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**A LITERATURE REVIEW OF VISITORS
TO THE CONSERVATION ESTATE WITH
SPECIAL REFERENCE TO FAMILIES AND
UNDER-REPRESENTED GROUPS**

Volume One

by

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EXECUTIVE SUMMARY

Trends in recreation and changes to the population structure of New Zealand have implications for the demand for Department of Conservation (DOC) outdoor recreation resources.

It seems likely that increased numbers of retired people and the large "baby boom" group now concentrated in the child-rearing stage, will cause passive recreational use of the DOC estate to increase in importance and active recreation in backcountry areas to stabilise. This follows evidence that the type of visitor attracted to the DOC estate differs by activity/activity-type. Passive visitors include family groups and more closely reflect the diversity found in society as a whole than active outdoor recreationists. People undertaking active pursuits are characterised by variables associated with a higher socio-economic level. Considerably DOC visitors undertake passive activities in park periphery areas, however, than active recreational pursuits in the backcountry.

Overall, outdoor recreation participation appears to be increasing. As coasts and areas near to urban centres have traditionally been the focus of most recreational activity, these areas are likely to maintain importance.

Trends in the use of the DOC estate may be altered by directing policy towards overcoming barriers that restrict recreation participation, especially for groups who are under-represented amongst DOC visitors (for both passive and active recreation). These groups include:

- Maori people
- the aged
- the disabled
- people of low socio-economic levels.

Barriers may be subdivided into internal (motivation, knowledge) and external (physical, social, economic, institutional). Measures to ameliorate barriers include:

- promotions/information to increase awareness and knowledge
- improved availability of recreational opportunity
- improved facilities and access on-site for those with mobility problems
- educational programmes in schools to encourage visits.

To be most effective, barriers against particular activities/activity types should be targeted.

Issues arise concerning interest in the area of visitors and non-visitors -a role that requires clarification. Consideration should be given to whether DOC's policies and operations influence the type of visit and visitor on the DOC estate. This needs to be addressed, along other issues raised, to ensure that suitable policies are developed.

* prepared for Directorates of Advocacy and Extension, and Recreation and Tourism, Head Office, Department of Conservation.

1. PURPOSE AND OUTLINE

This literature review is part of a strategy designed to address policy in order to encourage families and "non-traditional users" into DOC parks and facilities. The review has been undertaken by Kay Booth of the Science & Research Directorate, for the Directorates of Advocacy and Extension, and Recreation and Tourism.

The brief:

In order to identify means to encourage family and non-traditional use of DOC parks and facilities, a literature search is required to find out:

- the nature of the "New Zealand family";
- the nature of "non-traditional users";
- patterns of family recreation;
- barriers to family and non-traditional users recreation;
- families and non-traditional users in outdoor recreation.

The search should cover existing sources (unpublished) e.g. Wellington Recreation Survey data.

DOC parks and facilities have been defined through discussion as:

- national parks
- forest parks
- maritime parks
- historic resources
- various types of reserve (scenic, recreation,...).

The following sections present a review of the literature pertaining to this brief. Sections 2 - 5 stand alone, while section 6 is a synthesis of the previous sections and endeavours to provide a focus for the task which follows on from this review. Note that emphasis has been given to New Zealand literature owing to time limitations.

The document is presented in two volumes. Volume 2 contains tables and figures which support the text presented in Volume 1.

2. DEMOGRAPHIC TRENDS WITH SPECIAL REFERENCE THE "NEW ZEALAND FAMILY"

2.1. Introduction

This section takes a broader brief than originally prescribed as many of the demographic trends occurring, in New Zealand are considered pertinent to a review of recreational emphasis is given to defining the nature of the "New Zealand family".

For further information, the reader is referred to Davison (1986: chapter 8) who summarises changes in the New Zealand population and discusses trends to 2001.

Data discussed in sections 2.2 -2.5 are from Demographic Trends, 1988 (Department of Statistics, 1988a) unless otherwise indicated.

Tables and figures for this section are presented in Appendix 1.

2.2 Total population

The components of population growth (birth, death, migration) all point to very limited population growth in both the long and short term (Population Monitoring Group, 1984). Forecasts predict the 1986 population of 3.3 million people will rise to 3.6 million by the year 2001. This shows a marked decrease in population growth compared with the last 30 years (Population Monitoring Group, 1984). See Table 1.

2.3 Age structure

The New Zealand population is ageing. The fastest growth age group is that of retirement age. In 1987, persons 60 years and over accounted for 15% of the total New Zealand population (cf 14% in 1981); a 12.4% increase. In comparison, the under 15 years group reduced from being 27% of the New Zealand population in 1981 to 24% in 1987. These trends are likely to continue (Table 2 and Figure 1).

The median age of the population (i.e. the point at which half the population is aged above and half below) has increased as shown:

1976 - 26.5 years
1981 - 28.2 years
1987 - 30.1 years

Furthermore, the large "baby-boom" cohort has now reached the child-rearing period, increasing the proportion of the population within the 25-44 years age category. Growth in this segment is projected to increase this decade then fall off. All age categories less than 40 years are predicted to decrease by proportion of the population, while those 40 years and above are likely to increase.

Comparing the population distribution for the total New Zealand population and the New Zealand Maori population, it is evident that the Maori population is ageing at a much slower rate than the non-Maori. See Figures 2 and 3.

2.4 Geographic distribution

As at 31 March 1987, the North Island had an estimated population of 74% New Zealanders, which represented a 0.6% increase over the previous 12 months. In comparison, the South Island experienced a 0.2% decrease. See Figure 4. The New Zealand Planning Council's document New Zealand Population: Patterns of Change (Population Monitoring Group, 1984) states that the more rapid growth of the North Island's population reflects a younger age structure, higher fertility and absorption of a high proportion of international migration. Auckland, in particular, has become home for a growing body of Pacific Islanders.

Moreover, the ageing population suggests that internal migration is likely to become driven more by retirement movement than by that related to employment, especially in a decade or two (Population Monitoring Group, 1984). The implication is that the north will be particularly attractive. The Population Monitoring Group state, however, that the projected low New Zealand population growth and net migration is likely to regional population growth is on a much smaller scale than in the past 40 years.

Since early times, New Zealand's Maori population has been concentrated in the North Island. About ¾ of the present population now live in the North Island (Population Monitoring Group 1984).

Much of the estimated population growth in the North Island is concentrated in the north, especially the Auckland Region. At the end of March 1987, the Auckland Region contained 27% of the total New Zealand population, a slight increase over the previous year.

Over the March 1986 - March 1987 period, the combined populations of the 17 main urban areas increased by 0.4%. Figure 5 shows the continuing trend of urbanisation projected to 2001.

2.5 Fertility

Despite a recent upturn in the birth rate since 1985, a long-term trend of falling reproduction is evident. Table 3 shows the total fertility rate for the total New Zealand and Maori populations, indicating differences between the two. Maori women display a higher fertility rate, however this is decreasing more quickly than the non-Maori, and approaching the non-Maori rate of fertility.

The decline in fertility over recent years is partly due to trends in delayed marriages and delayed childbearing (Population Monitoring Group, 1984).

An upward shift in the age pattern of childbearing is reflected in an increase in the median age of mothers at first nuptial birth (25.1 years in 1978; 27.1 years in 1987) and a slow rise in the median age at childbearing ages, (women born in 1948 exhibit an estimated median age of 24.8 years compared with 25.1 years for women in 1952). The fertility rate for women aged has risen 36% in the last decade (to 91.4 per 1000 in 1987). Similarly, an increasing fertility rate for women aged 35-39 is evident since 1981 (to 27.0 per 1000 in 1987).

The Population Monitoring Group's report notes that there appears to be socio-economic differentials. Delayed childbearing is more likely among affluent couples and younger parenthood among lower income groups.

Figure 6 depicts the age-specific fertility rates of the Maori and total New Zealand populations over time. Significant differences are evident between the Maori and non-Maori, with the trend of higher Maori fertility rates reversed for women in their late 20s through 30s. Maori fertility remains very high for ages 15-19.

An increasing trend in ex-nuptial births (a significant increase in the past 2 years) reflects an increase in de facto marriages.

2.6 Children in the home

Nearly half of two-parent families and just under a third of one-parent families do not have any dependent children (i.e. childless couples or families with adult children). See Table 4. Table 5 suggests that the majority of couples with children are still active in childbearing or have recently completed their family. A more even spread of age of youngest child is evident for one-parent families, perhaps reflecting the diverse nature of origin of this type of family unit.

2.7 Marriage and divorce

Figure 7 shows an overall decrease in the rate of marriage since 1971, to reach a rate in 1987 of 24.93 per 1000.

Data also show a postponement of marriage since 1971. Table 6 shows a significant rise in the age at marriage, to a mean age of 24.7 years for first-time brides in 1987.

Declining marriage rates and later marriages have resulted in a growing proportion of New Zealand women remaining single through their twenties. In 1976, 38% of women aged 20-24 were single, compared with 66% in 1986.

The Department of Statistics (1988a) suggest a number of factors which may have contributed to these developments:

- increased career aspirations of young women
- increased periods of time spent in secondary and tertiary education
- the prevailing economic climate
- growth in de facto unions.

The advent of informal cohabitation also means that many unions are made and dissolved without being recorded.

Figure 7 shows a downward trend in divorce since 1982. This trend is affected by legislation changes concerning divorce; the Family Proceedings Act 1980 in particular, which termed divorce "dissolution of marriage". As a result of the legislative changes, a jump in marriage dissolutions was experienced, but this now seems to be stabilising below the 9,000 mark.

The current level of marriage dissolution is still 30% above the level for 1980 and 3.5 times the divorce rate in 1961.

Most divorces occur among couples who have been married 5-9 years, followed, in that order, by those married 10-14 and 15-19 years. Since 1982, the number of dissolutions involving marriage of less than 5 years duration has continued to rise.

2.8 Ethnicity

The majority of New Zealand families describe themselves as European/Pakeha, with the New Zealand Maori the second largest ethnic group by number of families, and total number of people, in New Zealand (Table 7). The data also show that proportionately more Maori live in one-parent families than Europeans.

2.9 Employment

Table 8 presents information on employment status with respect to the New Zealand family. For both one-and two-parent families, just under one third of all families have all parents working full-time. However, while about half of one-parent families have the parent non-working, only 1.6% of two-parent families have both parents not working.

2.10 Income

The Real Disposable Income Index measures changes in the after-tax purchasing power of gross incomes. The series are calculated by adjusting gross incomes for income tax and then for inflation as measured by the Consumers Price Index (Department of Statistics, 1988c).

Table 9 presents changes in the real disposable incomes of wage and salary earners, and households whose principal income earner is a full-time wage and salary earner. An overall decline in purchasing power has occurred since early 1984, however quarterly fluctuations are evident.

Figure 8 presents a profile of family income for both one-and two-parent families. The income distribution for one-parent families is skewed towards the lower income levels, while the two-parent families distribution shows overall higher income levels. This is partially explained by two-parent families where both parents are working (see Table 8).

A decline in single income families since 1976 is evident from Table 10. De Joux (1985) confirms that families with mothers not in work are becoming more rare, particularly where the children are of school age. This trend, however, does not necessarily imply greater disposable income.

Family income, weighted to represent disposable income after taking into account the differing income needs of family members, shows a positive relationship between age of a child and the relative wealthiness of the child's family. Families of infants are more likely to fall into a low income group than families of teenagers. Ethnic differences are apparent by disposable income, with Maori families more commonly occupying low income levels. See Table 11.

2.11 Labour force

The New Zealand Planning Council's Population Monitoring Group (1984:31) identify three major trends in age-specific participation in the labour force:

- a) Decreased labour force participation of 15-19 year olds, as a result of prolonged education.
- b) Increased labour force participation of women during and after family formation.
- c) Earlier retirement, possibly as a result of wealth, better retirement provision during the 1970's, a slack labour market.

2.12 Household composition

The household is the basis of a number of socio-economic statistics, and while "household" does not imply "family", the nature of living arrangements may impact on recreational participation by influencing activities undertaken and providing companions.

The Department of Statistics defines household as:

a group of persons, whether related or not, who live together and who normally consume at least one meal together daily (Department of Statistics, 1988d).

Tables 12 and 13 provide a description of household composition. Key points from the data include:

- in 1986 just over $\frac{3}{4}$ of the population lived as a single-family unit (includes couples, solo parents, nuclear families)
- in 1981 only $\frac{2}{5}$ of households consisted of the conventional nuclear family (husband/wife/dependent children); representing just over $\frac{1}{2}$ of the population. This proportion dropped between 1976 and 1981
- fluctuations have occurred in households which include other people/families (trends may be obscured owing to changes in the format of statistics collection in 1986)
- an increase in the number of single-person households 1976-1986, although only a small increase in terms of the number of people living alone is evident

The average household size has dropped from 3.6 people in 1951 to 3.0 in 1981 (Population Monitoring Group, 1984).

2.13 Conclusion

2.13.1 New Zealand Population

The demographic picture presented in this section has potential implications for the use of the DOC estate. Relevant population trends include:

1. Future increases in the number of elderly.
2. Shorter supply of family support for the elderly due to decreased family members, greater geographical mobility, and more women in formal employment. One implication is decreased opportunity for the elderly to visit DOC areas.
3. Decreased number of children per family and decreasing family size. Condensed childrearing period.
4. More women in continuous full-time employment. More families with both parents in paid employment.
5. More women remaining single longer.
6. Delayed childbearing.
7. Increase in the number of people living alone and in households without children.
8. Larger proportion of the population presently in childrearing period
9. Concentration of population in the far north and in cities.
10. Decreased disposable income generally.
11. Earlier retirement. More young people remaining in educational institutions longer.

These trends may affect an individual's recreation by influencing availability of leisure companions, type of recreation pursued, ability to participate, and area recreation is undertaken (both type of environment and geographical location).

2.13.2 The New Zealand Family

The Department of Internal Affairs document The Family, Leisure and Recreation (de Joux, 1985) describes the New Zealand family as increasingly characterised by change and diversity. The picture of the "normal" family as father (the breadwinner), wife (the homemaker) and 2-3 children is no longer valid in both numerical and nonnative terms, if it ever was.

The result is a greater variety of living styles and a greater number of family lifestyle changes for individuals. This does not necessarily indicate a collapse or decline in the family, however. Present trends indicate that families are accepting greater change and flexibility within their structures. Historical and cross-cultural studies have shown that some form of family has been and still is the most durable of social units across the whole range of known societies, and there is little reason to suppose this will change (de Joux, 1985:10).

De Joux's report warns against the dangers of talking of "the New Zealand family", owing to the diversity described above. For both research and policy, it warns, a wide definition of must be used.

3. THE NATURE OF "NON-TRADITIONAL USERS"

3.1 Introduction

The aim of this section is to review information on "non-traditional users". However, in order to interpret data presented later, a brief description of the amount and type of recreational use received by the DOC estate, is given in 3.2. This is followed by a discussion of the demographic and socio-economic characteristics of both DOC visitors and non-visitors in 3.3, while conclusions are drawn from the literature about "non-traditional user" groups in 3.4.

Data for this section are held in Appendix 2.

3.2 Amount and type of use

An idea of the magnitude of recreational use (and therefore non-use) of the DOC estate, is available from the following statistics:

- 33% of a sample of the New Zealand population (15 years+) had visited a national park the last 2 years, visiting on average 1.4 different national parks during that period (Colmar and Brunton, 1987).
- 46% of a Christchurch residents sample (15 years+) had visited a national park in the past 2 years, visiting an average 1.4 different national parks during that period (Booth, 1986). This figure was suggested to be high owing to the close proximity of Arthur's Pass National Park
- 50% of New Zealanders sampled from Auckland, Rotorua, Nelson and Christchurch (15 years+) had visited a forest for recreational purposes in the previous year (see for Bignell *et al.*, 1983).
- an estimate has been made of 1 million people making 6 million visits to forests annually (Bignell and Smith, 1984)
- the magnitude and type of recreational use between parks (national and forest) varies (Booth, 1986; Colmar and Brunton 1987; Murphy, 1981).

Numerous studies indicate that greater numbers participate in passive recreational activities than active (see for e.g. Bignell *et al.*, 1983; Booth, 1986; Tourism Resource Consultants and Lincoln, 1988). As stated by Aukerman and Davison (1980:65):

participants in tramping, hunting and climbing, the traditional mountain land recreation activities, are far fewer than participants in passive or "fringe" area activities such as picnicking, sightseeing, swimming, camping, walking, etc. [their emphasis]

Neighbour (1973) uses a classification of rural-passive, rural-active and urban-based recreation to present recreation as a three-part typology. Rural-passive activities include driving and walking for pleasure, picnics; rural-active pursuits cover tramping, hunting, swimming, etc.; while urban-based recreation focuses on sports and has no relevance to DOC. From surveys of Auckland and Christchurch residents, it was shown that rural passive recreation involved nearly everyone at some time during the past 12 months (>95% participation), while rural-active pursuits had 77-80% participation (Auckland Regional Authority, 1973; Neighbour, 1973; Davison, 1986).

Davison (1986) notes that a study "of substance" to indicate trends since 1980 has not been produced. However, from a regional perspective, the recent Department of Conservation survey of the Waikato region indicates a continuing emphasis on passive activities. The top four activities most frequently undertaken by respondents were day trips, walking/rambling, picnics, sunbathing/relaxing (Heylen Research Centre, 1988).

3.3 Demographic and socioeconomic characteristics of visitors and non-visitors

Two New Zealand studies have statistically compared **park visitors** (defined as those who had visited a national park in the past 2 years) against **non-visitors** to test for differences in profile characteristics (Booth, 1986; Lomax, 1988). Lomax addressed Maori park visitors and non-visitors and compared results to Booth's general population study. Results are discussed in **3.3.9 Ethnicity**.

From a sample of Christchurch residents, Booth's results show national park visitors are more likely to be:

- male
- "better" educated
- In professional/skilled occupations
- inclined to visit the countryside for recreation
- inclined to engage in active pursuits
- patrons at cultural events.

No difference between the two groups was found on the bases of

- age
- marital status
- presence of children in the home
- employment status (i.e. paid employment, retired, student, etc.)
- transport availability
- rural/urban background

There is a considerable volume of New Zealand literature, however, which describes **park** visitors in terms of their socio-economic characteristics, and offers comparison with the total New Zealand population (i.e. non-visitors and visitors). Information from these studies is presented in 3.3.1-3.3.8.

3.3.1 Age

Referring to age, Neighbour (1973:23) states that "of all the variables affecting participation rates age is the most important as a limiting factor". She found that not only did age affect total participation in outdoor recreational activities, but it also accounted for variability between different activities. Age appeared a major constraint for Neighbour's rural active pursuits which were dominated by the 16-24 age group, but all age groups participated in rural-passive activities. Participation differences in active versus passive pursuits by age, are evident throughout the literature.

The 1988 Wellington Regional Recreation Study found that participation peaks at different ages dependent on the activity. Collaborating Neighbour, it was also found that "older people comprise the bulk of outdoor recreation non-participants" (Tourism Resources Consultants and Lincoln, 1988:16).

Moreover, the 1988 Regional Authority regional parks survey noted with respect to age, that the most significant factor was the under-representation of those 65 and over (Auckland Regional Authority, 1988).

Other studies have also noted a strong age relationship. In the New Zealand context, back-country users are heavily concentrated in the 15-24 years age group while more accessible areas and/or passive activities are undertaken by a more mature cohort and generally a more evenly spread sample (see for e.g. Beamish, 1977; Simmons, 1980; Pearce, 1982; Groome *et al.*, 1983b). Booth (1986) found no significant difference by age between her national park user non-user samples, and hypothesised that this result was due to the importance of passive activities within national parks.

The nation-wide survey of national park use found the following proportion of age groups had visited a national park in the last 2 years:

- 56% of 15-24 years
- 50% of 25-39 years
- 54% of 40-59 years
- 21% of 60 years and over

(Colmar and Brunton, 1987: Table 20)

3.3.2 Sex

The dominance of male participation has been highlighted in the outdoor recreation literature (e.g. Outdoor Recreation Resources Review Commission, 1962a, Henderson and Stagpoole, 1974; Beamish, 1977; Murphy, 1981; Gilmour, 1982; Booth, 1986; Tourism Resources Consultants and Lincoln, 1988). Studies of Mount Cook, Tongariro and Arthur's Pass National Park visitors found a virtually identical male:female ratio of 63:37 (Snadden, 1968 cited Devlin, 1976; Devlin, 1976; Simmons, 1980). In her sample of Christchurch residents, Booth (1986) found a male:female ratio of 58:42 for national park users, and exactly the reverse ratio for her non-user sample.

Colmar and Brunton (1987) found that 36% of males had visited a national park in the last 2 years, whereas 29% of females had done so.

Differences by activity are evident. Groome *et al.* (1983a and b) found very few female hunters (95:5 male:female ratio in Kaimanawa/Kaweka Forest Parks). Trampers in the two parks had a 66:34 ratio, while sightseers were more similar to the New Zealand population, at a 55:45 ratio of males to females (Groome *et al.*, 1983b).

Neighbour (1973) noted that twice as many males as females participate in rural active pursuits, whereas rural passive activities were favoured by considerably more women.

On Auckland Regional Authority guided walks, women were found to substantially outnumber men (Auckland Regional Authority, 1988).

3.3.3 Marital Status

Characterisation of outdoor recreationists by marital status has depicted a group with a high proportion of single persons (Devlin, 1976; Simmons, 1980). Some differences are recorded for specific activities. Groome *et al.* (1983b), for example, show that sightseers to the Kaimanawa/Kaweka Forest Parks closely resemble the New Zealand distribution, hunters are over-represented by single people, while trampers have an even more extreme number of singles and fewer people. Neighbour (1973) shows that twice as many single people participate in rural active pursuits, while marginally more singles than married people undertake passive activities.

Booth (1986) notes the influence of passive activities to explain the lack of differentiation between national park users and non-users by marital status.

3.3.4 Family Group/Life Cycle Stage

Overall national park users show no difference to non-users by presence of children in the home (Booth 1986), however back-country users are less likely to have children in the home. This may be explained by the high number of singles and relatively young age of these visitors.

During visits to parks, back-country users are also less likely than road-end/fringe users to have children with them (see for e.g. Groome *et al.*, 1983b). Visitors to Tongariro National Park (passing through the park headquarters), Arthur's Pass National Park (facilities users), Lake Sumner Forest Park and Kaimanawa/Kaweka Forest Parks (road-ends/fringes) were frequently in family or partial-family groups (Devlin, 1976; Simmons, 1980; Simmons and Devlin, 1982; Groome *et al.*, 1983b).

Simmons (1980) found those summertime visitors to Arthur's Pass National Park who specified they had come with their families (60%) were visiting with:

- spouse alone (31%)
- all of children (51%)
- some children (14%)
- extended family (5%)

(1980:203)

Amongst the 40% of visitors who had children with them, there was a noticeable absence of "very young" children. "Older aged children" were more evenly represented. (Simmons, 1980).

About one third of holiday programme participants are children, with children involved in all programme activities not just the specially designed children's programme (Davies, 1988). Devlin in his study of summer visitors to Tongariro National Park, found that family groups were the most frequent users of summer programmes, however few children were under 5 years.

Simmons and Devlin (1982) note that recreational hunters are predominately men and that for those who owned a rifle but did not hunt, family commitments were an important reason for giving up hunting.

The proportion of people visiting national parks (in the last 2 years) broken down by life cycles stage, is shown in Table 14. A greater propensity to visit is evident for young people.

