></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>98.1</td>
</tr>
</tbody>
</table>

\(n=373 \text{ (98\%)}\)

In keeping with the high degree of educational attainment, is the over-representation of "professional" visitors (34.5%), and the corresponding under-representation of those in the production, transport, labour and trade occupations (2.6%). This result remains unchanged once the overseas visitor responses are removed. According to the New Zealand Census data, "professionals" represent only one in ten (10.8%) New Zealanders over the age of fifteen years. While those from production, transport, labour and trade occupations\(^2\) comprise one third of the New Zealand labour force, only 1.9 per cent of New Zealand respondents in this study were from this group. In general, the findings of the present study are well

\(^{1}\) A problem exists in comparing all categories with the New Zealand Census. The "student" and "houseperson" categories are not listed as occupations in the Census and, therefore, no figures are recorded in these rows of the table. In addition to this, the table does not detail the results of Simmons (1980) in this case. This is because the scale he use (which included "skilled" and "unskilled") was seen as inappropriate for this study and could not be compared with Census information.

\(^{2}\) In order to compare the data collected for the present study, the occupations of: agriculture and fishery workers; trades workers; machine operators and assemblers; and elementary occupational groups were amalgamated.
supported by previous research both in North America (Bultena and Field, 1978; 1980; Manning, 1986) and in New Zealand (Devlin, 1976; Simmons 1980; Booth, 1986; Barker, 1989; Harris and Oram, 1991; Ward, 1993).

Although students are not specified in the New Zealand Census information, it is possible to suggest that this group is over-represented in the Park with 15.1 per cent of New Zealand visitors reporting their primary occupation as such. The presence of this sector is especially evident in the back-country where nearly one quarter (24.4%) of all visitors indicated that they were students. A chi square test indicates that this represents a significant difference between the front-country and back-country data sets ($x^2=40.5, df=7, p<.001$).

Students were also a dominant visitor group in 1980. Simmons reported that 20.2 per cent of males, and 14.3 per cent of females were students. He explained the high student numbers as, in part, reflecting the young age of many respondents. In the present study, the age structure is not quite so young or as clearly within the "student" bracket. Simmons also reported a strong "professional" element within his sample. For instance, his results indicated that 24.9 per cent of male visitors were from such occupations.

Of further significance is the absence of an "unemployed" category in Simmons' (1980) results. In 1980 there were appear to have been no visitors to the Park who were unemployed (the available statistics in the 1976 Census indicate an unemployment figure of approximately 3%). As a reflection of the social and political changes within New Zealand, this group now represents 4.7% of New Zealand visitors to the Park. This group is under-represented when compared with the proportion of New Zealand residents unemployed (10.15%\(^\text{13}\)).

\(^{13}\) The figure for unemployment has been re-calculated. The 1991 census did not include unemployed on the list of occupations within the labour force. The figures for those who were unemployed but actively seeking work were available elsewhere in the census results. For the purposes of discussion, the numbers of unemployed people were added to the number of people employed in other occupations, and the proportions re-calculated in order to produce meaningful comparisons.
8.4 Summary of visit and visitor characteristics

From an examination of the trip characteristics, previous visitation patterns, group composition and socio-demographic attributes, a number of statements can be made about summertime visitation to the Park. For instance, while the most common visitor generating region is Christchurch, more than 45 per cent of Park visitors originate from overseas. Results from this study therefore, indicate a strong proportional increase in international presence within Arthur’s Pass as well as a continuation of the local (Christchurch) visitation trend reported by Simmons (1980).

Partly reflecting the strong presence of visitors from Christchurch, the mode of travel to the park is overwhelmingly through the use of private (or rental) car. The most notable change associated with this trip characteristic is the decline in the use of rail and bus among back-country visitors. In 1994, it is those visiting the front-country who utilise the train and buses. This shift in travel mode is possibly associated with the increase in overseas visitation, as well as reflecting commercially driven changes in the rail system.

The overall trend for visitors spending between one and six days in the Park remains unchanged since 1980. However, a smaller proportion of people now spend long periods (one week or more) in the Park than was the case 15 years ago. Today, a high proportion of people spend one day or less in the Park. Moreover, visitors tend to visit during the summer, or the summer and winter.

In terms of the frequency of visits, the majority of respondents (repeat visitors) had visited the Park once or twice during the last twelve months. While frequency of visits declines in a linear fashion from this point, a significant proportion of back-country respondents visited the Park ten or more times over the preceding year. This is thought to reflect the increasing influence of endurance events such as the Coast to Coast race and the Avalanche Peak Challenge, both of which occur in January or February and demand high levels of training.\(^\text{14}\)

\(^{14}\) The organisers of the Coast to Coast event stipulate that their entrants undertake no more than one training run over the course set. However, it is clear from field observations, discussions with competitors, and a recent Social Impact Assessment (Corbett and Espiner, 1993), that most competitors exceed this quota.
There is a clear and continuing tendency for groups visiting the Park to be small in size and to be family-oriented. There is, however, also some evidence which suggests that solo-visitation is increasing. The majority of visitors were in the Park with three people or fewer and/or with family members. Family groups were especially predominant among front-country visitors, while back-country groups reflect a higher composition of friends.

The socio-demographic characteristics of Park visitors show that most groups include young adults, males, those who are married or in some similar relationship, those from professional occupations, and those who are highly educated. These results broadly reflect the findings of Simmons (1980).

While social demographic characteristics can tell us much about the type of people who are visiting the Park, they must be viewed collectively to have any meaning whatsoever. For example, professional occupation, or age alone do not suggest that one person will be a Park user and another a non-user. Taken together, however, it is possible to illustrate the type of person who might be involved in national park use. Many of the characteristics mentioned above are cross-linked. For example, a high level of education is likely to be related to a professional, technical, or managerial occupation. A greater proportion of men hold these positions in society, and, therefore, their presence will affect the occupation findings.

However, there is more to the explanation of national park visitation than being male, aged between 20 and 34, highly educated and professionally occupied. Such characteristics may well be typical of a culture which values nature and physical challenge, but in themselves do not provide a complete picture. These individual level characteristics fail to consider a variety of social processes which occur both long before, as well as during, national park visitation.

Although an examination of social characteristics in context can broadly suggest the likelihood of who will visit the Park, and who is less likely to do so, there are several other factors which need to be explored in order to obtain a clearer picture of what it is that determines national park use. The next section of the Results looks at elements of socialisation, life cycle, the influence of the social group, and
culture, and the ways in which these factors influence the use or visitation of Arthur's Pass National Park.

8.5 Socialisation and life-cycle influences

8.5.1 Early experiences of natural areas

Respondents in both the front-country and the back-country were asked whether they specifically visited national parks or other scenic areas as children.

Table 8.13: Respondents visiting national parks or similar areas as children

<table>
<thead>
<tr>
<th></th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visited national parks</td>
<td>66.5</td>
<td>68.5</td>
<td>67.0</td>
</tr>
<tr>
<td>Did not visit national parks</td>
<td>33.5</td>
<td>31.5</td>
<td>33.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

The majority (67%) of all respondents specifically visited national parks or other scenic areas as children. This corroborates the findings of previous studies that suggest childhood experiences play a significant role in current park usage (Burch, 1969; Yoesting and Burkhead, 1973; Kelly, 1974; Yoesting and Christensen, 1978; Carlson, 1979; Crawford, Godbey, and Crouter, 1986; Colton, 1987; McGuire, Dottavio, and O'Leary, 1987). There appears to be no difference between the front-country and back-country respondents in terms of childhood experience of natural areas.

When respondents were asked to identify the regularity of their natural area visits as children, over half (53.3%) reported that such visits were undertaken either "quite often" or "frequently". The remaining 46.8 per cent indicated that visits occurred "sometimes" or "rarely". A higher proportion of front-country respondents than back-country respondents reported visiting national parks "frequently" as children.

---

Respondents were provided with a five point scale from which to choose an appropriate descriptive. The scale can be viewed in the Appendices as Q 27 in the back-country questionnaire. The 'never' option of the scale attracted 3 respondents, whose choices were then omitted as they represented non-visitors as children.
8.5.2 Socialisation agents of first introduction

This research also attempted to gather evidence on the primary agents of socialisation into national park visitation. To this end, respondents were asked to indicate the group, or person, with whom they first visited a national park.

Table 8.14: Group with which first national park visit occurred

<table>
<thead>
<tr>
<th></th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
<th>Simmons %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td>76.7</td>
<td>74.2</td>
<td>76.1</td>
<td>47.3</td>
</tr>
<tr>
<td>Friends</td>
<td>9.7</td>
<td>12.1</td>
<td>10.3</td>
<td>23.7</td>
</tr>
<tr>
<td>School</td>
<td>7.2</td>
<td>7.3</td>
<td>7.2</td>
<td>13.0</td>
</tr>
<tr>
<td>Club/Scouts/Guides/Brigade</td>
<td>2.1</td>
<td>4.8</td>
<td>2.8</td>
<td>15.1</td>
</tr>
<tr>
<td>Other</td>
<td>4.3</td>
<td>1.6</td>
<td>3.6</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>99.1</td>
</tr>
</tbody>
</table>

n=364 (95.8%)

As Table 8.14 demonstrates, the majority (76.1%) of respondents reported the family as the group with which their first visits to national parks were made. This reinforces the suggestion that people are socialised into national park visitation, with the family being the strongest of the primary agents of socialisation in this society (Burch, 1969; Kelly, 1974; Devlin, 1976; Carlson, 1979; Simmons, 1980; Holman and Epperson, 1984; Colton, 1987).

Friends (10.3%) and School (7.2%) also feature as important introductory agents. Both front-country respondents (76.7%) and back-country respondents (74.2%) named the family as the agent responsible for park introduction. Approximately one in ten front-country visitors named their spouse or partner as the person with whom they first visited a national park.

Although Simmons (1980) did not compare his tramper respondents with the facilities users, his overall results demonstrate a similar pattern to that illustrated in the present study. However, while the ranking of various introductory agents is similar, the relative influence of each deviates from the findings of Simmons' study.

16 "Spouse or partner" responses have been included in the totals for "Family" in order to make comparisons with Simmons' work more viable.
For instance, Simmons reported less than half of respondents as naming the family. Three quarters of respondents in the present study specified this as the group within which their first national park visit was made. Furthermore, Simmons found that friends were the main introductory agent for nearly one quarter (23.7%) of respondents. The present study reveals that only one in ten (10.3%) visitors indicated that their first visit was with friends. Also of interest is the small extent to which specific recreation clubs have played a part in initial Park introduction. Even when combined with "scouts/guides/brigades", clubs as introductory agents only represent three per cent of respondents. This is a dramatic departure from the findings of Simmons, who reported that clubs were responsible for over 15 per cent of national park introductions.

It is also interesting to examine the extent to which schools have been initiating agents of national park visits. In 1980, schools were specified as the group with which 13 per cent of respondents first visited a national park. In the present study, schools were specified by only 7.2 per cent of respondents. The decline in importance of clubs and schools as introductory agents has increased the proportion of people naming the family as the primary introduction agent.

8.5.3 Agent of greatest influence

When respondents were asked to indicate which of the same groups had been the most influential on their national park visitation patterns, a different picture emerges.

Table 8.15: Group of greatest influence on national park use

<table>
<thead>
<tr>
<th>Group</th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
<th>Simmons %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td>46.6</td>
<td>37.7</td>
<td>44.2</td>
<td>30.4</td>
</tr>
<tr>
<td>Friends</td>
<td>30.0</td>
<td>38.5</td>
<td>32.3</td>
<td>41.3</td>
</tr>
<tr>
<td>School</td>
<td>7.4</td>
<td>3.3</td>
<td>6.3</td>
<td>4.5</td>
</tr>
<tr>
<td>Club (Scouts/Guides etc)</td>
<td>12.8</td>
<td>16.4</td>
<td>13.8</td>
<td>23.8</td>
</tr>
<tr>
<td>Other</td>
<td>3.2</td>
<td>4.1</td>
<td>3.4</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

n=340 (89%)
While the family (44.2%) is still very important in terms of general influence, the influence of friends (32.3%) is also evident. The importance of friends in influencing on-going participation in a recreation activity is a finding consistent with research undertaken and reported elsewhere (Burch, 1969; Devlin, 1976; Simmons, 1980; de Joux, 1985; Colton, 1987).

Several other groups also feature prominently in national park influence, most particularly specific recreation clubs (13.8%). While the influence of schools seems to remain constant from first visit to overall visits, the influence of clubs and the various scouting movements has clearly increased.

Comparison with the findings of Simmons (1980), indicate that there are relative differences in the rankings of influence. For example, Simmons reported that friends had a greater influence on overall park visitation than family. Family, in the present study, is of greater influence than friends in terms of park visitation. Another departure from the findings of Simmons, is the relative lack of influence of the club apparent in the present study. Simmons reported clubs as the most influential for 23.8 per cent of respondents. This study finds only 13.8 per cent of respondents in the same category. However, it is clear from both studies that the club is far more prominent as an maintenance agent than as an introductory agent. This is consistent with the leisure socialisation and life-cycle literature which suggests that particular agents will be of lesser or greater importance during specific life stages.

When the two visitation settings (front-country and back-country) are viewed independently, some significant differences are apparent ($x^2=17.65$, $df=4$, $p<.01$). For instance, while family is the most commonly specified influence for front-country respondents (46.6%), back-country respondents indicate that friends (38.5%) are slightly more influential on their national park use than their families (37.7%). Additionally, specific recreation clubs seem to have been more influential for the back-country respondents (16.4%) than they have been for front-country visitors (12.8%). Conversely, the influence of school appears to be more significant for front-country visitors (7.4%) than is the case for their back-country counterparts (3.3%).
Further evidence of the influence of friends in the visitation patterns of back-country visitors was found when these respondents were asked: "Of your five closest friends, how many take part in back-country recreation at least now and then?". The responses to this question (n=126: 97.7%) revealed that the majority (62.7%) of back-country visitors had between three and five close friends also involved in back-country recreation. Under one third (31.7%) had one or two close friends described as such, while less than six per cent claimed to have no close friends involved in back-country recreation. These findings support previous studies (Devlin, 1976; Hendee, 1968, cited in Colton, 1987; Burch, 1969).

8.5.4 Life-cycle influences: constraining and facilitating factors
This section of the Results focuses on life-cycle factors including the influence of marriage (or similar, permanent relationships), and children on the style, nature, and extent of respondents' visits.

8.5.4.1 The influence of partner
Married (or similar) respondents were asked to indicate how their partners had influenced their participation in outdoor recreation activities (Table 8.16).

### Table 8.16: The influence of partner on recreation participation

<table>
<thead>
<tr>
<th></th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
<th>Simmons %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited my range</td>
<td>10.9</td>
<td>15.4</td>
<td>11.9</td>
<td>9.8</td>
</tr>
<tr>
<td>Not affected my range</td>
<td>47.6</td>
<td>42.3</td>
<td>46.4</td>
<td>52.8</td>
</tr>
<tr>
<td>Extended my range</td>
<td>41.5</td>
<td>42.3</td>
<td>41.7</td>
<td>37.4</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Largely corroborating the findings of Simmons (1980), a substantial majority (88.1%) of respondents reported that their participation in outdoor recreation activities was either "extended" or "not affected" by the influence of partners. Only 11.9 per cent of respondents claimed that their participation had been limited by their partners. Back-country respondents were more likely (15.4%) to report this than front-country respondents of whom only 10.9 per cent claimed that their involvements had been limited.
Cross-tabulated data suggest a statistically significant association between gender and partner influence ($\chi^2=23.8, df=2, p<.01$). Fifteen per cent of men claimed to be limited in their participation. The corresponding figure for women was nine per cent. Sixty per cent of women and 28 per cent of men reported that their partners had extended their participation, while 57 and 31 per cent of men and women respectively claimed their participation to be unaffected by their partners. Other research (Burch, 1966; Rapoport and Rapoport, 1975; Simmons, 1980; de Joux, 1985; Horna, 1989) has generally found that men’s recreation participation is less affected than that of women by the life event of marriage. The most significant life-cycle change occurs with the birth of the first child.

One respondent, although not married himself, indicated his perception of the affect of a stable partner in a very graphic manner. When presented with the Likert scale question asking how many close friends were also involved in similar outdoor recreation activities, he selected the number "1", and below it wrote "now". Beneath the number indicating four friends, he wrote "then", and the additional remark "all bloody married!". Those with whom this respondent was "then" recreating had obviously progressed to another stage of the life cycle perhaps more restrictive on frequent use of outdoor recreation areas.

It is important to note that those people whose outdoor recreation activities are most severely affected by the influence of a spouse or partner are less likely to be present in the park in the first instance, and will, therefore, be under-represented in the sample. This is also a point to keep in mind when assessing the influence of children on park visitation.

