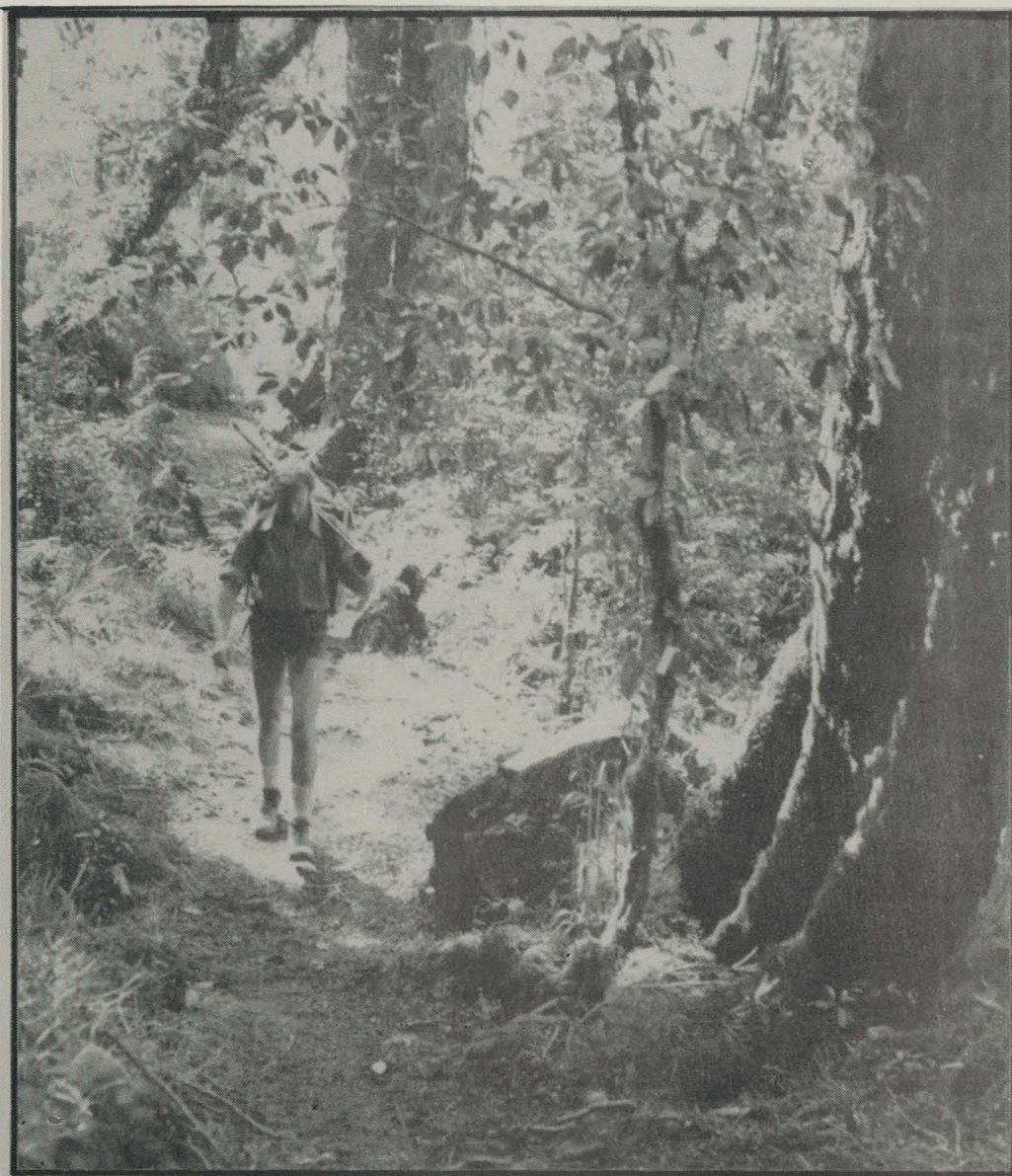




The Recreational Hunter

Central North Island Study

K.H. Groome,
D.G. Simmons, L.D. Clark. Bulletin No.38



Department of Horticulture
Landscape
and Parks

Lincoln College, University College of Agriculture

THE RECREATIONAL HUNTER: CENTRAL NORTH ISLAND STUDY

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Department of Horticulture
Landscape
and Parks

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1.0 INTRODUCTION

This research has been undertaken under contract to the New Zealand Forest Service.

In 1981 Simmons and Devlin completed the first study of recreational hunting which was based on the Canterbury region with emphasis on the use of Lake Sumner Forest Park. The Central North Island study is a replication of that Canterbury study, with additional attention given to management questions particular to Kaimanawa and Kaweka Forest Parks.

Both of these studies have arisen from issues concerning the management and future directions of Recreational Hunting Areas (RHA's).

1.1 BACKGROUND TO THE ISSUE

Introduced wild animals (e.g. deer, chamois, thar, pigs) have long been the cause of a major debate in New Zealand between the values associated with the protection of indigenous environments and those recognizing recreational hunting as a worthwhile pastime.

Deer were first successfully introduced into New Zealand in 1861 (Logan Harris, 1967, p.8). Acclimatisation Societies were soon formed in many parts of New Zealand and with support from the Government Tourist Department, considerable numbers of deer and smaller numbers of chamois and thar were released (Donne 1924, p.206, 304). Under protection, with an ample food supply and no natural predators, these animals spread quickly and multiplied. Competition with domestic animals, damage to pine plantations and later, accelerated erosion, became problems and introduced animals were clearly blamed at the time.

The Otago Acclimatisation Society started culling as early as 1916 and from 1924 to 1930 all protection was progressively withdrawn from the numerous deer herds. The 1930's were the era of the Government foot hunter, with the eradication and control programme under the jurisdiction of the Department of Internal Affairs. In 1956 the N.Z. Forest Service took control of the deer programme under the Noxious Animals Act which declared all introduced wild animals as 'noxious' and listed many species for eradication.¹

¹ The Noxious Animals Act (1956) defined as noxious those animals specified in the sixth schedule of the Wildlife Act (1953).

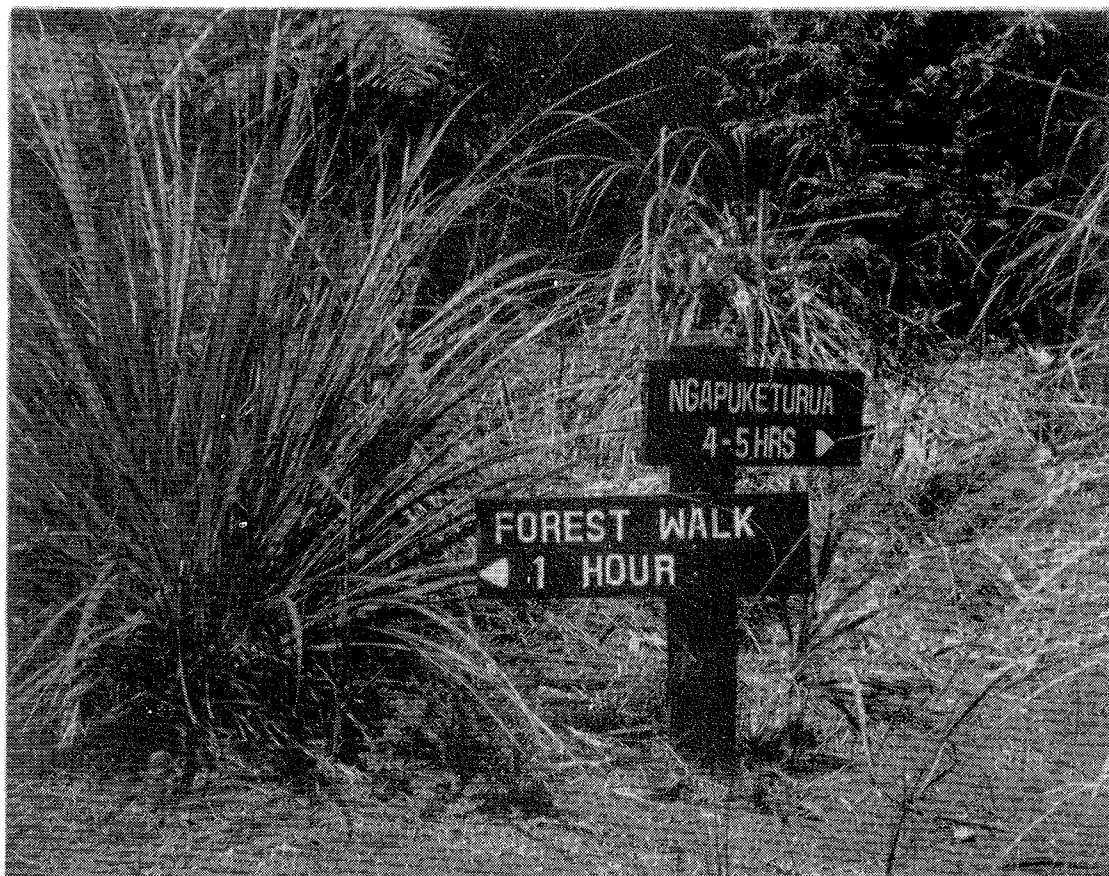
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The contributions of many people have led to the completion of this study. In particular, the authors are indebted to:

- Staff of the New Zealand Forest Service, in particular, David Wilson (O/C Kaimanawa F.P.), Wally Drayton (O/C Kaweka F.P.), and Andy Bignell (Head Office).
- The students, Forest Service trainees and wagedworkers who persevered in all kinds of weather to monitor the survey points or assisted with the sampling and mailing of questionnaires.
- Leonie Daniels and Stephanie Wilson who helped 'get the report together'.
- Lincoln College staff, particularly Dianne Lenz, for her contribution to graphics and Judy Boyd for her patience in typing the report.
- Finally, the many respondents who completed survey forms.