3.3.5 Occupation and Employment

Studies of wilderness users in the United States have shown a strong representation of the professional/technical occupations and a high number of students (e.g. Outdoor Recreation Resources Review Commission, 1962b). New Zealand work supports this trend, with visitors' occupational distribution skewed to the professional occupations, the unskilled/labouring under-represented, and a high proportion of students (Devlin, 1976; Simmons and Devlin, 1982; Gilmour, 1982, Colmar and Brunton 1987). Booth (1986) found her non-users dominated the categories of service, primary production and production (cf. users who were largely professional/technical employees or self-employed, sales or clerical).

As with other socio-economic characteristics, variations occur by activity. Groome *et al.*, (1983a and b), for example, found hunters over-represented in agricultural/forestry and skilled trade occupational groups and slightly over-represented in the professional/technical group. Trampers were more likely to be professionals, students or employed in technical occupations, while sightseers were also over-represented in professional/technical occupations.

Neighbour's (1973) rural active pursuits had high participation by professional and sales/service occupational groups, while all occupational classes were represented in rural passive activities.

Neighbour also discusses employment status. Of her rural passive participants, more than half were not in formal employment (retired, home-making), whereas more of her rural active recreationists were in paid employment, although a significant number of students were recorded. Such differences may be masked in Booth's (1986) result that the aggregate national park user group is not statistically different from the non-user group by employment status. Using categories of full-time, part-time and not employed, Colmar and Brunton (1987) found the following amount of use of national parks by each group respectively: 41%, 31%, and 21%.

3.3.6 Education

Simmons (1980:212) notes that "educational level is the factor which distinguishes Park users strongly from the rest of society". He found 63% of Arthur's Pass National Park visitors had some tertiary education, a figure comparable with Booth's (1986) user group (57% cf. 47% for non-users) and overseas findings (e.g. Hendee *et al.*, 1968; McDonald and Clark, 1968 in Heimstra and MsFarling, 1974). Furthermore, Simmons noted that 46% currently or previously had attended university, a proportion similar to that found in Mount Cook and Tongariro National Parks (Snadden, 1968 cited in Devlin, 1976; Devlin, 1976).

Devlin noted his back-country user group exhibited more extreme educational levels than respondents contacted at park headquarters. Groome *et al.* (1983b) had a similar result, and overall, park visitors were better educated than the general population.

3.3.7 Transport

Outdoor recreation has been linked with means of transport in the literature and the importance of the private car stressed (e.g. Patmore 1970). Patmore (1983) noted that car ownership and countryside visiting were virtually synonymous; 76% of all trips to the country were made by car in Britain, 1980. In New Zealand, Neighbour (1973) found the car to be an important "recreational tool", being a primary means of conveyance to outdoor recreational sites. Driving for pleasure was also shown to be an important passive recreational experience.

Visitors to Kaimanawa/Kaweka Forest Parks, predominately travelled by car (>75%), with 4-wheel-drive vehicles and buses the second most important modes of transport (Groome *et al.*, 1983b).

Murphy (1981) in the 4-centre study of forest recreation notes that intended forest users were "significantly prominent" in their regular use of a car, however Booth (1986) found no difference between her user and non-user groups by car availability. She attributed this result to our highly mobile society and prevalent car ownership.

3.3.8 Urban/rural

Investigation of area of residence/childhood environment in the overseas recreational literature has produced some conflicting results (e.g. Outdoor Recreation Resources Review Commission, 1962a; Hendee *et al.*, 1968; Hendee, 1969). Within New Zealand, however, visitors are predominantly urban residents (Devlin, 1976: both headquarters and back-country samples; Simmons and Devlin, 1982; Gilmour, 1982: tramping-user group). Indeed, Groome *et al.* show that visitors to the North Island Forest Parks they studied, were under-representative of rural residents compared with the total North Island population.

3.3.9 Ethnicity

Description of ethnicity is not a feature of visitor studies in New Zealand. Lomax (1988) is the only source of information, and this relates to a Christchurch sample of the New Zealand Maori. As states, there are no data on park use by ethnicity, however Maori and Polynesian people are conspicuous by their absence from national parks (1988:1).

To parallel the information presented elsewhere in this section, the following points summarise Lomax's findings:

Amount of use

71% had visited a national park at some time (cf 79% general population - Booth, 1986)

- Table 15 shows that a lower proportion of Maori had visited a national park in the last 2 years than the general population (and were thus defined as a user). However the Maori sample also recorded a small proportion of non-users. The large number of Maori who were not sure whether they had visited a national park in the last 2 years explains these results.
- Lomax hypothesises that use level for the total New Zealand Maori population will be lower than that exhibited by the Christchurch Maori sample (36%) and the total New Zealand population (33% - Colmar and Brunton, 1987).

Type of use

- Walking was the most popular activity undertaken in national parks (20%)
- picnicking, camping and climbing were not mentioned by respondents
- N.B.: the precision of these results is in question owing to the small sample base for this information.

Demographic and socio-economic variables

- compared with Booth's (1986) general population sample, the Maori sample overall exhibited a lower proportion of workers in the professional, technical and related category. Maori users versus non-users differed little by occupation, although park users were characterised by a high proportion of people in paid employment. Unemployed people were only recorded as non-users, while those who didn't know whether they had visited a park were over-represented by the unpaid and houseworkers (cf. users and non-users).
- the Maori and general population samples displayed similar educational levels. Maori users were slightly better qualified than non-users.
- Maori users were broadly similar to the general population users in the composition of groups visiting the park. Family groups accounted for 36% of visits; however friends were less important park companions to the Maori.

3.3.10 A Caution

It should be remembered that "people from all age groups are park visitors and variables such as education occupation, income and residence, which identify the park user aggregate, are also common to thousands of people who never use parks" (Devlin 1976:38).

Furthermore, Bignell *et al.* note that

with regard to occupation, income characteristics and recreational profiles, little relationship appears to exist ...it [] appears that the association between social stratification variables and past forest recreation intensity looks to be very weak (1983:401).

3.3.11 Summary

Owing to the dearth of studies focused on non-visitors, information on the nature of the "non-traditional user" must be inferred largely from the information on visitors. The picture, however, is not a clear one. While some activity-based conclusions can be drawn, it is evident that the generic terms "user" and "non-traditional user" become meaningless in terms of profile characteristics. In summary:

1. The nature of recreational users, and therefore non-users, differs by activity.
2. Some factors appear to differentiate participants in active and passive outdoor pursuits (Table 16).

3.4 "Non-traditional users" -A review of what is not in the literature

Owing to the lack of a "park-non-user" literature, thought should be given to special populations that are not mentioned in visitor studies. The handicapped (both physically and intellectually), for example, are not discussed - by inference, may it be assumed that they are not park visitors? Groups notable by their absence include

- the Maori and other Polynesians
- the disabled (both physically and intellectually)
- the aged.

It is reasonable to assume that those on low incomes are also "non-traditional users". While data on employment, occupation and education indicate this, insufficient empirical evidence on income is available to make a conclusive statement.

3.5 Conclusion

1. The term "**non-traditional user**" should be discarded and visitors identified by type of use. **Visitor** is a preferable term to user as it clearly defines a person who has visited the DOC estate. Use of the conservation estate may occur without visiting, merely by the appreciation of its value.
2. Active outdoor recreationists (back-country visitors) on DOC parks and facilities are untypical of the general population. See Table 16.
3. Passive outdoor recreationists (park periphery users), however, are a closer representation of the general population.
4. Some types of people (Maori, disabled, aged) appear not to be visiting the DOC estate, as indicated by their absence of mention in the large number of visitor studies based on the DOC estate.
5. The demographic **description** of park visitors does not **explain** the pattern of visits and visitors found.

TABLE 16: DEMOGRAPHIC AND SOCIO-ECONOMIC CHARACTERISTICS BY ACTIVITY TYPE

ACTIVE OUTDOOR PURSUITS		PASSIVE OUTDOOR PURSUITS
Young (high proportion 15-24)	AGE	More spread; More mature
1 ½ - 2 times more likely to be male	SEX	More women c.f. active outdoor pursuits.
More singles	MARITAL STATUS	Married & singles in similar proportions.
Less likely to have children in the home (c.f. passive) and less likely to have children in group (c.f. passive).	FAMILY GROUP	Often family groups
More paid employment (c.f. passive) and high no. of students.	EMPLOYMENT	More than ½ not in formal employment.
High proportion of professional/technical and sales/service.	OCCUPATION	More spread over all occupations
More "extreme" levels	EDUCATION	

4. RECREATIONAL PATTERNS

4.1 Introduction

This section presents an overview of the recreational patterns of New Zealanders. Particular emphasis is given to outdoor recreation. A general description of recreation is provided in 4.2, including what activities are undertaken, where, when and by whom. The recreational patterns of families and "non-traditional users" are then separately discussed in 4.3.

All tables and figures are given in Appendix

4.2 Recreation patterns in New Zealand

Several publications are drawn upon heavily in the following discussion. They include the 1974/75 New Zealand Recreation Survey (Tait, 1984), the first national comprehensive survey of recreation patterns in New Zealand, which despite its date, remains the only source for information. Two later national surveys allow comparison -the 1980/81 Social Indicators Survey (Department of Statistics, 1984) and a survey of physical activity by Heylen Research Centre (1987). Davison (1986) has reviewed the outdoor recreation literature in New Zealand and is used as a summary document.

4.2.1 Activities

A picture of New Zealander's recreational patterns is evident from the New Zealand Recreation Survey and Social Indicators Survey (Tables 17 and 18). Home-based activities are the most frequently pursued recreational activities, with reading the most popular (44% of respondents participating) and the most frequently undertaken (83% reading at least once a day). The 1974/75 survey found activities with the highest participation rates were:

- reading
- gardening
- listening to records
- swimming.

The 1980/81 survey noted that the activities undertaken the most frequently were:

- reading
- watching television
- listening to music.

While the 1980/81 Department of Statistics survey included watching television as a recreational activity, the 1974/75 study did not.

A survey of Christchurch residents' recreation patterns, using the same question design as the 1980/81 survey, found strong similarities with the national data (Table 19). Some differences are evident, however, suggested by Booth (1986) to be due to regional variation.

A more recent survey of **physical activity** shows broad similarities with the previous work, although the different focus, period of recall and activity list presented to respondents precludes direct comparison. (Table 20).

Results from the "Life in New Zealand", pilot survey of Dunedin residents show that

- 30% do no regular vigorous physical activity at all
- 73% rate watching television as one of their most frequent leisure activity followed by reading (36%), listening to music (34%), and visiting friends/relatives (34%)
- the most highly rated leisure pastimes requiring physical activity are gardening (32%), organised sport (26%), and walking for pleasure (17%).

(University of Otago, 1988)

The Social Indicators Survey (Department of Statistics, 1984) reports that virtually all respondents undertook a leisure activity at least weekly; six being the average number of weekly activities.

The Heylen survey found that 89% of New Zealand adults had participated in some form of physical activity in the 4 weeks prior to the mid-February survey. Whereas the 1974/75 national found that, on average respondents recalled about a dozen activities that they had participated in over the previous year.

The Department of Statistics 1980/81 survey found that the majority of respondents found their leisure activities satisfying, indeed, the more leisure activities pursued, the greater the satisfaction. The report, however, suggested that this result may be a spurious one, owing to other factors (Department of Statistics, 1984).

Furthermore, the pattern of activities undertaken is similar to the patterns of preferred activities for both women and men (Tait, 1984).

Figure 9 puts active outdoor recreation into the context of all recreational pursuits (based on the survey data). Seventy percent indicated they had participated in active outdoor recreation. This does not imply, however, that all these activities are undertaken on the DOC estate. Note that the participation rates were calculated on a different basis to earlier activity-specific tables. While home-based activities were the top three activities shown in Table 17, because each person is recorded only once under **home-based activities** in Figure 9, the activity-type shows a lower participation rate than cultural activities, for example.

A major survey of forest users and potential users was undertaken in 1979/80 by the New Zealand Forest Service (Murphy, 1981). Davison (1986) compares this data with the 1974/75 Recreation Survey, indicating a considerable increase in active outdoor recreation adherents over the 5-year time period (Table 21). Davison speculates that active outdoor pursuits are gaining participants at the expense of conventional team or facility-based sports.

Recent trends from the USA however, suggest that active outdoor recreation in back-country areas is stabilising, i.e. the past rapid growth is slowing (Lucas and Stankey, 1988). An assessment of use trends in Auckland's regional parks from a recent study (Auckland Regional Authority, 1988), while fraught with methodological problems, shows increasing camper numbers, but overall slow growth. Substantial increases in a minority of the parks are off-set by steady or decreasing patronage at other parks.

Studies of the recreational patterns of residents in Christchurch and Auckland (summarised in Davison, 1986) offer insight. Table 22 shows recreation involvement by activity type, and supports the discussion of DOC use presented in 3.2, i.e. the dominance of rural passive activities. Figure 10 shows the activities in more detail.

Note that the New Zealand Recreation Survey and the New Zealand Forest Service survey sought to elicit activities with a degree of committed or more-than-once participation, while the Auckland and Christchurch surveys reported any participation at all (Davison, 1986).

Finally, Table 23 depicts the recreational patterns of residents in Auckland (1972), Wellington (1973, 1988) and Christchurch (1972/73, 1980) which includes the base data for Figure 10. Davison (1986), from whom the table was adapted, notes that some differences can be explained in terms of resource availability (e.g. higher involvement in sailing in Auckland), however, methodologies, question terminology and purpose of study all compound comparison. A trend of increasing participation in skiing, tramping, mountaineering, cycling and other land-based active pursuits is apparent, however.

4.2.2 Where Recreation Occurs

Davison (1986) summarises outdoor recreation destinations, providing both a geographical breakdown of New Zealand Tourist and Publicity Department data and also information on type of environment visited. The New Zealand Domestic Travel Survey 1987/88 (New Zealand Tourist and Publicity, 1988) records trips by New Zealand residents (10 years +) **involving at least one night away from home territory**, and shows that:

- 37% of visits were mainly for holiday
- 32% visiting friends or relatives
- 7% in pursuit of sports and hobbies
- 15% business
- 8% for other reasons

Davison states that a "considerable portion" of the sports and hobby category is outdoor oriented (1986: 105).

Destinations with the highest recreational visitation percentages are:

Destination	Recreational Trips as % of Total Trips	Destination	Recreational Trips as % of Total Trips
Milford Sound/Tracks	100%	Queenstown	68%
Glacier	93%	Mount Cook	67%
Marlborough Sounds	75%	Turangi/Tokaanu	65%
Nelson Bays	72%	Methven	65%
Westport	71%	Bay of Islands	63%
Kokitika	68%	Picton	63%

To these can be added rural small town destinations: Nelson Bays (72%), West Coast (72%) and Tongariro (64%) local government regions, and coastal Nelson (72%), and Clutha/Central Otago (65%).

(1983/84 NZTP data in Davison, 1986: 106)

Tables 24 and 25 provide information on the environment visited, showing the importance of the beach and coastal areas for city residents. Local proximity to forest and mountain areas result higher visitor use in Rotorua, Nelson and Christchurch (Davison, 1986).

Kaverman and Leathers (unpublished data, in Davison, 1986) show the distances travelled for rural passive and rural active outdoor recreation from Christchurch (Table 26). Areas closest to the city receive the highest overall use. While a distance-decay function is evident for rural passive and rural pursuits, a positive distance relationship is depicted for rural activities. Again, the relative importance of rural passive activities is obvious.

Two recent surveys also show the regional or localised nature of much recreation. A survey undertaken for the Department of Conservation in Waikato found that most visitors originated from the northern North Island, with the southern areas of Taupo and Tongariro also popular with southern North Islanders (Heylen Research Centre, 1988). The Auckland Regional Authority found that regional park users tended to visit those parks nearest to their home (Auckland Regional Authority, 1988).

4.2.3 of Time Spent and When

The Social Indicators Survey 1980/1981 (Department of Statistics, 1984) investigated the amount of spare time available for leisure, estimating the median amount per day was about 4 ½ hours. Men were found, on average, to have about one hour more than women. Figure 11 illustrates the leisure time profiles for men and women.

A South Australian study provides an overview of the of time devoted to leisure activities. Figure 12 shows that activities at home take up the most time, followed by activities away from home, and television viewing.

A positive association between the amount of leisure time available and satisfaction with the amount was disproven by the Social Indicators Survey. Men were no more or less satisfied than women, and unemployed people (both sexes), who had the greatest amount of spare time, were the least likely to say they had about the right amount. This may be because being unemployed is an unexpected, unacceptable role. On the other hand, the retired, who also have large amounts of spare time, are more satisfied, perhaps because they are filling an acceptable societal role (Department of Statistics, 1984).

Difference in amount of leisure time and satisfaction with the amount were also evident by life cycle stage (Table 27). While greater proportions of women through the life cycle have 4 hours or less leisure time, overall similarities between the sexes by life-cycle stage are evident (see **4.3.2 Women**).

The New Zealand Recreation Survey (Tait, 1984) found holiday periods to be the most popular time for both active outdoor activities and conveyance-related activities, while weekend mornings were the most popular time for home-based activities, educational activities and hobbies. The most popular activity for weekday evenings was team sports (although teams sports-people participated even more often in the weekends).

The more recent Wellington regional study found a similar pattern. The bulk of recreation occurred on weekends or weekends/holidays. Some variation was noted by activity, for example, running/jogging took place anytime (most respondents) (Tourism Resource Consultants and Lincoln, 1988).

Table 28 gives the frequency of involvement in favourite activities from the 1974/75 national survey, and shows that education-related recreation and home-based activities are pursued the often. Active outdoor recreation is undertaken by nearly half of respondents "less than weekly", although 42% participate "more than weekly" (urban-based sports perhaps). Over half of respondents participated in conveyance-related recreation "less than weekly".

4.2.4 With Whom

Resource Consultants and Lincoln (1988) found "most participation took place with either family or friends, to a lesser extent a combination of both". This pattern reflects the 1974 Wellington Study (Henderson and Stagpoole, 1974).

From Neighbour's Christchurch study, the importance of the family as recreational companions is clear (Figure 13). Activity-specific differences are shown, however, hunting and skiing both being pursued more frequently by friendship groups than families.

Information from Aukerman and Davison (1980) is in accordance with Neighbour:

- families make up a considerable proportion of trampers on major tracks (within 23-30% in several studies). The definition of "family" is unknown.
- on well-known tracks, solo trampers are evident (7-17% of trampers)
- skiers mostly go with friends, however families were well-represented at Mt Hutt on weekends (47%) and at Lake Tekapo during the August school holidays (55%)
- hunters are mainly in friendship groups, although a third of Wellington hunters said they frequently hunted with family groups (male members)
- fishing is most frequently done with friends, although families are also important, and fishing alone is common.

4.2.5 Summary

1. Home-based activities receive the highest overall participation levels, especially passive pursuits. Compared with these activities, relatively small numbers of the population participate in specific active outdoor activities, such as tramping.
2. Almost everyone participates in rural passive activities. Rural active pursuits have a lower involvement rate and receive a similar number of adherents to urban based activities, although frequency of participation may vary.
3. Most people engage in a number of different recreational pursuits, but not everyone undertakes physical activity.
4. New Zealanders' recreation is largely concentrated on coasts/beaches, and close to cities where most of the New Zealand population live.
5. The bulk of recreation occurs at weekends and during holiday periods
6. The "family" is very important as the source group for recreation. Friends are also frequent companions, particularly for some active outdoor pursuits.

4.3 Recreation patterns of families and "non-traditional users"

4.3.1 Families

New Zealand recreation surveys have been concerned with the individual rather than the family group. De Joux (1985), however, recreation studies relevant to the family, using the following headings:

- family life cycle
- social class
- socialisation
- family authority
- family cohesiveness

Her findings, along with some additions, are presented below.

Family life cycle

The family life cycle represents the phases through which a family passes from the time a couple get married, through childbearing years, to the later years when children disperse and the couple reach old age. Leisure patterns change with changes in the family life cycle.

(de Joux, 1985:15)

Different stages in the family life cycle bring different role expectations and provide opportunities for leisure, but also impose certain constraints on leisure behaviour. While there is likely to be a correlation between position in the family life cycle and recreation activities, it is not necessarily a causal relationship. Rather, life cycle stage helps explain general leisure patterns.

New Zealand studies confirm the importance of the family life cycle for recreation. The amount of time available for leisure varies through life cycle stages (see Table 27). Marriage reduces the amount of spare, "uncommitted" time and more so for women than men. A substantial drop in leisure time occurs with the addition of children to the family. Again, the reduction is more marked for women than men.

In his study of the influence of family life cycle on recreation, Kavermann (1982) concludes that the three variables he tested are equally good indicators of recreational activity : family life cycle, age of head of household, and presence of children. He describes their influence on recreation:

- participation rates rise with the presence and age of children
- decrease with increasing age of head of household
- family life cycle changes show high participation for singles, a decrease after marriage and birth of children, an increase as children's ages rise, and a decrease as children leave and parents are in "old age".

Crawford (1970) focuses upon individuals in family groups and their recreation outside the home. He deals with easily defined activities only (e.g. swimming) and not informal activities (e.g. picnics). In summary, Crawford found:

- newly-married: both spouses continue separate interest; wives' activities likely to be reduced.
- arrival of children: recreation activities outside the home substantially reduced (both spouses).
- family at "a stable size" - increase in participation among all members, except mother.
- children leave home: mother likely to increase recreational involvement.
- "old age": rates of participation decline, females more so than males.
- a positive relationship existed between family size and total number of recreational activities of family members
- girls participate in a greater number of recreational activities than boys
- married women have a lower participation rate at each stage; children of both sexes have similar rates of overall participation.

The New Zealand Recreation Survey (Tait, 1984) supports Crawford's finding that children reduce women's recreation participation. Indeed McLean (1981) found that the birth of the first child had a major impact on the mother's recreation patterns (see **4.3.2 Women** for further discussion). Klap (1981) found in his Timaru study, that mothers with pre-school children were the group most dissatisfied with their recreation.

Sociologists have studied the family life cycle and outdoor recreation in national parks. Their findings having already been discussed in **3.3.4 Family Group/Life Cycle Stage**, from which it is apparent that life-cycle has a relationship with park use. The importance of the family life cycle is clear. Indeed Simmons has stated that (1980 : abstract)

Social influences, acting through the changing roles and expectation of one's "family life cycle", offer the best understanding of use while **at the park** [my emphasis].

Social class

Social class is often measured by assessing levels of income, occupation and education, and appears to influence family recreation patterns. Social class membership is believed to have a considerable effect on the frequency of involvement in different types of leisure activity.

A study of youth in America found social class to be an important influence on family recreation patterns and the uses of leisure time (cited in de Joux, 1985). Anderson (n.d. in de Joux, 1985) found a relationship between formal and informal social participation by social class -the former being pursued more often by those from a "higher" class. Scheuch (1960 in de Joux, 1985) found that patterns between classes differed the most at weekends, and the higher the social class, the more likely the

family to place emphasis on weekend leisure devoted to the family and spent outside the home. In Britain, it was found that the higher up the social scale a couple were, the more likely they were to "go out" together without their children. However those who do go out frequently are likely to be from the highest social classes (because they can best afford it) or from the lowest social classes (because they tend to have other adults living in the house who can share costs and babysitting) (Rapoport and Rapoport, 1977 in de Joux, 1985).

Young and Wilmott (1973 in de Joux, 1985) believe that the upper and middle classes are innovators and research should concentrate on their recreational patterns, as what they do will percolate down to the mass of ordinary people. Young and Wilmott, however, placed little emphasis on education, and others have argued that occupation does not make a major impact on leisure compared with family life cycle (de Joux, 1985).

De Joux presents evidence from several studies that indicate the importance of education. The family appears to be a less important source of leisure companions the more educated one is. Roberts (1978 in de Joux, 1985) for example, found that a high proportion of leisure companions for well-educated people were school or university friends. A Belgian study found that the education level of the father was the best indicator of whether family members were involved sport or not (Famaey-Lamon, 1977 in de Joux, 1985).