8.5.4.2 The presence of children

It was hypothesised that the presence of children, and in particular, young children, would constrain park visitation at least in some respects (activities undertaken, length of stay, frequency of visit). It should be noted, however, that those respondents visiting the Park with their children account for only about one third of the sample. The fact that there are so few such respondents is indicative in itself of the constraints children place on visitation to such areas.
Table 8.17: Visitors reporting their use as restricted by children

<table>
<thead>
<tr>
<th></th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
<th>Simmons %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted</td>
<td>32.7</td>
<td>30.3</td>
<td>32.3</td>
<td>30.0</td>
</tr>
<tr>
<td>Not restricted</td>
<td>67.3</td>
<td>69.7</td>
<td>67.7</td>
<td>70.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>n=125 (91% of those visiting with children)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Of those people visiting the Park with their children, the majority (67.7%) do not believe that their national park use has been restricted by the presence of children. Only small differences between the front-country and back-country responses exist in this case. It is important to note that of the respondents who claimed that children were not restrictive to their use of the park, only 27.1 per cent were back-country visitors. This suggests that visitors with children are under-represented in the back-country. The findings here generally mirror the results of Simmons’ (1980) study.

Those respondents who indicated that children were restrictive to their national park use (most of whom were front-country respondents) were asked why or how they were restricted. There were typically two responses. The majority (72.5%) referred to the types of activities they could undertake, while the remainder (27.5%) commented on the short duration and low frequency of their visits.

Respondents were also asked about the strategies used to reduce these constraints. There were 38 responses to this question, most of which can be grouped within two main themes. The greatest proportion (44.7%) of respondents indicated that they reduce or cope with the constraint of children by going on short, easy walks or tramps of a similar nature. Others (39.5%) specifically mentioned that they would leave their partners at home with the children, or split the family and pursue separate activities. The remaining responses (15.8%) produced a range of remarks including "bringing the children’s friends", and "obtaining correct equipment".

In another question set to determine the extent to which children were perceived as a constraint on national park visitation, respondents were asked if they chose recreational activities within the Park primarily to suit their children (Table 8.18, overleaf).
Table 8.18: Visitors reporting Park activities as chosen to suit children

<table>
<thead>
<tr>
<th>Activities chosen to suit children</th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
<th>Simmons %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>52.4</td>
<td>15.6</td>
<td>44.9</td>
<td>56.0</td>
</tr>
<tr>
<td>Activities not chosen to suit children</td>
<td>47.6</td>
<td>84.4</td>
<td>55.1</td>
<td>44.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

n=115 (83.9% of those visiting with children)

The majority (55.1%) of visitors to the Park do not choose recreational activities primarily to suit their children. However, when the visitor settings are examined independently, it is clear that back-country visitors report this most strongly (84.4%). More than half (52.4%) of the front-country respondents report that they do choose activities which suit their children. The differences between the front-country and back-country were found to be statistically significant ($x^2=27.7$, $df=1$, $p<.001$). This finding is not surprising considering that those visiting the back-country are likely to be those whose activities are not affected by the presence of children. Conversely, those in the front-country may have been there because of the presence of children. Although the difference is small (11.1%), the above results depart from the findings of Simmons (1980) to the extent that, in his study, a majority (56%) of respondents claimed to select their activities to suit their children.

While the literature suggests that children act as a significant inhibitor of recreational activities (Bollman et al., 1975, cited in Holman and Epperson, 1984; Horna, 1989), and that children have a substantial influence on vacation destination decisions (Crompton, 1981, cited in Holman and Epperson, 1984), the present research does not fully support this. Clearly, visitors in some areas are more affected than those in others, but to a large extent visitors do not feel constrained by the presence of children, or specifically choose their activities to suit their children.

There are at least two possible explanations for the relatively low level of perceived constraint. First, a degree of rationalisation (and/or product shift) may be occurring. This refers to the tendency for people to report high levels of satisfaction regardless of how frustrating or disappointing an experience may have been (Hammitt and Patterson, 1991). Owing to their distance from most urban
residences, national parks require a high degree of commitment from visitors. Significant amounts of time, money and effort have often been invested in visits.

A second possible explanation for low levels of perceived constraint regarding the presence of children has already been alluded to. The very act of visiting certain areas of many national parks is a screening process. Those people most significantly affected by the presence of their children, in terms of the recreation activities they would like to pursue, tend not to be present in the Park in the first place. In this way, the study excludes people whose activities are most affected by the presence of children.

8.5.5 Qualitative contributions to understanding of socialisation and life cycle

Some of the preceding data have suggested that recreationists move through a "career" of use which begins with parental introduction in front-country areas and gradually extends and intensifies before new life-cycle stages constrain or alter the style of use again. Some of the following qualitative responses help provide images of this process. For instance, Joe (a back-country user in his forties) described his national park use:

Probably the first time I went to Arthur’s Pass would be getting on for twenty-five years ago - for an outdoor experience rather than just passing through. I went away on a shooting trip with my brother - up Sudden Valley - just a young fellow! [Trips continued until] when I was about twenty years old, when I left it - went away from it, you know, the outdoors thing - chasing women around!... Got married, and we sort of got the young family - you don't get much of a chance.

[Then, when the children were a little older] we got back into it. We used to go to Arthur’s quite regularly, particularly if there was a bit of a snow-fall. We took the kids up the Waimak - just day walks and a lot of the little walks around Arthur’s. As they [the children] got a bit more interested, we branched out a bit and spent nights up there - you know, fairly handy places - in and around Mount White Station and places like that.

Since his children have moved away from home, and become less interested themselves, Joe and his wife Paula have intensified their use of the Park.

Since we shifted to the Coast, we have sort of got into it in a bigger way - two or three days up the Taipo, Avalanche Peak - Crow River, and the three pass trip. We did the Coast to Coast this year as a team, and we’ll do it again next year.
From this excerpt, it is clear that Joe's use of the Park follows a career that is largely shaped by life cycle factors such as family of origin, the peer group, marriage, children and later adulthood (launching).

Another informant (Marge), an older woman of considerable national park experience, emphasised the way in which there is a continuity to the socialisation process - an on-going transfer of norms and values.

We [her husband and her] have spent many happy and peaceful holidays at Arthur's Pass, and it was there that we introduced our children to the mountains and tramping. This developed in them a love of nature at quite an early age. As they reached their teens, they were able to join tramping clubs and experience nearly all the longer tracks and routes in the Park. Now, they, in turn, take their children to Arthur's Pass to experience the joys they knew as children.

While a strong family background in natural area use was a clear theme for back-country informants, it was not necessarily the case for front-country informants.

8.5.6 Summary of socialisation and life cycle influences

The data from the present study indicate that Park users overwhelmingly visited similar areas as children, did so regularly, and typically with their families (first visit). The influence of friends and partners is also strong, with the former the most commonly mentioned continuing influence after family. For the majority, spouse or partner has not been a limiting factor on Park use and in many cases it would appear to have been an extending feature. This was especially the case for women. Despite several questions, it is difficult to assess the extent of restriction that the presence of children places upon Park visitation. The small number of children visiting the Park is data in itself. Where children have been limiting it appears that this occurs in terms of the activities in which the family can participate and the duration of trips undertaken. Strategies used to overcome or reduce these constraints include pursuing short or easy walks, splitting the family while in the Park, and/or leaving a partner at home with the children. Overall, respondents were divided over whether children determined the activities undertaken within the Park, but clearly the front-country visitors felt constrained, while back-country visitors did not.
An additional insight into the effects of socialisation and life-style factors on recreation patterns has been obtained from case examples examining the recreation histories of individual informants.

8.5.7 Interim conclusion

Whereas the social demographic characteristics were not able to provide adequate answers as to why some people visited the Park, or undertook certain activities, and others did not, knowledge of personal history and life cycle stage are important contributors to a better understanding of Park use. It is likely that the use of Arthur's Pass National Park is determined, in part, by the socialisation process in which the agents of family and friends are especially important. Life cycle factors, such as the advent of marriage, or the presence of children also constrain or promote various styles of visitation. While those people with certain individual characteristics may typify the Arthur's Pass National Park visitor, the more salient features determining visitation are likely to be related to the social context of each individual's life, and within the current visitation group.

Another important aspect of national park visitation, to which the Results and Discussion now turns, is the motivations which direct behaviour. While socialisation and life-cycle factors can be viewed as sociological factors influencing national park use, motives are generally perceived as the individual (psychological) factors affecting visitation. These perspectives are complementary in understanding national park use.

8.6 Motivations and Satisfactions

Motivations direct and influence behaviour. They can be described as the reasons why people do one thing and not another, the driving forces behind much of what people do. Although psychologists distinguish between motives and reasons, it is clear from the literature review that many recreation studies do not. As stated previously, the term motivations will be used here for the sake of consistency,

This section of the Results examines the prevalence of specific Park motivations which are then summarised and compared with those discussed by Simmons (1980).
Qualitative data are used to provide additional explanation. Satisfactions are then presented in a similar fashion before a comparison of the two is made.

Plate 1: A sense of escaping urban environments and being close to nature are popular themes in the motivations for visiting APNP (Mt. Rolleston from Temple Basin).

### 8.6.1 Specific motivations

Using a closed choice format (adapted from Crandall, 1980), a list of twenty possible motivations was presented to respondents who were asked to select and rank up to five main reasons (or motivations) for visiting the Park. In order to present this data in a comprehensible form, it was necessary to weight and scale each response. Motivations ranked as "1" (most important) were attributed a score of five, and motivations ranked as "5" (least or fifth in importance) a score of one. The total score for each motivation was calculated by multiplying the number of responses for each choice by its rank. This was necessary so that individual motivations could be compared with one another.

Table 8.19 (overleaf) is a summary of responses to motivational options. The percentages reflect no more than a simplified way of understanding the relative
importance given to each of the motivation choices. It needs to be acknowledged that this merely represents a method by which all choices can be reported in a relative fashion. It is not valid to assume that the distances between each rank are the same, or that a motive ranked "first" (highest) is five times more important than a motive ranked fifth (lowest).

Table 8.19: Specific motivations for visiting APNP (weighted)

<table>
<thead>
<tr>
<th>Motivation</th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>To get be close to nature</td>
<td>21.4</td>
<td>18.4</td>
<td>20.4</td>
</tr>
<tr>
<td>To explore new areas</td>
<td>17.7</td>
<td>13.3</td>
<td>16.1</td>
</tr>
<tr>
<td>To get away from civilisation for a while</td>
<td>14.1</td>
<td>14.3</td>
<td>14.2</td>
</tr>
<tr>
<td>To relax</td>
<td>11.4</td>
<td>10.2</td>
<td>11.0</td>
</tr>
<tr>
<td>For exercise or training</td>
<td>7.3</td>
<td>11.6</td>
<td>8.8</td>
</tr>
<tr>
<td>For the challenge</td>
<td>4.4</td>
<td>12.2</td>
<td>7.1</td>
</tr>
<tr>
<td>To do things with friends</td>
<td>4.9</td>
<td>6.4</td>
<td>5.4</td>
</tr>
<tr>
<td>As a change from my daily routine</td>
<td>6.1</td>
<td>2.6</td>
<td>4.9</td>
</tr>
<tr>
<td>To get away from people</td>
<td>2.2</td>
<td>2.2</td>
<td>2.3</td>
</tr>
<tr>
<td>For the excitement</td>
<td>1.6</td>
<td>3.3</td>
<td>2.2</td>
</tr>
<tr>
<td>To help bring the family together</td>
<td>1.7</td>
<td>0.7</td>
<td>1.4</td>
</tr>
<tr>
<td>To think about my personal values</td>
<td>1.3</td>
<td>1.0</td>
<td>1.2</td>
</tr>
<tr>
<td>To meet new and varied people</td>
<td>1.1</td>
<td>1.0</td>
<td>1.1</td>
</tr>
<tr>
<td>To travel/access to the Coast</td>
<td>1.6</td>
<td>.01</td>
<td>1.1</td>
</tr>
<tr>
<td>For the risks involved</td>
<td>0.6</td>
<td>0.5</td>
<td>0.6</td>
</tr>
<tr>
<td>To be competitive</td>
<td>0.1</td>
<td>1.0</td>
<td>0.4</td>
</tr>
<tr>
<td>To use my mind</td>
<td>0.5</td>
<td>0.1</td>
<td>0.3</td>
</tr>
<tr>
<td>To be away from the family</td>
<td>0.2</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td>To show others I could do it</td>
<td>0.2</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>To exercise leadership</td>
<td>0.3</td>
<td>0.1</td>
<td>0.2</td>
</tr>
<tr>
<td>To help others</td>
<td>0.4</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Other</td>
<td>0.9</td>
<td>0.2</td>
<td>0.6</td>
</tr>
<tr>
<td><strong>Total %</strong></td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 8.19 demonstrates that the most highly ranked motivation for visiting Arthur's Pass National Park is "to be close to nature" (20.4%). This is followed by the motivations of "exploring new areas" (16.1%) and "to get away from civilisation for
a while (14.2%). These results are similar to the findings of studies in both North America (Manning, 1986; Stankey and Schreyer, 1987; Hammitt and Madden, 1989) and New Zealand (Neighbour, 1973; Cessford, 1987; Kearsley, 1990; Sutton, 1992).

At a slightly lower level, another set of less abstract motivations exists. Here, "relaxation" (11.0%), "exercise or training" (8.8%), and "challenge" (7.1%) are prominent. The motivations of "change from routine" (4.9%), and "to do things with friends" (5.4%), are also important motivations for many people. Below these, a range of very specific motivations has been reported.

There are some similarities as well as differences between the motivations of front-country and back-country respondents (columns 2 and 3 of Table 8.19). For both visitor settings, the motivations of "getting away from civilisation", "closeness to nature" and "exploring new areas" are of the highest importance. The central difference between the two groups is the extent to which the "change in daily routine", the need for "exercise and training", and "challenge" motivate the visit.

The development of various endurance activities and multi-sport events within the Park may have increased the predominance of these latter two motivations within the back-country visitors. For instance, "challenge" was seen as the most important motivation by 12.2 per cent of back-country visitors, while only 4.4 per cent of those visiting the front-country rated it as such. Exercise and training was also an important motivation for many back-country visitors (11.6%), but less so for their front-country counterparts (7.3%).

The salience of the introduction of mountain running (endurance or multi-sport events) in Arthur's Pass National Park is made clearer when the motives of traditional back-country users (such as trampers, climbers) are compared with those of participants in newer activities (running, kayaking and multi-sport). For instance, 51 per cent of the latter group reported "training and exercise" as the most important reason for visiting the Park. Of the other back-country visitors, only 15 per cent ranked this reason first. While other motives were broadly similar among back-country visitors, almost 20 per cent of "traditional" users rated the exploration of new areas as the most important, while only 2.5 per cent of participants in "new" activities placed this reason first. These findings suggest that those participating in
mountain running and other endurance style activities in the back-country, are more likely to be motivated by extrinsic factors than other back-country users.

8.6.2 General motivations

The motivation data have been re-categorised in order to make some broad comparisons with Simmons (1980). Differences in the method of collection and classification criteria, means that only indicative comparisons are meaningful. Table 8.20 presents the motivations in the categories used by Simmons and initially adapted from the ORRRC Report No. 3 1962 (cited in Simmons, 1980).

Table 8.20 (overleaf) demonstrates the strong influence of motivations linked to "exit civilisation", "aesthetic/religious", and "health and fitness" values. While the former two motivations were also prominent in the results reported by Simmons (1980), respondents in his study named "specific activity" and "access" as most important. Other motivations appear in a different order to that given by Simmons. In particular, motivations associated with the visitors' "health and fitness" have become very important. While "challenge" scored highly for trampers in Simmons' study, it is not among the primary motivations reported in the present study. It is, however, still an important motive for back-country visitors.

"Access" as a motivating force scored highly for both front-country and back-country respondents in Simmons' study. Its lack of influence in the current work is owing to the fact that it was not included as an item on the list from which responses were selected. Although not evident in this study, access is still likely to be an important influencing factor, given the Park's close proximity to urban populations.

---

1 Simmons used an open-ended format.

2 This category represents the combination of "for exercise or training" and "to relax".
Table 8.20: Reclassification of motivations and comparison with Simmons (1980)

<table>
<thead>
<tr>
<th></th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
<th>Simmons (scores)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>FC</td>
</tr>
<tr>
<td>Aesthetic/Religious</td>
<td>23.3</td>
<td>19.5</td>
<td>21.9</td>
<td>10</td>
</tr>
<tr>
<td>Exit civilisation</td>
<td>22.7</td>
<td>19.4</td>
<td>21.6</td>
<td>10</td>
</tr>
<tr>
<td>Health/Fitness</td>
<td>18.6</td>
<td>21.9</td>
<td>19.8</td>
<td>-</td>
</tr>
<tr>
<td>New Area</td>
<td>17.7</td>
<td>13.3</td>
<td>16.2</td>
<td>4</td>
</tr>
<tr>
<td>Challenge</td>
<td>6.9</td>
<td>17.3</td>
<td>10.6</td>
<td>3</td>
</tr>
<tr>
<td>Social</td>
<td>7.7</td>
<td>8.2</td>
<td>7.8</td>
<td>8</td>
</tr>
<tr>
<td>Nature</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>8</td>
</tr>
<tr>
<td>Access</td>
<td>1.6</td>
<td>.1</td>
<td>1.1</td>
<td>11</td>
</tr>
<tr>
<td>Specific Activity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>11</td>
</tr>
<tr>
<td>Other</td>
<td>1.5</td>
<td>.3</td>
<td>1.0</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

8.6.3 Qualitative contributions to understanding motivation

The qualitative interviews undertaken with a small number of both back-country and front-country visitors, helps to add depth to the above findings. Although several informants remarked that their reasons or motives for participation were very hard to put into words, some commons themes did emerge. For example, interviews often revealed the existence of a spiritual or inspirational element to their motivation. John, an experienced tramper and traveller in his twenties, had this to say:

*I have gone past the challenge stage. For me, there is no challenge - just enjoying being in the wilderness - enjoying the scenery. The challenge has been replaced by inspiration - it's hard to put into words really.*

Keith, a man of limited outdoor experience, also found it difficult to express his reasons for visitation:

*It's a spiritual experience really. I just think about the hills and it does something to me... brings a tear to my eye just thinking about it!*
Neil, a younger recreationist who was both an active tramper and Coast to Coast race competitor, spoke of his experience in terms of the freedom and flexibility the outdoors gave him:

*Camping by the river is quite a different set-up. The achievement of having all you need - the self-sufficiency is great. It's not just getting away from what's in town, but what's happening in your own life, or whatever. I mean, whether you are at varsity or whether you are working and all your troubles at work and the rest of it, you can go up there [Arthur's Pass] for the weekend and it is still like what it was ten years ago.*

Here Neil illustrates the importance of the need to escape from urban pressures and the complexities of life to an area where one can be self-sufficient and enjoy a relative absence of change. These comments re-emphasise the saliency of the nature appreciation and escape motives associated with outdoor recreation participation.