The cover photograph and photograph heading the appendices section are by Noala Borst (N.Z.F.S., Rotorua). The remainder were taken by Kathryn and David.

Contents



	<u>Page</u>
1. INTRODUCTION	1
1.0 Introduction	3
1.1 Background to the Issue	4
1.2 Study Aims	6
2. METHODOLOGY	9
2.0 Introduction	11
2.1 Forest Park User	12
2.2 Permit Hunter Sample	17
2.3 Rifle Owner's Sample	19
3. FOREST PARK USER	21
3.0 Introduction	23
3.1 Visitation	25
3.1.1 Origin	25
3.1.2 Group Composition	26
3.1.3 Entry Points	27
3.1.4 Destination	28
3.1.5 Time Spent In Park	30
3.1.6 Transport	31
3.1.7 Information	31
3.1.8 Costs	32
3.1.9 Summary and Discussion	33
3.2 Demographic Characteristics	34
3.2.1 Age	34
3.2.2 Sex Ratio	35
3.2.3 Marital Status	36
3.2.4 Home Situation	37
3.2.5 Education	38
3.2.6 Occupation	39
3.2.7 Summary and Discussion	40

3.3	Experience	41
3.3.1	Main Activity	41
3.3.2	Other Activities	44
3.3.3	Agents of Introduction and Influence	44
3.3.4	Years of Experience	45
3.3.5	Number of Visits	46
3.3.6	Use of Other Backcountry Areas	47
3.3.7	Membership of Organisations	48
3.3.8	Summary and Discussion	50
3.4	Motivations	52
3.4.1	Motivations	52
3.4.2	Satisfaction	54
3.4.3	Summary and Discussion	56
3.5	Facilities and Services	57
3.5.1	Facilities and Services	57
3.5.2	Rubbish Disposal	58
3.5.3	Equipment	59
3.5.4	Summary and Discussion	60
3.6	Attitudes and Beliefs About Hunting	62
3.6.1	Introduction	62
3.6.2	Hunting Experience	62
3.6.3	Animal Control	64
3.6.4	Attitudes to Hunting, Animal Control and Other Park Use	67
3.6.5	Summary and Discussion	74
3.7	Additional Comments	75
4.	THE HUNTER	77
4.0	Introduction	79
4.0.1	Participation	79
4.0.2	Methodology	81

4.1	Demographic Characteristics	83
4.1.1	Age	83
4.1.2	Sex Ratio	84
4.1.3	Marital Status	84
4.1.4	Home Situation	85
4.1.5	Education	86
4.1.6	Occupation	87
4.1.7	Origin	88
4.1.8	Summary and Discussion	90
4.2	Current Hunting Patterns	91
4.2.1	Last Hunting Trip	91
4.2.2	Hunting Trip Duration	93
4.2.3	Hunting Group Structure	94
4.2.4	Choice of Hunting Area	96
4.2.5	Animal Species Hunted	99
4.2.6	Hunting Success	99
4.2.7	Summary and Discussion	104
4.3	Experience	105
4.3.1	Introduction	105
4.3.2	Introduction to Hunting	105
4.3.3	Years of Experience in Hunting	109
4.3.4	Continuity of Hunting Experience	111
4.3.5	Membership of Organisations	112
4.3.6	Summary and Discussion	115
4.4	Motivations	116
4.4.1	Motivations	116
4.4.2	Other Backcountry Activities	118
4.4.3	Importance of the Hunt	119
4.4.4	Reasons for Hunting	121
4.4.5	Value of Trophies	122
4.4.6	Summary and Discussion	123

4.5	Facilities and Services	124
4.5.1	Introduction	124
4.5.2	Access	126
4.5.3	Tracks	127
4.5.4	Huts	128
4.5.5	Amenities	129
4.5.6	Services	130
4.5.7	Equipment	131
4.5.8	Summary and Discussion	133
4.6	Attitudes and Beliefs	134
4.6.1	Wild Animal Management Options	134
4.6.2	Hunter Administration	137
4.6.3	Attitudes about Permit Administration	139
4.6.4	Attitudes about Recreational Hunting	140
4.6.5	Other Attitudes and Beliefs	142
4.6.6	Summary and Discussion	144
4.7	Active Rifle Owner Sample	145
4.7.1	Introduction	145
4.7.2	Demographic Characteristics	146
4.7.3	Current Hunting Patterns	147
5.	NON-ACTIVE RIFLE OWNER	149
5.0	Introduction	151
5.1	Ex-hunters	152
5.1.1	Introduction	152
5.1.2	Reasons for Retirement from Hunting	153
5.1.3	Hunting Continuity Since Last Successful Kill	155
5.1.4	Last Animal Hunted	156
5.2	Potential Hunters	157
5.3	No Interest in Hunting	158

6. MANAGEMENT IMPLICATIONS	159
6.0 Summary	161
6.1 Demographic Characteristics	163
6.2 Current Hunting Patterns	165
6.2.1 Group Structure	165
6.2.2 Hunting Areas and Times	165
6.2.3 Animals Hunted	166
6.2.4 Hunting Success	167
6.2.5 Other Activities	168
6.3 Experience	170
6.3.1 Introduction to Hunting and Years of Experience	170
6.3.2 Continuity of Hunting Experience	171
6.3.3 Membership of Clubs	172
6.4 Motivations	173
6.4.1 Motivations	173
6.4.2 Reasons for Hunting	174
6.5 Facilities and Services	175
6.5.1 Facilities	175
6.5.2 Equipment Carried	176
6.6 Attitudes and Beliefs	177
6.6.1 Wild Animal Management Options	177
6.6.2 Hunting Administration	177
6.6.3 Attitudes to Recreational Hunting	178
REFERENCES	181
APPENDICES	185
1. Methodological Framework	187
2. User Questionnaire for Individuals	189
3. User Questionnaire for Each Group	197
4. Permit Hunter Questionnaire	201
5. Rifle Owner Questionnaire	213
6. Comparison Tables (Active Rifle Owner and Permit Hunter Sample)	221

LIST OF TABLES

<u>Table</u>	<u>Title</u>	<u>Page</u>
	CHAPTER 2 - METHODOLOGY	
2.1	Response Rates for User Sample	13
2.2	Response Rates for Hunter Sample	17
2.3	Response Rates for Rifle Owner Sample	19
	CHAPTER 3 - FOREST PARK USER	
3.1	Residence of Survey Respondents	25
3.2	Size of Groups	26
3.3	Cost of Trip	32
3.4	Comparison of Ages	34
3.5	Sex Ratios	35
3.6	Marital Status	36
3.7	Highest Attained Educational Qualification	38
3.8	Activity in the Parks	41
3.9	Main Activity in the Parks for January and Easter Samples	42
3.10	Years of Experience in Main Activity	45
3.11	Visits to the Forest Parks in the Past Two Years (1980-81)	46
3.12	Average Number of Days Spent in other Backcountry Areas (1980-81) Undertaking Main Activity	47
3.13	Membership of Conservation and Outdoor Recreation Groups	48
3.14	The Four Most Important Reasons for Visiting Kaimanawa/Kaweka Forest Parks	53
3.15	Satisfaction with the Visit	54
3.16	Rubbish Disposal	58
3.17	Level of Contact with Hunting	62
3.18	Preferred Methods of Animal Control in Kaimanawa and Kaweka Forest Parks	64
3.19	Options for Recreational Hunting Administration Combined with Other Control Methods	65

<u>Table</u>	<u>Title</u>	<u>Page</u>
	CHAPTER 4 - THE HUNTER	
4.1	Age of Hunters	83
4.2	Hunters' Marital Status	84
4.3	Highest Attained Educational Qualification	86
4.4	Residence of Hunters	88
4.5	Hunters' Residence During Upbringing	89
4.6	Time Since Last Hunting Trip	91
4.7	Trip Duration and Frequency in Last Two Years (1980-81)	93
4.8	Length of Last Hunting Trip	93
4.9	Popularity of, and Number of Days Spent in, Selected Hunting Areas in Last Two Years	96
4.10	Hunting Success - Selected Areas by Animal Species	100
4.11	Agents of Introduction to Hunting	105
4.12	Years of Experience in Hunting (Permit Sample) Canterbury and North Island	109
4.13	Years of Experience: Hunters and Trampers (User Sample)	110
4.14	Reasons for Interruption to Hunting Experience	111
4.15	Hunters' Membership of Outdoor Recreation Organisations	113
4.16	Motivations for Hunting	117
4.17	Hunters' Other Backcountry Activities	118
4.18	Importance of Animal Observation on Hunting Trips (Median Response)	119
4.19	The Importance of Killing an Animal (% of respondents at extremes of scale)	120
4.20	Disposal of Animals	121
4.21	Preferred Methods of Deer Control	134
4.22	Options for Recreational Hunting Administration Combined with Other Control Methods	135
4.23	Preferred Method of Hunting Block Administration	137
4.24	Length of Permit	138
4.25	Attitudes About Permit Administration	139
4.26	Attitude Statements - Permit Hunter Sample Only	141
4.27	Choice of Hunting Areas - Active Rifle Owners	147
4.28	Choice of Animals - Active Rifle Owners	148