Furthermore, there are clear class differences in how parents socialise their children. For example, work has shown that Little League baseball in the United States is used by parents from different social classes, to teach their children different attitudes (e.g. function as team members, co-operation vs respond to authority, conform to external control).

New Zealand studies have been unable to establish clear differences in general recreation patterns due to income, occupation or education (Jorgensen, 1974 in de Joux, 1985). Family life cycle patterns appear to be similar across social classes.

Material is available which suggests that income, education and occupation can be related to the type of activity undertaken. These differences for outdoor recreational activities have already been discussed in **3.3 Demographic and socio-economic characteristics of visitors and non-visitors.**

Leisure Socialisation

The family is central to an individual's socialisation for recreation, even more important than a child's peers. Overseas research has shown that the family is the most important leisure group in Western societies for those who live in families (which most people do). Leisure time is mainly spent in the home, and family members are the usual companions for most kinds of weekday, weekend, and holiday leisure both active and passive. This appears to be true even for high income groups where income cannot be seen as a constraint (de Joux, 1985:33).

An example of a study in this area is Kelly (1974, 1977, 1978 in de Joux, 1985) who investigated 3 diverse American communities and found that over 70% of recreational activities were undertaken with the family. Furthermore, he noted that individuals mainly participated in activities with the family for the satisfactions to be found in participation and not because of a sense of family obligation (although this was important). Indeed, Scheuch (1960 in de Joux, 1985) in a German study, found that more people wanted to spend leisure time with their whole family (c.f. part of a family, alone, or with non-family members) than actually did so.

Looking to determinants of recreation patterns, Kelly (1977 in de Joux, 1985) concluded that most recreation activity is learnt from the family, and that such learning continues throughout the life cycle. Studies on the link between childhood and adult participation in recreation activities have mostly been inconclusive, however childhood experiences may predispose an individual towards certain types of activity.

Outdoor recreation research within New Zealand confirms the importance of the family, both as leisure time companions and agents of introduction to new recreational activities.

Most recreationists within forests visit with members of their immediate family (Murphy, 1981). Previous forest use is mainly with family when young, however adult family experiences, friends and youthful organisational experience (e.g. scouts and guides) are also important. Respondents seemed "to have inherited a lot of their parents' recreational interests" (Murphy, 1981:6).

Pittman (1980 in de Joux, 1985) interviewed walkway users around Wellington and found that 78% were in "family groups".

Simmons (1980) found a difference in group composition between "facilities users" and trampers in Arthur's Pass National Park. Facility users most often visited with family (51%) while only 22% of trampers did so, instead favouring friends (54%). The family was the most important introducer to park use for most people. Significant numbers were introduced by friends, school and clubs, however. In general, those who were introduced to the park by clubs, friends and schools, were those whose parents were not active outdoor recreationists. Indications are present that schools may be becoming more important as agents of introduction (Simmons, 1980 in de Joux, 1985).

Devlin (1976) found that the number of close friends actively involved in back country recreation was strongly influential on visitor behaviour. Only 13.5% of back country users had no close friends engaged in that type of recreation.

Simmons and Devlin (1982) found that parents and family were the main introducers of people to activities within Lake Sumner Forest Park. Friends were the most important influence for continued use of the park. Active outdoor recreationists (trampers and hunters) in the Forest Parks were mainly introduced to the activity by friends, whereas for the passive activity of sightseeing, parents played the dominant role (Groome *et al.*, 1983b). Hunters in Lake Sumner Forest Park were mainly with groups of friends, as also found in the Kaimanawa and Kaweka Forest Parks (Groome *et al.*, 1983b). Simmons and Devlin (1982) note, however, that hunters had been taught to hunt mainly by parents and family.

With respect to camping, Devlin (1976) found continuity in camping from one generation to another those whose parents had a strong interest in the outdoors were more likely to camp in remote areas. Whereas a Marlborough study found no significant relationship between childhood camping experience and present camping style (Roussel, 1980).

A Dunedin survey of three outdoor recreational clubs found socialisation varied by club (Craig, 1980 in de Joux, 1985). The family, particularly the father, appeared to be the primary influence in starting members tramping, with friends and other club members important influences on their continued participation. However, friends mainly introduced new canoe club members and club members were the main influences on continued participation. The orienteering clubs included older married members, who were often self-motivated both to join and stay. Spouses were an important influence.

Thus New Zealand evidence supports overseas findings that socialisation for leisure is a life-long process, heavily influenced by the family, but with no simple relationship between childhood and adult activities (de Joux, 1985).

Family authority

A Liverpool study found that the type of relationship between husband and wife in a marriage influenced leisure patterns (Roberts, 1978 in de Joux, 1985). Roberts thought that the change to shared tasks and decision-making by spouses, have led to greater similarity in the use of leisure time between husband and wives.

Further work has shown that the type of recreation pursued (e.g. within the home, away from home, family-centred or not) is influenced by who makes the decision.

Family recreation does not appear to decline when mothers are in paid employment, although working mothers are inclined to cut down on recreation involving relationships outside the family (Nye, 1958 in de Joux, 1985).

Devlin (1976, in de Joux, 1985) noted that tramping and camping families in Tongariro National Park were strongly family centred and shared recreation activities at home. The decision to come to the park was made either by the whole family or by husband and wife between them.

Family cohesiveness

De Joux reviews work that has looked at the effect of leisure on the family. While not discussed in this review, the presence of such work is significant, in that recreation can have positive or negative sociological effects.

4.3.2 Women

Section 4.2.3 has already indicated that women have less "free" time for leisure than men. Why is this? The Department of Statistics (1984) speculated within their Report on the Social Indicators Survey 1980-81, that women's lower proportion of leisure hours was due to greater expenditure of "committed time" to child care and housework. This, however, could not be established by the survey. The difference by sex was evident across all employment statuses and most stages of the life cycle.

Women in the paid workforce had the same median number of leisure hours as women whose employment status was "household duties", but were less satisfied with the amount.

Some differences occur between the sexes with respect to time of participation in particular activities:

- women appear more involved in recreational activities during the day on weekdays, particularly for team and individual/small group sports
- for conveyance-related activities, women's participation is more likely to be restricted to holiday periods.

The New Zealand Recreation Survey 1974/75 and the Social Indicators Survey 1980/81, despite differences in methodology, show a consistent pattern of differences in female and male participation in recreational activities (see Tables 18, 29 and 30).

Middleton and Tait (1981) assessed the New Zealand Recreation Survey data in terms of women and outline three prominent features of women's recreation:

1. Home-based activities involved 9 out of 10 women compared to 5 out of 10 men.
2. Cultural pursuits show higher participation levels for women (89% compared to 81% for men).
3. Sporting activities show higher participation levels for men (92% compared to 80% for women).

They state that

these features clearly coincide strongly with many of the prevailing stereotypes in our society about the recreation of women, i.e. women are more cultural and home centred while men are more sports minded.
(1981:1)

Sex-specific differences emerge when participation levels in activities are examined. More women participate in home-based recreation earlier than men (from their teens for women). When the focus is shifted to favourite activities, the pattern changes slightly. Women's popular activities were mainly hobbies or home-related - supported by the Social Indicators Survey finding that more women participated in these activities than men. Furthermore, while entertaining family/friends was popular with both sexes, the Department of Statistics noted that women were more likely to do this more often than men. A few activities are particularly popular for different age groups - visiting and entertaining friends (25-49), netball (<25). Overall more women than men said they favoured arts-related activities.

McLean (1981) addresses recreation patterns in the first year of motherhood, but also considered recreation participation over a longer time period. A continuing downward trend from school through to early motherhood is evident. The only statistically significant effect on recreational participation found was birth of the first child.

Broken-down by activity-type, the largest decrease over the life cycle stages was for sport, followed by cultural pursuits. Participation in craft activities remained relatively stable throughout, while social activities showed a steady increase from school through the married years before birth of the first child and continued to decline thereafter. Social activities is the only category that recorded a statistically significant decrease with birth of the first child.

Very little change occurred in the mix of recreation activities one year prior to birth and in the first year of motherhood. Furthermore, it is possible to predict patterns of participation following the transition to motherhood on the basis of a woman's past involvement in recreation. High prior involvement, suggests she is likely to continue to be highly involved following birth. Moreover, there was shown to be a clear positive relationship between past and present levels of participation in recreation.

Gray (1981) summarises results from interviews with 100 New Zealand women aged 20-50 years. Of particular interest, is the picture drawn of women's recreational patterns by socio-economic level. Working-class women's recreation was family oriented, passive and spasmodic. Middle-class women read as a pastime (no working-class woman had mentioned this), undertook home-based activities, and arts and crafts. Upper-middle class women were the only group to participate in skiing and mentioned sports with high inputs of time, money and energy more often. Involvement in political and cultural organisations was a feature of this group, with arts and crafts, reading, gardening and cooking also popular.

While total amount of recreational participation increased with socio-economic level, employment status did not affect sports participation.

4.3.3 The Aged

The New Zealand Recreation Survey (Tait, 1984) shows that changes occur with age to the individual's patterns of recreation. Involvement in home-based activities peaks when the individual reaches 60 years and over. In contrast, sports are less likely to be participated in by those 60+ than younger age groups. Cultural activities show some drop-off into the 60's, but the aged continue a high involvement in interest-group recreation (community service, professional groups).

Pannett (1977) found that a high proportion of those who did not participate in any recreational activity were over 60 years. He notes, however, that some of these respondents may have perceived recreation in terms of active pursuits. This finding corresponds to the more recent Wellington regional study of recreational demand (Tourism Resource Consultants and Lincoln, 1988). The Wellington study also found that most age groups (including the over 60's) did most activities, with the exceptions that "older age groups" did not scuba dive, off-road drive, horse ride, windsurf or canoe white water. For those 60+, the level of involvement in many activities declines, however, picnicking, driving for pleasure, yachting (keelers) all remained important activities for those over 60.

Neighbour's (1973) Christchurch survey, shows that people aged over 44 years are the least likely to participate in all types of outdoor activity.

A quarter of those not interested in visiting a forest were 65+ years (Murphy, 1981). The aged were, however, recorded amongst forest visitors, and also amongst national park and forest park users (Booth, 1986; Colmar and Brunton, 1987). For both types of park, numbers of aged visitors were relatively low compared with younger people.

The Heylen Research Centre's study (1987) considered age and evolved a population segment described as **older sedentaries**. However this category included only 41% of all respondents aged 55 years and over. Their segmentation analyses are not discussed here, as it is believed that this segment does not truly represent the aged.

The discussion has concentrated upon what the aged do not do rather than what recreation they in. This is due to a lack of information about the recreational patterns of the aged.

4.3.4 Ethnic Groups

The Wellington Regional Recreation Study (Tourism Resource Consultants and Lincoln, 1988) found Maori respondents over-represented in the following activities: diving, freshwater fishing and shellfish gathering. While actual numbers of respondents made these results weak, discussion groups supported the link between recreational activities and traditional, cultural interests (e.g. kaimoana). A corresponding result from the Auckland Regional Authority regional parks study supports this theory. Maori and Polynesian visitors were more likely (than other ethnic groups) to fish (including gathering shellfish) and also to participate in active sports (softball, volleyball, soccer, cricket, races). Furthermore, Maori visitors were more likely to have a barbecue than other groups (Auckland Regional Authority, 1988).

The Auckland survey found an under-representation of Polynesians visiting Auckland Regional Authority regional parks, and a differential pattern of visitor ethnicity within the parks system. The parks closest to predominantly Maori and Polynesian residential areas attracted proportionately high numbers of these groups (Auckland Regional Authority, 1988).

Lomax (1988) explored the general recreational behaviour of Christchurch Maori. Over half said they "went away for recreation and leisure" (58%) and this was mainly within the Canterbury region. The West Coast was the next most popular destination, followed by the central North Island. The latter area may be associated with visits to friends and relatives, she suggests.

The length of these visits was most often 3 days to 1 week, however days trips may be understated because of the ambiguous question design (Table 31). Nearly half of the sample "went away" 2-5 times in the last 2 years (Table 32).

The Maori respondents identified three main reasons for their recreational trips : relaxation, visiting friends and family, and general recreation and leisure. Outdoor pursuits such as walking/tramping, fishing, picnicking and camping, had low rates of participation.

With specific focus on national parks, Lomax recorded the activities undertaken by her Maori sample. Because of a small sample base, the results are subject to a large margin of error, however it is notable that active pursuits were more frequently undertaken than passive. Lomax suggests that Maori people may not use national parks for activities which occur commonly outside park boundaries (e.g. picnicking).

4.3.5 The Disabled

Buchanan (1977) investigated the recreational patterns of the physically disabled. Table 33 shows that the bulk of respondents spent less than 5 hours a week on recreation (as defined by each individual).

The majority of respondents felt they didn't have enough recreation time (60%).

Buchanan investigated the activities offered and participated in by the various disabled associations but also asked respondents if they had any hobbies. Of the 71% who said they did, the most popular were philately, drawing, and handcrafts.

Table 34 lists the favourite recreational, social, sporting activities of Buchanan's respondents; the top three recreational/sporting activities being family outings, beaches, sports. The three most popular social activities were dinner parties, dining out, and visits by or to friends and relatives.

Approximately half belonged to clubs and societies (other than disabled associations) that were mostly of a recreational or social nature. The preferred recreational programmes on an integrated basis with able-bodied people (60%).

Thorensen (n.d.) examined the recreation patterns of the intellectually handicapped and found the three most popular leisure time activities to be:

- picnicking (approx 70%)
- reading (approx 14%)
- swimming (approx 9%)

It is unclear whether the percentages allowed for multiple-response.

The use of various recreation facilities gives insight into Intellectually handicapped recreation. In descending order of use:

- parks/children's playgrounds
- library
- gymnasium
- art and craft facilities
- school facilities
- playing fields/camps
- public pools

(n.d: 51)

Focusing on activities undertaken within Intellectually handicapped schools or centres, the following results were found:

- socialisation activities (90%)
- music (15%)
- swimming (15%)
- arts/crafts (10%)
- physical fitness (10%)

(n.d: 56)

4.3.6 Summary

1. Major influences on the individual's pattern of recreation include stage in family life cycle, social class, sex, age, and ability. Other factors are likely also to exist.
2. Family life cycle exerts an influence via availability of leisure companions and apparent changes to overall levels of participation and type of activity pursued (whether voluntary or not).
3. Those from higher social classes appear to place more emphasis on recreation away from the home and formal social participation (e.g. club involvement). Furthermore, it has been suggested that they seek different leisure socialisation experiences for their children.
4. Women appear to be restricted in their recreation by other commitments. This is further discussed in 5.5.2.

5. Little information is available on the recreational patterns of the aged, however it is clear that some aged people do participate in all activities. A high proportion do not however.
6. Maori use of the parks system operates under values systems different to the Pakeha.
7. Over half of physically disabled people appear to favour recreation on an integrated basis with able-bodied people.

4.4 Conclusion

1. The generalised picture of New Zealanders' recreational patterns shows the relative importance of outdoor recreation, and its passive and active dimensions:
 - Most people participate in outdoor recreation.
 - Passive outdoor recreation is undertaken by a greater number of people than active outdoor recreation.
 - As many participate in active outdoor recreation, as urban-based pursuits (both active and passive facility-dependent activities).
 - It appears that small numbers engage in specific active outdoor pursuits, e.g. tramping.
 - Greater numbers engage in driving for pleasure
2. Greatest demand on resources for recreation occurs near urban areas. Most New Zealand cities are beside or near coastlines and this type of environment is the most popular for recreation.
3. Outdoor recreation is most often undertaken on weekends and during holiday periods, i.e. it is periodic in nature.
4. The family has a strong influence on an individual's recreation:
 - parents introduce children to new recreation experiences
 - children influence parents' recreation by amount and type of recreation pursued
 - family members are often leisure companions.
5. Schools, friends and clubs are also influential. One implication is the ability to target children through school programmes.
6. Children are well-represented in holiday programmes in parks. Family groups visit park periphery areas but seldom back-country areas, owing to the passive nature of their recreation.
7. The sex difference in active outdoor pursuits is a reflection of men's greater involvement sports generally. The decline in recreational involvement of women after leaving school, and particularly after childbirth may also contribute.

5. BARRIERS TO RECREATION

5.1 Introduction

Owing to the nature of the information available, this section has been generalised from "Barriers to Family and Non-Traditional User Recreation" to "Barriers to Recreation Participation".

Section 5.2 provides a definition and focus for the succeeding sections and is followed by a discussion of types of barriers in 5.3 and 5.4. Section 5.5 examines barriers to specific "non-traditional user" groups.

Tables and figures for this section are presented in Appendix 4.

5.2 Not interested?

Jackson, a prominent researcher in recreational non-participation (see for e.g. Jackson, 1983; Jackson and Searle 1983; Jackson and Dunn, 1988), defines non-participants as people who express a desire to participate in an activity but are unable to do so because of the effects of one or more barriers (Jackson and Dunn, 1988: 33). Non-participants who do not express an interest in participating in a new leisure activity are excluded by Jackson's definition.

A distinction can be made between persons interested in recreating on the DOC estate and those not. Booth (1986) found that 16% of her non-users had not visited a national park simply because they did not want to. A similar result by Murphy (1981) (13% of the New Zealand 4-centre sample were not interested in visiting a forest for recreational purposes), clearly indicates that the majority of New Zealanders are potential recreationists on the DOC estate, however not all wish to be.

Booth proposes that those who do not aspire to visit a park are not "of concern", in agreement with Jackson's perspective. So, while lack of interest is a reason why people do not visit the DOC estate, it cannot be viewed as a barrier in the strictest sense.

5.3 Barriers research

Searle and Jackson (1985) review the work that has recently begun to appear on recreation non-participation and the barriers which inhibit recreation or detract from its enjoyment. They identify five main barriers:

- (i) lack of interest
- (ii) lack of time
- (iii) lack of money
- (iv) lack of facilities
- (v) lack of required skills or abilities.

Within New Zealand, the typical approach to "barriers research has been to ask respondents a direct question. The results have therefore been a list of constraints offered by (potential) recreationists. In some cases the research is directed specifically at non-participation in desired activities; other studies examine recreation non-participation generally. It is evident that responses vary dependent on the scope of questioning.

Tables 35-41 and figures 14 and 15 present information from several New Zealand and Australian studies. In summary:

- (i) a large proportion respond with "unexplained" answers, e.g. no time
laziness/lack of motivation
never got around to it;
- (ii) home/family commitments features strongly in several of the studies;
- (ii) access/transport is an important constraint upon national park would-be visitors, but features less strongly for local/regional studies. The recent Wellington regional study found that 84% of respondents considered a car essential to their recreation participation (Tourism Resource Consultants and Lincoln, 1988).

Unfortunately, owing to the differing forms of question design and nature of the recreation and resources under study, a more definitive picture cannot be established.

Drawing conclusions from previous overseas work, Searle and Jackson (1985) state:

- the effects of barriers vary according to the type of activity, but no single barrier is of overriding importance in inhibiting participation in any given recreational activity.
- Combinations of barriers best characterise and discriminate amongst types of activity
- grouping barriers into categories may mask important differences
- desire to participate in new recreational activities varies according to personal and situational characteristics (discussed in 5.5.1)

Davison (1986) notes that the rising cost of mobility and reducing disposable personal income are likely to inhibit outdoor recreation in the future. In contrast, she proposes that factors promoting outdoor recreation participation are:

- outdoor education
- health and lifestyle choices
- greater participation by women
- potentially fewer New Zealanders holidaying overseas
- desire to participate

5.4 Specific barriers

Section 5.3 has presented a number of barriers to recreational participation. Of these, two specific and related barriers have been discussed in the literature with respect to national parks presented in this section. Other barriers relate to socio-economic and demographic variables and have been covered by discussion in **3.3 Demographic and socio-economic characteristics of visitors and non-visitors**. Activity- or area-specific constraints (e.g. lack of facilities, climate) preclude general discussion, while others are too "undefinable" to discuss here (e.g. lack of time, health).

5.4.1 Awareness

Research by Booth and Lomax indicate that one reason for non-use is lack of awareness - 7% and 12% of non-users for the general population and Maori samples respectively, cited the reason for not visiting as "knew nothing about national parks". Indeed, in her work, Booth found that respondents often misperceived what a national park was. She concluded that some individuals held a concept of national parks as "relatively extensive and used by a large number of people, rather than any legislative or symbolic meaning" (1986:62). Four percent of her sample were unaware whether they had ever visited a national park, while others indicated visits to non-national parks -local urban parks or major national recreational areas, e.g. Lake Taupo.

A significant difference was evident between Booth's park users and non-users on the number of parks named from memory, suggesting a positive relationship between awareness and use. Gilmour (1982) in her study of Fiordland National Park, found a similar result between knowledge of the number of national parks and number of visits. Of a sample of Dunedin residents, 17% knew the correct number of parks (or where to find it), 20% admitted ignorance, and 10% did not answer the question.

A national survey disclosed that 67% of people could name at least one national park. Awareness of national parks was found to be higher than average among:

- males (71%)
- people aged 25 to 59 years (72%)
- people employed full-time (73%)
- professional/managerial occupations (83%)
- people who live in the South Island (75%), mainly made up of higher awareness of Fiordland (27%)

and lower among:

- females (61%)
- people aged 15 to 24 years (59%) and 60 years and over (54%)
- people who are not employed (56%)
- retired (51%) and non-working occupations (57%)

(Colmar and Brunton, 1987: 11)

Variations in awareness park-park showed Tongariro to have the highest level of recall (47% mentioning it), followed by Fiordland (30%), Mt Cook 919%), Urewera (17%), Egmont (13%), Abel Tasman (12%), and Nelson Lakes (10%) (Colmar and Brunton, 1987).

Comparison of this information, with the level of awareness of national parks by Maori people does not provide a conclusive result. While Maori respondents in 1988 study were less aware whether they had visited a national park (29% did not know if they had visited in the last 2 years cf. 12% for general population), the Maori sample were better at naming national parks from memory (an average of 4.5 parks cf. 3.4 parks for general population)¹.

Different levels of awareness **by park** were clearly evident, however. The Maori sample's awareness was not strongly linked to their visits to different parks, indicating other cultural influences. A notable example is that Urewera National Park was mentioned more often by Maori respondents. While Booth found a relationship between visit patterns and awareness, she hypothesises that other factors also influence awareness -location, regional importance, specific promotions or events, access. Booth concludes a low level of knowledge of national parks.

5.4.2 Information

Availability of information may be viewed as a barrier to recreation. Several studies have investigated visitor data sources on national parks. Booth (1987) shows a significant difference between users and non-users of national parks by source of information (Figure 16). Users had utilised a greater number of sources overall and were shown to be more reliant on information disseminated by ranger station/park HQ/rangers and also word of mouth/friends/relatives. Non-users displayed greater exposure to film and television information sources.

Lomax (1988) found Maori park visitors were more likely to have seen or heard information via park headquarters than non-visitors, and the top three sources of information were the as Booth's sample (television, newspaper, friends and relatives).

Gilmour's (1982) sample of residents is broadly similar to Booth's Christchurch sample in terms of information sources. Simmons (1980), however, found users most often cited friends and family as the main source of information. Written publications/maps were of secondary importance with information learned from school more important than for the later studies.

¹ The number of national parks had increased by 2 (Paparoa and Whanganui) between studies. However the associated publicity appears to have had little influence as both parks were seldom mentioned.

Booth notes that few people had not seen/heard any information. However, she states that this figure may be low because of the misperception of national park areas.

Data from Groome *et al.* (1983) is presented in Table 42, showing the sources of information about two North Island forest parks for various visitor groups. Different categories were used compared with the national park studies, but the overwhelming importance of word by mouth supports other results. The influence of the family is apparent, also written material.