Plate 2: For many visitors to the Park the permanency of landscape counter-balances the temporary and transitional nature of human modified areas (Tarn on Walker Pass).

**8.6.4 Intrinsic and extrinsic motivations**

Iso Ahola (1989) refers to intrinsic motivations as participation in an activity for its own sake, rather than for any external reward. Extrinsic behaviour is motivated by
the expectation of some "end" or reward. Multi-sport participants (endurance runners), may be motivated more by extrinsic factors than the traditional, more passive users. For example, as previously reported, runners are more likely to specify the motivations of training and exercise (51%) than other back-country users (15%).

A recurrent theme among those endurance runners and endurance runner/trampers interviewed was describing the running experience as a means to an end. Joe, an experienced outdoor recreationist in his forties described the differences between running and tramping:

*When you're running, you're looking about twelve feet in front of you. Occasionally, you glance around to see if someone's catching you. ...it's not the same experience as walking. You get the benefit of having worked hard - that's what you get out of it, whereas with a tramp you take in a hell of a lot more. You've got time to stop and take photos, you see what the creeks are like rather than trying to jump across and through them.... You get a lot more long-lasting effects from a tramp than you ever will from a run. From the run, you might have a few aches and pains and a couple of bruises, but all you are thinking about is 'how can I prune five or ten minutes off it'; 'what did I do wrong'....*

Further reinforcing the pragmatic motives behind the activity, Joe asserts that

*It wouldn't matter where the event was. The fact that it is at the Deception has got nothing to do with it. You could just as easily hold the event by running up the Taramakau or Lake Sumner, or paddling the Hurunui to the mail road.*

Neil, a much younger man who had recently taken up multi-sport and triathlete activities following a broad tramping background, had similar comments to make about tramping and running.

*When I am running, it is much more challenging - the time challenge, competing against other people. When I go tramping, it's for quite different reasons - being there, and in a different place, and just the beauty of the place. When I'm running, there's just the challenge of getting out - you really focus on the car at the end of the road, getting out to the road, and the track you are running down is really not important.*

These comments suggest that the activities of tramping and running, although in this case reliant on the same geographical location, are differentiated on the basis of the motives that drive them. Tramping can be seen as typified by motives which are intrinsic, while running is based on motives that are more extrinsic in character.
In these examples, tramping is clearly seen as an end in itself, whereas running is a means to an end. The fact that some runners clearly see the location of the pursuit as unimportant has implications for the potential substitutability of such events should conflict develop between users, or serious resource damage occur.

8.6.5 **Interim summary of Park visitor motivations**

Respondents were asked to select and rank five potential motivations for visiting Arthur’s Pass National Park. From this, a detailed and varied set of motivations resulted. In order for this information to be condensed and presented in a useful manner, the data were weighted so that each motivation could be assessed in terms of its relative importance. The motivations of "getting away from civilisation", "being close to nature", and exploring new areas" were of primary importance. These motivations were also a feature of Simmons’ (1980) study. However, people visiting the Park for reasons associated with health and fitness signifies a new motivational influence on Park use. This is especially the case in the back-country, and reflects the progressive developments in multi-sport events within the Park.

The qualitative data support the main themes of the quantitative analysis. The inclusion of this data serves to highlight the differences between the motives for traditional versus new activities in the Park.

It is important to remember that there is a broad and diverse range of possible motivations for visiting an area like Arthur’s Pass National Park. The above presentation has attempted to outline and highlight some of those most commonly reported Park visitation motivations. Although attention is drawn to the most frequently mentioned reasons for visiting the Park, the plethora of less visible motivations should not be ignored.

8.7 **Satisfactions**

The literature reviewed suggested that visitors’ satisfactions are dependent on a variety of factors. Elements external to the visitor which can shape satisfactions include management actions or presence, the weather, and the behaviour and/or activities of other users. Influential internal factors include the visitors’ motivations
for visiting a particular area, their expectations, and previous experiences. These factors are inter-related - each determines or is determined by the others.

This section of the Results and Discussion reports the satisfactions and expectations of respondents, and links motivations to satisfactions. Satisfactions are represented by responses to an open-ended question requesting visitors to rank the three "most enjoyable aspects" of their visit. Visitor dissatisfaction and the extent to which expectations were met will also be discussed.

8.7.1 Specific satisfactions

As with the presentation of motivations, satisfactions will initially be presented in specific form. Following this, they will be re-categorised for comparison with motivations. In both cases, a process of weighting has been used. Each response has been calculated to represent the rank given to it by respondents. The overall results are then documented in percentage form in order to determine the relative importance of each satisfaction.

Table 8.21 (overleaf) illustrates that the greatest proportion (28.3%) of visitors rate scenic aspects as the most enjoyable of their trip. The remaining aspects appear relatively minor in proportional terms. "Specific activities" (7.4%) are the next most enjoyable, followed by "solitude" (5.6%), "closeness to nature" (5.2%) and "fauna and flora" (5.1%).

Although scenic aspects are equally important for visitors to both the front-country and the back-country, there are differences at other levels. For example, more than one in every ten front-country visitors (10.2%) indicated that the specific activity in which they were involved was the most enjoyable aspect of the visit to the Park. This corresponds to only 2.1 per cent of back-country visitors. Conversely, back-country visitors rated "solitude", "challenge" and "closeness to nature" at a higher level than did their front-country counterparts. It is interesting to note the low level of importance given to "being with family", considering the high proportion of people visiting with this group (46%, Table 8.7).
Table 8.21: Most enjoyable aspects (satisfactions) of visit to APNP (weighted)

<table>
<thead>
<tr>
<th>Aspect</th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenic</td>
<td>28.2</td>
<td>28.4</td>
<td>28.3</td>
</tr>
<tr>
<td>Specific activity</td>
<td>10.2</td>
<td>2.1</td>
<td>7.4</td>
</tr>
<tr>
<td>Solitude</td>
<td>4.5</td>
<td>7.6</td>
<td>5.6</td>
</tr>
<tr>
<td>Close to nature</td>
<td>6.2</td>
<td>3.3</td>
<td>5.2</td>
</tr>
<tr>
<td>Flora/fauna</td>
<td>6.0</td>
<td>3.4</td>
<td>5.1</td>
</tr>
<tr>
<td>Novelty of new area</td>
<td>3.8</td>
<td>4.9</td>
<td>4.2</td>
</tr>
<tr>
<td>Weather</td>
<td>3.7</td>
<td>5.1</td>
<td>4.2</td>
</tr>
<tr>
<td>Challenge</td>
<td>3.1</td>
<td>7.0</td>
<td>4.1</td>
</tr>
<tr>
<td>Peace and quiet</td>
<td>4.2</td>
<td>2.8</td>
<td>3.7</td>
</tr>
<tr>
<td>Sociability</td>
<td>3.8</td>
<td>2.1</td>
<td>3.2</td>
</tr>
<tr>
<td>Facilities</td>
<td>2.3</td>
<td>4.8</td>
<td>3.1</td>
</tr>
<tr>
<td>Mountains</td>
<td>3.5</td>
<td>3.2</td>
<td>3.4</td>
</tr>
<tr>
<td>Clean environment</td>
<td>2.5</td>
<td>3.1</td>
<td>3.0</td>
</tr>
<tr>
<td>Wilderness</td>
<td>2.0</td>
<td>3.4</td>
<td>2.5</td>
</tr>
<tr>
<td>Change</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Exercise</td>
<td>1.9</td>
<td>3.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Companionship</td>
<td>1.0</td>
<td>3.3</td>
<td>1.8</td>
</tr>
<tr>
<td>The village</td>
<td>2.1</td>
<td>1.0</td>
<td>1.7</td>
</tr>
<tr>
<td>The road</td>
<td>2.3</td>
<td>0.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Achievement</td>
<td>0.9</td>
<td>2.7</td>
<td>1.5</td>
</tr>
<tr>
<td>Relaxation</td>
<td>1.5</td>
<td>0.9</td>
<td>1.3</td>
</tr>
<tr>
<td>Being with family</td>
<td>0.3</td>
<td>2.1</td>
<td>0.9</td>
</tr>
<tr>
<td>Excitement</td>
<td>0.5</td>
<td>1.5</td>
<td>0.8</td>
</tr>
<tr>
<td>Seeing others learn</td>
<td>1.0</td>
<td>0.4</td>
<td>0.8</td>
</tr>
<tr>
<td>Other</td>
<td>2.2</td>
<td>1.1</td>
<td>1.9</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

8.7.2 General satisfactions

In order to compare the present results with those of Simmons (1980), the data has been re-categorised and is presented in Table 8.22 (overleaf).

Table 8.22 reinforces the dominance of the scenic aspects of visitor satisfaction, with the Aesthetic/Religious category incorporating 48 per cent of respondents. Below this, the most enjoyable aspects are virtually equivalent, with slightly higher
Table 8.22: Satisfaction of visit reclassified and compared with Simmons (1980)

<table>
<thead>
<tr>
<th></th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
<th>Simmons (scores)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>FC</td>
</tr>
<tr>
<td>Aesthetic/Religious</td>
<td>50.2</td>
<td>44.0</td>
<td>48.0</td>
<td>12</td>
</tr>
<tr>
<td>Exit Civilisation</td>
<td>6.7</td>
<td>11.6</td>
<td>8.5</td>
<td>12</td>
</tr>
<tr>
<td>Specific Activity</td>
<td>10.3</td>
<td>3.1</td>
<td>7.8</td>
<td>9</td>
</tr>
<tr>
<td>Social</td>
<td>6.1</td>
<td>7.9</td>
<td>6.6</td>
<td>8</td>
</tr>
<tr>
<td>Facility</td>
<td>6.9</td>
<td>6.0</td>
<td>6.6</td>
<td>NA</td>
</tr>
<tr>
<td>Novelty/Change</td>
<td>6.2</td>
<td>7.3</td>
<td>6.6</td>
<td>NA</td>
</tr>
<tr>
<td>Challenge</td>
<td>4.4</td>
<td>10.1</td>
<td>6.4</td>
<td>8</td>
</tr>
<tr>
<td>Health and Fitness</td>
<td>3.4</td>
<td>4.3</td>
<td>3.7</td>
<td>NA</td>
</tr>
<tr>
<td>Intellectual</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>10</td>
</tr>
<tr>
<td>Nature</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>9</td>
</tr>
<tr>
<td>Other</td>
<td>5.8</td>
<td>5.7</td>
<td>5.8</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>NA</td>
</tr>
</tbody>
</table>

proportions reporting aspects related to exiting civilisation and specific activities. There are significant differences between front-country and back-country respondents ($\chi^2=31.5$, $df=8$, $p<.001$). For instance, higher proportions of front-country visitors than back-country visitors rate "aesthetic/religious" and "specific activity" aspects as the most enjoyable of their visits. Back-country visitors are more likely to report the satisfactions of "exit civilisation" and "challenge".

Although direct comparisons cannot be made, it is evident that the two highest ranking satisfactions in this study are also important in Simmons’ (1980) study. However, it is likely that the relative importance of these is different. While "intellectual" satisfaction is not a feature of the present results, "specific activity" and "social" satisfactions remain important, especially to front-country groups. "Challenge" as a satisfaction is still important to back-country visitors.

8.7.3 Motivations and Satisfactions

In order to illustrate the relationship between motivations and satisfactions, they have been collated, ranked, and presented in Table 8.23 (overleaf).
Table 8.23: Park motivations and satisfactions ranked and compared

<table>
<thead>
<tr>
<th>Motive (rank)</th>
<th>Satisfaction (rank)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetic/Religious</td>
<td>1</td>
</tr>
<tr>
<td>Exit Civilisation</td>
<td>2</td>
</tr>
<tr>
<td>Health/Fitness</td>
<td>3</td>
</tr>
<tr>
<td>New Area/Novelty</td>
<td>4</td>
</tr>
<tr>
<td>Challenge</td>
<td>5</td>
</tr>
<tr>
<td>Social</td>
<td>6</td>
</tr>
<tr>
<td>Access</td>
<td>7=</td>
</tr>
<tr>
<td>Specific Activity</td>
<td>-</td>
</tr>
<tr>
<td>Facility</td>
<td>-</td>
</tr>
<tr>
<td>Other</td>
<td>7=</td>
</tr>
</tbody>
</table>

1 = most important

The primary motivational factors ("exit civilisation" and "aesthetic/religious") are also those aspects of visits which respondents found to be the most enjoyable. While "specific activity" was not an important motivational factor, it appears to be the source of considerable enjoyment for many visitors. Likewise, "facilities" do not seem to have been prominent in attracting people to the Park, yet they do feature in their satisfactions. Conversely, while "health/fitness" was a reported motivation for visitation, it is ranked lowest in the examination of satisfactions. This anomaly could represent one of two things. On the one hand it could indicate that people visiting for health and fitness reasons have not achieved satisfaction. On the other hand, it is more likely that the satisfactions of those visiting for health and fitness reasons are manifested in "specific activities".

The above comparison indicates that the satisfactions of visitors reflect their motivations for coming to the Park. From this it can be suggested that levels of satisfaction are relatively high among visitors to the Park.

8.7.4 Expectations

Expectation is an important component of satisfaction. From the literature reviewed (Chapter 6), it is clear that if expectations match the experience, there is a greater chance of achieving satisfaction. Respondents in this study were simply asked if their expectations were met. Table 8.24 (overleaf) outlines the responses to this
question which was conducted using a five point Likert scale. The responses have been collapsed into three categories to simplify the analysis.

Table 8.24: Degree to which visitors’ expectations of APNP visit were met

<table>
<thead>
<tr>
<th></th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expectations not met</td>
<td>3.3</td>
<td>1.5</td>
<td>2.9</td>
</tr>
<tr>
<td>Some were met, others were not</td>
<td>18.5</td>
<td>14.2</td>
<td>17.4</td>
</tr>
<tr>
<td>Expectations met</td>
<td>78.2</td>
<td>84.3</td>
<td>79.9</td>
</tr>
<tr>
<td>Total n=366 (96.3%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

The overwhelming majority (79.7%) of respondents reported that their expectations were met. This finding corroborates previous research in New Zealand which suggested high levels of satisfaction (Simmons, 1980; Groome, et al., 1983, cited in Moore, forthcoming; Cessford, 1987). Simmons (1980) reported that the visits of nearly 85 per cent of respondents were up to or better than expectations.

High levels of satisfaction among respondents indicate one of several things. For example, it could simply mean that the management of the area corresponds precisely with the needs of its visitors, and that the recreation experiences themselves are excellent. Alternatively, such results could suggest that respondents are undergoing a process of justifying their investments in time, money and emotion and are therefore reluctant to admit that they are dissatisfied. Finally, high levels of satisfaction may indicate that those who recreate at the present site are those who have remained because they enjoy the conditions or opportunities. Other recreationists, who may well have utilised the site in the past may have been displaced to another site through dissatisfaction. Therefore, high levels of satisfaction should not be used as the only basis for evaluating the success of recreation management. Such a variable may simply measure management’s effectiveness at filtering out people who are not satisfied by a particular management style, or set of opportunities provided.
8.7.5 Least enjoyable aspects of visit

Respondents were asked to indicate the aspects of their trip which were the least enjoyable. Once again, a broad spectrum of issues was raised. These have been classified into logical groups in Table 8.25.

Table 8.25: Least enjoyable aspects of visits to APNP

<table>
<thead>
<tr>
<th></th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wet weather</td>
<td>32.2</td>
<td>29.0</td>
<td>31.0</td>
</tr>
<tr>
<td>Lack of services</td>
<td>17.5</td>
<td>3.9</td>
<td>12.5</td>
</tr>
<tr>
<td>Sandflies</td>
<td>10.1</td>
<td>14.7</td>
<td>11.8</td>
</tr>
<tr>
<td>Huts/tracks/routes</td>
<td>6.2</td>
<td>16.7</td>
<td>10.0</td>
</tr>
<tr>
<td>Physical danger</td>
<td>6.2</td>
<td>5.9</td>
<td>6.1</td>
</tr>
<tr>
<td>Other users</td>
<td>6.2</td>
<td>4.9</td>
<td>5.7</td>
</tr>
<tr>
<td>Development</td>
<td>6.2</td>
<td>2.9</td>
<td>5.0</td>
</tr>
<tr>
<td>Litter</td>
<td>1.4</td>
<td>6.4</td>
<td>3.2</td>
</tr>
<tr>
<td>Other</td>
<td>14.0</td>
<td>15.6</td>
<td>14.7</td>
</tr>
<tr>
<td>Total %</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

The three most prevalent "least enjoyable aspects" (dissatisfactions) are the wet weather (31%), a lack of services (12.5%), and sandflies (11.8%). Importantly, these factors are beyond the control of those managing conservation and use of the area. While a "lack of services" is not an important source of dissatisfaction for back-country respondents, the condition of some huts, routes and tracks in the Park clearly is (16.7%). The inverse is true for front-country respondents.