<u>Table</u>	<u>Title</u>	<u>Page</u>
	CHAPTER 5 - NON-ACTIVE RIFLE OWNER	
5.1	Reasons for Retirement from Hunting	153
5.2	Last Animal Hunted	156

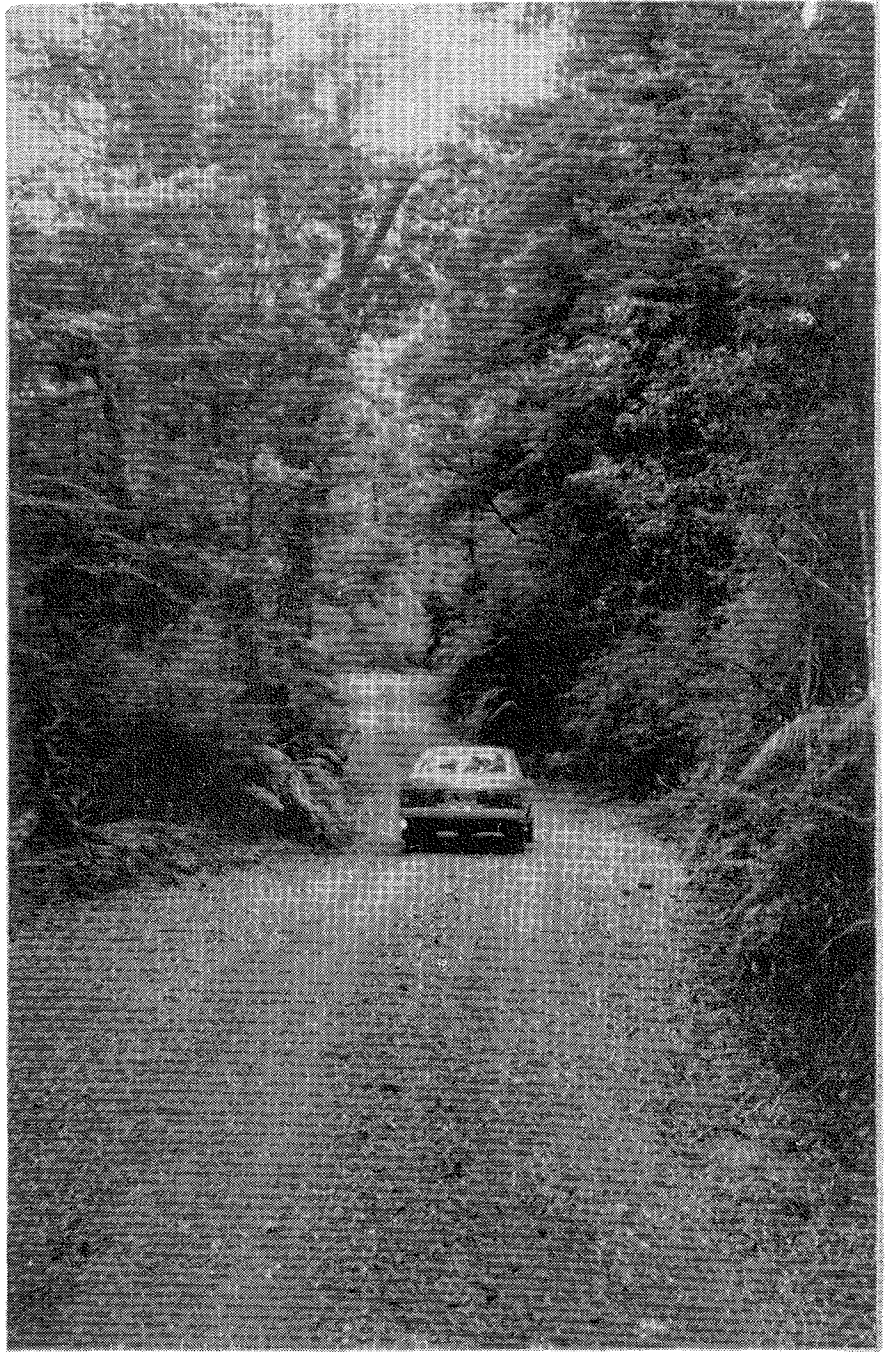
LIST OF FIGURES

<u>Figure</u>	<u>Title</u>	<u>Page</u>
	CHAPTER 3 - FOREST PARK USER	
3.1	Amount of Time Spent in the Parks	30
3.2	Home Situation	37
3.3	Occupation	39
3.4	Agents of Introduction and Influence on Main Activities in the Parks	44
3.5	Equipment Carried by Groups	59
Section 3.6.4	Attitudes to Hunting, Animal Control, and Other Park Use	
	3.6.4.1 Overview	68
	3.6.4.2 Compatibility	70
	3.6.4.3 Safety	72
	3.6.4.4 Management Considerations	73
	CHAPTER 4 - THE HUNTER	
4.1	Hunters' Home Situation	85
4.2	Hunters' Occupations	87
4.3	Number of People in Groups (to Base Camp, Actual Hunt)	94
4.4	Hunting Companions (to Base Camp, Actual Hunt)	95

<u>Figure</u>	<u>Title</u>	<u>Page</u>
4.5	Main Reason for Hunting in a Certain Area	98
4.6	Ages of Introduction to Hunting Animal Species	107
Section 4.5	Facilities and Services - Figures	
4.5.1	Key	125
4.5.2	Access	126
4.5.3	Tracks	127
4.5.4	Huts	128
4.5.5	Amenities	129
4.5.6	Services	130
4.7	Equipment Usually Carried By Hunters	131

LIST OF MAPS

<u>Map</u>	<u>Title</u>	<u>Page</u>
1	Locality Plan of Kaimanawa and Kaweka State Forest Parks	7
2	Kaimanawa Forest Park: Number of People at each entry point for January and Easter Sample Periods	15
3	Kaweka Forest Park: Number of People at each entry point for January and Easter Sample Periods	16
4	Destination of Forest Park Users	29



Numbers of deer killed reached a peak in the following years.

Major changes took place in the '60's with the development of an export market for venison. The operations of deer cullers could not compete with commercial hunters operating first from fixed-wing planes and later from helicopters (Harker, 1977). Forrester and Illingworth (1979, p.21) report that helicopter hunters began to take more than 100 deer a day. The phenomenal growth and success of the commercial game meat recovery and subsequent venison farming industry had controlled the numbers of wild animals to the stage where people were no longer thinking in the extermination terms of the Noxious Animals Act, but rather in terms of animal control and game management. In the meantime the recreational hunting fraternity faced with major changes to their quarry began to express concern about the future viability of their sport.

In 1974 a Government Caucus Committee on Noxious Animal Control was constituted to advise Government on future policy. The end result was the Wild Animal Control Act (1977) and the establishment of a National Recreational Hunting Advisory Committee. Legislation under this Act provided for the establishment of Recreational Hunting Areas (RHA's) over certain tracts of Crown Land. Here wild animals are to be controlled principally by recreational hunting. If other forest values are threatened because of increases in animal numbers there is provision to implement other means of control once recreational hunters have been advised to increase hunting pressure.

The following criteria have subsequently been adopted by the Advisory Committee for the establishment of RHA's:

- . easy accessibility
- . distinctive animal species
- . pleasant or challenging areas
- . no other conflicting issues (e.g. soil and water protection,

other recreational uses, or forest production issues).¹
 It is towards the clarification of the 'people' side of these issues that this study is directed.

The presence of New Zealand's only sika deer herd in the Kaimanawa and Kaweka Forest Parks led to establishment in 1982 of an RHA in the Kaimanawa Forest Park's north-eastern corner.