In summary, while Groome *et al.*'s data shows differences by visitor group (e.g. information via tramping clubs), the most common sources of information are word of mouth, family, written material and TV/films.

5.5 Barriers to "non-traditional users"

5.5.1 General

Searle and Jackson (1985) in a Canadian study found that perceived effects of barriers to participation in a desired recreational activity, varied according to recognisable characteristics of respondents. They found:

- the poor were most severely affected
- single-parent families were more constrained than other household types
- as age increased, barriers became stronger (e.g. lack of partners, physical ability, artistic ability)
- the highly educated identified barriers less frequently than those with the least amount of education
- women were more frequently blocked from participation than men.

Comparing these results with earlier work on the relative strength of desire to undertake a new activity, Searle and Jackson conclude:

- the poor, single parents, the elderly are most disadvantaged with regard to their access to recreation, both due to perceived barriers **and** lack of interest
- the young, better-educated and financially better-off more frequently expressed desire to participate but were unable to, however these groups were found to be the least inhibited by perceived barriers (at least those under study).

It may be, Searle and Jackson state, that the apparent lack of interest among single parents, the elderly and the poor is more appropriately interpreted as resignation to personal and external circumstances, rather than lack of interest per se (1985: 243).

Witt and Goodale (1981) examine relationships between barriers to leisure enjoyment (not participation) and family stage. They found family stage to be an important factor in explaining barriers to enjoyment, however it only accounted for 10-15% of the variance for any given barrier. In other words, other factors influence the relative importance of given barriers to a large extent.

Witt and Goodale conclude that at least as much attention needs to be paid to motivation, attitudes and values (capacity to choose) as critical barriers, as to the more frequently cited time, money and opportunity problems.

Speaking about the New Zealand scene, Devlin (1987) asserts that park visitors (particularly national and forest park visitors) are not a proportional cross-section of New Zealand people. Notably under-represented are those from the lower socio-economic groups, and Maori people. Devlin does not find mobility and other access costs convincing reasons for the low use by both groups.

5.5.2 Women

A point of definition is first required. For women outside paid employment, the problem of defining their recreation is complex. There are blurry lines between leisure (non-work) time and "work", e.g. dressmaking and cooking have a dual purpose of enjoyment and productivity (Middleton & Tait, 1981).

A study of women conducted in South Australia (Burrows, 1985) asked respondents the reason preventing them from participating in a desired activity. As shown in Figure 14, "no time" was the most frequent response, followed by "facilities not available" and "too expensive".

In their assessment of women's recreational interests based on the New Zealand Recreation Survey (Tait, 1984 - 1974/75 data), Middleton and Tait (1981) summarise factors which handicap women's recreational involvement:

1. children - Table 43 indicates that while children limit the recreational participation of women this is not the case for men;
2. transport - "women appear to suffer more, in terms of recreational participation, if private transport is not available" compared with men;
3. education - has a levelling effect. As the level of the woman's education increases, she becomes more active recreationally;
4. employment status - "employed women have a better chance of realising their demand for cultural activities than women who are homemakers".

In conclusion, Middleton and Tait (1981: 5) state:

We can conclude that the ideological construction of women in our society, that which defines women as a leisure class devoting their time to home and children, has affected the way in which individual women make significant choices about their leisure.

Talbot (1979) puts the thesis that the crucial concept is the extent to which women are conscious of the constraints acting upon them and of the choices theoretically open to them (e.g. their awareness); also the extent to which their place in the social structure determines choices for them. Furthermore, Jones (1981) states that the constraints acting on women are based on one significant and common factor - attitudes toward women. Nisbet, targeting high risk adventure activities, agrees, summing up the conditioning message as "girls aren't tough or strong enough" (1981: 251).

Talbot goes on to suggest that women and men are the recipients of different sets of leisure skills. "Training" in leisure appears to be one constraint precluding participation in both institutionalised and informal recreation.

Darlison (1985) discusses time constraints acting upon women. She states that women in the paid work force have far less disposable (leisure) time than either their counterparts or home-based women. Despite this, "working women still manage to become involved in more leisure pursuits than their home-based sisters" (1985:78). Three possible explanations are suggested, with the proviso that further research is required:

- a) the nature of housework which has no "work, non-work" distinctions. (Work is home and home is work. Is watching television while ironing or sewing, work or leisure?)
- b) the fact that women in the paid work force have their own disposable income
- c) the ideology of motherhood (which suggests, amongst other things, that family needs, including leisure, come first)

(1985:78)

In a study of recreation in the first year of motherhood, McLean (1981) noted the following constraints:

- those related directly to mothering (lack of time; fatigue; new routine; etc)
- reliable child care
- inconveniently timed recreation programmes
- unattractive recreational options
- transport
- cost
- personal factors (lack of company to participate with; lack of confidence, skills; etc).

Theobald (1976) discusses female participation in public recreation programmes. He states that the "single most inhibiting factor" is lack of provision for child care. Other constraints are:

- inadequate changing facilities
- traditional female stereotyping
- lack of basic physical skills
- finding time for females in already overcrowded facilities.

5.5.3 The Aged

The Rapoport (1975) suggest that activity in one's later years is determined by education, income and health. Atchley (1971 in Long and Wimbush, 1979) considers security of income to be an important factor in recreational participation, while Long and Wimbush (1979) suggest that a threshold income exists which is necessary to maintain living standards in retirement (presumably including recreation).

Long and Wimbush (1979) link income to ownership of a car, which facilitates access to many leisure activities. Problems of transport "are particularly important in constraining participation by the elderly" (Long and Wimbush, 1979: 12). Because of a low level of access to private cars, public transport assumes a special significance - a form of transport that may not be suited to the needs of the elderly (Long and Wimbush, 1979).

Personal mobility, or health, is a further constraint. Indeed:

Health would appear to have such an important effect on participation in leisure pursuits that this relationship has rarely been examined among the elderly. It would appear that deteriorating health is as often the cause of declining participation in leisure pursuits as a psychological desire to withdraw (Kimmel, 1974).

(Long and Wimbush, 1979: 12)

Long and Wimbush also discuss the effects of education - both the direct impact upon the individual's lifestyle and interests and the indirect effects via occupation or income. This leads into a discussion of societal beliefs that work is the major source of meaningful activity - with the result that retired people may have little experience of leisure and may not be motivated to pursue recreational activities.

Threlfall (1983) makes the point that access to recreation for the aged also depends on the expectations held by others of the interests and abilities of the aged.

5.5.4 Ethnic Groups

As part of her investigation of Maori use of national parks, Lomax (1988) asked her respondents who had not visited a park in the last 2 years, why this was so. Her results are shown in Table 44 alongside those for Booth's (1986) general population sample. A smaller proportion of the Maori sample (cf. general) stated that they wanted to visit but were apparently constrained in some way, and more did not want to visit.

In his paper Red, White and Black in National Parks, Meeker (1984) suggests that blacks and Indians in North America lack enthusiasm for national parks because of different cultural values from white Americans. He propounds that the blacks and Indians do not relate to a system that sets nature apart from humanity. This is elucidated by Devlin (1987:6), who has transferred Meeker's ideas to the New Zealand scene. He states that it is hardly surprising that Maori people feel no need to return to nature, as they have never been cut off from it -people and nature to the Maori are not separated.

Meeker also suggests that the parks system celebrates the "conquest" of the wilderness and this includes the native people, who are now displayed and exploited within park boundaries.

Meeker comments that policies to attract blacks and Indians to the park system may never succeed, "except in the relatively superficial matter of providing inexpensive recreational space without discrimination" (1984:134). He feels that the emotional and cultural needs of the black and red are unlikely to be satisfied by the park system.

Devlin states,

Parks systems are a product of the traditions and value systems of Western civilisations and it should not be surprising to us that groups whose value systems differ markedly from these, should see parks differently.

(1987:6)

Meeker comments that often socio-economic attributes of the ethnic groups are identified as the reason for their lack of presence in parks (i.e. lack of time and/or money). He does not believe these are major constraints, however Lomax (1988) questioned her group who wanted to visit but couldn't and found the following reasons (in descending order of importance):

- lack of time
- health
- finance
- access/transport

- family commitments
- work
- other

- not interested²

She concluded that many of the Maori respondents appeared to be constrained from using national parks for reasons that relate to the lower socio-economic status of many urban Maori. But a large number have no desire to visit a national park.

It appears that it is not a question of merely whether Maori visit parks, but their total relationship to the system of protected natural areas. Indeed it seems that,

Efforts to explain the relationships between different groups and their attitudes towards parks needs to be sought not in terms of socio-economic differences, but in terms of values inherent within sub-cultural differences and expectations.

(Devlin, 1987:6)

² Not directly comparable to Booth's (1986) results (Figure 15) owing to different question designs. Booth used a closed question (categories given) whereas Lomax requested respondents to list their own reasons.

Because of the apparent relationship of the Maori to parks in a cultural/spiritual sense, it suggests that

the common ground in any sub-cultural differences lies in those dimensions of park management which are preservation-oriented rather than those which are recreational or use-oriented. [Devlin's emphasis]

(Devlin, 1987:7)

Furthermore, a paper that discusses Pacific Island women and recreation concludes with the point that recreation for Pacific Island communities must "grow out of life" rather than be treated separately. It must reflect the Island way of life (Walker *et al.*,1981).

5.5.5 The Disabled

Leisure '77, a seminar organised by the Council for Recreation and Sport, incorporated a working party on Recreation and Disabled people. The working party defined barriers which prevented disabled people from engaging in ordinary recreation activities as:

- access barriers
- transport difficulties
- communication problems
- public attitudes
- lack of education for leisure
- insufficient use of community resources
- lack of trained leadership for professionals and volunteers in the field
- lack of suitable aids to assist recreation activities

(Lavender and Belcher, n.d.:82)

his survey of physically disabled people in New Zealand, Buchanan (1977) included several questions relating to participation barriers. In total, 57% of his respondents considered that their disability seriously affected their recreational/social/sporting choice. A similar number felt they did not have enough opportunity to participate in their favourite activities. Reasons why the disability impaired their recreation are shown in Table 45.

A major difference was found between those with disabilities from birth and those with disabilities through accident/disease. The former were "quite well rehabilitated (1977: 36) and many stated their disability had not seriously affected their recreation choice, but all added that they had always participated in activities which were physically within their capability. The latter group showed "real problems in having to change the nature of their recreational participation especially those respondents who had once been extremely active" (1977: 36).

Table 46 shows the reasons why the disabled respondents had not participated in a certain activity of their choice. "No opportunity" was the overwhelming reason, followed by of lack of information, transport and confidence, also cost.

Some respondents described reasons for non-participation in activities organised by disabled persons associations to which they belonged. These reasons included:

1. Transportation to venue difficult

2. Don't participate in the sports, and social events are only rarely available and sometimes far too costly, especially if transport costs (taxis) are involved as well.
3. Infrequency of events makes participation at specific times unsatisfactory. A choice of time and place to activities would make the situation easier.
4. The Muscular Dystrophy, Multiple Sclerosis and Spastic Fellowship Societies are based in Auckland and because of this, participation is impossible unless one lives in the latter area.
5. Don't enjoy the physical sports much and not many passive activities offered.
6. Participation in the types of activities offered are too difficult for me and I didn't enjoy being a spectator.
7. No regular activities provided in Levin, parts of the Wairarapa, King Country, Nelson or country districts, plus, I suspect, many other areas removed from a central location.
8. The recreational and social opportunities offered are too structured and formal for my liking.

(Buchanan, 1977: 14-15)

Buchanan (1977: 15) also notes,

Other reasons for non-participation would include such constraints as time, family and work commitments, age and distance travelled. The problems facing country disabled people, and those well removed from central areas are also very relevant for it would seem that these people are at a decided disadvantage to those for whom a central Branch of their Disabled Association is closely situated.

Concerning transport, 53% stated that it was a factor affecting their choice of activity with 36% noting that transport was difficult or very difficult.

Questioned on access to facilities and venues, 39% said it affected their participation. Buchanan states that this result must be viewed with the consideration that not all disabled people are seriously disabled and others are not given the opportunity to participate anyway (implying that access does not become a problem).

Access was a less important problem affecting the choice of activity than transport, lack of information, activity available, and physical capability (Table 47).

Buchanan notes that respondents repeatedly stated that they were unable to pursue the types of activities which held most interest for them. This was either because the activities were not available within their region, or information on the activities was not forthcoming.

Thorensen (n.d.) focused on the intellectually handicapped. In summary she found:

- 1 Insufficient recreation programmes available.
- 2 Community facilities - the greatest lack is clubs providing integration.

3 Reasons for not using facilities considered important (in descending order):

- no supervision
- lack of transport
- time availability
- distance too great
- other.

5.6 Conclusion

1 Non-visitors to the DOC estate can be subdivided into those who are and those who are not interested in visiting.

2 Barriers to general recreation appear to be relevant to outdoor recreation on the conservation estate, however some assume greater importance, e.g. transport.

3 Constraints on participation should be analysed by activity or at least activity-type.

4 Section 3 suggested that particular groups are under-represented on the DOC estate. Barriers to their recreational participation have been identified in 5.5.

5 It may not be appropriate to discuss the recreational use of the DOC estate by Maori people in separation from values not associated with visiting.

6 Some barriers may be alleviated by the application of targeted measures. Barriers which be (partly) overcome include:

- awareness of opportunity
- lack of information
- transport (to/from, on-site)
- access (on-site)
- facilities for disabled.

This list is by no means exhaustive,

Other barriers are beyond DOC's control, e.g. personal health.

7 Talbot (1979) warns of the temptation to think of identified constraints inevitably suppressing participation and the removal of such constraints inevitably stimulating participation (her emphasis). She notes, for example, that the provision of creches at an English sports centre was not the panacea to non-participation by women as was originally thought.

On a positive note, Talbot states that

the greatest likelihood to overcome constraints, springs from commitment to a specific activity rather than to a more generalised pre-occupation - knowing what one wants to do makes a good basis for overcoming barriers.

(1979: 32)

8 A large proportion of the reasons for non-participation may be subsumed under **lack of motivation**. Means to stimulate motivation are not elucidated in the literature nor implicitly evident.

6. CONCLUSIONS AND IMPLICATIONS

6.1 A matter of definition

It is clear that several terms used in the area of recreational use and demand are misleading. It is therefore recommended that:

1. **Non-traditional user** be dropped from use. It implies that a profile of an untypical user can be defined, and is meaningless as a generic term.
2. A person visiting the DOC estate be referred to as a **visitor** rather than a **user**. Use of the estate, or utility gained from it, is not restricted to those who visit, but may also encompass those who merely value its existence.
3. Wherever applicable, the type of recreational visit be identified, i.e. **active** versus **passive**, or activity-specific if possible.
4. A broad definition of **family** be used in subsequent policy-making.

6.2 Resource demand

The changing demographic profile of New Zealand suggests both general and specific trends which impact on the DOC estate. Our ageing population has implications for the demand placed on certain types of facilities.

1. In the USA, Lucas and Stankey (1988) have observed a levelling off or decline in wilderness use (i.e. back country, active outdoor recreation). There are indications this that this may be the case in New Zealand also.
2. In the last 15 years or so, the large baby-boom cohort has occupied the 15-24 years age group, the period strongly associated with active back-country recreation. Now this group is in the period of child rearing and the proportion of the population in the 15-24 age category is forecast to slowly decline. It follows that demand on back-country facilities may stabilise and greater demand may be placed on peripheral park areas and facilities for passive activities. Families have also been shown to be heavy users of summer programmes in parks.
3. Other factors may influence demand. For example, a link between higher education and active outdoor recreation has been made. Will the recent increase in tertiary enrolments therefore influence more young people to participate in active outdoor pursuits?
4. It remains to be seen what impact delayed marriage and child bearing will have on park use. It is clear, however, that young single people are the most involved in active recreation, so individual's participation in this form of recreation may be extended. Owing to a lengthier time period available to establish individual patterns of outdoor recreation before commitments of marriage and children (and the subsequent decreased recreational involvement), it may be that as families, outdoor recreation is pursued more often. These considerations are especially pertinent for women, who suffer the greatest loss of recreation with children and marriage, but have been shown to return to activities after child birth they were previously committed to.
5. The increase in households without children, overall decrease in number of children and more compact spacing for births, may result in greater outdoor recreation participation. However, this is not clear.
6. Work in the United States has shown that recreation participation is increasing for all age groups (Lucas and Stankey, 1988). If this holds for the New Zealand situation, the projected increase in numbers of retired people may have greater impact on DOC resources than otherwise assumed. The type of use is likely to be passive recreation in park peripheral areas.

7. People in the later stages of retirement, with increasing mobility problems, may have less opportunity to visit DOC resources than in the past owing to decreased availability of family support.
8. The decline in disposable incomes since 1984, and the increase in the proportion of women in the paid workforce, suggests a change in recreation patterns owing to decreased spending power and/or disposable time. Whether this will impact on DOC resources is not known.
9. Demand on resources in the northern half of the North Island is likely to continue to be high, particularly around the Auckland area. Coastal facilities will probably continue to be popular, and as the population becomes more urbanised and concentrated, DOC coastal facilities will be under increasing pressure (e.g. within Hauraki Gulf and Bay of Islands Maritime Parks). Some communities may have distinctive demographic characteristics, e.g. retirement areas (Davison, 1986).

6.3 Type of visitor

1. A portion of the population is not interested in visiting parks (approx 13-16% for national and forest parks).
2. The majority of visits on the DOC estate are for passive recreation. Family groups are well-represented amongst visitors undertaking passive activities.
3. Active park recreation attracts a particular sector of society. Visitors are dominated by the well-educated, professional, young and male.
4. Certain groups of people are under-represented in parks, both for passive and active recreation:
 - Maori ,
 - the aged
 - the disabled
 - low socio-economic status
5. Barriers have been identified that appear to be constraining some potential DOC visitors. Those barriers that may respond to ameliorating measures are discussed in **6.4 Policy Issues and Directions**.
6. Figure 17 presents a conceptual overview of the different types of visitor and potential visitor discussed in this report.
 - a) The model depicts the main linkages between potential visitors and visitors
 - b) The barriers which act upon potential visitors, may also prevent passive recreational visitors from participating in active recreation on the DOC estate. This "problem" falls within the sphere of the Hillary Commission, Federated Mountain Clubs, and similar agencies.
 - c) Non-visitors are self-defined in terms of their interest in visiting the DOC estate, and divided to show a group that is constrained by real structural barriers.

6.4 Policy issues and directions

6.4.1 Issues

The previous sections raise a series of questions which need to be addressed. These include:

1. Is the current pattern of recreational use of the DOC estate a reflection of policies and operations. For example, that is the current balance between resources spent on passive recreation facilities and active recreation facilities?
2. Does DOC have the capacity to cope with more passive visitors?
3. Does DOC cater adequately for recreation that occurs close to cities? What opportunities are open to the department?
4. Is it appropriate to foster Maori/Polynesian recreation, or should a wider culturally-based approach be taken?
5. Is the DOC estate equally available to all people? What can be done to remove barriers to participation?
6. What are the political ramifications if recreational use of the DOC estate stabilises, i.e the rapid growth in numbers of past years declines? Does this suggest that a shift in emphasis is required from recreational use of the estate to the social values of its preservation?

6.4.2 Directions

Directions for policy appear to include:

1. To target barriers which may be alterable. Means to do this include:
 - promotions and information to increase awareness and knowledge
 - improved availability of opportunity for recreation, e.g. transport to and from large centres, for the aged, the disabled, etc
 - improved facilities and access on-site for those with mobility problems
 - educational programmes in schools to encourage visits.
2. To work alongside other agencies (e.g. Hillary Commission) who hold a social responsibility in this area.
3. To support research into the reasons for non-visitation. As stated by Devlin "our failure to understand the reasons for non-visitation means we do not know whether or not it is really a problem!"
4. To clarify DOC's social responsibility. While it is unclear whether parks are equally available to all, they are obviously not equally desired (Devlin, 1987). Is this of concern to DOC? Should DOC its recreational resources so they appeal to all people?
5. To consider these issues and concerns with view to all uses of the estate, both recreational and non-recreational.

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**A LITERATURE REVIEW OF VISITORS
TO THE CONSERVATION ESTATE WITH
SPECIAL REFERENCE TO FAMILIES AND
UNDER-REPRESENTED GROUPS**

Volume One

by

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APPENDIX 1: DEMOGRAPHIC DATA

TABLE1: TOTAL POPULATION PROJECTIONS

Year	Estimated Total Population (millions)
1991	3.37
1996	3.48
2001	3.57
2006	3.63
2011	3.66

Notes

1. Projections based on medium fertility and medium migration trends

SOURCE: Pers. Comm., Department of Statistics.

**TABLE 2 : PROJECTED GROWTH OF TOTAL POPULATION BY AGE GROUPS (%),
1981-2011**

Year	Age						Total
	0-4	5-14	15-24	25-44	45-59	60+	
1981-1991	4	-15	1	30	11	21	10
1991-2001	-2	4	-16	10	36	10	8
2001-2011	-13	-2	-12	-1	68	33	12

SOURCE: Population Monitoring Group, 1984

TABLE 3: TOTAL FERTILITY RATE: NEW ZEALAND MAORI AND TOTAL NEW ZEALAND POPULATIONS

Calendar Year	Total Fertility Rate	
	Total NZ Population	NZ Maori Population
1971	3.18	5.05
1976	2.27	3.08
1981	2.01	2.47
1986	1.96	2.16P

Notes

1. P = Provisional

2. The Total Fertility Rate in a particular year is the average number of births a woman would have during her reproductive life if she was exposed to the fertility rates characteristic of various childbearing age-groups in that year.

SOURCE: Department of Statistics, 1988a.

TABLE 4: NUMBER OF DEPENDENT CHILDREN

Number of Dependent Children	One-Parent Families		Two-Parent Families	
	No.	%	No.	%
None	36,117	30.4	347,748	48.9
One	43,734	36.8	116,469	16.4
Two	25,944	21.9	147,807	20.8
Three	9,372	7.9	71,421	10.0
Four	2,655	2.2	21,009	3.0
Five or more	924	0.8	6,783	0.9
Total	118,740	100.0	711,240	100.0

SOURCE: 1986 NZ Census (Department of Statistics, 1988b).

TABLE 5: AGE GROUP OF YOUNGEST CHILD

Age Group of Youngest Child	One-Parent Families		Two-Parent Families	
	No.	%	No.	%
0-4 years	29,103	24.5	149,823	21.1
5-9 years	22,233	18.7	88,539	12.5
10-12 years	13,176	11.1	54,375	7.6
13-15 years	14,409	12.1	55,407	7.8
16-19 years	13,749	11.6	47,739	6.7
20-24 years	9,216	7.8	28,044	3.9
25 years and over	16,857	14.2	17,883	2.5
Not applicable			269,433	37.9
Total	118,746	100.0	711,240	100.0

SOURCE: 1986 NZ Census (Department of Statistics, 1988b).

TABLE 6: MEAN AGE AT MARRIAGE

Year	Mean Age	
	All Brides	First-time Brides
1971	23.4	21.1
1987	28.1	24.7

SOURCE: Department of Statistics, 1988a.

TABLE 7: ETHNIC TYPE OF FAMILY

Ethnic Type	One-Parent Families		Two-Parent Families	
	No.	%	No.	%
European	85,065	71.6	617,115	86.8
N.Z. Maori	20,292	17.1	45,879	6.5
Pacific Island Polynesian	4,569	3.9	16,767	2.3
Other	5,712	4.8	23,850	3.3
Not specified	918	0.8	3,903	0.6
Not available (1)	2,187	1.8	3,720	0.5
Total	118,740	100.0	711,240	100.0

Notes

1. One or both parents temporarily absent from the dwelling on census night.

SOURCE: 1986 NZ Census (Department of Statistics, 1988b).