Simmons (1980) also noted the frustration expressed towards sandflies and wet weather. Furthermore, human activities causing concern included litter and hut conditions (for trampers). Unlike the findings of Simmons (1980), and others (Manning, 1986), "litter" is specified as a source of dissatisfaction by only a minority of respondents (3.2%) in the present study.

3 "Services" relates to the facilities available in Arthur's Pass Village (such as shops, restaurants, and accommodation) rather than to facilities or services provided by DOC.
8.7.6 Interim summary of satisfactions and expectations

Respondents were asked to describe and rank the most enjoyable aspects of their visit to Arthur's Pass National Park. These descriptions were used to represent satisfactions. The most prominent satisfaction reported by respondents related to aesthetic and religious features of the visit. This was especially true of those respondents visiting the front-country of the Park. Other important satisfactions, which included specific activities, exiting civilisation, and challenge, were reported at a much lower level - most commonly by back-country respondents.

When satisfaction rankings are compared with those of the re-classified motivations, a strong relationship between them is evident. Satisfactions generally reflect the specified motivations for coming to the Park, which suggests that levels of satisfaction among visitors to the Park are high. This suggestion is further emphasised by the extent to which visitors reported that their expectations had been met.

It is important to note from these results that the most prominent motivations and satisfactions of visitors to Arthur's Pass National Park are based in the fragile aspects of scenic appreciation, and the ability to escape from modified environments. Such information has important policy implications in terms of considering the level or extent of development within the Park.

8.8 Perceptions and Attitudes

In this section of the Results, visitor perceptions and attitudes are examined. More specifically, crowding, attitudes towards other users and uses, and the need for limitations are considered.

8.8.1 Crowding

In an attempt to determine the extent to which respondents perceived crowding, visitors were asked if they believed there were "too many people", "just the right number of people", or "too few people in the area" in which they were visiting (Table 8.26, overleaf).
Table 8.26: Visitors’ perceptions of crowding in APNP

<table>
<thead>
<tr>
<th></th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too few people</td>
<td>5.7</td>
<td>6.4</td>
<td>5.8</td>
</tr>
<tr>
<td>Just the right number of people</td>
<td>86.1</td>
<td>86.4</td>
<td>86.2</td>
</tr>
<tr>
<td>Too many people</td>
<td>8.2</td>
<td>7.2</td>
<td>8.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

The majority (86.2%) of respondents felt that there were "just the right number" of people in the areas visited. A slightly higher proportion of visitors indicated there to be "too many people" (8%) in the area than reported "too few" (5.8%). This difference is greater in the front-country response than in the back-country. This is a surprising result considering that people recreating in more remote settings were expected to be more sensitive to crowding. This finding may be partly explained by the weather conditions which prohibited extensive back-country visitation. The subsequent increase in front-country use may have exceeded the numbers expected by visitors to these areas. This suggestion is partly supported by the results of another question where a small proportion of respondents report the number of people on the short walks around the village as "extreme".

In response to a similar question in Simmons' (1980) study, the majority of both trampers and facilities users felt that there were "just the right number" of people in the area. However, 46.7 per cent of "facilities users" and 22.2 per cent of "trampers" believed that "more people could use the area". Only five per cent of facility users and 10.4 per cent of trampers felt there were "too many people" in the area.

Respondents in the present study were then asked whether any of the huts, tracks, or routes were crowded. In keeping with the response to the previous question, the majority (90.3%) indicated that huts, routes and tracks were not crowded (n=350: 92.1%). Of the remainder (8.9%) who reported the areas as crowded (n=25: 80.6%), there were two main reasons specified. The most common of these was the comment that there were "too many people on short walks around the village" (48%). Respondents also reported "runners" and "Coast to Coast trainees" (28%) as

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4 The question used by Simmons was not replicated in this study as the respondent options were not seen as mutually exclusive.
Contributing to their perception of crowding. Previous researchers (Lucas, 1964, cited in Manning, 1986; Graefe, 1984, cited in Stankey and Schreyer, 1987) have found that the degree to which recreationists perceive crowding other visitors as similar contributes to crowding. This finding may help explain why some respondents specified "Coast to Coast trainees" as the basis of their crowding perception.

8.8.2 Interim summary of crowding

Overall, crowding is not an issue for the majority of visitors to Arthur's Pass National Park. The fact that people are content with the number of other people encountered during their visits, may indicate that visitors are adopting coping behaviours in order to avoid crowding. The processes of displacement, rationalisation and/or product shift may be in operation - thereby reducing the level of perceived crowding. For instance, some respondents made specific reference to routes in the Park that they had avoided on the basis of their knowledge of likely numbers. For example: Carrington Hut is often crowded, but we didn't stay there on purpose.

Crowding is a fickle concept which is not easily studied given the range of factors which influence its manifestation. Often studies may report low levels of perceived crowding simply because if visitors did feel crowded at a particular site, they are likely to have moved elsewhere in order to avoid crowding. The end result is a group of people who are content with the present levels of use.

8.8.3 Attitudes towards other Park users and uses

Respondents were asked whether their own experiences were ever affected by the activities of other Park users. Of those who responded to this open-ended question (n=360: 94.7%), the majority (77.5%) indicated that their experiences were not affected by the activities of other users. However, one in five (22.2%) respondents reported that their experiences were affected. For these respondents, the most common reasons for this are recorded in Table 8.27 (overleaf).

For more than half (57%) of all respondents, having to share tracks, routes and roads with other visitors affected their experience. Litter left by other users also
Table 8.27: Ways in which APNP visitors' experiences are affected by other users

<table>
<thead>
<tr>
<th></th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sharing tracks/routes/roads with others</td>
<td>56.8</td>
<td>57.7</td>
<td>57.0</td>
</tr>
<tr>
<td>Litter</td>
<td>20.0</td>
<td>15.4</td>
<td>18.8</td>
</tr>
<tr>
<td>Runners</td>
<td>5.8</td>
<td>15.4</td>
<td>8.2</td>
</tr>
<tr>
<td>Other</td>
<td>17.4</td>
<td>11.5</td>
<td>16.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

n=78 (97.5% of those "affected" by activities of other users)

had a detrimental effect on the experiences of respondents. In addition, runners in the Park (primarily on the Mingha-Deception and Avalanche Peak - Crow River route) were identified as affecting the experiences of other users (8.2%). This response was particularly evident among back-country visitors (15.4%). Sixteen per cent of respondents indicated other explanations for why their experiences were affected. These responses included reference to "mountain bikes", "trail bikes", and "tourists".

In another open-ended question, respondents were asked to indicate and identify whether there were any current activities which they believed to be inappropriate or unsuitable in the National Park (n=350: 92%). In keeping with the response to the previous question, the majority (79.7%) report that there are no such activities. Nevertheless, 28 per cent of back-country respondents indicate that there are inappropriate or unsuitable activities occurring in the Park. Table 8.28 (overleaf) outlines the responses of both front-country and back-country visitors.

The most commonly reported inappropriate activity is mountain-biking (26.3%). This is especially the case for back-country respondents (37.5%). Runners in the Park are identified as inappropriate or unsuitable by one in five (21.0%) respondents in both front-country and back-country categories, while hunting (16.4%) and "motorised activity" (15.8%) also feature. This latter activity is especially important to front-country respondents of whom 19.6 per cent specify it as inappropriate or unsuitable. Approximately one in ten respondents from each visitor setting specify

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5 It is important to acknowledge that responses are dependent on knowledge of current activities. Many visitors, especially those from overseas, may be unaware of the activities which are undertaken in the Park.
Table 8.28: Activities considered inappropriate in APNP

<table>
<thead>
<tr>
<th>Activity</th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mountain biking</td>
<td>19.6</td>
<td>37.5</td>
<td>26.3</td>
</tr>
<tr>
<td>Running</td>
<td>20.6</td>
<td>21.8</td>
<td>21.0</td>
</tr>
<tr>
<td>Hunting</td>
<td>16.8</td>
<td>15.6</td>
<td>16.4</td>
</tr>
<tr>
<td>Motorised activity</td>
<td>19.6</td>
<td>9.4</td>
<td>15.8</td>
</tr>
<tr>
<td>Tourist activity/development</td>
<td>9.3</td>
<td>9.4</td>
<td>9.4</td>
</tr>
<tr>
<td>Other</td>
<td>14.0</td>
<td>6.3</td>
<td>11.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

n=67 (94% of respondents indicating that there were inappropriate or unsuitable activities)

Tourist activities and/or development as inappropriate or unsuitable in the National Park.

The higher proportion of back-country visitors who responded to this question, as well as the responses given, indicate that back-country users are more sensitive to developments and other users than their front-country counterparts. The findings of the present study have some interesting parallels with previous research. For example, Stankey and Schreyer (1987) note that persons travelling on foot are highly sensitive to and distressed by people travelling by other means. Likewise, in New Zealand, Aukerman and Davison (1980) report that trampers vehemently oppose trail bikes and four-wheel drive vehicles, as well as commercial tourist activities, aircraft flights and jet-boat trips. In the present research, back-country visitors appear to be more concerned about "inappropriate" use and users than front-country visitors. Furthermore, the most commonly reported inappropriate activity is mountain-biking - a new and innovative use of mountain-lands which clearly conflicts with the ideals of some of the more traditional users.

8.8.4 Qualitative contributions to understanding attitudes and perceptions

Rather than mountain-biking, the reaction to commercial events in national parks is the most prevalent theme in the interview data. For instance, when discussing the suitability of various activities in the Park, Eve (a tramper in her mid-thirties) commented:

_I was about to say the Coast to Coast, but I accept it as a famous, traditional event - but I don’t want to see any more such events in national parks._
they're running so fast they can't admire the scenery, then let them be somewhere else - not in national parks.

This comment illustrates the "last settler syndrome" (Heberlein, 1973, in Nielsen, et al., 1977) to a certain extent. In other words, the current conditions are acceptable as they are seen as the status quo. The increase or development of such conditions would affect the personal balance for this informant. Eve's remarks also serve to demonstrate how, once an activity has existed for a while, it becomes "traditional" and, perhaps despite its inappropriateness, is acceptable because of its history.

While many interview informants and informal comments from visitors to the Park indicate that an increase in the number of organised running events, is undesirable, there are also less accommodating views espoused. Re-emphasising the comments made by Eve, Marge had this to say:

It's [the Coast to Coast] a commercialised glamour event and should have no place in the National Park.... We believe [the Park] should be kept in its natural state so far as it is possible - with no exploitation for monetary gain allowed.

Naturally, those informants who were participants in the Coast to Coast event are more positive about their activity. Neil remarked:

I think it's a good idea to run the Coast to Coast through here. I reckon national parks should be open for all types of use - including commercial uses.

Interestingly, Joe (both a runner and tramper) emphasised his belief that those running the Mingha - Deception should have to pay for their practice runs. While concerned by the amount of litter left across the route, he was also believed that the minor modifications to the river bed, through the constant building of cairns to signify the easiest river crossings, could make use of the area highly confusing for other users. A fee for training runs, according to Joe, would allow the employment of someone to oversee the behaviour of competitors during training runs.

Joe's views raise an important issue concerning the staging of the annual Coast to Coast race, and other similar events throughout the natural areas of New Zealand. While monitoring and clean-up programmes may well be in place during the events, the vast majority of use occurs well before the race day. Although the conditions of entry specified by organisers of the Coast to Coast race allow for one
training run only, evidence indicates that many runners train more than four times
leading up to the race (Corbett and Espiner, 1993). On any given weekend during
the months between November and February, it is not uncommon to see one
hundred people training on the Mingha Deception route (Pers. Comm., Simpson,
1993). This situation is exacerbated by the availability of guided running trips
across the Mingha-Deception route, which places pressure on other competitors to
become increasingly familiar with the course.

The influence of traditional (and inter-generational) values is particularly well
illustrated in a remark made by Jack (a moderate back-country user in his forties),
when discussing his attitudes toward running in national parks:

Not organised events, no - that would be out in my book. A lot of why I think
this is because I'm sort of a traditionalist - going back to my grandfather's days,
when you put the pack on your back and the 303 on your shoulder and out you
went - you didn't run! These organised running events are like a herd of
elephants going through the place, and I can see it really churning up the
tracks....

Jack continues in a very anti-commercial, pro-traditional vein:

I feel that if they don't put a lid on it, it's the beginning of the end, I really do.
Pretty soon I'll be stopped from walking on these tracks because of a whole lot of
runners. There is plenty of places these people can run - back-roads and things
like that - without having to use our places that we use to get away.... It
appears that it is just another thing where money has taken over again. I feel
that there are some things where money shouldn't be allowed to touch. It [the
National Park] should just be left alone. Once they start commercialising
things, sooner or later it's spoiled. There are so many things around that the
business people have their fingers into, I'd just like something left for the rest of
us.

While Jack's views may not be highly representative of Park visitors, a small
number of other informants, as well as questionnaire respondents, made comments
of a similar nature about both commercial running events and tourist activities.
Among the interview informants, the clear theme is not necessarily a negative
attitude toward running as an activity, but, rather, an opposition to the commercial
nature of the events which promote these activities. Although these attitudes are
typically held by New Zealand recreationists, some overseas visitors also made
cautionary remarks, such as those of one German respondent:

Don't push the tourism here. Leave it as it is.
**8.8.5 Interim summary: attitudes**

In general, the degree to which people hold one activity as unsuitable and another as entirely appropriate will depend upon the values with which visitors come to the Park. As has been shown, the most common motivations and satisfactions of visitors to Arthur’s Pass National Park relate to the appreciation of nature and getting away from civilisation. For many, mountain bikes, competitive runners, motorised activity, and tourist developments represent the antithesis of the elements which attract them to the Park.

Despite the remarks of the interview informants in particular, the majority (79.7%) of questionnaire respondents did not specify any activities as inappropriate or unsuitable. As was the case with satisfactions and crowding, this may indicate that, on the whole, visitors are happy that a range of diverse uses is undertaken in the Park. Alternatively, this result might reflect the extent to which more sensitive users have been displaced from the site.

**8.8.6 Conservation, use and limitations**

Respondents were asked to consider the issues of conservation and use in Arthur’s Pass National Park, and to indicate where each of these existed on a scale of one to five (where 1 = "too little" and 5 = "too much"). For the purposes of analysis, the data from the five-point scale have been condensed to three-points and are displayed in Tables 8.29 (below) and 8.30 (overleaf).

<table>
<thead>
<tr>
<th>Table 8.29: Visitors’ perception of use level at APNP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FC %</strong></td>
</tr>
<tr>
<td><strong>Too little use</strong></td>
</tr>
<tr>
<td><strong>Right level of use</strong></td>
</tr>
<tr>
<td><strong>Too much use</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

In keeping with respondents’ perceptions of crowding, the majority (81.2%) believe that Arthur’s Pass National Park currently receives "the right level" of use. Only a very small proportion (8.8%) believe that there is "too much use" of the Park. Poor
weather conditions during the research period, and the consequent low numbers of people in the back-country of the Park, may have contributed to this finding.

When respondents were asked about conservation, a similar pattern emerges.

**Table 8.30: Visitors' perceptions of conservation at APNP**

<table>
<thead>
<tr>
<th>Perception</th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too little conservation</td>
<td>17.7</td>
<td>19.5</td>
<td>18.1</td>
</tr>
<tr>
<td>Right level of conservation</td>
<td>78.1</td>
<td>74.6</td>
<td>77.2</td>
</tr>
<tr>
<td>Too much conservation</td>
<td>4.2</td>
<td>5.9</td>
<td>4.7</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

n=329 (86.6%)

Once again, the majority (77.2%) of respondents believe that the level of conservation in Arthur's Pass National Park is the "right level". However, approximately one in every five respondents (18.1%) believe that there is "too little conservation" in the Park. This compares with fewer than one in twenty (4.7%) respondents who believe there is "too much conservation".

Finally, respondents were asked if they agreed with limitations on national park use. Those who agreed were asked to make further comments about limitations. These responses have been classified in Table 8.31 below.