1.2 STUDY AIMS

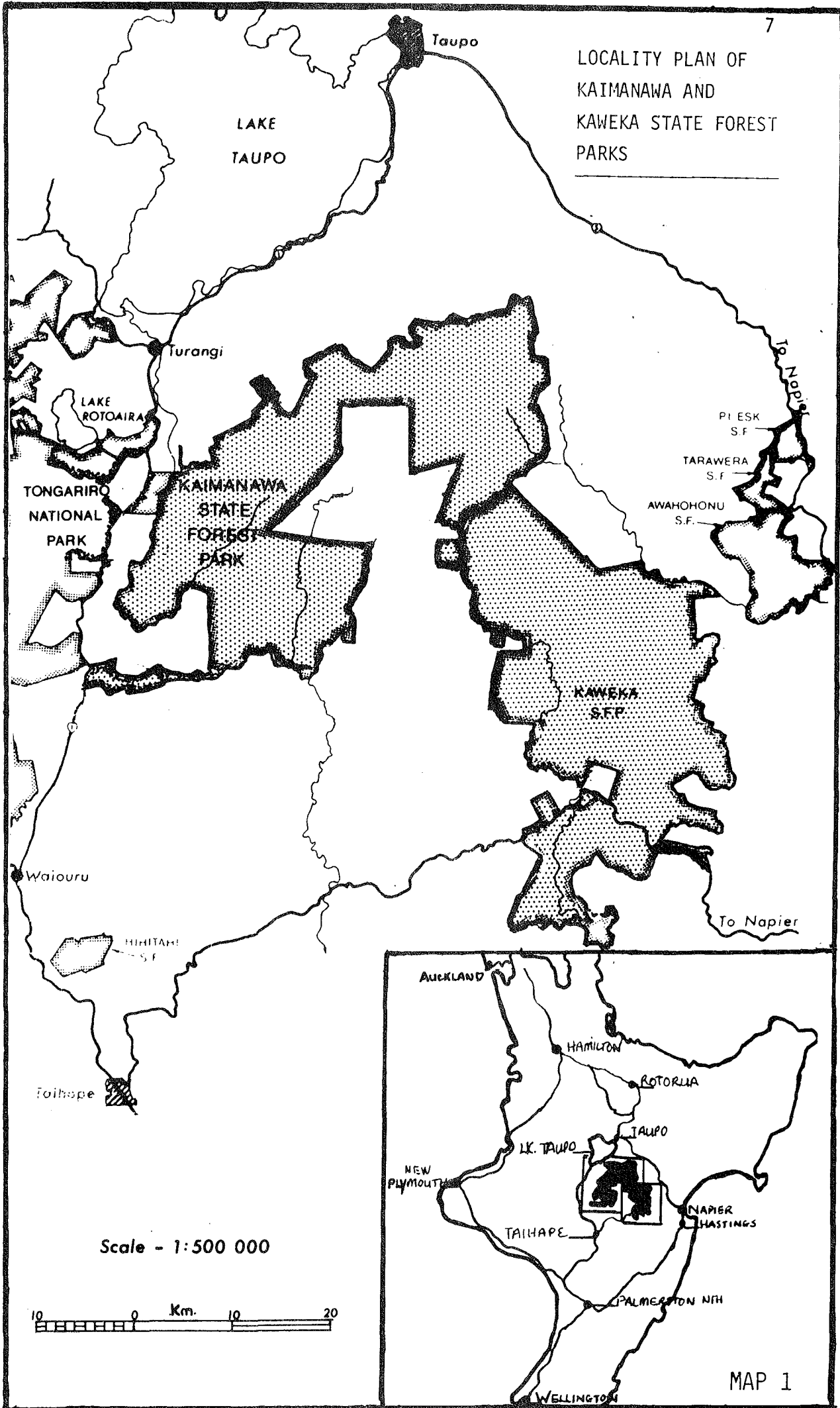
The aims of this study are therefore:

- . to gauge the current status of recreational hunting in the Central North Island and to elicit hunters' attitudes and opinions regarding their sport.
- . To compare recreational hunters in the Central North Island with those in the Canterbury region and offer direction for future RHA policy.
- . To examine whether the change of status and possible increased hunting use under a RHA is compatible with other existing recreational uses of the Kaimanawa and Kaweka Forest Parks.
- . To provide additional structured public input to guide recreational hunting management and planning of Kaimanawa and Kaweka Forest Parks.

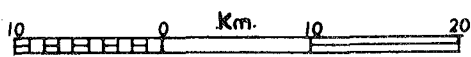
The following chapter outlines the study's methodology while subsequent chapters discuss survey results on forest park users, recreational hunters and potential and ex-hunters. Chapter six draws these results together to spell out management implications from the study.

¹Abridged criteria adopted at the second meeting of NRHAC (7 March 1979).

LOCALITY PLAN OF
KAIMANAWA AND
KAWEKA STATE FOREST
PARKS



Scale - 1:500 000





2.0 INTRODUCTION

A major objective of this study has been to provide comparable information on hunters of the Central North Island to that obtained from Canterbury hunters (Simmons D.G. and Devlin P.J., 1981). The research methods employed are therefore a replication of the saturation (user) and random sampling (hunters, rifle owners) methods employed in the earlier study. To reduce repetition, this report is designed to be read in conjunction with the Lake Sumner Study.

In both studies three samples provide different perspectives on recreational hunting and are designed to provide suitable cross checks on key information to determine the study's validity.¹ The Forest Park User Sample (Section 2.1) is a saturation sample of users at two peak user times. It provides direct information for management planning, questions the compatibility of recreational hunting with existing uses, and provides a profile on the existing recreational hunters and their use of these forests. The Permit Hunter Sample (Section 2.2) comprised a random sample of hunters from permit entries, in a broad range of Forests and Parks in the Central North Island. In providing the foundation to the Study it seeks descriptive information on hunters and their attitudes, preferences and current use of hunting resources. The final sample (Section 2.3) comprises a group of known rifle owners to check again validity of the two hunter profiles established

¹Appendix 1 provides an overview of the methodological and sampling framework.

in the previous samples. Potential and 'ex-hunters' are studied to explore factors that may influence their present commitment to their sport.

Throughout all phases of sampling the researchers have sought informal contact with the above groups to confirm questionnaire items and data interpretations.

Questionnaire distribution is discussed in greater depth below.

2.1 FOREST PARK USER (SATURATION SAMPLE)

An individual questionnaire (Appendix 2) was distributed to all people over an estimated age of 15, entering or leaving the Forests through known access points [Map 2, Map 3]. A group questionnaire was also given to one representative of each group (Appendix 3).

Sampling periods were:

- a. January - January 7 (Thursday) - January 11 (Monday) 1982.
6.00am - 9.00pm daily.
- b. Easter - April 8 (Thursday 4.00pm) - April 13 (Tuesday) 1982.
6.00am - 6.30pm daily.

Questionnaires were also posted to the Army and Prison farms with land adjacent to Kaimanawa Forest Park and helicopter firms licensed to operate in the Parks. Table 2.1 sets out the numbers of group questionnaires distributed and their return rates. In all, a total of 1268 individuals responded.

TABLE 2.1: Response Rates for User Sample

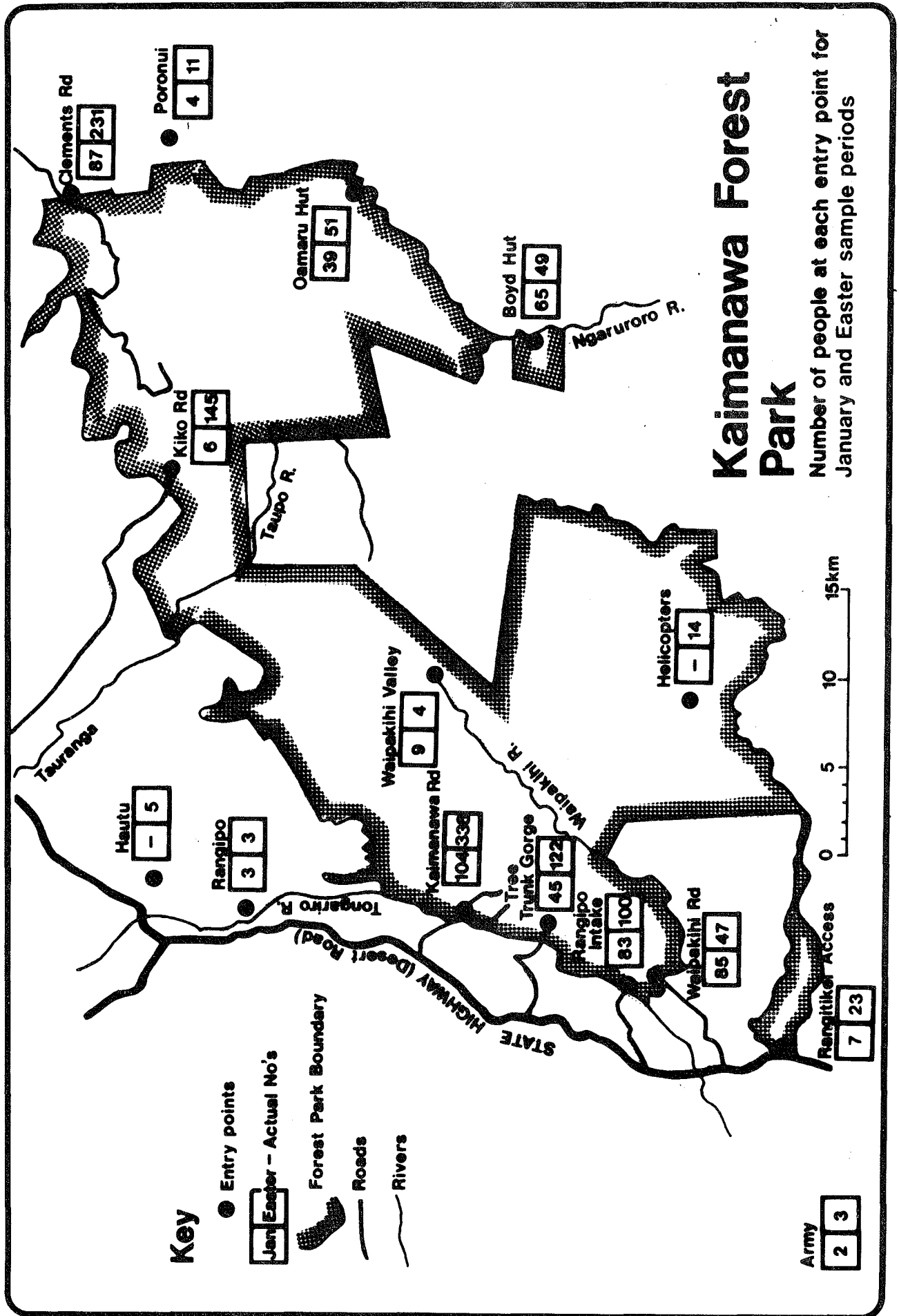
<u>January Sample</u>	<u>Kaimanawa</u>	<u>Kaweka</u>	<u>Total</u>
Questionnaires distributed	202	116	318
Questionnaires returned	140	81	221
Response rate	69.3%	74.1%	69.5%
<u>Easter Sample</u>			
Questionnaires distributed	311	147	458
Questionnaires returned	171	74	245
Response rate	55.0%	50.3%	53.5%
<u>Total Response</u>			
n	311	155	466
%	60.6	59.0	60.1