TABLE 8: FAMILY EMPLOYMENT

Family Employment Indicator	One-Parent Families		Two-Parent Families	
	No.	%	No.	%
One Parent Family				
Working full-time	37,881	31.9		
Working part-time	15,876	13.4		
Not working	62,796	52.9		
Not available(2)	2,196	1.8		
Total	118,746	100.0		
Two Parent Family				
Father working full-time, mother not working			172,464	24.2
Mother working full-time, father not working			9,072	1.3
Both parents working full-time			222,876	31.3
Father full-time, mother working part-time			135,699	19.1
Mother working full-time, father working part-time			7,470	1.0
Both parents working part-time			6,147	0.9
Father working part-time, mother not working			11,727	1.6
Mother working part-time, father not working			5,391	0.8
Both parents not working			111,552	15.7
Not available (1)			28,836	4.1
Total			711,234	100.0
Total	118,746	100.0	711,240	100.0

Notes

1. One or both parents temporarily absent from the dwelling on census night.
2. Parent temporarily absent from the dwelling on census night.

SOURCE: 1986 NZ Census (Department of Statistics, 1988b).

TABLE 9 : CHANGES IN REAL DISPOSABLE INCOME FOR ALL FULL-TIME WAGE AND SALARY EARNERS AND HOUSEHOLDS OF FULL-TIME WAGE AND SALARY EARNERS

	% change from previous quarter		% change from same quarter previous year	
	ALL W & S EARNERS	W & S EARNER H'HOLDS	ALL W & S EARNERS	W & S EARNER H'HOLDS
Sep 1985	-2.3	-2.1		
Dec	0.4	0.4		
Mar 1986	3.7	3.6		
Jun	2.4	2.3	4.3	4.2
Sep	-2.3	-2.3	4.3	4.0
Dec	2.8	2.5	6.7	6.2
Mar 1987	0.8	0.8	3.7	3.4
Jun	-0.9	-0.9	0.3	0.1
Sep	-0.1	-0.1	2.5	2.3
Dec	-0.6	-0.5	-0.8	-0.7
Mar 1988	-0.7	-0.9	-2.4	-2.4
Jun	1.2	1.1	-0.3	-0.4
Sep	0.4P	-0.3P	-0.6P	-0.6P

Notes

1. P = Provisional
2. Full-time wage and salary earners = persons working 30 or more hours per week for wages and/or salary and whose principal source of income is wages and salaries
3. Households of wage and salary earners = households whose principal income earner is a full-time wage and salary earner.

SOURCE: Department of Statistics, 1988c.

TABLE 10: PERCENTAGE OF SINGLE INCOME FAMILIES

	% of families with one income
1976	43.3
1981	37.8
1986	30.4

Notes

1. Owing to changes in statistical categories, the 1986 figure is calculated from a different base than the previous figures. Despite this methodological difference, the trend depicted by the data holds true.

SOURCE: de Joux. 1985; Department of Statistics, 1988b.

TABLE 11: FAMILY INCOME CIRCUMSTANCES FOR DEPENDENT CHILDREN AGED 0-19 YEARS, BY ETHNIC DESCENT AND CHILD'S AGE, 1981-1986.

MAORI

Age Group	INCOME GROUP (QUINTILE)									
	5 th		4 th		3 rd		2 nd		1 st	
	1981	1986	1981	1986	1981	1986	1981	1986	1981	1986
<1 year	54	33	30	44	11	16	4	5	1	1
1-4 years	52	30	28	44	14	18	5	6	1	1
5-9 years	51	28	24	41	16	20	7	9	2	2
10-14 years	42	24	26	38	20	23	9	12	3	3
15-19 years	44	31	21	34	22	20	10	12	3	4
All ages	48	28	26	40	17	20	7	9	2	2

Explanation: 54% of all dependent children < 1 year are in a family whose adjusted (disposable) income falls within the bottom income quintile, i.e. the lowest 20% of all family income.

TABLE 11: FAMILY INCOME CIRCUMSTANCES FOR DEPENDENT CHILDREN AGED 0-19 YEARS, BY ETHNIC DESCENT AND CHILD'S AGE, 1981-1986 (continued).

PACIFIC ISLAND POLYNESIAN

Age Group	INCOME GROUP (QUINTILE)									
	5 th		4 th		3 rd		2 nd		1 st	
	1981	1986	1981	1986	1981	1986	1981	1986	1981	1986
<1 year	46	33	33	39	12	19	8	7	1	2
1-4 years	45	29	30	39	17	21	7	9	1	2
5-9 years	39	27	30	39	20	23	9	10	2	2
10-14 years	36	23	25	35	21	27	15	12	3	4
15-19 years	34	26	22	31	24	25	12	14	8	4
All ages	40	27	28	36	19	23	10	11	2	3

TABLE 11: FAMILY INCOME CIRCUMSTANCES FOR DEPENDENT CHILDREN AGED 0-19 YEARS, BY ETHNIC DESCENT AND CHILD'S AGE, 1981-1986 (continued).

PAKEHA AND OTHER ETHNIC-DESCENT GROUPS

Age Group	INCOME GROUP (QUINTILE)									
	5 th		4 th		3 rd		2 nd		1 st	
	1981	1986	1981	1986	1981	1986	1981	1986	1981	1986
<1 year	22	13	32	26	25	28	14	21	7	12
1-4 years	21	13	31	26	27	29	14	21	8	11
5-9 years	20	12	25	25	27	27	18	23	10	13
10-14 years	17	10	21	21	25	26	23	26	14	17
15-19 years	17	17	16	17	22	20	26	25	19	22
All ages	19	13	24	23	26	26	20	24	12	15

Notes

1. Data from 1981, 1986 census.
2. Dependent children defined as all children under the age of 15 (normally residing with their parents in private dwellings), plus those aged 15-19 years who were both normally residing with their parents in private dwellings and were economically dependent, i.e. his or her average weekly personal income < minimum unemployment benefit.
3. Income quintiles: if a family is in the bottom or 5th quintile, its income ranks it as one of the bottom 20% of families.
4. The income of each family has been adjusted using the Revised Jensen Equivalence Scale prior to ranking by quintile. The scale divides the total family income by family members according to their income needs. The result is that families of different sizes, with members of different ages can be compared. Thus a family with a high income, but many dependents, can be compared to a family with low income, but few dependents.

SOURCE: Social Monitoring Group, 1989.

TABLE 12: TYPE OF HOUSEHOLD BY TOTAL POPULATION

Type of household	No. and % of total population		
	1976	1981	1986
1 family only	2,219,256 75%	2,197,293 71%	2,382,477 77%
- married couples	13%	14%	NA
- husband/wife/unmarried chdn	57%	51%	NA
- 1 parent and unmarried chdn	5%	6%	NA
Family hhds. which include other people/families	508,614 17%	526,575 18%	354,318 11%
Non-family hhds.	108,151 4%	118,959 4%	159,450 6%
1 person hhds.	132,809 4%	169,245 7%	199,164 6%
TOTALS	2,968,830 100%	3,012,072 100%	3,095,409 99%

Notes

1. NA = not available

SOURCE: NZ Census (Department of Statistics, 1988d); de Joux, 1985.

TABLE 13 :TYPE OF HOUSEHOLD BY NUMBER OF HOUSEHOLDS

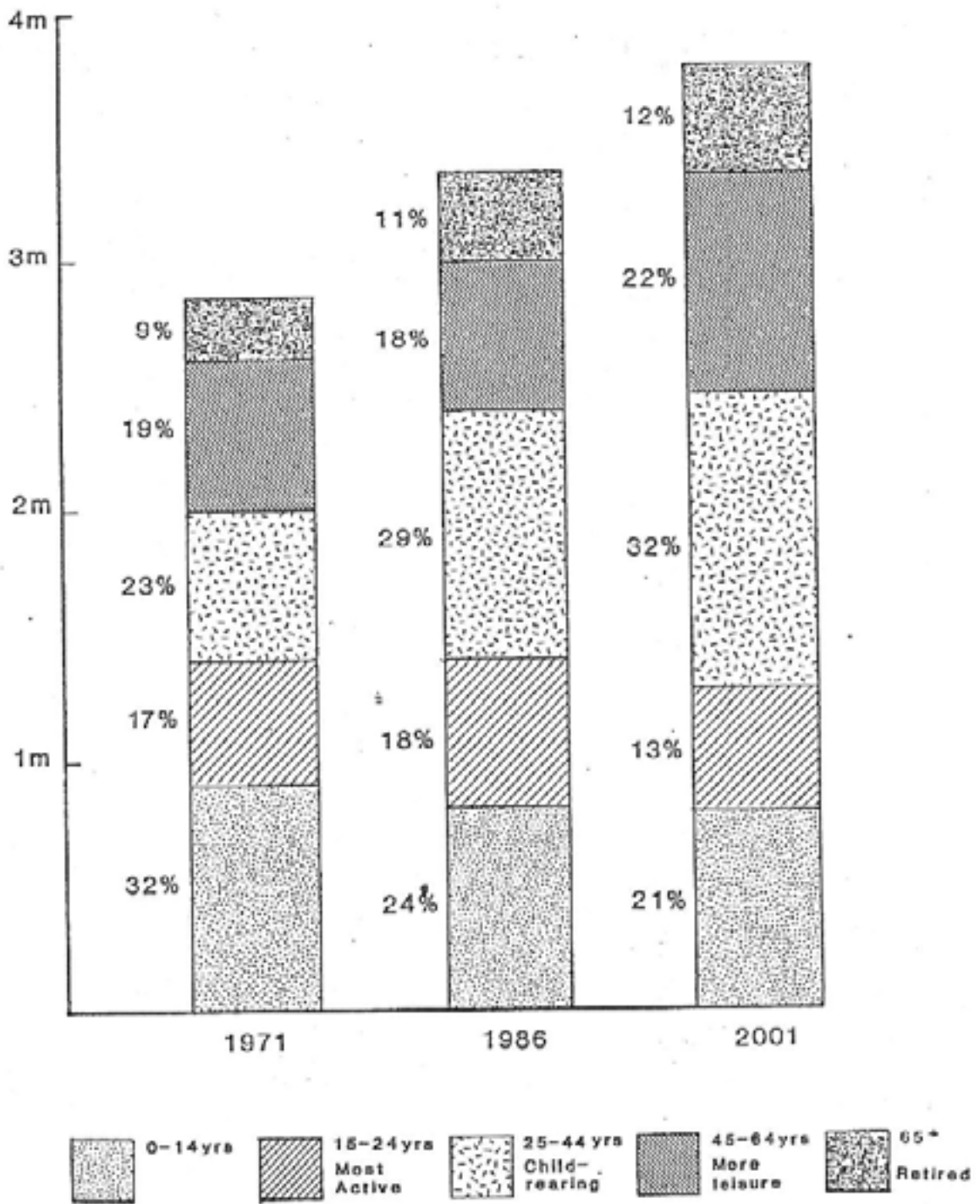
Type of household	No. and % of total population		
	1976	1981	1986
1 family only	632,617	658,356	734,262
- married couples	68%	71%	69%
- husband/wife/unmarried chdn	20%	21%	NA
- 1 parent and unmarried chdn	43%	39%	NA
	5%	6%	NA
Family hhds. which include other people/families	115,609	126,705	72,444
	12%	13%	7%
Non-family hhds.	42,222	48,810	63,576
	5%	5%	6%
1 person hhds.	132,809	169,245	199,164
	14%	17%	19%
TOTALS	923,257	1,003,119	1,069,446
	99%	101%	101%

Notes

1. NA = not available

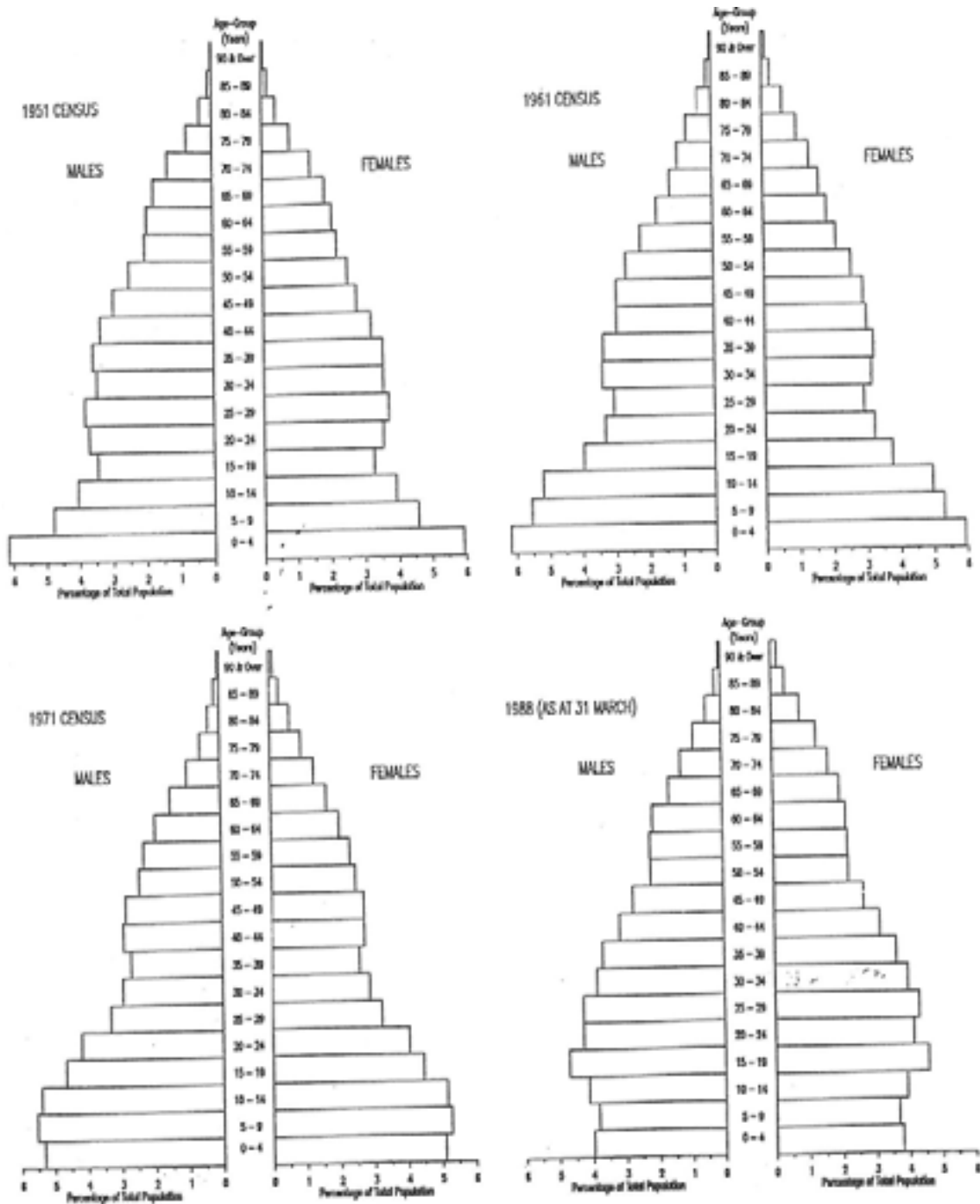
SOURCE: NZ Census (Department of Statistics, 1988d); de Joux, 1985.

FIGURE 1: POPULATION AGE STRUCTURE 1971-1986-2001



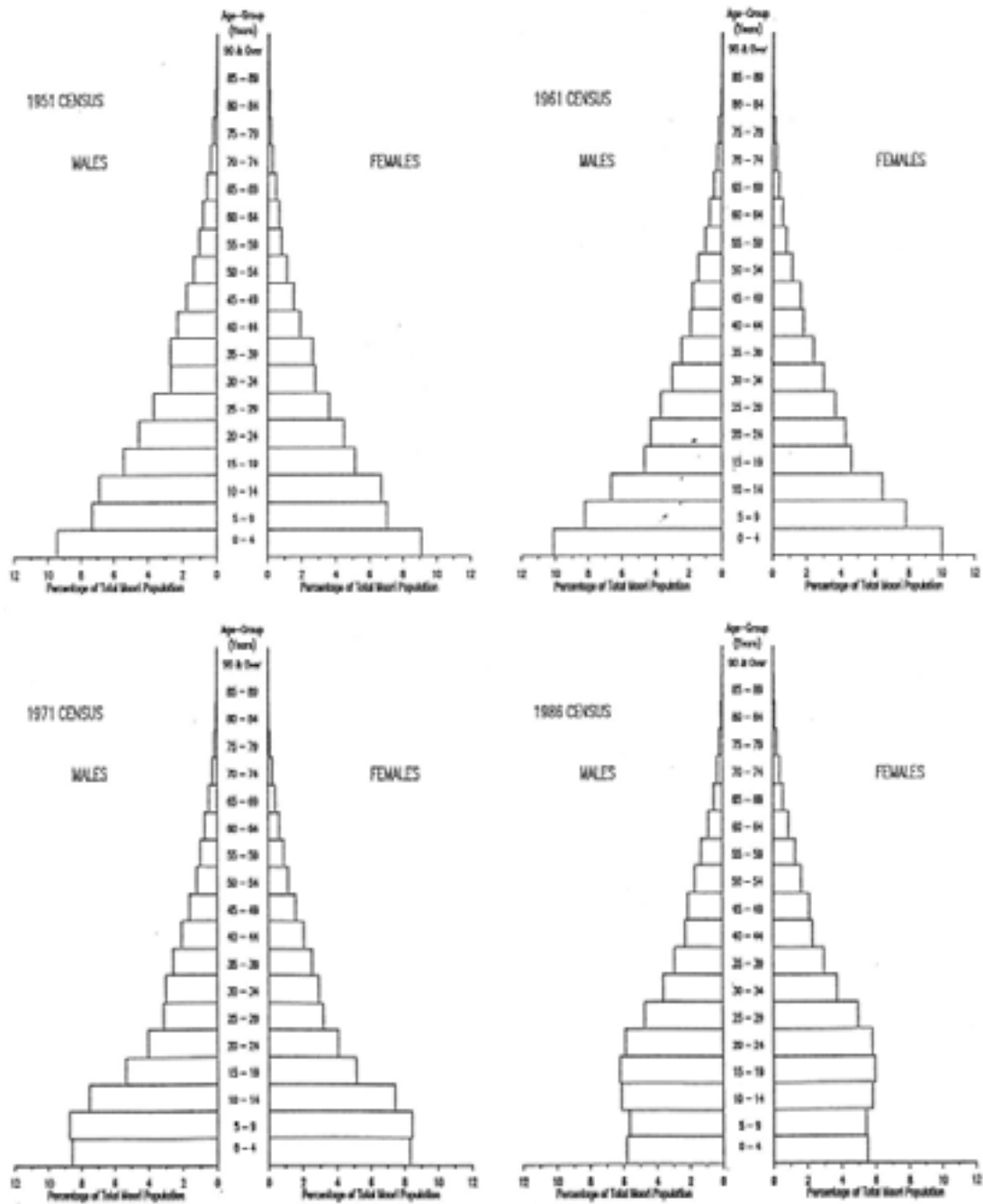
SOURCE: Davison, 1986

**FIGURE 2: AGE-SEX DISTRIBUTION OF TOTAL NEW ZEALAND POPULATION:
1951, 1961, 1971, 1988**



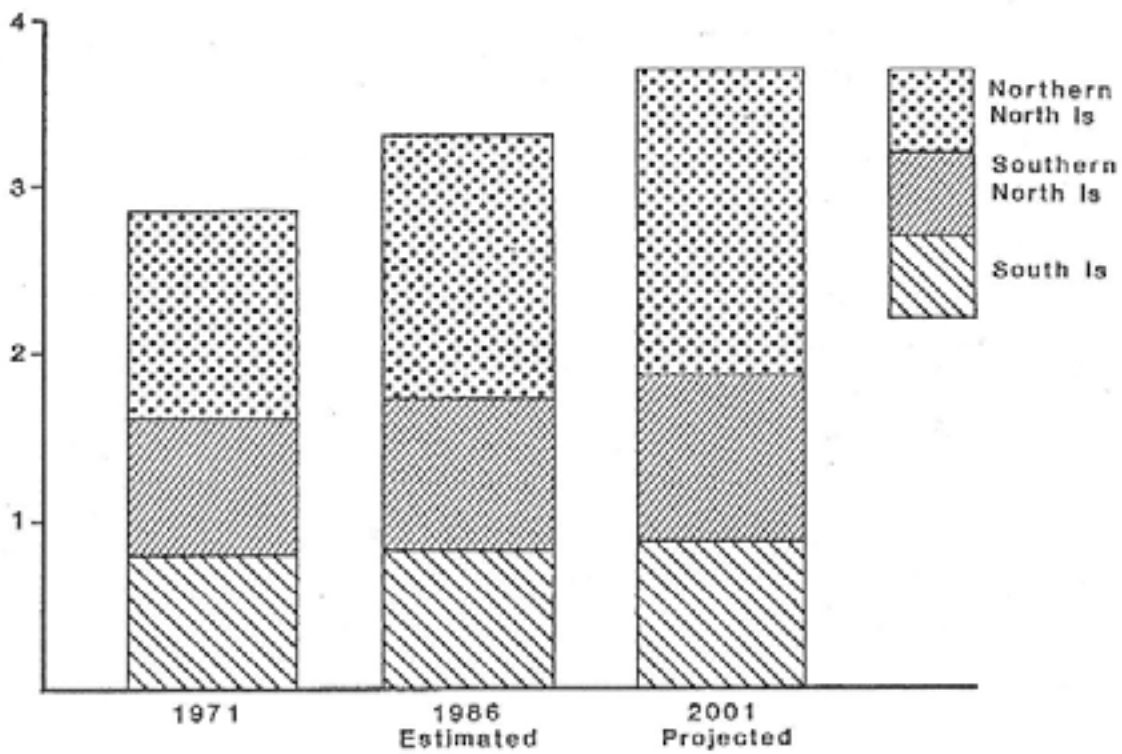
SOURCE: Department of Statistics, 1988a.

**FIGURE 3: AGE-SEX DISTRIBUTION OF NEW ZEALAND MAORI POPULATION:
1951, 1961, 1971, 1986**



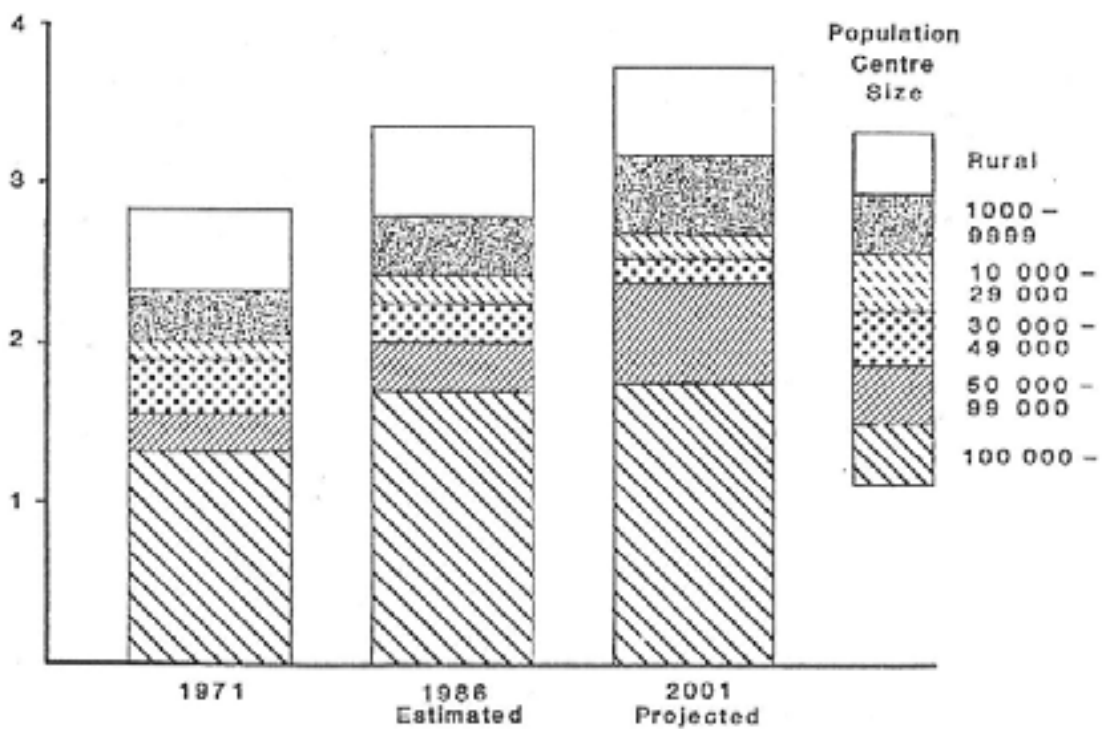
SOURCE: Department of Statistics 1988a.