**Table 8.31: Limitations on National Park use**

<table>
<thead>
<tr>
<th>Limitation</th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limit to ensure conservation comes first</td>
<td>38.3</td>
<td>36.8</td>
<td>38.0</td>
</tr>
<tr>
<td>Need to restrict numbers or access</td>
<td>25.6</td>
<td>27.9</td>
<td>26.1</td>
</tr>
<tr>
<td>Need to restrict types of use</td>
<td>18.4</td>
<td>17.6</td>
<td>18.2</td>
</tr>
<tr>
<td>Limit commercial development</td>
<td>13.5</td>
<td>14.7</td>
<td>13.8</td>
</tr>
<tr>
<td>Other</td>
<td>4.2</td>
<td>3.0</td>
<td>3.9</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

n=210 (70% of those agreeing that limitations are necessary)

Consistent with the literature reviewed (Lucas, 1985, cited in Altman and Zube, 1989; Manning, 1986), the majority of respondents in this study (87.4%) agree with limitations on the use of national parks. More specifically (Table 8.31), these
respondents emphasise a need to ensure that conservation comes first (38.0%). Over one quarter (26.1%) of respondents specified limiting the numbers of people visiting national parks or access to some areas, while approximately 18 per cent stressed the need for limits on the types of use of national parks (for example, the Coast to Coast race and scenic flights were two common themes). Specific mention was also made of the need to limit commercial development and use (13.8%), especially tourism.

The high level of support for conservation, and limitations to ensure continued conservation, tend to support findings reported elsewhere (Lucas, 1985, cited in Altman and Zube, 1989; Manning 1986; Jackson, 1987; Heylen research Centre, 1992). The reference to limiting commercial development is also a theme reported in some other national park studies in New Zealand. For example, Kearsley (1990), examining use of Fiordland National Park, reports a strong feeling that national parks were not for the promotion of tourism or providing relaxing holidays. Nor is there support for commercialising or "opening up" the Park.

8.8.7 Summary and conclusion: Perceptions and Attitudes

In the main, respondents in this study do not perceive crowding to be a problem in the Park. The most common response appears to be that the numbers of people encountered are "just the right number of people" and that both use and conservation, for example, are currently at the "right" level. Against this background, the majority of respondents are not affected by the activities of other Park visitors. Despite this, not all Park visitors are content with the current situation. In particular, concerns are raised over having to share tracks, roads and routes with other visitors, litter, and runners in the Park. The most commonly mentioned inappropriate Park activities included mountain-biking and running. In addition to this, the majority of visitors agreed with the need for limitations on national park use. In particular, there was a belief that limitations should be based on ensuring that conservation comes first. There was also support for limits on the numbers of people visiting the Park and the types of activities permitted.

Given the high levels of visitor contentment apparent in these results, it is somewhat surprising that there is such strong support for limitations on national park use. This support suggests the existence of what can be described as a "last settler syndrome". All the components of this syndrome are present. For instance,
visitors do not feel crowded or adversely affected by the activities of others, they are happy with the current levels of use, and would like limitations put in place in order to ensure that conditions remain in this state. It is logical that high levels of contentment exist among Park visitors as those who are discontent (that is, those who feel crowded or affected by the activities of other users) typically become displaced to other, probably more remote, areas.

It is also interesting to consider the implications of this visitor contentment. For instance, most respondents indicated that the level of Park use was "right". Therefore, if use increases in the future, will visitors then indicate that use is "not right"? Using the "last settler syndrome" as an hypothesis, it seems likely that this would not happen, but, rather, visitors to the Park would respond in a way similar to those in this study. For example, despite increases in use of the front-country (see Figure 2.2, Chapter 2), there has been no increase in perception of crowding since Simmons' (1980) study. Because of the "last settler syndrome", and the highly variable nature of individual perception, the specification of explicit social carrying capacities becomes very difficult.

8.9 Recreational activities of Park Visitors

A proportion of this research undertook to determine what activities were pursued in Arthur's Pass National Park. To this end a list of possible activities was generated and presented to respondents who then indicated which they had participated in during their visit to the Park. As activities were clearly not mutually exclusive, respondents were asked to select as many as were appropriate. For this reason, the percentages in Table 9.1 (overleaf) do not equal one hundred per cent. Furthermore, owing to the different activities available in the each of the visitor settings, a combined (Total %) figure is not always provided.
**8.9.1 Specific activities**

Table 9.1: Activities undertaken in APNP

<table>
<thead>
<tr>
<th>Activity</th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
<th>Simmons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>HQ %</td>
</tr>
<tr>
<td>Sight-seeing</td>
<td>62.9</td>
<td>NA</td>
<td>NA</td>
<td>30.8</td>
</tr>
<tr>
<td>Holidaying in village</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>21.4</td>
</tr>
<tr>
<td>Short walks (&lt; half day)</td>
<td>60.6</td>
<td>12.4</td>
<td>44.2</td>
<td>71.9</td>
</tr>
<tr>
<td>Tramping</td>
<td>17.1</td>
<td>66.7</td>
<td>33.9</td>
<td>-</td>
</tr>
<tr>
<td>Long walks (&gt;= half day)</td>
<td>33.1</td>
<td>23.3</td>
<td>29.7</td>
<td>26.6</td>
</tr>
<tr>
<td>Climbing</td>
<td>10.0</td>
<td>17.8</td>
<td>12.6</td>
<td>13.3</td>
</tr>
<tr>
<td>Picnicking</td>
<td>17.9</td>
<td>NA</td>
<td>NA</td>
<td>32.2</td>
</tr>
<tr>
<td>Running</td>
<td>2.8</td>
<td>24.8</td>
<td>10.3</td>
<td>-</td>
</tr>
<tr>
<td>Camping (back-country)</td>
<td>5.6</td>
<td>14.7</td>
<td>8.7</td>
<td>-</td>
</tr>
<tr>
<td>Driving for pleasure</td>
<td>12.0</td>
<td>NA</td>
<td>7.9</td>
<td>34.7</td>
</tr>
<tr>
<td>Camping (designated)</td>
<td>10.0</td>
<td>0</td>
<td>6.6</td>
<td>19.2</td>
</tr>
<tr>
<td>Kayaking</td>
<td>0.4</td>
<td>7.8</td>
<td>2.9</td>
<td>-</td>
</tr>
<tr>
<td>Fishing</td>
<td>2.4</td>
<td>3.1</td>
<td>2.6</td>
<td>-</td>
</tr>
<tr>
<td>Cycling</td>
<td>3.2</td>
<td>1.6</td>
<td>2.6</td>
<td>-</td>
</tr>
<tr>
<td>Hunting</td>
<td>0.4</td>
<td>0.8</td>
<td>0.5</td>
<td>3.9</td>
</tr>
<tr>
<td>Multi-sport events</td>
<td>0.8</td>
<td>0</td>
<td>0.5</td>
<td>-</td>
</tr>
<tr>
<td>Mountain biking</td>
<td>0</td>
<td>0.8</td>
<td>0.5</td>
<td>-</td>
</tr>
<tr>
<td>Other</td>
<td>6.0</td>
<td>4.7</td>
<td>5.5</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 9.1 indicates that, of those activities applicable to both recreation settings, short walks (44.2%), tramping (33.9%), and long walks (29.7%) are the most commonly reported. At a lower level, climbing (12.6%), running (10.3%), and back-country camping (8.7%), emerge as important. However, when the visitor settings are examined separately, some clear differences become apparent (this is to be expected as activity and location are major determinants of setting). For instance, short walks is an activity undertaken by over 60 per cent of front-country respondents and only 12 per cent of back-country respondents. Picnicking (17.9%), and tramping (17.1%) are also commonly undertaken by front-country respondents (the latter indicating that front-country visitors also use the back-country).
Conversely, the most commonly reported activities among back-country respondents are tramping (66.7%), running (24.8%), and long walks (23.3%). Climbing (17.8%), back-country camping (14.7%), and short walks (12.4%) are also common features of back-country use.

Over three quarters of front-country visitors (76.9%), and half of back-country visitors (50.4%) specified participation in at least two activities. As many as five activities were recorded by over eight per cent of front-country respondents, compared with less than two per cent of their back-country counterparts. This suggests that the back-country activities listed are either mutually exclusive, and/or require more time and effort than many front-country activities. Importantly, over one third of all respondents specified three activities, indicating that Park use is not a single-activity experience for many visitors.

In comparison with the findings of Simmons (1980), it is possible to suggest two things. First, it appears that visitation to the Park has diversified since the earlier study. There are simply more activities reported. In particular, the activities of "running", "kayaking", "mountain-biking", and "multi-sport" represent new and innovative uses of the Park. Second, the use of the Park can be described as more active, or less passive than was the case fifteen years ago. For example, the prevalence of "driving for pleasure" has not re-emerged in the present study, and a lower proportion of visitors appear to be undertaking the traditional pursuits of tramping, climbing and hunting.

8.9.2 The relative importance of activities

In an attempt to ascertain which activities were the most important to visitors, respondents were asked to select and rank three activities in order of importance. A weighting scale has been applied in order to generate a single figure for each activity. This weighting has attributed a score of three to the activity rated as most important, and a score of one to the activity rated third in importance. Scores are then represented as percentages in order for the relative ratings to be apparent.

Table 9.2 (overleaf) indicates that the most important activity is short walks (18.3%) which, when combined with long walks (11.9%), demonstrates that nearly one third (30.2%) of the sample considers walks of up to one day in duration as the most
### Table 9.2: Three most important activities (weighted)

<table>
<thead>
<tr>
<th>Activity</th>
<th>FC %</th>
<th>BC %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short walks (less than half day)</td>
<td>24.9</td>
<td>5.4</td>
<td>18.3</td>
</tr>
<tr>
<td>Sight-seeing</td>
<td>22.8</td>
<td>2.7</td>
<td>16.0</td>
</tr>
<tr>
<td>Short tramps (over-night, 3 days or less)</td>
<td>10.4</td>
<td>25.5</td>
<td>15.5</td>
</tr>
<tr>
<td>Long walks (half day or more)</td>
<td>13.9</td>
<td>8.1</td>
<td>11.9</td>
</tr>
<tr>
<td>Climbing</td>
<td>4.7</td>
<td>11.8</td>
<td>7.1</td>
</tr>
<tr>
<td>Major tramps (more than 3 days)</td>
<td>3.2</td>
<td>7.8</td>
<td>4.8</td>
</tr>
<tr>
<td>Running</td>
<td>0.7</td>
<td>11.3</td>
<td>4.3</td>
</tr>
<tr>
<td>Camping (back-country)</td>
<td>1.6</td>
<td>5.1</td>
<td>2.8</td>
</tr>
<tr>
<td>Picnicking</td>
<td>3.6</td>
<td>0.6</td>
<td>2.6</td>
</tr>
<tr>
<td>Camping (designated)</td>
<td>2.5</td>
<td>1.9</td>
<td>2.3</td>
</tr>
<tr>
<td>Multi-sport</td>
<td>0.7</td>
<td>4.7</td>
<td>2.0</td>
</tr>
<tr>
<td>Cycling</td>
<td>1.7</td>
<td>2.1</td>
<td>1.7</td>
</tr>
<tr>
<td>Driving for pleasure</td>
<td>2.4</td>
<td>0</td>
<td>1.6</td>
</tr>
<tr>
<td>Kayaking</td>
<td>0.6</td>
<td>3.4</td>
<td>1.5</td>
</tr>
<tr>
<td>Mountain-biking</td>
<td>1.1</td>
<td>1.9</td>
<td>1.3</td>
</tr>
<tr>
<td>Fishing</td>
<td>1.5</td>
<td>0.6</td>
<td>1.2</td>
</tr>
<tr>
<td>Hunting</td>
<td>0.4</td>
<td>1.4</td>
<td>0.9</td>
</tr>
<tr>
<td>Other</td>
<td>3.4</td>
<td>5.8</td>
<td>4.2</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

important activity. Sight-seeing is also rated highly overall (16%), as are short tramps (15.5%). An examination of the two visitation settings reveals a slightly different emphasis. For instance, while among front-country respondents, short walks (24.9%) and sight-seeing (22.8%) are the most important, back-country respondents report short tramps (25.5%), climbing (11.8%), and running (11.3%) as the most important. Major tramps (7.8%), back-country camping (5.1%), and multi-sport (4.7%) are specific activities which are also important to many back-country visitors.

A comparison of participation in activities with their relative importance demonstrates that there are many similarities. For instance, the seven most commonly reported activities were also the seven activities ranked as the most important to respondents. However, there are some anomalies. For instance, while
participation in "picnicking" and "driving for pleasure", is reported moderately, their rankings of importance are low. Conversely, while participation in "multi-sport" is low, its ranking in terms of importance is higher. This is probably because, in many cases, "picnicking" and "driving for pleasure" are incidental activities which become obscured by more specific recreational pursuits. "Multi-sport", on the other hand, is a term typically used to describe a particular competitive event, of which there was none during the sample period. Hence the consequent low participation reported. It is likely that this activity rated more highly in terms of importance due to the impending Coast to Coast race (which is a multi-sport event).

8.9.3 Interim summary of Park activity patterns

Visitors to Arthur's Pass National Park participate in a wide range of recreational activities. A large proportion of visits encompass several pursuits rather than one specific activity. In particular, "short walks", "sightseeing", "tramping", and "long walks" are the most prominent in terms of overall participation. The two former activities are especially dominant among front-country visitors, while the latter, in conjunction with "running", typify the back-country respondent.

When respondents were asked to rank their three most important activities, "short walks", and "sightseeing" were again dominant, further challenging the belief that national park visitation is about back-country experiences. This does not imply that tramping and other back-country activities are disappearing. "Short tramps" ranked third in overall importance and "running", when combined with "multi-sport" (as new back-country uses), also ranked highly - ahead of both "back-country camping" and "major tramps". These new activities represent an intensification and diversification of the National Park's use.
Organised running events represent a major change in Park use, from the traditional, small group pursuits, to mass recreation of a higher intensity.

Plate 3 (left): Training for the Coast to Coast race (Deception River).

Plate 4 (below): Tramping up the Waimakariri River.
8.10 Integration and interpretation of the research findings and themes

The research findings presented and discussed above demonstrate a broad level of change in the recreational use of Arthur's Pass National Park. This change has implications for the balance between preserving and using national parks, and for those responsible for their management. These implications will be discussed in Chapter 9 (Conclusions). In the current section, aspects of visitors' socio-economic characteristics, motivations and socialisation patterns will be discussed. Furthermore, the concepts of time deepening, use diversification, and increased commercialisation are examined with reference to the research findings.

8.10.1 Social characteristics of visitors

The results of the present study indicate that a relatively elite group of people frequent Arthur's Pass National Park. In particular, people with high educational attainment and professional or technical occupations are most prevalent. While this finding is not unique, there does appear to have been a moderate increase in the proportion of such visitors to the Park, compared with the results of Simmons (1980). As suggested in the literature review, specific socio-demographic characteristics are unlikely to be explanatory factors for national park use. Even so, wider socio-economic factors indicate that this trend is unlikely to abate in the near future.

Outdoor recreation is an expensive pastime. In particular, visits to national parks require access to transport, the time to visit (or potential loss of earnings), and the resources to obtain suitable equipment and clothing for an enjoyable and safe outing. Contrary to some opinion, the "liberalisation" of the New Zealand economy and, in particular, the Employment Contracts Act (1991), have not necessarily made these things more available to a greater number of people. In some cases, such economic restructuring has led to longer working hours and the erosion of the traditional "week-end" - characteristically an important unit of leisure and recreation time. The implication of these changes is that people in occupations such as sales and service, transport, production, and labouring are even less likely to visit national parks than they were in the past. Those in professional and technical
occupations are more likely to have retained the weekend as a block of consecutive
days which can be used for recreation.

This issue is exacerbated by the changes in family occupation patterns over the last
decade. In families where both members of the partnership dyad are working,
coordinating the consecutive days off necessary for some outdoor recreation
experiences becomes very difficult. The result of these factors could help explain
the increasing use of front-country areas, the increase in shorter visits to the Park,
and the low proportion of people from some sectors of the occupational spectrum.

8.10.2 Diversification of recreational use
Increasing overseas visitors, especially in the front-country regions, mean that more
people are now using Park amenity areas such as picnic spots and short walks
(Simpson, Pers. Comm., 1993). The back-country, too, has been an area of change in
the last decade. Traditionally the locale of small tramping, climbing and hunting
parties, some parts of the back-country in Arthur’s Pass National Park are now used
for multi-sport endurance events and training. This diversification in use, which
constitutes a shift from small group "passive", to "active" *en masse*, also contains
within it a commercial element not seen before in Arthur’s Pass National Park. It is
suggested that this style of use is one illustration of time-deepening, as well as a
more extrinsically-motivated Park use. While multi-sport endurance events are only
a feature of Park use for approximately six months of the year, it occurs during the
peak visitor period. In some areas of the Park during the this time, it is likely that
mountain endurance runners outnumber traditional mountain-land visitors.

Such change in outdoor recreation style is often accompanied by a certain level of
conflict or resistance. As Horn (1994) notes, change is often a basis for conflict.
Given this, greater evidence of visitor dissatisfaction might have been expected in
this study. There are several possible explanations for the low level of resistance to
the most recent developments in Park use. For example, as some visitors noted, the
*Coast to Coast* race is now a "traditional" event - having been held annually since
1983. The initial events were of a relatively minor nature and as such caused little
concern at the time (Charles, Pers. Comm., 1993). This is in direct contrast to the
resistance encountered by the organisers of the proposed Milford Marathon (Brett,
1992), in which 400 runners were to complete the Milford Track in Fiordland
National Park as a commercial endurance event. It is likely that any attempt to initiate another endurance race in Arthur's Pass National Park of similar proportions to the current Coast to Coast race would meet with considerable resistance. Current acceptance of the race is the result of its original novelty value, and the incremental nature of its growth.