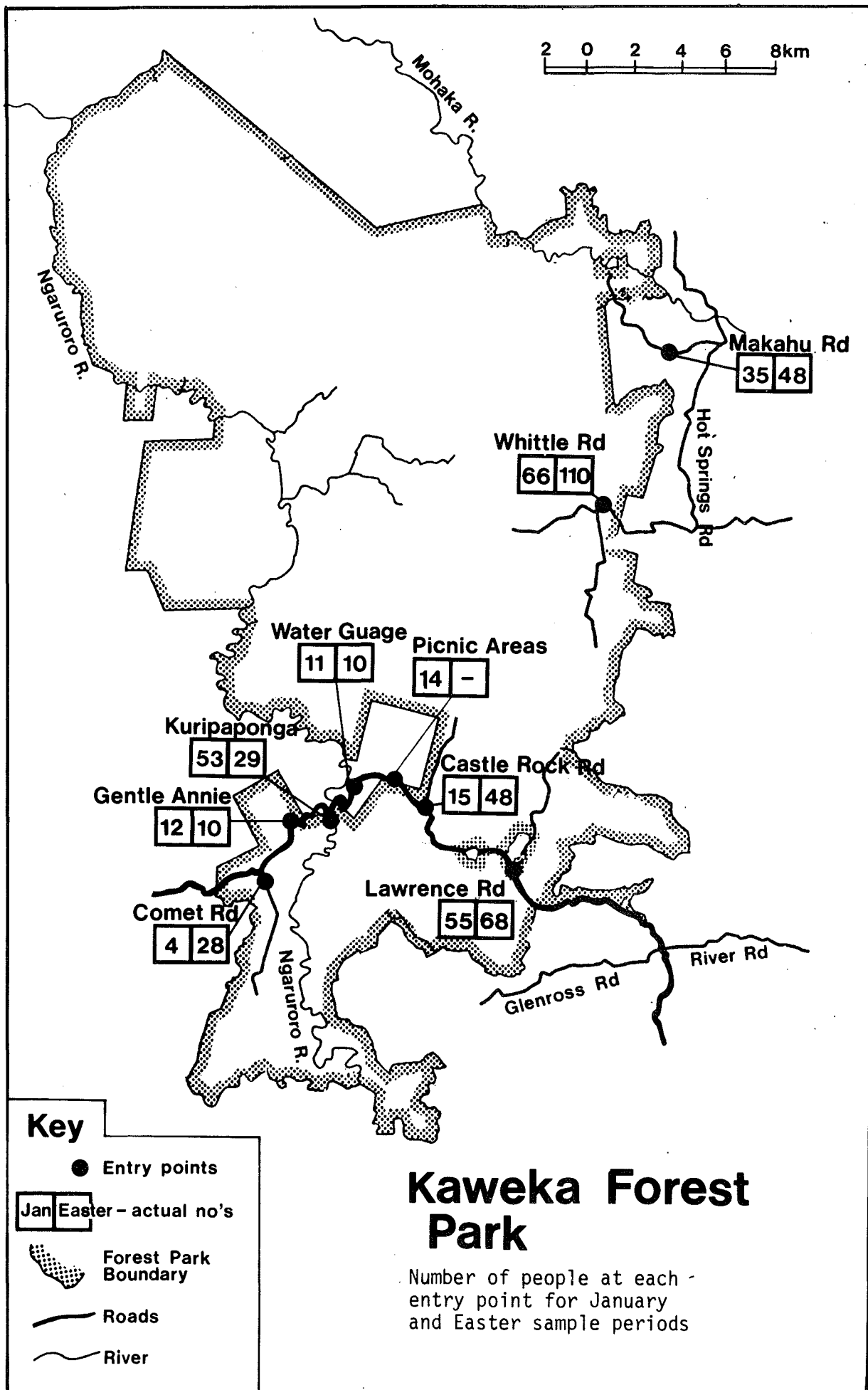
Response rates for Easter are slightly lower than for the January Sample. Several reasons may account for this:

- January respondents were encouraged to complete the questionnaire 'on-site' while Easter users were encouraged to 'post back' via pre-paid envelopes to avoid rushing their responses.

- . The tail end of Cyclone Bernie passed over the Parks at Easter and caused unpleasant weather and delays or property damage to some.
- . The opening of Kiko Road (northern Kaimanawa Forest Park) and widely reported storm damage brought many short-term sightseers to this area.







2.2 PERMIT HUNTER SAMPLE (RANDOM SAMPLE)

Fifteen hundred questionnaires (Appendix 4) were posted (21 January 1982) to a random sample of hunters who had obtained hunting permits for State Forests in the Central North Island over an 18 month period prior to October 1981. The sampling frame was designed to sample 10% of permits. This broad framework was chosen to encompass all periods of hunting use.

While the results demonstrate that few hunters travel to chosen hunting areas alone, difficulties in contacting all hunters listed on a permit have necessitated only the first name being entered on the Sample list. If this name was already listed, however, the next permit was taken. A consequent issue of using this framework is whether all hunters (in terms of age, hunting experience, leadership or the like) are equally disposed toward applying for the permit. Two reminders were sent to non-respondents (5 February and 4 March), which raised response levels by 24 and 7% respectively (Table 2.2).

TABLE 2.2: Response Rates for Hunter Sample

	<u>n</u>	<u>%</u>
Total sample size	1,494	
a. Questionnaires accounted for	1,151	77.0
- useful responses	955	63.8
b. Questionnaires unaccounted for	341	22.9
. Sampling frame (permits)	10%	
. Estimated confidence interval (at .95) =	± 1.7%	

Sixty four percent of questionnaires (n = 955) were usable for analysis. While these figures could be regarded as very high for general postal social surveys (Gardner 1976), they are consistent with other recreation studies (Simmons and Devlin 1980). As such they could be interpreted to demonstrate hunters' enthusiasm for their sport or recognition of their strong feeling toward recent changes in hunting. The data (Chapter 4) describes hunters' demographic characteristics, their attitudes, motivations and current patterns of use.