FIGURE 4: POPULATION DISTRIBUTION: 1971, 1986, 2001



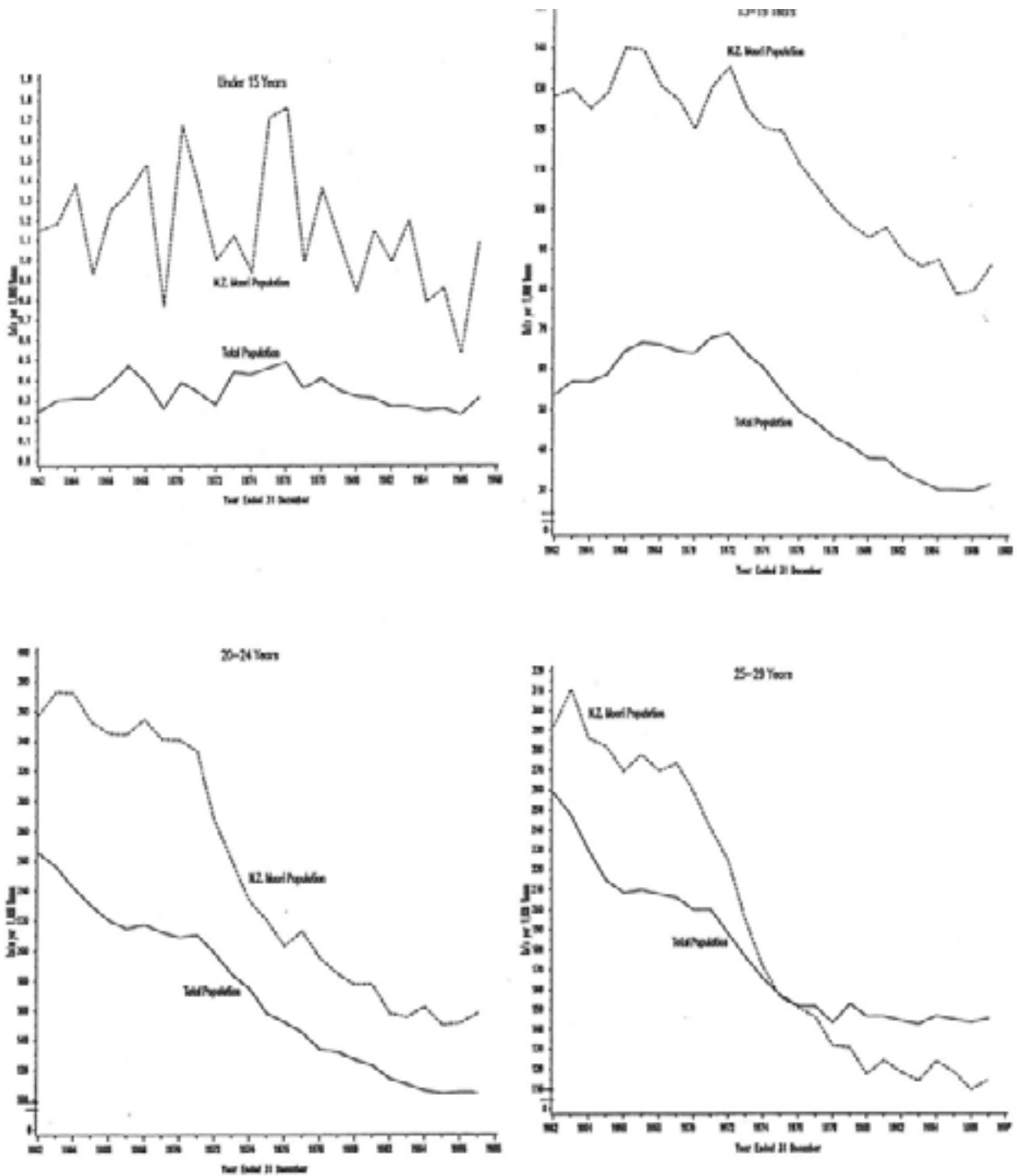
SOURCE: Davison, 1986

FIGURE 5: POPULATION BY URBAN CENTRE SIZE: 1971, 1986, 2001



SOURCE: Department of Statistics, 1986.

FIGURE 6: AGE-SPECIFIC FERTILITY RATES, MAORI AND TOTAL POPULATIONS, NEW ZEALAND, 1962-1987.



SOURCE: Department of Statistics, 1988A.

FIGURE 6: AGE-SPECIFIC FERTILITY RATES, MAORI AND TOTAL POPULATIONS, NEW ZEALAND, 1962-1987 – continued

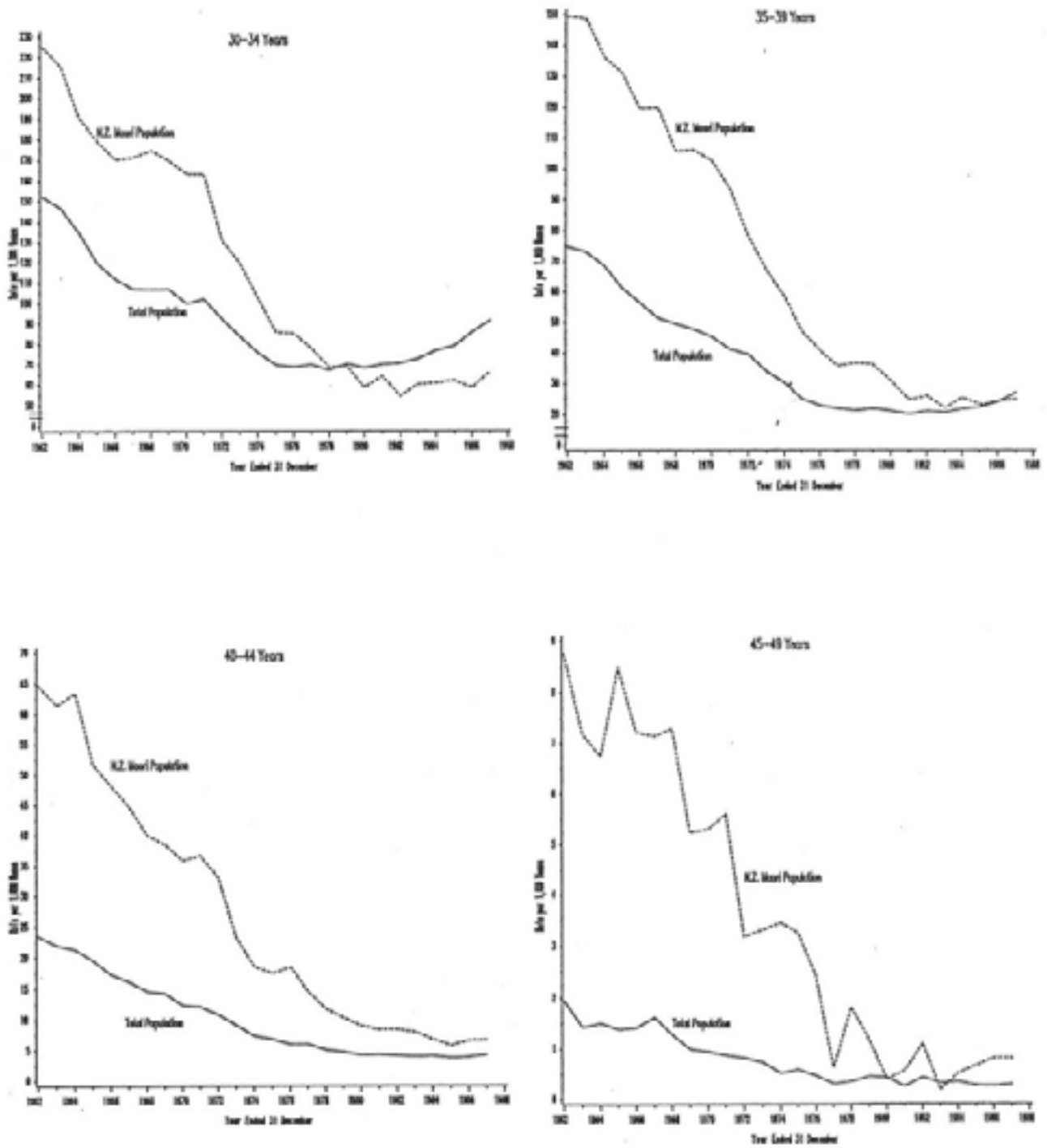
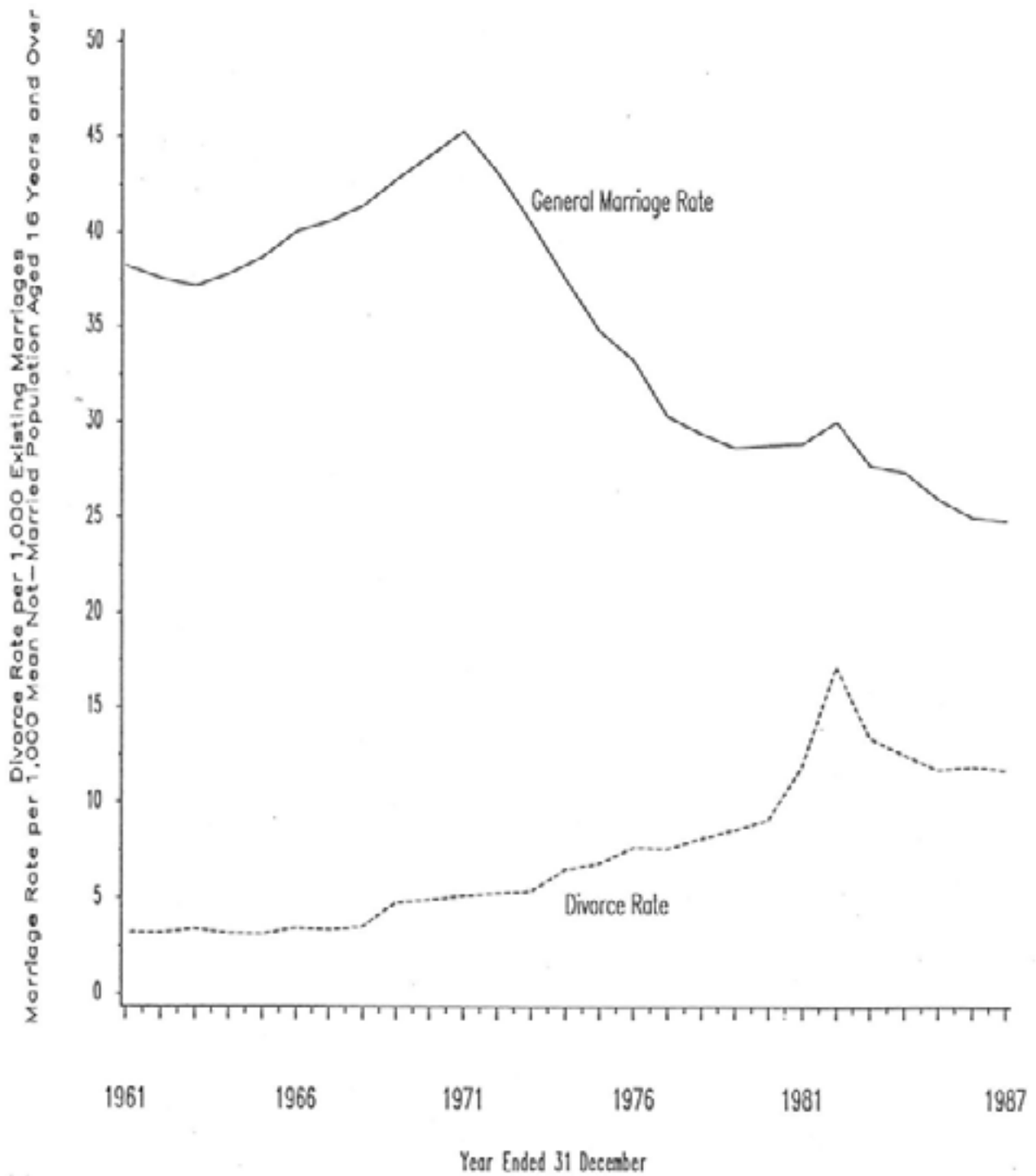
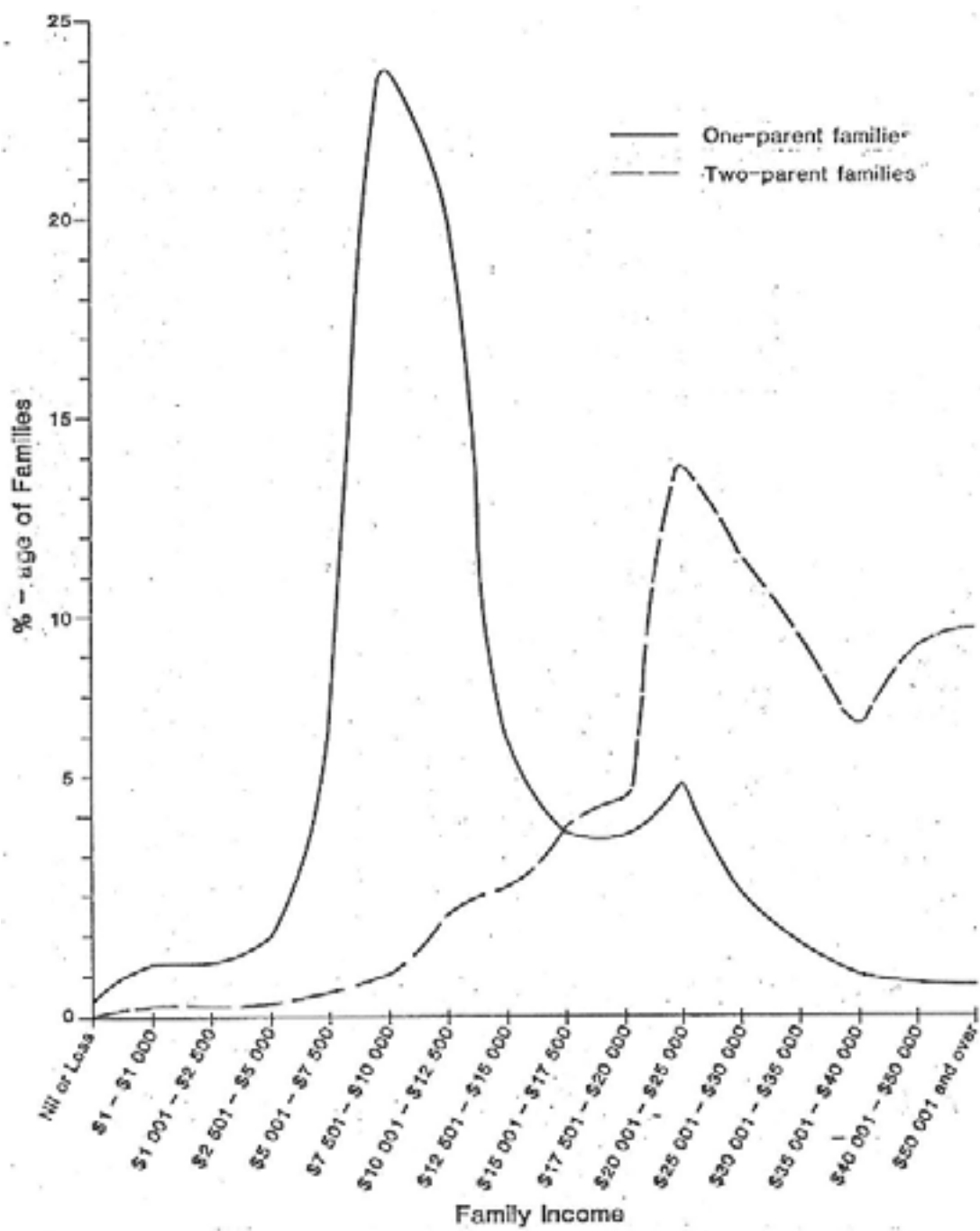


FIGURE 7: GENERAL MARRIAGE RATES AND DIVORCE RATES, NEW ZEALAND, 1961-1987.



SOURCES: Department of Statistics, 1988a.

FIGURE 8: FAMILY INCOME



Notes

1. Figures calculated from Tables 2 and 5 of the census report.
2. Figures include families with dependent children only and families with dependent children and adult (independent) children. They do not include families with adult (independent) children only nor couples without children.
3. One-parent families: 11.1% not specified, 3.5% not available
Two-parent families: 14.3% not specified, 6.5% not available

SOURCE: 1986 NZ Census (Department of Statistics, 1988b).

APPENDIX 2: VISITOR DATA

TABLE 14 :PARK USERS BY LIFE CYCLE STAGE

Life Cycle Stage	National Park Users %
Single/under 40 years (n=78)	46
Married/under 40 years (n=37)	38
Pre-school children (n=87)	32
School-age children only (n=128)	36
Married/40 years and over (n=105)	26
Single/40 years and over (n=65)	20

Notes

1. Figures are percentages of the number of people within that life cycle stage who have visited a national park.
2. Sample sizes are small, which implies a large margin of error.

SOURCE: Colmar and Brunton, 1987.

TABLE 15: LEVEL OF NATIONAL PARK ATTENDANCE BY FREQUENCY OF VISITS IN THE LAST 2 YEARS, FOR MAORI AND GENERAL POPULATIONS

Frequency of Visit	Maori %	General %
Never (non-user)	36	48
Once	10	15
2-5	17	20
6-10	4	4
10+	5	1
Total Users	36	40
Don't knows	29	12
TOTAL	101	100

Notes

1. Never (non-users) includes those who said they had not visited a national park within the last 2 years.
2. Figures for Maori use from Lomax (1988), Christchurch sample = 101.
3. Figures for general population use from Booth (1986), Christchurch sample, n = 303.
4. Totals may not equal exactly 100 due to rounding.

SOURCE: Lomax, 1988 (special permission gained from author to overwrite 'no quoting' regulation imposed on the thesis).

APPENDIX 3 :RECREATION DATA

TABLE 17: INVOLVEMENT LEVEL IN SPECIFIC ACTIVITIES (TOP 25)

Type of Activity	% Respondents	Type of Activity	% Respondents
Reading	44	Music	20
Gardening	40	Fishing -saltwater	20
Listening to records	36	Rugby Union	20
Swimming	35	Walking	20
Cooking, baking	29	House maintenance	19
Visiting or entertaining friends	29	Driving	19
Sewing	28	Travelling	19
Knitting	28	Cards	19
Watching sport	27	Billiards, snooker, pool	18
Picnics, barbeques, hangis	26	Religion	18
Dining out	25	Visiting parks, gardens, zoos	18
Cinema, theatre	22	Tennis	14
		Camping	14

Notes

1. % of respondents participating in the activity in the previous year "more than just once or twice".

SOURCE: Tait, 1984

TABLE 18: FREQUENCY OF PARTICIPATION IN RECREATIONAL ACTIVITIES BY SEX.

Activity	Men				Women				Total			
	Daily	At least once a week	At least once a month	At least once a year	Daily	At least once a week	At least once a month	At least once a year	Daily	At least once a week	At least once a month	At least once a year
	Cumulative percentage											
Read a newspaper, magazine or book	85	97	98	99	81	96	99	99	83	97	98	99
Spent time on hobbies, arts and crafts	15	47	58	69	24	60	72	81	20	54	65	75
Had family or friends around to visit	8	65	91	98	14	75	93	99	11	70	92	99
Listened to music	64	82	88	92	67	85	90	93	66	83	89	93
Watched television	78	95	96	98	79	94	96	97	79	95	96	98
Done any gardening	13	52	69	82	11	47	68	82	12	49	68	82
Played cards, house, and other indoor games	4	23	41	65	2	20	36	60	3	21	39	63
Taken part in any kind of drama, singing or music	1	7	10	18	2	9	12	21	1	8	11	19
Gone out to a restaurant, club or pub	2	32	57	87	1	13	38	83	1	22	48	85
Visited friends or family	4	53	86	97	5	60	89	98	5	57	87	98
Gone to the cinema, theatre, concerts or exhibitions	1	6	27	74	1	3	21	72	1	4	24	73
Gone out to watch sports or athletics	1	19	39	68	1	17	30	54	1	18	35	61
Gone on a picnic, or for a drive	1	18	55	88	1	20	53	87	1	19	54	87
Taken part in any active outdoor sports, athletics, swimming, tramping, cycling	5	33	45	59	4	24	34	44	5	29	40	51
Taken part in any indoor sports, or any kind of dancing	2	18	27	43	1	16	23	37	2	17	25	40

Notes

1. Frequency of participation over the past year.
2. Categories are cumulative : once a week includes daily; once a month includes both once a week and daily; etc.
3. Sample of 3359 men and 3532 women.

SOURCE: Department of Statistics, 1984

**TABLE 19 : FREQUENCY OF PARTICIPATION IN RECREATIONAL ACTIVITIES
(CHRISTCHURCH SAMPLE)**

	Reading incl. paper (n=255)	T.V. music (n=254)	Gardening (n=245)	Visiting (n=252)	Hobbies (n=229)	Indoor games (n=225)	Restaurant, club, pub, (n=239)	Cinema, theatre, etc. (n=236)	Indoor sports, dancing (n=228)	Sports spectating (n=228)	Urban outdoor sports (n=228)	Rural outdoor sports (n=225)	Drive, picnic (n=246)
USERS													
Daily	90.6	86.3	11.3	18.1	13.9	-	1.8	9.8	3.8	0.9	29.0	6.6	7.9
1+ per week	] 100.0		58.3	83.6	59.3	19.1	23.9	28.3	15.4	15.4	] 29.0		7.9
1+ per month	] 100.0		80.9	98.3	79.7	36.4	57.5	49.1	31.8	31.8	33.7	21.7	49.1
Every 2-3 months	] 100.0		90.5	100.0	85.3	53.7	79.6	76.8	60.4	52.7	45.8	44.3	85.9
1-2 per year	] 100.0		97.5	100.0	91.8	78.2	100.0	99.1	79.2	78.2	55.1	78.3	100.0
Never	] 100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-
NON-USERS													
Daily	65.5	91.2	19.2	12.5	13.2	0.9	2.4	3.2	-	-	22.3	0.8	3.8
1+ per week	] 100.0		60.0	72.8	49.5	17.4	24.6	20.5	10.2	10.2	] 22.3		3.8
1+ per month	] 100.0		80.0	94.1	63.5	27.8	51.6	25.8	26.2	27.1	24.0	4.2	20.5
Every 2-3 months	] 100.0		85.5	100.0	69.4	40.0	72.2	54.0	35.2	38.1	28.1	10.9	54.6
1-2 per year	] 100.0		95.4	100.0	76.0	67.8	100.0	86.3	68.0	72.0	40.5	32.7	93.2
Never	] 100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Notes

1. Frequency of participation over the past year.
2. Categories are cumulative (1+ per week includes daily; 1+ per month includes both 1+ per week and daily etc) and amalgamated where necessary for Chi-Square testing.