Low levels of negative feeling may also reflect the fact that the most dissatisfied users no longer visit the Park, or the particular areas in which the events are held. More specific research is needed to accurately assess the social impact of such events.

8.10.3 Socialisation of Park users
The current study confirms the importance of the socialisation process in transmitting the values and norms associated with natural area use. It has been proposed that a generational continuity exists through which parents pass on their natural area values and experiences to their children. Our knowledge of this process is based on the understanding that the majority of national park visitors are introduced to the outdoors by their families. However, it is worth considering that new developments in back-country use, and the increasing presence of international visitors, may affect this fundamental aspect of norm transmission. For instance, it is possible that back-country runners are more likely than trampers to be introduced to national parks by their friends, than by their families. Whether this results in norms more akin to the code of multi-sport than those of trampers, is not yet possible to ascertain. Additionally, according to the results of this study, the number of international visitors to the Park is almost equal to the number of domestic visitors. This is also the case at several other national parks and natural attractions (NZTB and DOC, 1993). The implications of this in terms of traditional user norms and values is also likely to be unknown for some time. However, it is possible to suggest that traditional means of disseminating "accepted" norms and practices in national parks (and in the back-country in particular) will be less influential in the future.
8.10.4 Motivations

The results of this study indicate that those motivations associated with exercise and training in particular have increased since the last study of this area. There appears to have been a shift in motivation from what was largely intrinsic, to what is increasingly extrinsic motivation. The predominant reason for this shift is the recent addition of new and innovative recreation activities to the Park - especially mountain running. The results have suggested that this activity, in particular, is likely to be extrinsically, rather than intrinsically, motivated. This finding, in combination with increased commercialism, indicates that some visitors now use the Park as a means to an end rather than as an end in itself. This represents an important change from the way in which the Park has been used in the past.

8.10.5 Commercialisation

The increase in extrinsically motivated uses of the Park is closely linked with increasing commercialisation. Arthur’s Pass National Park in the 1990s increasingly appears to be a venue for events rather than a location in which site-specific activities are enjoyed. One of the obvious manifestations of this change is the emergence of the commercially organised multi-sport events which incorporate significant parts of the most readily accessible areas of the Park. The two events currently held within the Park’s boundaries are the Coast to Coasts race and the Avalanche Peak Challenge. In addition to hundreds of officials and support personnel, each of the events involves between 300 and 600 paying competitors who stand to win a variety of prizes. Both events are heavily sponsored by organisations in the private sector.

A commercial trend is also reflected in the burgeoning number of international tourists visiting the area. The results in this study show an increase in overseas visitation to Arthur’s Pass National Park, which has contributed to a range of minor developments within the area. While visitors from other countries do not equate to commercialism per se, their increasing presence provides an incentive to develop aspects of the area. Changes in the Arthur’s Pass township environment over the last decade are obvious, and include increased accommodation opportunities, revamped and additional “restaurant” facilities, as well as the development of a small liquor outlet. Additionally, several tour guides now operate out of Arthur’s
Pass, and there are at least two tourism developments planned for areas close to the Park's perimeter. Furthermore, methods of transport to the Park have been affected by the cessation of rail services that once suited trampers visiting the Park. A new rail service now stops in the Park, but it is clearly a commercial venture designed to accommodate the needs of tourists to the region.

The commercial developments within Arthur's Pass National Park clearly reflect much broader social processes in New Zealand and the western world in general. The current political and economic environment rewards entrepreneurial activity, competition, efficiency and encourages a free-market. The organisation responsible for the management of Arthur's Pass National Park, the Department of Conservation, must operate within this system. Increasingly, the emphasis is one of cost-recovery and, in some cases, profitability. To this end, the Department of Conservation is encouraged to seek ways of generating revenue from the estate it manages. Revenue is likely to come from the commercial concessions and collaborative arrangements with the private sector deriving from increased overseas visitation (NZTB and DOC, 1993; Ernst and Young, 1995; Sage, 1995).

8.10.6 Time-deepening

As a concept which attempts to interpret and explain social change, time deepening is still in its infancy. However, while its application to recreation is only experimental, it does have potential to interpret recent recreation developments in Arthur's Pass National Park. For instance, the diversification of activities, and the emergence of mountain running, in particular, can be viewed as a result of time-deepening in the wider social arena.

One of the characteristics of time deepening is a desire to obtain multiple experiences, to "do it all" (Kelly and Godbey, 1992). Likewise, Charles (Pers. Comm., 1993), whose affiliation with Arthur's Pass extends back to 1959, notes that recreationists are no longer content to be specialists in one area:

... there are just so many more things to do now. Like, even during the summer a few years ago the Temple Basin Ski-field would get a whole bunch of young guys spending their weekend up here on a voluntary work party. But now you've got so many other things like rock climbing at Castle Hill and Castle Rock, aqualung, parapenting, and kayaking. Young people today seem to do a whole range of things.
This diversification of activity participation is part of what Kelly and Godbey (1992) have described as "the rush to experience".

In addition to diversification, the intensity of new pursuits represents the preoccupation with time which characterises time deepening. The multi-sport activities in the Park are undertaken with a precise regard to time not documented as important in the past. Furthermore, time deepening is reflected in individuals' attempts to increase the "yield" on their time - getting more from less (Kelly and Godbey, 1992). Through running, rather than walking or tramping, some visitors obtain a back-country experience in a relatively small unit of time. Similarly discussing the influence of time-deepening, Horn (1994:89) notes that mountain-biking can provide "...a concentrated physical and mental experience in a short space of time".

8.10.7 Summary and conclusion

The above discussion is an attempt to place the findings of the present study into a wider context. The visits people make to national parks are products of their various social characteristics, early and current experiences, motivations, and attitudes. However, these visits also occur within a broader social context, the identification of which is an important explanatory feature, in terms of understanding national park use. This integrative discussion has implied that there have been changes in the recreational use of Arthur's Pass National Park over the last decade, and that these changes can be explained in terms of wider socio-economic and political contexts. The implications of these changes are addressed in Chapter Nine.
Chapter 9

Conclusions

9.1 Introduction

This thesis has explored several facets of outdoor recreation. More specifically, its aims have been to examine contemporary social dimensions of national parks through a case study of summertime visitation to Arthur's Pass National Park, and to assess the nature and scope of change in the recreational use of this area. The study implies that, to a certain extent, national parks have been reconceptualised, as evidenced by new and innovative recreation activities, altered patterns of motivation, decreased lengths of stay, increased commercial use, and other effects of a recently restructured society.

The thesis comprises five central aspects. These are: the characteristics of visitors; the socialisation and life-cycle factors which have influenced visitor use; the motivations and satisfactions which direct, and result from, visitation; the attitudes and perceptions held by visitors; and the specific activities undertaken in the Park. These components provide the framework for the literature review (Chapters 3-6) and the results (Chapter 8), and are revisited here in order to reappraise the
research objectives. Following this summary and appraisal, implications of the research findings will be discussed. The chapter and thesis are concluded following a brief consideration of future research needs.

9.2 Reappraisal of the research objectives: a summary of the findings

9.2.1 Patterns of visitation to, and use of, Arthur's Pass National Park
Consistent with the literature review, and especially with the results of Simmons (1980), visitors to Arthur's Pass National Park tend to be young, predominantly male, highly educated and from professional or technical occupational backgrounds. Groups continue to be small in size and family oriented.

According to the results of this study, almost half of all visitors to the Park are international visitors, although the single most common residential region is Christchurch. While conforming with recent recreation research in natural areas, the high proportion of international visitors constitutes a significant departure from the findings of Simmons (1980). Other important points of departure include shorter visits to the Park, and a shift in the methods of transportation to the Park.

9.2.2 Socialisation and life-cycle
Families and friends continue to be strong influential agents which direct and shape Park use. The family is an especially important agent of introduction to national park use, while friends have their greatest effect on the continued use of these areas. The life-cycle influences of permanent relationships and children were not as evident in this study as they were in the literature reviewed. For the majority, a partner has not been a limiting factor on Park use, and in many cases it has been an extending feature. This was especially the case for women. Corroborating the findings of Simmons (1980), children were not a restriction on visitation for most people.

9.2.3 Motivations and Satisfactions
Park user motivations tend to cluster around the broad concepts of "getting away from civilisation" and "being close to nature". While this result is similar to the motivations reported by Simmons (1980), a greater proportion of visitors in the
present study specified motives associated with health and fitness than was the case in 1980. This motive reflects a western trend towards physical fitness and health manifested everywhere in the form of "health foods", fitness clubs, and multi-sport events. In particular, those using the back-country for running and multi-sport training tend to reflect an extrinsic basis for their motives rather than the intrinsic motivations typically associated with more traditional Park pursuits.

As has been the case in many outdoor recreation studies, visitors to Arthur's Pass National Park appear to be highly satisfied by their experiences. The results indicate that the most enjoyable aspects of respondents' visits (scenic appreciation, getting away from civilisation, and experiencing novelty and change), generally reflect the reported motivations for Park visitation. Furthermore, the majority of respondents specified that their expectations of the visit had been met.

9.2.4 Perceptions and Attitudes
Consistent with the high level of satisfaction apparent, most visitors indicated that crowding in the Park was not an issue for them. Furthermore, notwithstanding the comments of some interview subjects, and a minority of questionnaire respondents, most visitors did not specify any current activities as inappropriate or unsuitable. Despite the high level of support for the current levels of use and conservation, the majority of visitors also believed that limitations need to be placed on the use of national parks.

9.2.5 Activities undertaken in the Park
This study has shown that sight-seeing, short walks, and long walks are the most frequently reported activities for front-country visitors. Those using the back-country of the Park are more likely to report tramping, running, or long walks as their primary activities. Participation in several activities appears to be the norm. The most salient activity distinctions between the current study and the work of Simmons (1980) is the diversification of activities and the intensification of use. In particular, the pursuits associated with multi-sport events (running and kayaking) are now common forms of highly active summertime Park use.
9.2.6 The comparison of front-country and back-country use

Throughout this report, a differentiation between front-country visitors and back-country visitors has been maintained. The front-country and back-country are seen as distinctly different recreation settings within the Park. As a reflection of this, responses from visitors to each of these areas were different on a number of variables. For example, statistically significant differences were found in relation to: visitors' region of origin; frequency and season of visit; group composition; age; sex; occupation; agent of greatest influence; and the influence of children. Despite these differences, many visitors clearly used both the front-country and the back-country. This was particularly the case for potential back-country users who were sometimes confined to short and day walks away from the main river valleys during the periods of heavy rain and flooding experienced over the research period.

9.2.7 The comparison of the two studies

An important aspect of this study is its comparison with a similar study undertaken by Simmons in 1980. Although statistical comparisons were not appropriate, it has been possible to gauge change in a series of characteristics and themes of Park visitation. In very general terms, the findings suggest that there are two aspects to consider regarding change. On one level, many of the fundamentals of "traditional" national park use have remained surprisingly constant over time. For example: users surveyed in both studies are typified by a range of similar characteristics; introduced to the Park in particular ways, and through specific agents; report similar reasons for, and satisfactions from visits; and undertake many of the same activities. On another level, several of these features of use have undergone subtle changes in terms of their prevalence or importance and, together, imply a more significant alteration in visitation. The main points of departure from the findings of Simmons (1980) include:

1. an increase in the proportion of overseas visitors;
2. a decline in the importance of the train as a method of transport for back-country visitors, and an increase in its use by front-country visitors;
3. a reduction in the length of stay;
4. an increase in the proportion of people visiting alone, and a decrease of those visiting with school or club groups;
5. a decrease in the proportion of young people (15-19 years);
6. an increase in the relative importance of the family as an introductory agent;
7. the appearance of a health and fitness motive not previously present, and the absence of an intellectual dimension to visitor satisfaction; and
8. the development of a range of new activities.

In a wider context, changes in visitation can be linked to the macro-societal environment, and socio-economic, political, technological, and legislative developments occurring since 1980.

The research findings outlined above suggest that the use of the National Park is in a process of transition, elements of which have important implications for the management paradox concerning preservation and use. These implications are now discussed.

9.3 Implications of the findings

The findings of this research have a number of implications worthy of consideration. These include the implications for: Arthur's Pass National Park; national parks in general; and replicative studies. While the implications have been categorised under these headings, there is clearly a degree of overlap between the first two groupings.

9.3.1 Implications for Arthur's Pass National Park

The indices of recreational use change in this study of Arthur's Pass National Park have included changing motivations, increased commercial use, new recreational styles, and elements of time deepening. There are a number of implications associated with these changes in Park usage, many of which relate to the balance between preservation and use. These implications are set out below.

1. This research has emphasised that Arthur's Pass is increasingly becoming a venue for competitive events and enterprise. In order to assess the incremental changes which inevitably occur, management may have to implement a strategy which monitors change in a number of different
areas. The development of the Coast to Coast race over a twelve year period demonstrates how developments become accepted over time, while opportunities, experiences, and fragile resources may be lost.

2. Approval of multi-sport events within Arthur’s Pass National Park has much wider implications than those created by the competitors on the days of the events. In addition to the multiple training runs over the race route, interest and consequent use is likely to be generated through media coverage and a "labelling" effect. The status of the Mingha Deception route as the mountain run of the most well-known New Zealand race of its type, no doubt attracts people to the Park and to the route itself. Furthermore, the Coast to Coast and the Avalanche Peak Challenge, may have redefined people's use of the area. Traditionally, both of these routes were two day (overnight) trips, but since the emergence of the running events, greater numbers of visitors have been made aware that it is feasible to complete these routes in a single day.

3. While conflict between endurance runners and traditional users does not appear to be high, this could change quickly if additional events were introduced to the Park, or current event participation was allowed to increase. That some runners clearly see the specific location of the Coast to Coast event as incidental to the activity, has implications for the potential substitutability of these events should conflict between users, or serious resource damage occur.

4. The management of Arthur’s Pass National Park is no longer primarily about managing for New Zealand visitors. An equal proportion of international and domestic visitors was noted in this study. Management cannot assume that visitors have a reasonable level of understanding concerning appropriate behaviour or safety in the area. This has implications for the interpretation, education, information, and search and rescue aspects of the Park’s management.

5. As international visitor numbers grow, the front-country regions of Arthur’s Pass will continue to come under pressure. This will be
compounded by the shorter domestic visits brought about by the adoption of smaller units of recreation time, and the general affects of time deepening in wider society.

6. Increases in overseas visitor numbers, coupled with the Department of Conservation's need to recoup costs, is likely to lead to the development of guided walks and huts based on a concessionaire system.

7. An increased proportion of back-country users will cease to use the current huts, preferring to either run through back-country areas, or walk them in a single day. The consequence of this is that people will use an area but not pay the hut fee. In terms of cost-recovery and the maintenance of tracks and routes, management will need to consider additional or alternative strategies for revenue collection.

8. The findings relating to visitor motivations and satisfactions indicate that people visit the Park to fulfil needs to be close to nature and to escape from urban areas. This information has important policy implications in terms of considering the level, or extent of development within the Park.

9. Changes in socialisation patterns may challenge previously accepted norms and practices of Park use. The unwritten "code of ethics", perpetuated in the past by a strong generational continuity may, in the face of increasing overseas visitor use and new activity groups entering the Park, be less influential than in the past. Management may need to either accommodate varied recreation styles, and/or increase its role in directing appropriate behaviour and use. As Simmons (1980:152) has noted, the establishment of "environmentally protective" norms is crucial as Park use increases.

9.3.2 Implications for national parks

1. Those responsible for the management of Arthur's Pass National Park and similar natural areas, are increasingly under pressure to generate revenue and minimise costs. This will lead to an increase in commercial uses of parks, international tourism opportunities, sporting concessions
and other innovative developments. While this may be seen as a positive step, in terms of adding an economic value to natural resource areas, and because a diversification of use styles inevitably means a greater cross-section of people enjoy natural area experiences, there is a danger that over-emphasis on the use of national parks will undermine the balance between using and preserving these areas.

2. The current legislation may need to be revised to address the increasing intensity and diversification of use in national parks. While adjustments to management plans may be evident in the management of some national parks, the Act governing parks needs to be more explicit about a number of contemporary use and preservation issues. For example, multi-sport and endurance events represent new and innovative uses of protected natural areas. While this style of use is simply an expression of the freedom such areas allow, and does not necessarily contravene the legislation that protects them, these activities are typically associated with competition, commercialism and high numbers - concepts which strike at the heart of the values held strongly by many traditional users.

3. Given increasing proportions of overseas visitors, and the new commercial thrust of some activities, there is likely to be continued and increased recreational succession. This "breaking in" of new areas will occur both through the demand for a greater number of events and experiences in natural areas, and/or the need to avoid such events and numbers.

4. Increased overseas visitors to, and commercial uses of national parks, will also contribute to the debate over the imposition of a Green Tax or specific user charges, the implications of which would be wide ranging.

9.3.3 Implications and recommendations for replicative studies

Very few studies of outdoor recreation in New Zealand have been replicative or longitudinal in nature. A definite need for such studies was identified on the basis that appropriate management depends on knowledge of changing use trends. Increased proportions of women, children, overseas visitors, or older people in the
Park, may indicate the need for a range of alternative opportunities. Changes in the ways people travel to the Park, who they visit with, and the size of those groups have implications for managers. This kind of trend information cannot be obtained without longitudinal or replicative research.