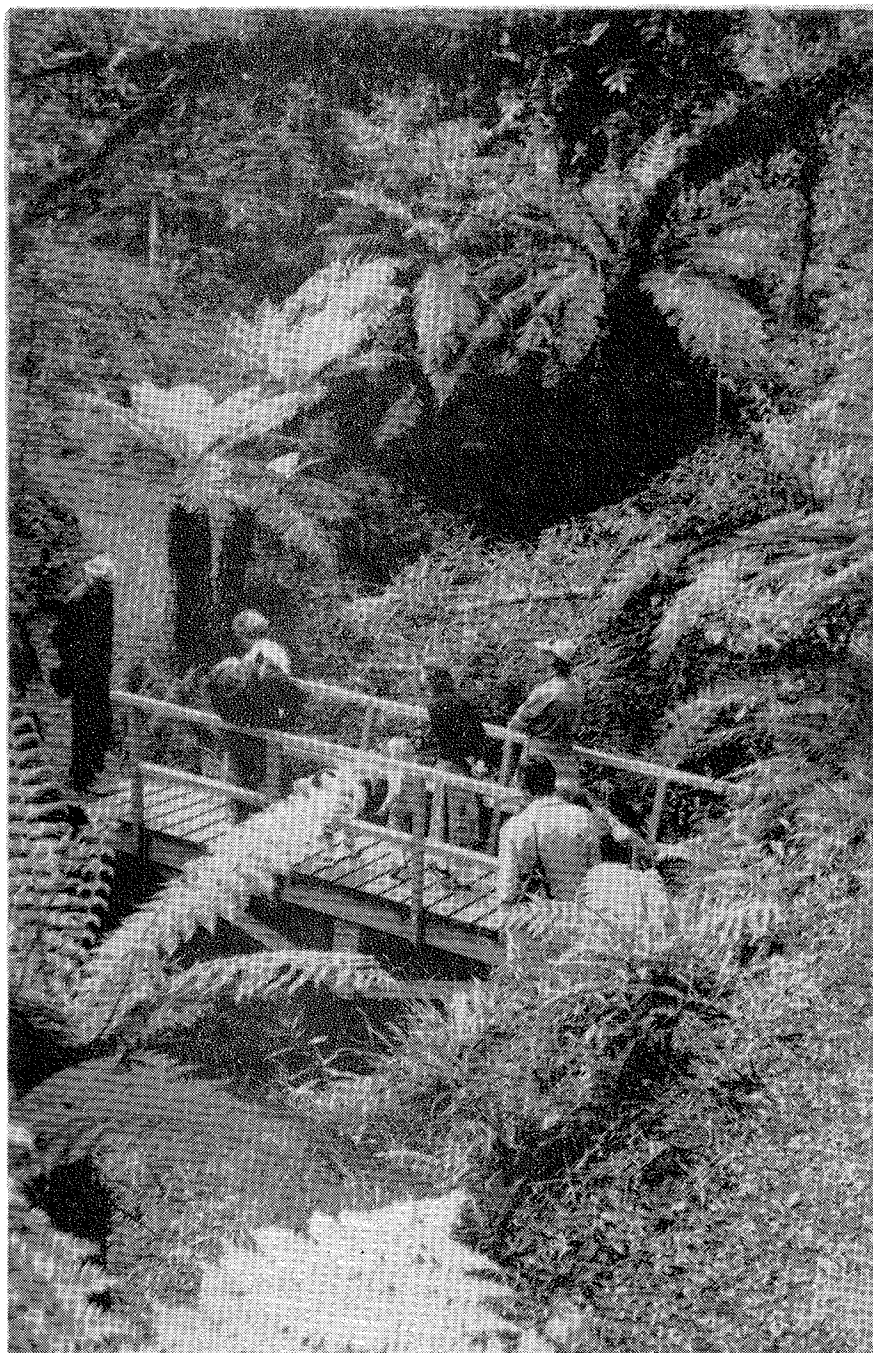
The discrepancy between questionnaire returns and usable responses (13.2%) is due to questionnaires being sent to incorrect addresses and subsequently returned. The demographic profile on hunters demonstrates a large group of young single males, who may reasonably be expected to be highly mobile.

2.3 RIFLE OWNER'S SAMPLE (RANDOM)

Fifteen hundred questionnaires were posted to a random sample of North Island Rifle Owners in Auckland, Rotorua and Napier (February - May, 1982). This questionnaire (Appendix 5) provides additional information on current active hunters as well as profiles on potential and ex-hunters (Chapter 5).

TABLE 2.3: Response Rates for Rifle Owner Sample

	<u>n</u>	<u>%</u>
. Total Sample size	1,488	-
Questionnaires accounted for	1,039	69.2
- useful responses	679	45.6
Questionnaires unaccounted for	458	30.8
. Sampling frame	2%	
. Estimated confidence interval (at .95)	± 2.8%	



3.0 Introduction

3.0 INTRODUCTION

Chapter 3 presents data obtained from the User Survey of Kaimanawa and Kaweka Forest Parks. As outlined in Chapter 2 a saturation sample was made of users during a limited number of days in January and Easter 1982. Each group received a questionnaire which asked for information relevant to the group as a whole. Individual questionnaires were distributed to everyone over an estimated age of 15 years.

The information presented in this chapter, is directed towards the study and management of recreational hunting. A further report will look at all users of the two parks in greater detail, thereby providing data and guidelines for total recreation management of the areas.



3.1 Visitation

3.1.1 ORIGIN

TABLE 3.1: Residence of Survey Respondents

Residence	Kaimanawa/ Kaweka %	North Island ^a (total pop.) %
N.I. City (>20,000)	61.1	65.7
N.I. Town (5,000-20,000) e.g. Taupo	9.7	7.9
N.I. Rural Town (1,000-5,000) e.g. Turangi	7.5	4.0
N.I. Rural Area	11.9	22.3
South Island Total	2.3	-
Overseas	4.9	-
Unspecified	2.6	-

^aDepartment of Statistics, 1981, N.Z. Census of Population and Dwellings 1981, Vol. 1: Location and Increase of Population Part A. This reference is used for all N.Z. statistics throughout the report.

Because of limited South Island visitors, North Island figures only have been used as a basis for comparison of residence.

In spite of the distance (four to five hour drive) from either Auckland or Wellington, a high percentage of users were from these

areas (16.5% and 15.9% respectively). Most people from places other than major cities, lived in the Central North Island or Hawke's Bay.

3.1.2 GROUP COMPOSITION

In contrast with Lake Sumner, many groups are small with only two or fewer people.

TABLE 3.2: Size of Groups

Number of People	Kaimanawa/ Kaweka %	Lake Sumner %
1 person	7.9	1.7
2 people	40.7	17.5
3 people	19.2 }	29.2
4 people	11.6	
5-10 people	14.5	37.5
>10 people	6.1	14.1

Friendship groups (35.5%) and groups made up of families, and families and friends (27.4%) were dominant. The remainder were couples, clubs or tours. Data to be introduced later will show that hunters tend to be in smaller groups. As the number of hunters in this sample is higher than Lake Sumner, the group size is correspondingly lower.

3.1.3 ENTRY POINTS

Maps 2 and 3 show the entry points to both Forest Parks and give the actual number of people entering during the January and Easter sample period (not the number of respondents).

As was expected, Kaimanawa Forest Park was the more popular, especially at Clements Road and along the Desert Road access points. Kiko Road was re-opened to the public (after 10 years' closure) just prior to Easter which accounts for the high number of visitors at Easter. Entry from the prison farms and army land was restricted to staff from these institutions.

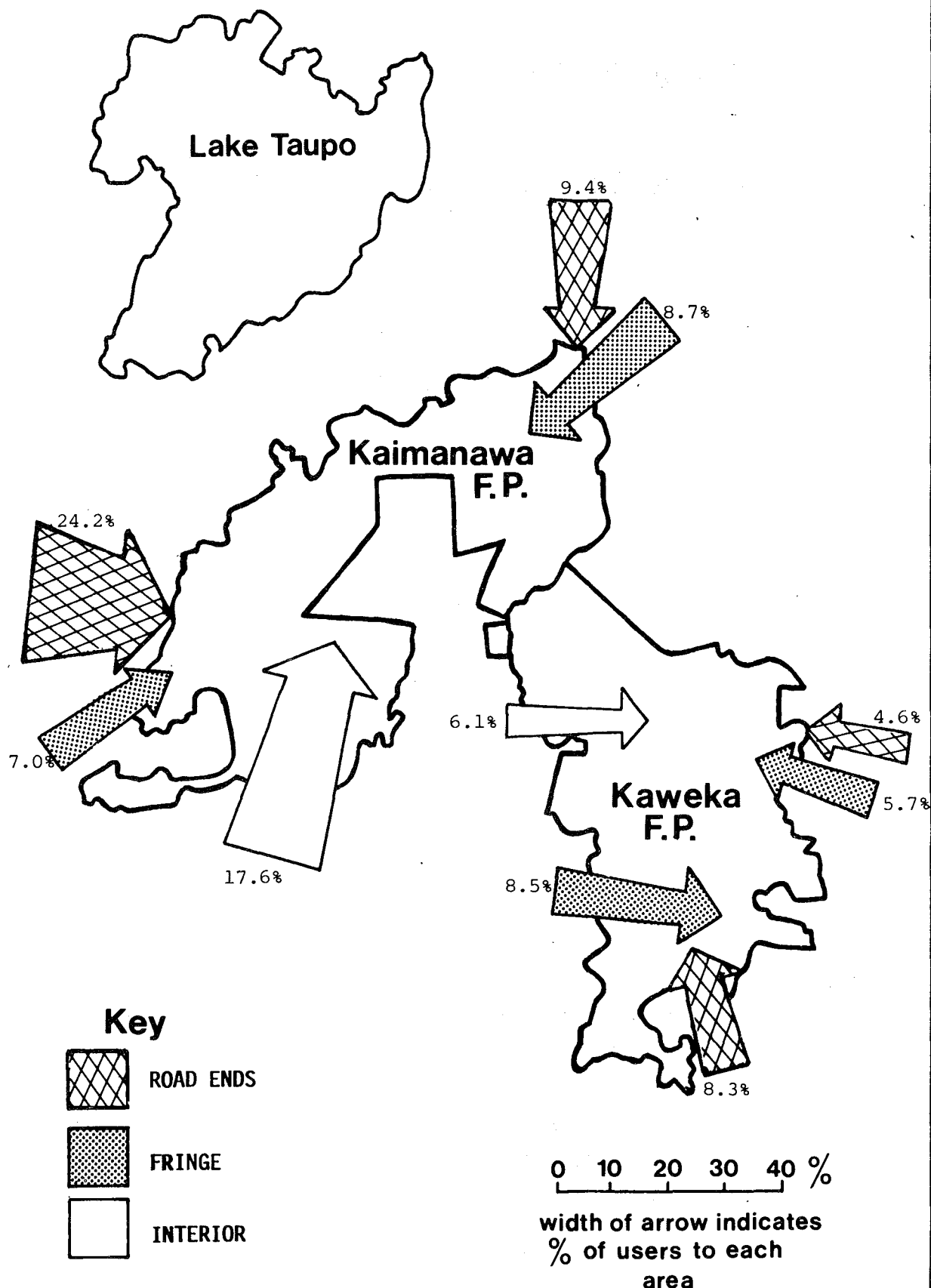
3.1.4 DESTINATION

Map 4 shows that the largest group of users (46.4%) are Road-end Users and are usually people stopping for a picnic and perhaps a short walk, or just sightseeing. Commercial rafting trips on the Tongariro River are also included here as were road-end campers.