SOURCE: Booth, 1986

TABLE 20: PARTICIPATION IN PHYSICAL ACTIVITIES

Participation in last 4 weeks	%
Gardening	42
Walking for recreation	28
Swimming	20
Playing	13
House renovation/boat building	13
Walking to/from work	13
Walking the dog	12
Arts/crafts/hobbies	12
Cycling	11
Jogging/running/harriers	10
Fitness exercises at home	9
Fishing - salt water	8
Snooker/pool/billiards/darts	7
Golf	6
Dancing (e.g. disco/party/rock 'n' roll)	6
Tennis	6
Cricket	
- outdoor	6
- indoor	5

Notes

1. Only activities with a participation of >5% of the sample are listed.
2. 11% had not participated in any physical activity in the previous 4 weeks.

SOURCE: Heylen Research Centre, 1987

TABLE 21: PARTICIPATION IN FAVOURITE AND THREE MOST FAVOURED ACTIVITIES BY ACTIVITY TYPES, 1974/75 AND 1979/80

Activity Group	Favourite Activity		3 Most Favoured Activities	
	NZRS 1974/75 %	NZFS 1979/80 %	NZRS 1974/75	NZFS 1979/80
Home science/maintenance	15	17	45	55
Collecting and Handcrafts	6	4	19	12
Educational/Philosophical/Religions	11	13	29	40
The Arts	7	7	21	16
Organisational (excl youth groups)	3	2	7	6
Youth Groups	2	-	6	1
Casual Activities	7	14	31	48
Outdoor Conveyance Related	8	8	21	17
Active Outdoor Pursuits	11	17	37	47
Sports	27	16	62	31
Animal Related Activities	3	2	9	3
	100	100	-	-

Notes

1. Data from 1975/75 NZ Recreation Survey (Robb & Howorth, 1977) and 1979/80 NZ Forest Service survey (Murphy, 1981).
2. Methodological differences in the two surveys should be noted:
 - NZRS sampled 4,011 individuals 10 years of age and over on a nationwide basis in summer and winter 1975.
 - NZFS 1979/80 sampled 2,260 individuals 15 years and over in 2 major urban areas (Auckland and Christchurch) and two provincial cities and their rural hinterlands (Rotorua and Nelson) in 1979/1980.
 - Respondents to the NZRS checked a list of over 200 activities, while respondents to the NZFS were not prompted.
3. "Outdoor conveyance related : canoes, motor boats, cycles, cars, motor cycles, hang gliders, cars driven for pleasure.
4. "Active outdoor pursuits" the broad range of outdoor activities from the physically challenging to picnicking and barbecuing.

SOURCE: Davison, 1986

TABLE 22: AUCKLAND AND CHRISTCHURCH PARTICIPATION IN RURAL PASSIVE, URBAN BASED AND RURAL ACTIVE RECREATION IN 1972

	Auckland %	Christchurch %
Rural Passive	95.25	97.8
Urban Based	77.65	80.3
Rural Active	79.12	78.8
All Activities	97.06	90.0
Combinations		
Urban Based/Rural Passive/ Rural Active	66.90	60.8
Urban Based/Rural Passive	8.82	18.0
Rural Passive only	7.65	11.0
Rural Passive/Rural Active	7.90	7.9
No activity	3.09	0.8
Urban Based only	1.03	1.5
Urban Based/Rural Active	0.44	0.0
Rural Active only	0.29	0.0

Notes

1. Auckland data from Regional Authority (1973).
2. Christchurch data from Neighbour (1973).
3. Rural passive activities "generally take place outside the urban area where the natural environment is an important attraction. Facilities may be provided, but in most cases they are not absolutely essential to the enjoyment of the pursuit. Passive pursuits require little expenditure of energy, time and money and involve few skills".

Urban based activities "by definition, take place in or on the periphery of the urban area. Facilities, equipment, buildings and fields are specifically prepared to enable physical participation in these forms of recreation in towns. Such activities are usually organised by clubs or a similar form of organisation".

Rural Active pursuits "involve the expenditure of money for equipment, are energetic as opposed to passive activities and their enjoyment generally involves the acquisition of skills".

SOURCE: Davison, 1986

TABLE 23: AUCKLAND, WELLINGTON AND CHRISTCHURCH PARTICIPATION IN OUTDOOR RECREATION ACTIVITIES

	Auckland 1972	Christchurch 1972/73	Christchurch 1980	Wellington 1973	Wellington 1982
Visiting the beach	84	77	51		
Driving for pleasure	77	83	48		
Picnics	72	88	47		
Swimming	66	52	25		
Organised sport (spectator)	51	59	22		
Walking	50	57	19		
Swimming (pool)	44	35	18		
Staying at beach	44	50	18		
Fishing (sea)	36	20	14		
Organised sport (participating)	31	33	12		
Horse & dog racing (spectator)	26	31	11		
Pleasure boating	22	27	11		
Tenting	16	9	10		
Power boating	15	12	9		
Sailing	14	5	8		
Cabins	13	6	7		
Caravans	11	9	6		
Nature studies	11	6	6		
Horseriding	10	3	4		
Tramping	10	9	3		
Car rallies	7	13	3		
Hunting	7	8	3		
Fishing (freshwater)	6	17	2		
Water skiing	6	5	2		
Skiing	6	7	2		
Underwater sports	6	2	2		
Surfing	5	5	2		
Canoeing	4	3	2		
Mountaineering	3	3			
Trips, picnics to beach					
Trips, picnics to parks/gardens					
Trips, picnics to rivers/bush					
Walking - coastal					
Walking - bush					
Walking - farmland					
Walking - urban					
Running/jogging					
Skin/scuba diving					
Swimming - river					
Swimming - sea					
Fishing - boat offshore					
Fishing - freshwater					
Fishing - shores/wharf					
Shellfish gathering					
Overnight tramping					
Camping - tent					
Camping - caravan/motorhome					
Driving for pleasure/sightseeing					
Cycling for pleasure					
Motorbiking for pleasure					
Off road vehicles (incl. bikes)					
Hunting					
Horseriding					
Hang gliding					
Rock climbing					
Yachting - centreboard					
Yachting - trailer sailers					
Yachting - keelers					
Windsurfing					
Surfing/wave riding					
Canoeing - flat water					
Canoeing - white water					
Rowing					
Rafting					
Power boating - cruising					
Power boating - racing					
Power boating - water skiing					

Notes

Sample size and question are given to illustrate the problems in anything but a broad comparison of survey results.

1 Auckland Regional Authority (1973): Outdoor Recreation in Auckland.

Sample: At least one person over 16 years in each household sample size of 500 households returning 700 questionnaires (53% person interviewed, 46.3% self-administered) giving an approximate 1:800 sample fraction (total population 604,000 (1971 census). (See Neighbour 1973 below).

Question:

2 Neighbour (1973): Outdoor Recreation in Christchurch.

Sample: At least one person over 16 years in each household / 800 responses in 452 households by personal interview, giving an estimated 1:225 sample fraction for population over 16 years in the Christchurch region.

Question: "How many times have you taken part in the following recreational activities over the past 12 months?" (List supplied).

3 Kaverman and Leathers, (unpublished data).

Sample: 400 households, 362 successfully contacted. (Note one person to answer for all activities generated by all household members).

Question: "What were the activities associated with your/their trip? (ie. trip outside the city) RECORDED UP TO 3.

4 Henderson and Stagpoole (1974): Regional Recreation and Conservation Study (Part 1).

Sample: Up to three persons over 12 years in randomly selected households / 1505 questionnaires from 730 households or 52% of households contacted, yielding a sample fraction of 1:600 for an estimated population over 12 years of 245,000.

Question: "Circle the number(s) of any activity(ies) you participate in".

5 TRC and Lincoln (1968): Wellington Regional Recreation Study 1968

Sample: Postal survey, response rate of 31%, 555 usable responses. Individual respondent, randomly selected from household.

Question: "Put a circle around the number of every activity you participated in over the last 12 months in the Wellington region".

SOURCE: Adapted and updated from Davison, 1986.

TABLE 24: DRIVING FOR PLEASURE DESTINATIONS: AUCKLAND AND CHRISTCHURCH 1972

Destination	% Mentions	
	Auckland	Christchurch
Hill country	5	18
Rural countryside	15	21
Coastal	76	32
River or lake	4	25

Notes

- 1 Auckland data from Auckland Regional Authority (1983)
- 2 Christchurch data from Neighbour (1973)

SOURCE: Davison, 1986

TABLE 25: LOCATION AND NUMBER OF VISITS OUT OF CITY 1979/80

	New Zealand	Auckland	Rotorua	Nelson	Christchurch
Beaches and Ocean					
% visited	79	80	83	89	75
Average visits per year	14	15	9	13	13
Friends and relatives in other centres					
% visited	67	65	85	79	64
Average visits per year	7	7	9	7	7
Lakes and Rivers					
% visited	50	50	76	77	65
Average visits per year	7	6	11	11	7
Farmland					
% visited	46	45	49	46	46
Average visits per year	8	8	10	13	8
Forests					
% visited	38	36	49	53	37
Average visits per year	5	5	8	7	5
Mountains					
% visited	26	22	19	34	38
Average visits per year	6	6	4	5	5

Notes

1. Data from Murphy (1981)

SOURCE: Davison, 1986

TABLE 26: RURAL RECREATION ACITIVITIES OF CHRISTCHURCH RESIDENTS BY DESTINATION ZONE 1979/80

Number of events	0-30 km		30-60 km		60-190 km		TOTAL No
	No	%	No	%	No	%	
Rural Passive	457	39	386	33	332	28	1,175
Rural active/land	29	14	48	23	130	63	207
Rural active/water	126	49	77	30	53	21	256
Total	612		511		515		1,638

Notes

1. Data derived from Kaverman & Leathers (unpublished data)

SOURCE: Davison, 1986

TABLE 27: SPARE TIME BY SEX AND LIFE CYCLE STAGE : (a) AVAILABILITY OF SPARE TIME,
(b) DISSATISFACTION WITH AMOUNT.

	Not married aged under 35	Couple						Total
		No children	Age of youngest child		Self parent	Total	Not married aged 35+	
			Under 15	15+				
			Children					
		Men		Women				
<i>Number of respondents</i> "	893	795	1065	329	1394	42	212	3359
(a) <i>Percentage with 4 hours or less spare time per day</i> "	24	30	49	43	48	†	30	36
(b) <i>Percentage feeling they do not have enough spare time</i> "	28	27	42	35	41	†	19	32
<i>Number of respondents</i> "	582	767	1194	317	1511	185	405	3532
(a) <i>Percentage with 4 hours or less spare time per day</i> "	28	41	70	60	68	54	30	50
(b) <i>Percentage feeling they do not have enough spare time</i> "	31	25	42	35	40	33	18	32

Notes

- 1 "Total" includes a small residual group.
- 2 Spare time is defined as the time remaining free after time has been allocated to necessary time, contracted time and committed time.

SOURCE: Department of Statistics, 1984

TABLE 28: FREQUENCY OF INVOLVEMENT IN FAVOURITE ACTIVITIES

Favourite activity	More than weekly	Weekly	Less than weekly
Home based	71	20	17
Cultural			
Hobbies	51	28	25
Education-related	87	6	7
Religion	60	32	7
Arts-related	56	20	29
Interest groups			
Community service	40	25	31
Professional group	33	37	28
Sports			
Team	54	39	13
Individual and small group	51	38	18
Active outdoor	42	18	48
Other Recreation			
Conveyance-related	31	24	53
Casual	50	30	3

Notes

- 1 % of respondents listing activity as one of their 'favourite' activities.
- 2 Respondents may have listed more than one of the favourite activities in a particular activity-area, so % may be >100%.

SOURCE: Tait, 1984

TABLE 29: INVOLVEMENT LEVEL IN ACTIVITY TYPES

Activity Type	Men %	Women %
Home-based	52	87
Cultural pursuits	81	89
Interest groups	36	36
Sporting activities	92	80
Other recreational activities	85	82

SOURCE: Middleton and Tait, 1981

TABLE 30: INVOLVEMENT LEVEL BY SEX

MEN Types of Activity	%	WOMEN Types of Activity	%
Gardening	37	Sewing	55
Reading	35	Knitting	53
Swimming	34	Reading	53
Rugby union	33	Cooking, baking	49
Listening to records	33	Gardening	44
Watching sport	33	Listening to records	39
Billiards, snooker, pool	30	Swimming	36
Fishing -saltwater	30	Visiting, entertaining friends	36
House maintenance	27	Picnics, barbecues, hangis	30
Vehicle maintenance	24	Dining out	28
Visiting, entertaining friends	22	Walking	26
Picnics, barbecues, hangis	22	Cinema, theatre	25
Dining out	21	Music	24
Cinema, theatre	19	Religion	22
Driving	19	Travelling	21
Woodwork	19	Visiting parks, gardens, zoos	21
Cards	18	Watching sport	21
Cricket	18	Cards	20
Soccer	18	Crochet	19
Travelling	17	Driving	19
Music	17		
Boating	16		

SOURCE: Tait, 1984

TABLE 31: LENGTH OF TRIP

Time Spent Away From Home	% (n=58)
Day	12
Weekend	17
3 days to 1 week	29
1-2 weeks	18
2 weeks or more	9
Varies	15
TOTAL	100

Notes

1. Small sample size

SOURCE : Lomax, 1988 (special permission gained from author to overwrite 'no quoting' regulation imposed on the thesis).

TABLE 32: FREQUENCY OF TRIPS

Frequency over past 2 years	% (n=58)
Once	12
2-5 times	48
6-10 times	21
10+ times	19
TOTAL	100

Notes

1. Small sample size

SOURCE : Lomax, 1988 (special permission gained from author to overwrite 'no quoting' regulation imposed on the thesis).

TABLE 33: OF TIME EACH WEEK SPENT ON RECREATIONAL, SPORTING OR SOCIAL ACTIVITIES

TIME	%
<5 hours	48
5-10 hours	19
10-15 hours	11
15-20 hours	9
20+ hours	4
Don't know	1
Not specified	7

SOURCE: Buchanan, 1977

TABLE 34: FAVOURITE RECREATIONAL/SOCIAL/SPORTING ACTIVITIES

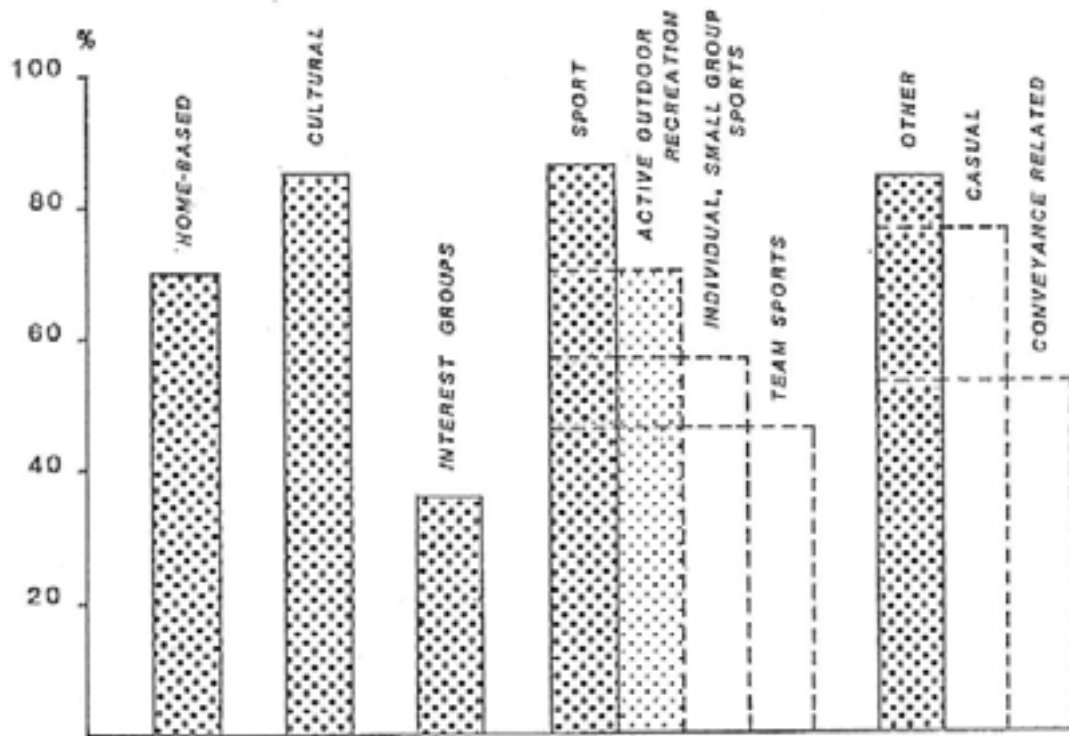
ACTIVITY		
TOP 10		TOP 10
Recreational & Sporting		Social
Family outings to various events		Dinner parties
Beaches		Dining out
Sports (8 types)		Having friends and relatives to visit & returning trips
Handcrafts		Balls
Holiday camps		General parties
Spectator sports		Social drinking
Paraplegic games		Discos
Listening to good music		Dances
Movies		Balls
Swimming		Wine & cheese

Notes

1. Percentage of respondents participating was not available from the report.
2. The appearance of **Balls** twice was an error in the original study.

SOURCE: Buchanan, 1977

FIGURE 9: RECREATION PARTICIPATION BY ACTIVITY TYPE 1974/75

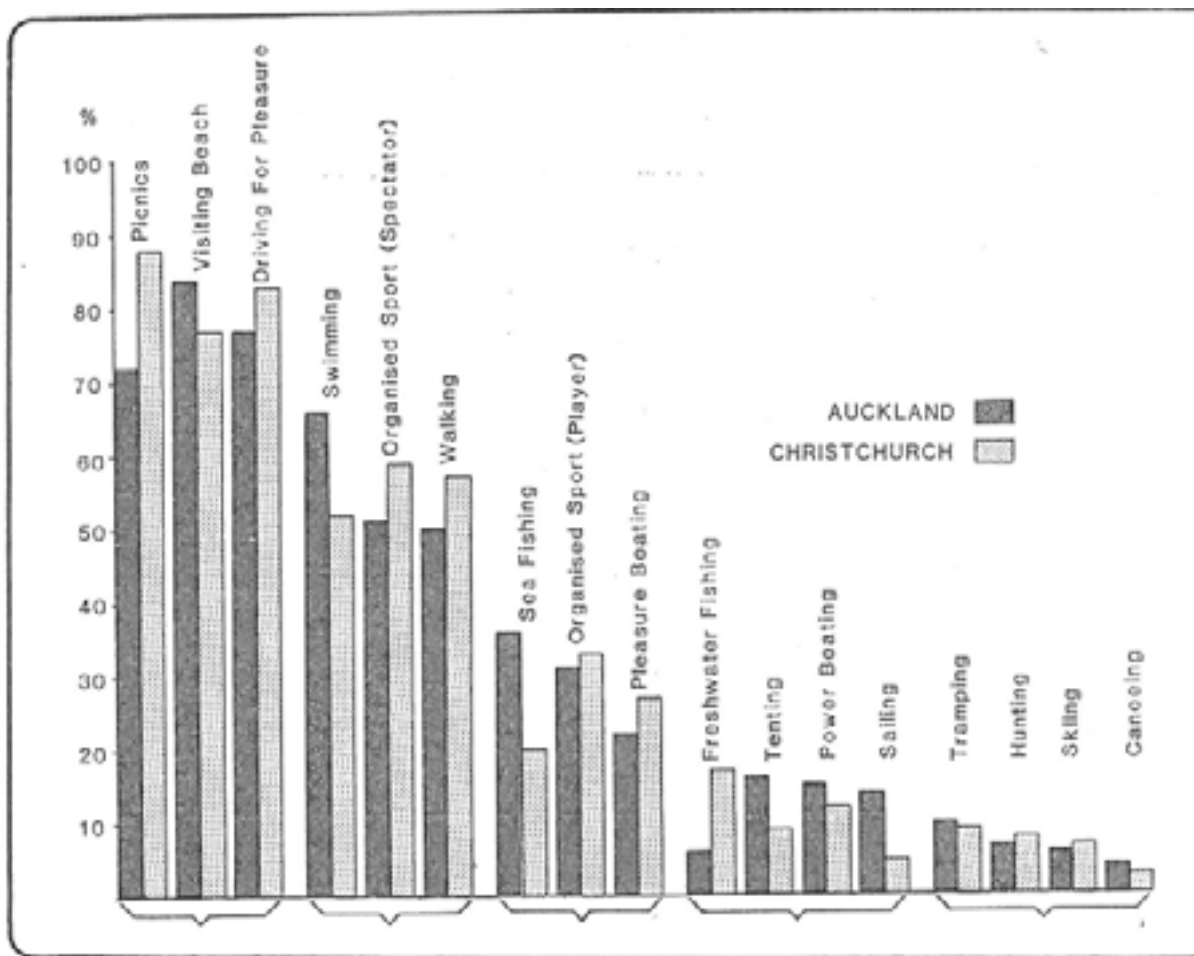


Notes

1. Percentages calculated by number of respondents who had participated in at least one activity within the activity type grouping.
2. Data from 1974/75 NZ Recreation Survey (Tait 1984).

SOURCE: Davison, 1986

FIGURE 10: PARTICIPATION IN OUTDOOR RECREATION

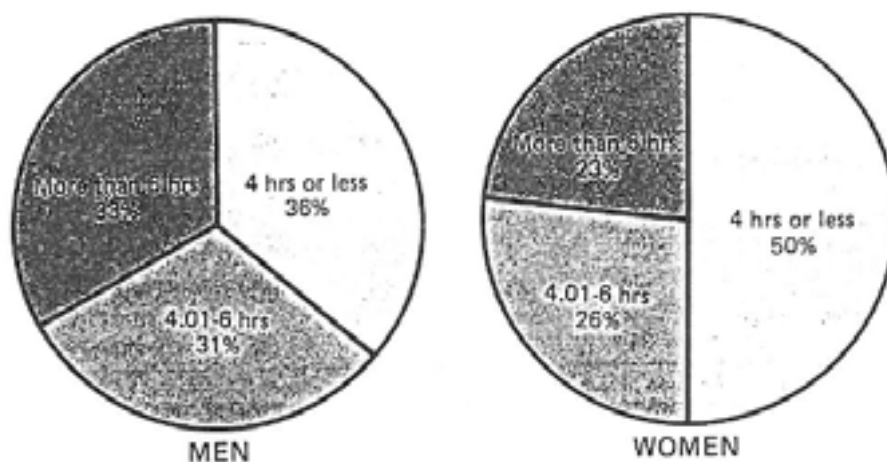


Notes

1. Auckland data from Auckland Regional Authority (1973).
2. Christchurch data from Neighbour (1973).
3. Participation in activity over the past year.