In addition to use trends, future studies of Arthur’s Pass National Park will continue to be of value in terms of monitoring the development of, and attitudes towards, multi-sport activities and events, and tourist ventures in the Park. The viaduct proposed for the road through the Otira Gorge is also likely to affect Park use. In addition to an increase in heavy transport (including tour buses and caravans), the viaduct may become an attraction in itself during its first years of operation.

Although it is acknowledged that longitudinal research is important, there are a number of factors which complicate such studies. The following comprises some implications of, and recommendations for, replicative projects in particular.

1. Owing to the nature of social science research and, in particular, that which is undertaken in large, natural areas where recreational use is highly dispersed, complete replication is not always possible. Even when a detailed sampling schedule is available, a number of factors, well beyond the control of the researcher, is likely to affect the study. The implication of this is that the findings will be of an indicative, rather than a statistically significant nature.

2. When replicating a study that was carried out more than ten years ago, many of the terms and phrases used in the questionnaire may no longer be applicable. Two examples of this in the present study are the issue of marital status and occupational categories. Attempts to find alternative phrases, which measure the same concept or variable, can be very difficult. The validity of comparisons is dependent on this.

3. Pure replication implies that previous questions be used regardless of their validity. Altering questions may change meanings to the extent that data received are not appropriate for comparison. Where retaining the
original questions is not appropriate, only an indicative comparison is possible.

While future replicative research is supported, it is not recommended that the research methods employed in the present study, or the study undertaken by Simmons (1980) are used. These methods have allowed too many variables to interfere with the validity of comparisons. In order to avoid this, and other problems associated with sampling in large sparsely populated recreation areas, another method is proposed.

It is recommended that future researchers select six representative sites within the Park, covering both the front-country and back-country zones, and concentrate sampling within these. A "short burst" sampling approach could be used where seven representative days during January are chosen. Using six researchers, a full day could be spent at each selected site. Data at each of these locations would be collected on the basis of a sampling fraction later weighted for comparative purposes. Through selecting approximately two days in each week of January, the chances of the study being badly affected by several days of rain are significantly reduced, and a good cross-section of the Park could be covered with a minimal amount of time wasted. The advantage to those replicating the research would lie in the pre-set sampling locations. A representative picture of Park use could be obtained while increasing the validity of potential replications. Studies undertaken at five yearly intervals would probably provide the most useful trend information.

9.4 Future research needs

In addition to the on-going assessment of change at specific recreation sites within Arthur’s Pass National Park, it is possible to identify several broad opportunities for further research emerging as a result of the present work. These are outlined below.

1. An increased understanding of the social impact of commercially organised sporting events, and other commercial developments in national parks. Impact reports and statements need to address more than
the physical environmental issues. Social impacts, although perhaps
more complex to measure, are an equally important component of
assessment.

2. An extensive qualitative assessment of the abstract concepts of outdoor
recreationists' motivations, satisfactions and perceptions. It is possible
that qualitative techniques will provide additional insights into such
aspects of outdoor recreation use.

3. A related and intriguing avenue for research, is to ascertain the meanings
of national parks to both users and non-users. A symbolic interactionism
perspective on the role and significance of national parks in the recreation
and spiritual lives of New Zealanders is absent from the research
literature to date.

4. An appraisal of the various research methods used to study outdoor
recreation in New Zealand, with a special emphasis on highly natural
and dispersed recreation settings.

9.5 Conclusion

The inter-related nature of all aspects of human existence means that social,
economic, political and environmental change inevitably leaves no life sphere
unaffected. This thesis has implied that, owing to a rapid and diverse set of
technological, socio-economic and political developments, the way in which national
parks are conceptualised and used is in transition.

Against this back-drop of change, the present study has assessed summertime
visitation to Arthur's Pass National Park. Focusing on the characteristics, activities,
motivations, attitudes and perceptions of visitors during the summer of 1994, a
relatively specific case study has addressed the broader issue of preservation and
use in protected natural areas of New Zealand.

In addition to preserving natural habitats, national parks are places of active
enjoyment and recreation. It is this potential dichotomy, between preservation and
use, that poses one of the most significant challenges to national park policy, planning and management. This challenge is one that is continuously expanding as new and innovative forms of recreation and tourism, assisted by technological development, begin to enter national parks.

A new era in the evolution of national parks in New Zealand may be unfolding. This era, in many ways, contradicts theories which suggest that a paradigmatic shift towards environmentalism is occurring. While it is acknowledged that there is a greater awareness of issues affecting the physical environment, this has not led to a decrease in the recreational use of these environments. On the contrary, this renewed interest and awareness has either contributed to, or been accompanied by an increase in its utilisation: for recreation and tourism. The new era is one of intensive use, examples of which include a multitude of adventure tourism activities and commercially organised sporting events.

Managers and planners, at an early stage, must be careful to assess the potential impacts of this emerging style of use. Failure to address some of the fundamental issues currently facing the conservation of New Zealand's national parks, will result in a loss of recreational and ecological diversity and values. It is important that a coordinated approach to management is undertaken, with links across various public and private agencies. Such coordination is reliant on a level of informed government intervention to ensure that conservation lands are managed in such a way that the prime beneficiaries are the endemic species, and the public of New Zealand.
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Appendices
ARTHUR'S PASS NATIONAL PARK VISITOR SURVEY

FRONT-COUNTRY QUESTIONNAIRE

Department of Parks, Recreation and Tourism
Lincoln University
Canterbury
The following questionnaire seeks information about the way in which you use Arthur’s Pass National Park. Although the results of this research may well help inform Park management, the study itself is completely independent of any organisation. Primarily, the results will be used in the preparation of a masters thesis focusing on the activities and attitudes of summertime visitors to Arthur’s Pass National Park.

Please attempt to answer each question. Most questions require a response in the form of a tick (✓) in the box provided, although many also ask for your comments. All responses will be confidential to the researcher.

Once you have completed the questionnaire, please place it in the FREEPOST envelope provided and return it as soon as possible. Alternatively, you may leave your questionnaire at the National Park Headquarters or the YHA. Thank you for your time and effort required to complete this questionnaire.

Stephen Espiner
Masterate student
Parks, Recreation and Tourism Department
Lincoln University.

Research Supervisors:
Dr PJ Devlin
Dr DG Simmons
This first section asks for details about your use of Arthur’s Pass National Park. It includes questions about what activities you pursue, when you participate and how often.

Q1 Which of the following best describes you?

1. Bach owner/resident/holiday-maker staying in village
2. Day visitor near highway (including day walks) /picnic
3. Passing through - stopping briefly in the Park
4. Tramper/climber/runner/back-country camper
5. Other (specify) __________

Q2 Is this your first visit to Arthur’s Pass National Park?

Yes □, No □

Please go to Q5

Q3 Including this trip, about how often have you visited the Park during the last twelve months?

Once or twice □
Three or four times □
Five or six times □
Between seven and ten times □
More than ten times □

Q4 Have your previous visits mostly been

Summer visits □
Winter visits □
Both summer and winter visits □
Q5 What activities are you taking part in while in the Park?

On this trip (please tick ✓)
1. Sightseeing
2. Picnicking
3. Cycling
4. Fishing
5. Climbing
6. Hunting
7. Kayaking
8. Running
9. Mountain-biking
10. Long walks (half day or more)
11. Short walks (less than half day)
12. Camping (designated site)
13. Back-country camping
14. Short tramps (over-night, 3 days or less)
15. Major tramps (more than three days)
16. Multi-sport events
17. Driving or motor-cycling for pleasure
Others

On other trips, if applicable (✓)
1. Sightseeing
2. Picnicking
3. Cycling
4. Fishing
5. Climbing
6. Hunting
7. Kayaking
8. Running
9. Skiing (cross-country)
10. Skiing (down-hill)
11. Mountain-biking
12. Long walks (half day or more)
13. Short walks (less than half day)
14. Camping (designated site)
15. Back-country camping
16. Short tramps (over-night, 3 days or less)
17. Major tramps (more than three days)
18. Multi-sport events
19. Driving or motor-cycling for pleasure
Others

Q6 Which three of the activities listed in Q5 are the most important to you at the moment? (1= most important)

1. 
2. 
3. 

[ ]

[ ]

[ ]
Q7  About how often do you participate in these three activities within Arthur's Pass National Park? Please indicate this on the chart below by placing a tick (√) in each of the three columns.

<table>
<thead>
<tr>
<th>HOW OFTEN?</th>
<th>ACTIVITY 1</th>
<th>ACTIVITY 2</th>
<th>ACTIVITY 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two - three times per month or more,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once per month</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once every two - three months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once every six months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once per year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than once per year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q8  In total, how long have you been involved (in years/months) with these activities?

Activity 1
Activity 2
Activity 3

This next section seeks information about the group that you are with on this trip, and the nature of your stay.

Q9  Which of the following best describes the group with whom you have come to the Park?

- With family
- With spouse/partner only
- With family and friends
- Single person
- With friends
- With school trip
- With club trip
- Other (specify)
Q10 If you are visiting the Park with your family, what is the composition of this group?

- With spouse or partner alone □, With parent(s) □
- With all of your children □, With other relations □
- With some of your children □

If you are with your children, what are their ages ____________

Q11 How many people are there in your group? ______

Q12 How long will you spend in the Park on this particular trip? ______ day(s)

Q13 How did you travel to the Park?

- Private car □
- Motorcycle □
- Train □
- Bus/Coach □
- Cycle □
- Hitch-hike □
- Other (specify) □

Q14 If you have been a previous visitor to Arthur's Pass National Park, has your use (or style of use) changed over time?

- No □
- Not applicable □
- Yes □

Please go to Q16

Please comment on the nature of this change


Q15 If your use has changed in some way, can you indicate the main reason(s) for this change?


The next set of questions asks about your attitudes toward the use of Arthur’s Pass National Park.

Q16  Arthur’s Pass is an area within which many people recreate. Are there any current activities which you believe to be inappropriate or unsuitable in the national park?

No  ☐ 2  Please go to Q17
Yes ☐ 1  If Yes, please specify, and explain why you think this

Q17  The management of any national park requires a balance between the conservation of the area and its use and enjoyment by the people. On the following scales, please indicate where you believe this balance is currently located for Arthur’s Pass National Park. (Circle one number on each of the scales).

1-------------------- 2 --------------------3-------------------4--------------------5
Too little Right level Too much
use of use use

1-------------------- 2 --------------------3-------------------4--------------------5
Too little Right level Too much
conservation of conservation conservation

Q18  Is your experience ever affected by the activities of other Park users?

No  ☐ 2  (Please go to Q19)
Yes ☐ 1  In what ways does this happen?
Q19  Do you agree with limitations on national park use?

No □₂
Yes □₁  Please comment

Q20  In the area that you have visited on this trip, do you think that:

there were too many people in the area □₁
there were just the right number of people in the area □₂
there were too few people in the area □₃

Q21  In your opinion, were any of the tracks or walks crowded?

Yes □₁
No □₂  Please specify and explain

  ____________________________
  ____________________________
  ____________________________
These next few questions ask you about what it is that attracts you to Arthur’s Pass National Park and the aspects of your visit that you find the most enjoyable.

Q22 Please choose, from the following list of possible motivations, up to five reasons (or motivations) for visiting of Arthur’s Pass National Park.

Rank your choices from 1 to 5 by placing a number in the box next to your selection. The number 1 should be given to the most important reason.

☐ 1. To get away from civilisation for a while
☐ 2. To be close to nature
☐ 3. To explore new areas
☐ 4. As a change from daily routine
☐ 5. For exercise/training
☐ 6. To relax (either physically or mentally)
☐ 7. To do things with friends
☐ 8. To get away from people (solitude)
☐ 9. To meet new and varied people
☐ 10. To help bring the family together more
☐ 11. To be away from the family for a while
☐ 12. To show others that I could do it
☐ 13. To exercise leadership
☐ 14. To help others
☐ 15. For the excitement
☐ 16. For the risks involved
☐ 17. For the challenge (physical or mental)
☐ 18. To be competitive
☐ 19. To use my mind
☐ 20. To think about my personal values
☐ Others (specify) ____________________________________________

_________________________
Q23 What were the most enjoyable aspects of your visit to Arthur's Pass National Park? (Please list up to three aspects, in order of importance to you, where 1 = most important).

1. ____________________________________________ 
2. ____________________________________________ 
3. ____________________________________________ 

Q24 What were the least enjoyable aspects of your visit to Arthur's Pass National Park? (Please list up to three aspects, where 1 = least enjoyable).

1. ____________________________________________ 
2. ____________________________________________ 
3. ____________________________________________ 

Q25 Did your visit meet your expectations of the area? Please indicate your response on the following scale (circle one number).

1------------------ 2------------------ 3------------------ 4------------------ 5
Expectations not met at all
Some were met, others were not
Expectations fully met

These questions relate to the way(s) in which you were introduced to national parks, and how this has affected your current use of the Park.

Q26 As a child, did you specifically visit national parks or other scenic areas?

No ☐  Please go to Q27
Yes ☐, If yes, please use the following scale to indicate the regularity of these visits (please circle one number).

1 2 3 4 5

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Quite often</td>
</tr>
<tr>
<td>Frequently</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q27  On your very first trip to any national park, with whom did you visit? Please respond using the following chart, as well as indicating the one group which you believe to have been the most influential on your park use.

<table>
<thead>
<tr>
<th>Visited with...</th>
<th>First Visit, (✓)</th>
<th>Most Influential, (✓)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scouts/guides/brigades</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific recreation club</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spouse or partner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q28  Are you married or in some similar permanent relationship?

No  ☐  (Please go to Q29)
Yes ☐  If Yes, how has your partner influenced your visits to areas like Arthur’s Pass National Park?

- Limited my range ☐
- Extended my range ☐
- Not affected my range ☐
The next three questions refer to those people whose Park use has involved their children either now or in the past. If you do not have any children, please go to Q32.

Q29 Has the presence of children been restrictive on your national park usage?
   No □₂ Go to Q31
   Yes □₁ If yes, in what ways has this occurred? ___________________
   ______________________________________________________________
   ______________________________________________________________

Q30 What, if any, strategies do you use in order to reduce these constraints?
   ______________________________________________________________
   ______________________________________________________________

Q31 Do you choose your recreational activities within the Park primarily to suit your children's needs?
   Yes □₁
   No □₂

This is the final section. Its aim is to build up a picture of Park visitors. In order to do this, it is necessary to collect demographic data, some of which may be considered personal. Consequently, you are reminded that all responses will be confidential to the researcher.

Q32 Where do you normally live? (please give city/town and country)
   ______________________________________________________________
Q33 Which of the following age categories do you fit into?

10 - 14 □₁  
15 - 19 □₂  
20 - 24 □₃  
25 - 29 □₄  
30 - 34 □₅  
35 - 39 □₆  
40 - 44 □₇  
45 - 49 □₈  
50 - 54 □₉  
55 - 59 □₁₀  
60 - 64 □₁₁  
65 + □₁₂

Q34 Are you:  Male □₁  
Female □₂

Q35 What is your occupation? (Please be as specific as possible. For example, "full-time university student", "unemployed", or "salesperson").

If you are married (or in a permanent relationship) please also give the occupation of your partner

Q36 What is the highest level you have reached in your formal education?

Primary school □₁  
Secondary School (no School Cert.) □₂  
School Certificate □₃  
U.E./ Matriculation/ Sixth form Cert. □₄  
Higher School Certificate/ Bursary □₅  
Technical or Trade qualification □₆  
University incomplete/ not yet completed □₇  
College of Education or Nursing qualification □₈  
University Degree □₉  
Post-graduate degree (part or complete) □₁₀

Other (please specify) ____________________________
Q37 Are you a member of any of the following outdoor clubs, conservation organisations, or similar groups?

<table>
<thead>
<tr>
<th>Club</th>
<th>Yes □</th>
<th>No □</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenpeace</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Forest and Bird</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Maruia Society</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Tramping/climbing club</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Running/Harriers club</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Mountain-bike club</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Tri/Multi-sport club</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Deerstalkers Association</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Other (specify)</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

Thank you for your cooperation and honesty in completing this questionnaire. If you are interested in further assisting with this research by participating in a more detailed interview about your experience of and association with the Park, you are invited to either leave your name and contact telephone number below, or to contact me at the address provided.

____________________________
Stephen Espiner
Department of Parks, Recreation and Tourism
PO Box 84
Lincoln University
FREEPOST 36
CANTERBURY
Tel. (03) 3252 811 x 8424

Please now fold this questionnaire, place it into the FREEPOST envelope provided, and return it as soon as possible. Thank you.
ARTHUR'S PASS NATIONAL PARK VISITOR SURVEY

BACK-COUNTRY QUESTIONNAIRE

Department of Parks, Recreation and Tourism
Lincoln University
Canterbury
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Stephen Espiner
Masterate student
Parks, Recreation and Tourism Department
Lincoln University.

Research Supervisors:
Dr PJ Devlin
Dr DG Simmons
This first section asks for details about your use of Arthur’s Pass National Park. The questions focus on your back-country experiences, which basically refer to the times when you leave short walks, the main roads and amenity areas, and venture further afield.