Fringe Users accounted for 29.9% of respondents and included people on short (half to one day) tramping and hunting trips, using well-known tracks and some huts (e.g. Te Iringa hut) with easy access.

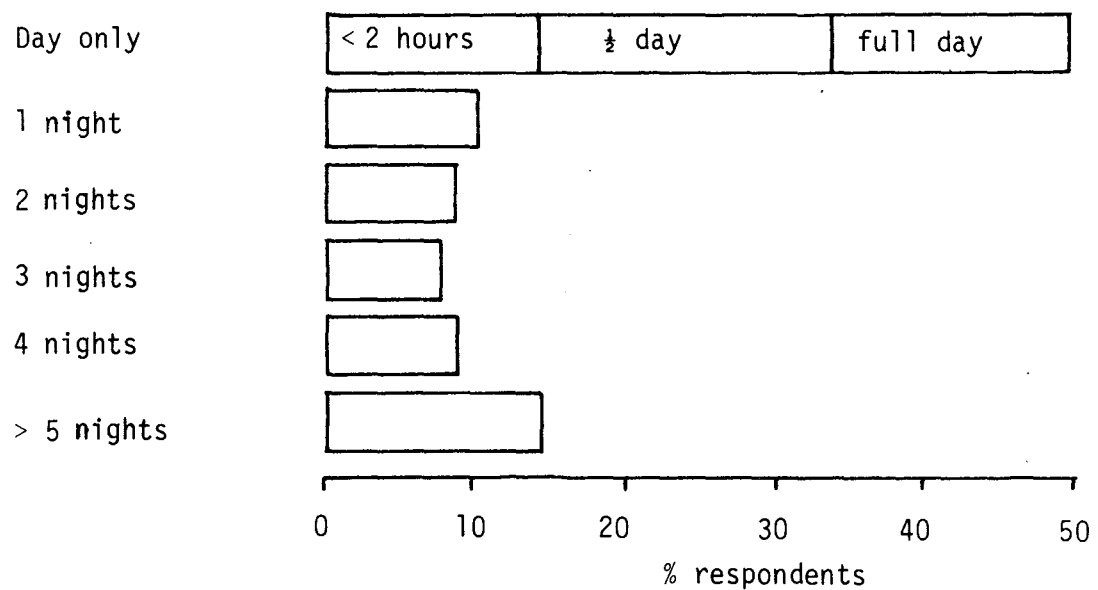
The Interior Users (23.7%) undertake more demanding and longer trips into the centre of the Parks. Approximately 60% of this group are hunters while 27% list tramping as their main activity. These trampers, however, represent only 10% of the total number of people who listed their main activity in the Park as tramping. Thus, the potential for minimising conflict between these groups, in these remote areas, is relatively high.

Destination of Forest Park Users



3.1.5 TIME SPENT IN PARK

FIGURE 3.1. Amount of time Spent in the Parks



Over half the users are 'day visitors' with most of these staying less than half a day.

These data are consistent with the numbers of road-end users. For this group recreational activities may be of short duration, but require a high standard of facility provision (e.g. toilets, picnic tables, short walks, etc.).

3.1.6 TRANSPORT

Private cars were the most common means of transport (78%). This figure is higher than the corresponding figure for Lake Sumner Forest Park, however, four-wheel drive vehicles were less (6.5% as compared with 18.5% in Lake Sumner). Six percent flew into Boyd or Oamaru airstrips by fixed wing plane and 1.5% by helicopter. Another 5% arrived at the Parks by bus.

3.1.7 INFORMATION

The majority of users heard about the parks by 'word of mouth' (46.6%) or from their family (18.6%). Fifteen percent read about them in Forest Service (7.2%) or other publications. Another 8% were 'just exploring' in the area. Similarly, most users of Lake Sumner Forest Park heard about it by 'word of mouth' and only 9% read about it in Forest Service or other publications.

3.1.8 COSTS

TABLE 3.3: Cost of Trip

Dollars	% Response
< 10	22.4
10-19	13.4
20-29	11.0
30-39	11.1
40-49	6.9
50-59	5.8
≥ 60	29.4

Many respondents report spending less than \$10 to visit either Kaimanawa or Kaweka Forest Parks, but significant numbers spent more than \$60. This latter group are primarily those flying into the Park interior or taking a commercial rafting trip.

3.1.9 SUMMARY AND DISCUSSION

The use of the Kaimanawa and Kaweka Forest Parks is generally very similar to that of Lake Sumner Forest Park. Visitors tend to be urban dwellers with significant numbers coming from smaller local communities.

Not surprisingly there is a strong preference for private transport which is shared by limited numbers of friends or family.

The Kaimanawa Forest Park, in particular, is different from its Lake Sumner counterpart, in as much as its proximity to major roads makes it highly accessible to picnickers, sightseers, or those simply exploring the area. These road-end users account for half of the Forest Park sample. Although their visits are short, facility provision for this group will continue to be a management priority.

The remainder of Park visitors undertake longer trips to the centre of the Parks. Trip data suggests, however, that only limited numbers, and hunters in particular, venture to the interior and away from the popular fringe areas.

3.2 Demographic Characteristics

3.2.1 AGE

TABLE 3.4: Comparison of Ages

Age Group	Kaimanawa/ Kaweka %	Lake Sumner %	New Zealand ^a %
< 14	-	1.7	-
15-19	12.3	23.6	13.1
20-24	17.8	18.4	11.8
25-29	18.1	16.1	10.4
30-39	23.0	12.6	18.6
40-49	14.6	17.2	13.8
50-59	10.2	5.2	13.1
60+	4.0	5.1	19.2

^aNew Zealand statistics for those aged 15 and over.

The users of Kaimanawa and Kaweka Forest Parks are young compared with the total New Zealand adult population. Of particular note is the proportion of users in the 30-39 age category, which is double that of Lake Sumner and higher than the comparable N.Z. figures. The previous section has drawn attention to the high numbers of road-end users which, observation would suggest, tend to be family groups. Data to be introduced later in this report demonstrates that hunters are more heavily represented in this age group than in Lake Sumner and their presence in this sample also contributes to the above results.

3.2.2 SEX RATIO

The following table separates sex ratios according to the main activity¹ people undertook in the park.

TABLE 3.5: Sex Ratios

Main Activity	% Female	% Male
Hunting	4.7	95.3
Tramping	33.7	66.3
Appreciative	47.4	52.6
Road-end	47.7	52.3
Water-based	24.8	75.2
Average	27.8	72.2

The above data confirms the numerical domination of males in the more active recreations and corresponds closely with data from existing studies.

Of interest is the more equal distribution of sex ratios among appreciative and road-end users.

¹These activity groupings are defined and discussed in Section 3.3.1.