SOURCE: NZCRS, 1985

FIGURE 11: AMOUNT OF SPARE TIME PER DAY BY SEX

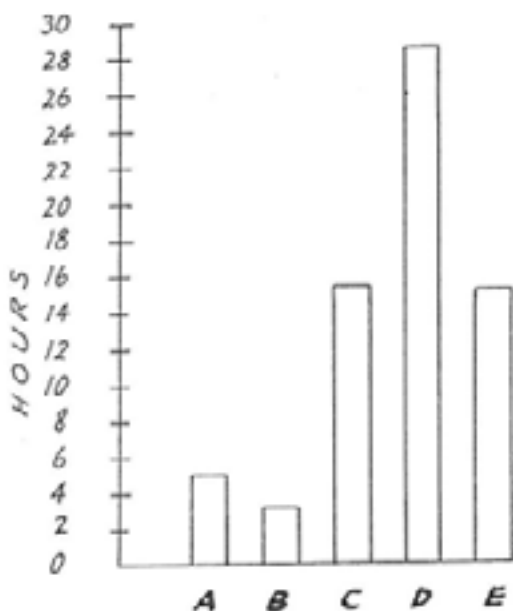


Notes

1. Respondents who answered 'Don't know' were included when percentages were calculated. This, and the effect of rounding, may result in percentages not adding up to 100.

SOURCE: Department of Statistics, 1984.

FIGURE 12: AMOUNT OF TIME SPENT ON LEISURE ACTIVITIES PER WEEK



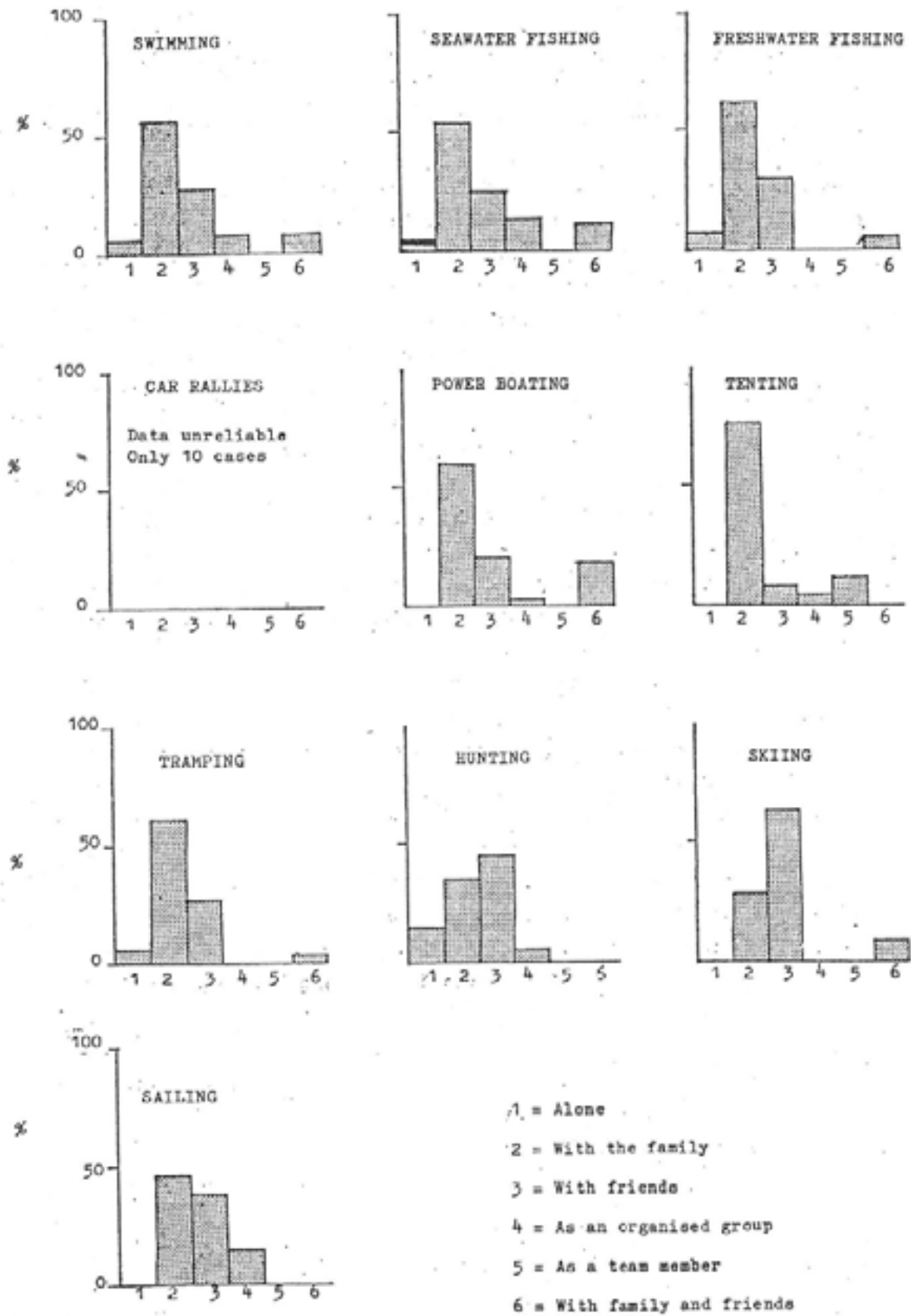
<i>A</i> = SPORT ORGANISED	4.7 hrs.
<i>B</i> = SPORT NOT ORGANISED	3.3 hrs.
<i>C</i> = ACTIVITIES AWAY FROM HOME	15.4 hrs.
<i>D</i> = ACTIVITIES AT HOME	28.3 hrs.
<i>E</i> = TV-WATCHING ONLY	15 hrs.

Notes

Data from a sample of South Australian women.

SOURCE: Maurer-Inquart and Burrows, 1985.

FIGURE 13: RELATIONSHIP BETWEEN GROUP COMPOSITION AND SELECTED RURAL ACTIVE PURSUITS



SOURCE: Neighbour, 1973

APPENDIX 4: BARRIERS TO RECREATION DATA

TABLE 35: REASON FOR NON-PARTICIPATION IN OUTDOOR RECREATION

"I do not participate in any of these activities because (please state the reason eg. not interested, ill health)".

Reason	% 1988	% 1974
Age	67	56
Lack of interest	11	19
Other reason	21	25
	99	100

Notes

1. The age barrier is further explained as a lack of self confidence and financial constraints operating on the elderly.
2. 1974 data from Henderson and Stagpoole (1974)
3. Wellington sample.
4. Focus on "activities which make use of natural places in the outdoors".

SOURCE: Tourism Resources Consultants and Lincoln, 1988

TABLE 36: REASONS FOR NOT CARRYING OUT RECREATIONAL AMBITIONS

Reason	%
Lack of time	46
Lack of finance	22
Lack of facilities	13
Family reasons	4
Health reasons	3
Age	2
Climate	2
Job reasons	1
Other or no reason	7

Notes

1. Dunedin sample
2. Focus on recreation generally

SOURCE: Pannett, 1977

TABLE 37: REASONS WHY NOT CURRENTLY ACTIVE IN DESIRED ACTIVITIES

"...for each activity you have circled, please select from the following list up to 3 reasons which best explain what now stops you doing it...put... the most important one first".

Reasons	n	%
Not enough money	1306	15.6
Too many other commitments	1296	15.5
Lack of equipment	1067	12.8
Family/home responsibilities	859	10.3
Lack of knowledge/information	636	7.6
Lack of skills/experience	592	7.1
Wellington's weather	497	5.9
Lack of sites	301	3.6
Increasing age	300	3.6
Sites too far away	295	3.5
No private transport	269	3.2
Lack of facilities	220	2.6
Lack of introductory courses	178	2.1
Ill health	152	1.8
Lack of public transport	66	0.8
Other	343	3.9

Notes

1. Wellington sample
2. Focus on 'activities which make use of natural places in the outdoors'.
3. Data presented in aggregate (combined for all activities).

SOURCE: Tourism Resources Consultants and Lincoln, 1988

TABLE 38: REASON FOR NOT TAKING UP DESIRED LEISURE ACTIVITY, BY SEX AND AGE

	Men						Women						Total
	Age group						Age group						
	15-24	25-34	35-44	45-54	55+	All men	15-24	25-34	35-44	45-54	55+	All women	
Number of respondents	850	719	538	464	788	3359	847	740	553	455	943	3532	6891
Respondents with desired activity they had not taken up	61	56	53	45	31	49	67	64	54	59	36	55	52
percentage	619	400	287	211	243	1667	667	473	298	269	340	1943	3603
Reason for not taking up activity	Percentage												
Don't know how to start or who to contact	6	†	†	†	†	3	8	4	†	†	†	5	4
Can't afford it	33	21	17	13	9	21	14	6	6	†	†	†	8
Too busy doing other leisure	13	16	11	23	25	16	12	8	11	16	18	12	14
Work reasons	12	22	26	21	14	18	12	14	17	18	10	14	18
Family commitments	†	11	16	9	7	8	12	37	29	16	11	21	15
Access difficult, no car, too far	3	†	†	†	†	1	5	4	5	6	9	6	4
Activities at inconvenient times or facilities poor or non-existent	8	8	9	6	7	8	10	10	9	13	9	10	9
Health reasons, too lazy, other reasons	23	19	20	26	38	24	27	17	22	24	35	25	24
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

SOURCE: Department of Statistics, 1984.

TABLE 39: REASONS FOR NOT BEING MORE ACTIVE IN PHYSICAL ACTIVITY OR EXERCISE

"What things do you feel have prevented you from being more active?"

PREVENTED MORE ACTIVITY...	TOTAL SAMPLE %
No time/work time	29
Laziness/lack of motivation	19
Health	18
Home and family commitments	16
Age	6
Time on other activities	6
Education/study	6
Don't like sport	4
Tired/lack of energy	4
Overweight-self conscious	1
Financial reasons	3
Travel difficulties	2
Pregnancy	2
Cold weather	1
Other	11
No particular reasons	5
Have enough activity at present	7
TOTAL	140

Notes

1. A national sample.
2. Focus on physical recreational activity.
3. Open-ended question; responses categorised during analysis.
4. Respondents could mention more than one reason, so total is greater than 100%.

SOURCE: Heylen Research Centre, 1987

TABLE 40: REASONS FOR NOT GOING TO ACTIVITIES (AS % OF THOSE WHO WOULD LIKE TO HAVE PARTICIPATED IN THEM).

"Can you suggest why you are no longer involved in (ACTIVITY)? Was it for any of these reasons (SHOW CARD) or for some other reason?"

	1 Facilities Lacking %	2 Too Far %	3 Transport %	4 Time/Money %	5 Too Young %	6 Too Old %	7 Miscellaneous %
Home-based	31	-	1	39	28	25	3
Hobbies	33	2	2	46	34	27	2
Education	24	5	3	41	35	21	4
Arts	22	6	5	44	32	27	5
Team sports	27	4	4	38	25	21	10
Individual and small group sports	34	3	4	41	28	27	4
Active outdoor recreation	38	14	8	39	28	23	5
Conveyance-related	29	2	7	63	24	22	4
Casual	19	5	5	47	23	21	3

Notes

1. No facilities/ no club/hard to join a club/no equipment available/no way of learning how/no teacher/no classes.
2. Too far to travel.
3. Lack of transport.
4. Lack of money/family ties/lack of time/ on shift work.
5. Too young/haven't got around to it/wouldn't be any good at it/not built for it/no talent/lack of know-how/not strong enough/not suitable for a girl.
6. If health/too old.
7. Too afraid to try/family/friends not interested/not sure how to go about it/don't know anyone with similar interests.
8. A national sample.
9. 1974/75 data.
10. Broad definition of recreation.
11. Respondents could mention more than one reason, so totals may be greater than 100%.

SOURCE : Tait, 1973

TABLE 41: BARRIERS TO PARTICIPATION

Activity	Barriers (% of mentions)							
	1	2	3	4	5	6	7	8
Organised sport		45	2	21	16	3	3	10
Golf		60	11	7	7	.6	1.8	5
Skiing		28	27	11	16	3	6	9
Swimming		58	-	10	11	3.3	-	17
Tramping		67	5	12	4	2	-	10
Fishing		75	-	2	6	6	2	6
Hunting		72	4	8	4	2	4	6
Diving	30	60	10	-	-	-	-	-
Camping		41	10	10	21	-	8	10
Waterskiing		52	1	10	11	10	-	16

1. No reason
2. Time
3. Finance
4. Young children
5. Ill health, old age
6. No transport
7. Lack of equipment
8. Other

SOURCE: Neighbour, 1973

TABLE 42: SOURCE OF INFORMATION ABOUT KAIMANAWA/KAWEKA FOREST PARKS

Source	Hunters %	Trampers %	Sightseers %
Word of mouth	57.6	46.0	36.7
Family	16.9	17.8	23.7
NZFS publication	8.4	6.2	7.9
Other publication	3.1	11.5	9.0
Exploring	6.7	4.5	14.1
Club	1.4	9.4	1.7
Live in the area	1.1	1.4	2.3
Work for NZFS	0.8	-	-
Other	3.9	2.1	4.5

SOURCE: Adapted from Groome *et al.* 1983b

TABLE 43: RECREATIONAL PARTICIPATION BY SIZE OF FAMILY

		Age group 25-49 Involvement level			
		Number of children under 10 in household			
		0	1	2	3
Arts	Men %	51	48	32	31
	Women %	76	74	49	60
Team sports	Men %	40	53	57	55
	Women %	61	61	65	53
Individual Sports	Men %	66	65	71	81
	Women %	69	55	38	59
Active Outdoor	Men %	72	73	79	83
	Women %	86	80	80	73

SOURCE: Middleton and Tait, 1981.

TABLE 44: REASON FOR NOT VISITING NATIONAL PARKS -MAORI AND GENERAL POPULATIONS

Reason	General %	Maori %
Wanted to but was unable	77	56
Did not want to	16	23
Knew nothing about them	7	12
Didn't have to visit to benefit	NA	8

Notes

1. Both surveys used closed question formats. Booth did not include the bottom category.

SOURCE: Booth, 1986; Lomax, 1988 (special permission gained from author to overwrite 'no quoting' regulation imposed on the thesis).

TABLE 45: REASONS INHIBITING RECREATION

Reason	%
Limit of capability	19
Physically not strong	16
Excessive pain restricts me from participation	12
Would still rather be independent and not need helpers	10
Cannot get in and out of cars	10
Lack of movement	10
Speed problem, lack of coordination	10
Need people willing to help	10
Forced me to take a different outlook	9
Lack of understanding between myself and others inhibits me	9
Had to stop the activities I enjoyed most of all	7
Physically unable to play the sport I used to	7
Not able to do more active things	7
Sporting, recreational, and social activities much different now - cannot adjust	7
Unable to do most things myself	6
Cannot get to the venues where my favourite activities are	6
Cannot just decide to go out when I wish	4
Frequency of participation lower	3
New problems to face, access, toileting, etc.	3
Not specified	23

Notes

1. 90 people answered the question, of which 32 gave more than one reason.

SOURCE: Buchanan, 1977.

TABLE 46: REASON FOR NON-PARTICIPATION IN CHOSEN ACTIVITY

Reason	%
No opportunity	60
No information	44
Transport	44
Lack of confidence	41
Cost	40
Hard to accept outside help	29
Access	26
Too dependent on others	23
Lack of contacts	19
Lack physical strength to participate	12
No-one to help me	12
No suitable facilities	8
Location of facility poor	8
Not mobile enough	6
Time	4
Bad speech impairment	3
Not specified	6

Notes

1. 73 people answered the question of which 42 gave more than one reason.

SOURCE: Buchanan, 1977

TABLE 47: FACTORS INFLUENCING ACTIVITY CHOICE FOR THE DISABLED

Major Problems/Considerations	%
Transport	45
Information on range of activities available	38
Availability of activity	33
Limit of capability	33
Access	31
Not specified	50

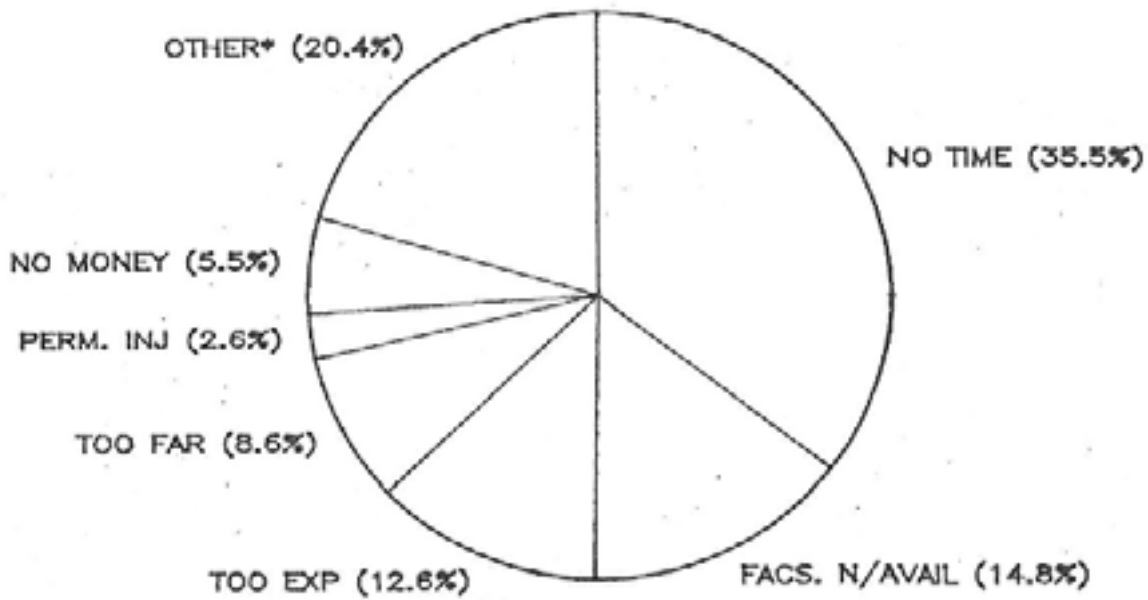
Notes

1. 161 people answered the question of which 69 gave more than one response.

SOURCE: Buchanan, 1977

FIGURE 14: REASONS PREVENTING PARTICIPATION IN ACTIVITIES

"What is the main reason that prevents you from participating in an activity which you would like to do?"



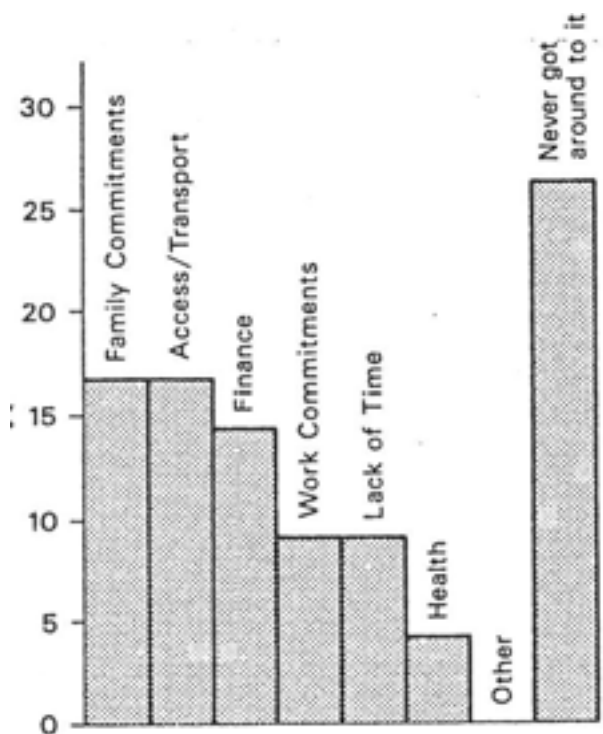
Notes

1. Sample of South Australian women.
2. Focus on "recreational/social activities away from home".

SOURCE: Burrows, 1985

FIGURE 15: REASONS FOR NOT VISITING A NATIONAL PARK

"Please tick the box below that best explains why you were unable to visit [a national park in the last 2 years]".

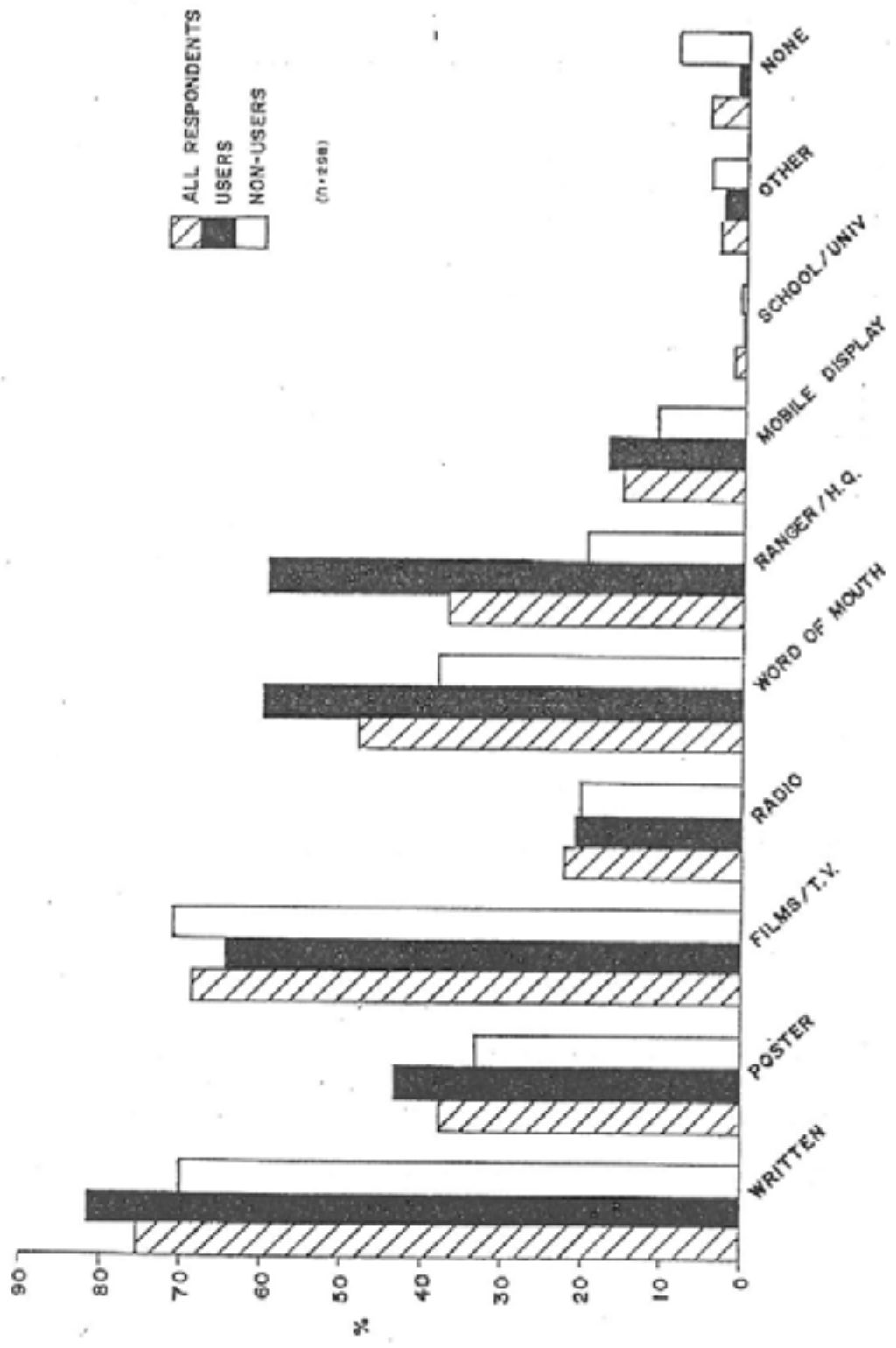


Notes

1. From a sample of Christchurch residents who had not visited a national park in the last 2 years.
2. Focus on recreation within national parks.

SOURCE: Booth, 1987

FIGURE 16: SOURCES OF INFORMATION ABOUT NATIONAL PARKS



SOURCE: Booth, 1986.

APPENDIX 5: CONCLUSIONS AND RECOMMENDATIONS

FIGURE 17: NON-VISITOR MODEL