Q1 Is this your first back-country visit to Arthur’s Pass National Park?
   Yes ☐1 Please go to Q4
   No ☐2

Q2 Including this trip, about how often have you visited the back-country of the Park during the last twelve months?
   Once or twice ☐1
   Three or four times ☐2
   Five or six times ☐3
   Between seven and ten times ☐4
   More than ten times ☐5

Q3 Have your previous visits mostly been
   Summer visits ☐1
   Winter visits ☐2
   Both summer and winter visits ☐3

Q4 Please provide brief details of the trip that you are currently on (including the track or route, and any huts, bivies or shelters in which you have stayed, or intend to stay).

   Route or track: ________________________________
   Have stayed in: ________________________________
   Intend to stay in: ________________________________
Q5  What activities are you taking part in while in the Park?

On this trip (please tick ✔)

1. Tramping
2. Climbing
3. Fishing
4. Hunting
5. Running
6. Kayaking
7. Long walks (half day or more)
8. Short walks (less than half-day)
9. Mountain-biking
10. Back-country camping

Others (specify) ______________________

On other trips, if applicable (✔)

11. Sightseeing
12. Picnicking
13. Cycling
14. Fishing
15. Climbing
16. Hunting
17. Kayaking
18. Running
19. Skiing (cross-country)
20. Skiing (down-hill)
21. Mountain-biking
22. Long walks (half day or more)
23. Short walks (less than half-day)
24. Camping (designated site)
25. Back-country camping
26. Short tramps (over-night, 3 days or less)
27. Major tramps (more than 3 days)
28. Multi-sport events
29. Driving or motor-cycling for pleasure

Others ______________________

Q6  Which three of the activities listed in Q5 are the most important to you at the moment? (1= most important)

1. ______________________ [ ]
2. ______________________ [ ]
3. ______________________ [ ]
Q7 About how often do you participate in these three activities within Arthur’s Pass National Park? Please indicate this on the chart below by placing a tick (✔) in each of the three columns.

<table>
<thead>
<tr>
<th>HOW OFTEN?</th>
<th>ACTIVITY 1</th>
<th>ACTIVITY 2</th>
<th>ACTIVITY 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two - three times per month or more</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once per month</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once every two - three months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once every six months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once per year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than once per year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q8 In total, how long have you been involved (in years/months) with these activities?

Activity 1
Activity 2
Activity 3

Q9 Using the following scale (and explanations), please rate your overall back-country experience (circle one number).

1------------------------2------------------------3-------------------------4-------------------------5
limited experience some intermediate experienced very experienced
experience experience experience

1. Limited experience = this is your 1st or 2nd trip into the back-country.
5. Very experienced = capable of high intensity, multi-day trips requiring high levels of skill or knowledge.
This next section seeks information about the group that you are with on this trip, and the nature of your stay.

Q10 Which of the following best describes the nature of your party?

- With family
- With spouse/partner only
- With family and friends
- Single person
- With friends
- With school trip
- With club trip
- Other (specify) _______

Q11 If you are visiting the Park with your family, what is the composition of this group?

- With spouse or partner alone
- With all of your children
- With some of your children
- With parent(s)
- With other relations

If you are with your children, what are their ages ___, ___, ___, ___

Q12 How many people are there in your party? ____

Q13 How long will you spend in the Park on this particular trip?

_______ day(s)

Q14 How did you travel to the Park?

- Private car
- Motorcycle
- Train
- Bus/Coach
- Cycle
- Hitch-hike
- Other (specify) _______
Q15  If you have been a previous visitor to Arthur's Pass National Park, has your use (or style of use) changed over time?

No □ 2  → Please go to Q17
Not applicable □ 3
Yes □ 1

Please comment on the nature of this change


Q16  If your use has changed in some way, can you indicate the main reason(s) for this change?


The next set of questions asks about your attitudes toward the use of Arthur's Pass National Park.

Q17  Arthur's Pass is an area within which many people recreate. Are there any current activities which you believe to be inappropriate or unsuitable in the national park?

No □ 2  Please go to Q18
Yes □ 1  If Yes, please specify, and explain why you think this


Q18 The management of any national park requires a balance between the conservation of the area and its use and enjoyment by the people. On the following scales, please indicate where you believe this balance is currently located for Arthur's Pass National Park. (Circle one number on each of the scales).

1-------------------2-------------------3-------------------4-------------------5
Too little Right level Too much
use of use use

1-------------------2-------------------3-------------------4-------------------5
Too little Right level Too much
conservation of conservation conservation

Q19 Is your experience ever affected by the activities of other Park users?

No □ 2 (Please go to Q20)
Yes □ 1, In what ways does this happen?

Q20 Do you agree with limitations on national park use?

No □ 2
Yes □ 1

Please comment

Q21 In the area that you are currently using, or were using on this trip, do you think that:

there were too many people in the area □ 1
there were just the right number of people in the area □ 2
there were too few people in the area □ 3

Q22 In your opinion, were any of the huts, routes or tracks crowded?

Yes □ 1
No □ 2 Please specify and explain

______________________________________________________
______________________________________________________
These next few questions ask you about what it is that attracts you to Arthur's Pass National Park and the aspects of your visit that you find the most enjoyable.

Q23 Please choose, from the following list of possible motivations, up to five reasons (or motivations) for visiting the back-country of Arthur's Pass National Park.

Rank your choices from 1 to 5 by placing a number in the box next to your selection. The number 1 should be given to the most important reason.

☐ 1. To get away from civilisation for a while
☐ 2. To be close to nature
☐ 3. To explore new areas
☐ 4. As a change from daily routine
☐ 5. For exercise/training
☐ 6. To relax (either physically or mentally)
☐ 7. To do things with friends
☐ 8. To get away from people (solitude)
☐ 9. To meet new and varied people
☐ 10. To help bring the family together more
☐ 11. To be away from the family for a while
☐ 12. To show others that I could do it
☐ 13. To exercise leadership
☐ 14. To help others
☐ 15. For the excitement
☐ 16. For the risks involved
☐ 17. For the challenge (physical or mental)
☐ 18. To be competitive
☐ 19. To use my mind
☐ 20. To think about my personal values
☐ Others (specify) ________________________________

[ ] [ ] [ ] [ ] [ ]
Q24  What were the most enjoyable aspects of your visit to Arthur's Pass National Park? (Please list up to three aspects, in order of importance to you, where 1 = most important).

1. ____________________________________________
2. ____________________________________________
3. ____________________________________________

Q25  What were the least enjoyable aspects of your visit to Arthur's Pass National Park? (Please list up to three aspects, where 1 = least enjoyable).

1. ____________________________________________
2. ____________________________________________
3. ____________________________________________

Q26  Did your visit meet your expectations of the area? Please indicate your response on the following scale (circle one number).

1------------------ 2------------------ 3------------------ 4------------------ 5
Expectations not met at all
Expectations fully met

Some were met, others were not

These questions relate to the way(s) in which you were introduced to national parks, and how this has affected your current use of the Park.

Q27  As a child, did you specifically visit national parks or other scenic areas?

No □₂ Please go to Q28
Yes □₁ If yes, please use the following scale to indicate the regularity of these visits (please circle one number).

1  2  3  4  5

|-----------------|-----------------|-----------------|-----------------|
Never Rarely Sometimes Quite often Frequently
Q28  On your very first trip to any national park, with whom did you visit? Please respond using the following chart, as well as indicating the one group which you believe to have been the most influential on your park use.

<table>
<thead>
<tr>
<th>Visited with</th>
<th>First Visit (✓)</th>
<th>Most Influential (✓)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scouts/guides/brigades</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific recreation club</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spouse or partner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q29  Of your five closest friends, how many take part in back-country recreation at least now and then?

0-------------------1-------------------2-------------------3-------------------4-------------------5

Q30  Are you married or in some similar permanent relationship?

<table>
<thead>
<tr>
<th>No</th>
<th>(Please go to Q31)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>If Yes, how has your partner influenced your participation in outdoor recreation activities?</td>
</tr>
</tbody>
</table>

- Limited my range  
- Extended my range  
- Not affected my range
The next three questions refer to those people whose Park use has involved their children either now or in the past. If you do not have any children, please go to Q34.

Q31 Has the presence of children been restrictive on your national park usage?

No □2 Go to Q33

Yes □1 If yes, in what ways has this occurred? ________________________________

______________________________

Q32 What, if any, strategies do you use in order to reduce these constraints?

______________________________

______________________________

Q33 Do you choose your recreational activities within the Park primarily to suit your children's needs?

Yes □1

No □2

This is the final section. Its aim is to build up a picture of Park visitors. In order to do this, it is necessary to collect demographic data, some of which may be considered personal. Consequently, you are reminded that all responses will be confidential to the researcher.

Q34 Where do you normally live? (please give city/town and country)

______________________________
Q35 Which of the following age categories do you fit into?

10 - 14  □₁  30 - 34  □₅  50 - 54  □₉
15 - 19  □₂  35 - 39  □₆  55 - 59  □₁₀
20 - 24  □₃  40 - 44  □₇  60 - 64  □₁₁
25 - 29  □₄  45 - 49  □₈  65 +  □₁₂

Q36 Are you: Male  □₁
Female    □₂

Q37 What is your occupation? (Please be as specific as possible. For example, "full-time university student", "unemployed", or "salesperson").

If you are married (or in a permanent relationship) please also give the occupation of your partner

Q38 What is the highest level you have reached in your formal education?

Primary school  □₁
Secondary School (no School Cert.)  □₂
School Certificate  □₃
U.E./ Matriculation/ Sixth form Cert.  □₄
Higher School Certificate/ Bursary  □₅

Technical or Trade qualification  □₆
University incomplete/ not yet completed  □₇
College of Education or Nursing qualification  □₈
University Degree  □₉
Post-graduate degree (part or complete)  □₁₀

Other (please specify) ____________________________
Q39 Are you a member of any of the following outdoor clubs, conservation organisations, or similar groups?

Yes □₁ (Please tick as appropriate)

- Greenpeace □₃
- Forest and Bird □₄
- Maruia Society □₅
- Tramping/climbing club □₆
- Running/Harriers club □₇
- Mountain-bike club □₈
- Tri/Multi-sport club □₉
- Deerstalkers Association □₁₀
- Other (specify) __ __

Thank you for your cooperation in completing this questionnaire. If you are interested in further assisting with this research by participating in a more detailed interview about your experience of and association with the Park, you are invited to either leave your name and contact telephone number below, or to contact me at the address provided.

______________________________

Stephen Espiner
Department of Parks, Recreation and Tourism
PO Box 84
Lincoln University
FREEPOST 36
CANTERBURY
Tel. (03) 3252 811 x 8424

Please now fold this questionnaire, place it into the FREEPOST envelope provided, and return it as soon as possible. Thank you.
This research focuses on the way in which people use Arthur's Pass National Park. The research period is intended to represent "Summertime" visitation of the Park, and as such coincides with the Park's peak usage.

As those of you who are familiar with the size and scope of New Zealand's National Parks will appreciate, a survey of users in such an area is no easy task. No single researcher, in the period of one month could hope to achieve an adequate coverage of the Park by him or herself. This is where you fit in.

Your task, should you choose to accept it, is to help implement the research programme as set out below. Most of the assistants will be involved with collection the Back-country sample, although this is not universal and, for this reason, I will include a brief summary of each of the surveying procedures.

Firstly, it is important to point out that there are two surveys used in this research. The first survey, the Front-country Questionnaire, targets those people who use/visit the fore-front areas of Arthur's Pass National Park. For instance, the Visitors' Centre, the Day shelters and the short and day walks off the main roads. Such people comprise by far the majority of Park visitors.

The second of the two questionnaires is the Back-country questionnaire. This is intended to survey those people who leave the short walks, main roads and amenity areas, and venture further afield. Typically, such visitors will include trampers, climbers, runners and any other people using the back-country huts and river systems.

General Notes and Guidelines for Data Collection

The main points

1. When approaching a potential questionnaire recipient, be as polite as possible and clearly identify yourself (you should already be wearing your research assistant name-tag). A possible opening sequence may be as follows: "Hi, my name is Bruce Rendall - I'm a post-graduate student from Lincoln University. I'm in Arthur's Pass to assist with a research project being undertaken by one of my colleagues. We're interested in the way in which people, like yourself, are using the National Park. To this end, a questionnaire has been developed. We're distributing these to visitors to the Park - would you be prepared to assist with this study?" (Be quick to point out that the questionnaire does not have to be completed on the spot, and that there is FREEPOST envelope included and, therefore, no stamp is required - providing that the questionnaire is posted in New Zealand!). Thank the approached whether or not he or she agrees to participate.

2. Regardless of whether or not the approached agrees to take a questionnaire, you must complete a Field Encounter Card (in the case of refusal obviously no questionnaire number can be recorded). These small white cards record brief and approximate information on the potential respondent or non-respondent. This is important information in terms of understanding non-response and to get an idea of to whom and where the questionnaires were distributed. (Although it is omitted from the FE Card, please also record the date of the encounter on the card).
When distributing multiple questionnaires you will not know exactly who receives each. This is unavoidable, and the best that can be done is noting on the card (with an * next to the number) that this is a one of a group of cards. Please still make an effort to record the approximate age grouping of each person approached.

3. When in the back-country, please record all hut book and intention station entries (including name, address, group size and route) which fall within the research period. This will give some indication of the extent of coverage.

4. When surveying at the Visitors’ Centre, please record the details of all intention cards which fall within the research period. These provide information about the levels of Park use and give me a back-up information source.

5. Please also record brief details of the weather and other conditions (eg., river levels) experienced during your research shift.

As mentioned previously, due to the nature of the Park and the often dispersed nature of its use, only parts of the Park can be dealt with at any one time. Specific locations have been chosen - based on available use statistics - which are intended to represent the general use of Arthur’s Pass National Park. Most areas are represented at some point in the study. However, those areas known to receive the highest levels of use predominate. The way in which this affects data collection is described below.

Front-country questionnaire distribution
As outlined above, the Front-country segment includes those people visiting the Park’s headquarters, its shelters and the various short and day walks. The available use statistics demonstrate that over half (55%) of the total Park visitation is absorbed by the Visitors’ Centre. A further 37% occurs in the other parts of the front-country. The majority of this latter use (about 70%) is of the Devil’s Punchbowl and Bridal Veil Falls walkways. The remainder of the Front-country use is spread over the other short and day trips such as Avalanche Peak, Mt. Bealey, the upper Bealey valley, the Otira valley and the Dobson Nature walk. Although these less used tracks need to be represented in the sample, their low use means that research hours can not really be allocated often.

Distributing the questionnaires
More specifically, as research assistants, you will need to be aware of the techniques used to distribute the questionnaires in the front-country. As there are slight differences per location, each will be dealt with in turn.

1. The Visitors’ Centre
When surveying at the Visitors’ Centre, stand on the outside of the second set of double doors. Approach every fifth person (over the approximated age of fifteen years) as he or she leaves the Visitors’ Centre. The interval of one in five has been chosen in order to keep the number of people surveyed down to a manageable number and to give the researcher time to briefly explain the purpose of his or her work and to fill in the Field Encounter Card (see above).

The interval of one visitor in five includes children - as long as they are walking. This is because the sample interval is based on the door counter
which records each person to pass. If the fifth person out of the door happens to be under the required age of fifteen, please approach the very next person who appears to be over the stipulated age.

If you should encounter any refusals (which include any such time when the approached walks away without a survey for whatever reason), assistants should leave a full minute to elapse. This helps avoid a potential "cascade of refusal".

2. Short walks and shelter areas
Due to the scope and nature of the Park and limited number of research assistants, specific areas and times have been targeted for Front-country sampling. Because of this, it has been decided that, on the short walks and in Day Shelter areas, one in every two people over the approximate age of fifteen should be offered a questionnaire.

3. The Back-country
Because of the low numbers of visitors in this region, a distribution strategy of one person, one questionnaire is to be used. This is particularly necessary in this portion of the Park as such a small proportion of visitation occurs here (about 7% of total Park use).

The only exception to the aforementioned distribution strategy occurs when sampling "Runners" at the Deception footbridge near Otira. In this case please sample one runner in each group (or carload). This person can be chosen by politely asking for the person who next has a birthday.

Some potential exists for confusion over which questionnaire to give people. This can normally be cleared up quickly by asking the person what he or she is doing (i.e., out for the day/night? etc.). It is generally possible to ascertain from the person’s gear and clothing what kind of trip he or she is on. If, for example, a person arrives at the Visitors’ Centre with a large pack, it is likely that he or she is a tramper and should be offered a back-country questionnaire.

Please arrive at the research location prepared for the obvious extremes of weather possible in the alpine environment. If you think you will need a specific item of equipment (a tent or a gas cooker, for example), please let me know in advance. Keep a note of your related expenses as I intend to reimburse these to the greatest extent possible.

Thank you for your help with this research. If you have any questions relating to the guidelines above, please don’t hesitate to ask me.
FIELD ENCOUNTERS

Questionnaire number ______

Point of contact________________________
Activity________________________

Sex:(✓)Male □
Female □

Origin: (✓)NZ □
Other □

Approximate Age Group (✓)
☐ 15 - 19 ☐ 35 - 39 ☐ 55 - 59
☐ 20 - 24 ☐ 40 - 44 ☐ 60 - 64
☐ 25 - 29 ☐ 45 - 49 ☐ 65 +
☐ 30 - 34 ☐ 50 - 54

Number in group______

Reason for refusal (if applicable)

__________________________________