3.2.3 MARITAL STATUS

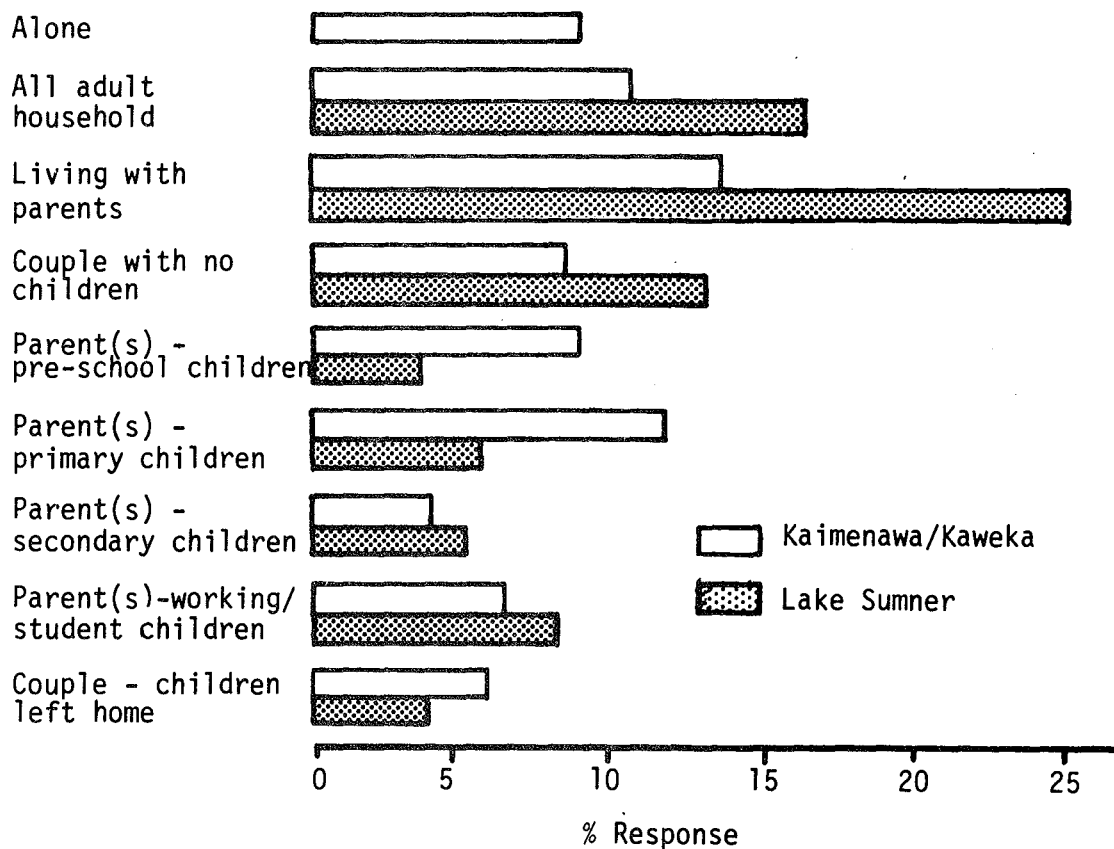
TABLE 3.6: Marital Status

Marital Status	Kaimanawa/ Kaweka %	Lake Sumner %	New Zealand %
Single	39.9	49.4	26.9
Married	58.4	41.1	58.2
Other	5.3	9.5	14.9

The previous two sections have highlighted the broader distribution of users' ages and levelling of sex ratios among road-end users. Cross-tabulation of the above data with users' ages supports the notion that the higher incidence of married respondents corresponds with higher numbers in the 30-39 age group.

3.2.4 HOME SITUATION

FIGURE 3.2: Home Situation^a



^aComparable N.Z. data are currently unobtainable. Nevertheless, the authors believe the above presentation to be particularly important to understanding back-country use and it is offered here for comparison with other Park user data.

The above figure demonstrates the home situation for respondents. Responses for all categories that embrace school age children are higher than those at Lake Sumner Forest Park. This reflects several factors already discussed, such as the Park's geographical

location, ease of access, sampling time, numbers of married people in the sample, and the like.

Overall, users originate from a wide variety of home situations. This suggests a dynamic pattern of Park use as changing constraints within family groups influence the extent of choice of activities at the Park, or Park visitation itself.

3.2.5 EDUCATION

TABLE 3.7: Highest Attained Educational Qualification

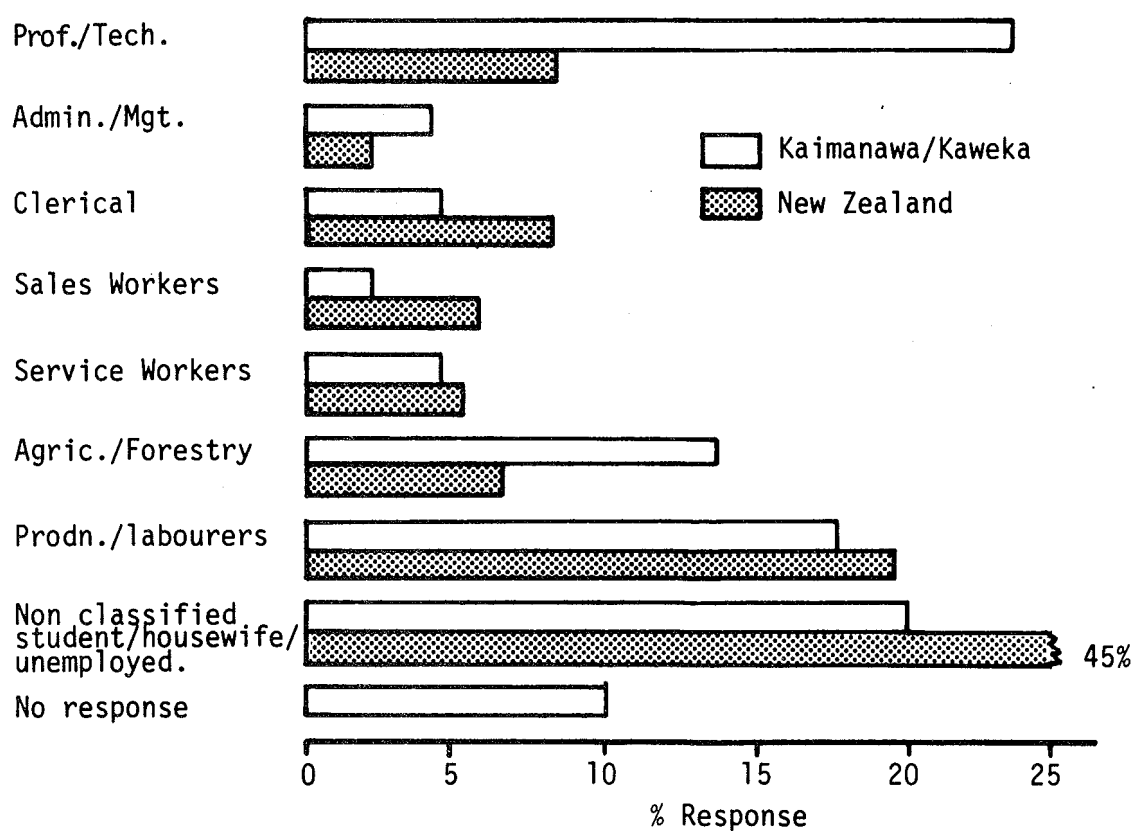
	Kaimanawa/ Kaweka %	Lake Sumner %	New ^a Zealand %
Primary School	1.2	-	20.1
Some Secondary School	18.3	14.2	41.5
School Certificate	15.1	17.6	-
U.E./6th Form Certificate	10.3	10.8	7.8
7th Form	3.1	10.8	2.0
Trade Qualifications	16.0	11.5	20.6
Tertiary Professional e.g. teaching	11.4	13.5	
Degree or part Degree	24.6	21.6	5.2

^aNo qualification specified by 2.8% in census.

Fifteen percent of respondents are still at an educational institution, compared with 36% at Lake Sumner.

3.2.6 OCCUPATION

FIGURE 3.3: Occupation



Results demonstrate educational and occupational data from Kaimanawa/Kaweka Forest Park Users that are consistent with data from Lake Sumner Forest Park and other similar areas.

3.2.7 SUMMARY AND DISCUSSION

The Lake Sumner report has clearly spelt out the need for caution in interpreting socio-economic data, inasmuch as individual variables may not truly reflect the ways in which combinations of variables operate to influence the activities and behaviours of users or user groups.

Data presented above suggests that the Kaimanawa and Kaweka Forest Parks, given their geographical location and range of opportunities, in many respects, reinforce the existing understandings of back country use in New Zealand. Of particular interest is the presence of a substantial group of road-end users who enjoy the Parks' easy access, particularly from SH 1 to Kaimanawa Forest Park. In terms of descriptive demographic characteristics this group reflects a greater spread of adult ages, more even sex ratios, marital status and home situations, than previously reported for Lake Sumner Forest Park.

Levels of educational achievement remain high, however, and a sizable group currently is attending educational institutions. This, coupled with the strong professional work orientation, suggests a user group that is likely to be receptive to resource information and understanding of management policy.

3.3 Experience

3.3.1 MAIN ACTIVITY

Respondents were asked to nominate their first (main), second and third activities in the Parks.

TABLE 3.8: Activity in the Parks

Activity	1st %	2nd %	3rd %	Average %
Hunting	32.1	5.8	4.4	14.1
Tramping	25.9	15.6	11.8	17.8
Appreciative				
- sightseeing	16.2	23.1	30.1	23.1
- nature-study	2.3	11.3	12.6	8.7
Road end				
- picnicking	5.5	7.5	11.8	8.3
- camping	4.1	16.6	14.2	11.7
- other	2.0	2.2	3.3	2.5
Water based				
- fishing	5.1	16.1	10.1	10.4
- rafting	4.9	0.9	1.7	2.5
- kayaking	1.9	0.9	-	0.9

TABLE 3.9: Main Activity in Parks for January and Easter
Samples

Main Activity	January %	Easter %
Hunting	25.6	37.3
Tramping	22.5	28.6
Appreciative		
- sightseeing	15.4	16.8
- nature study	2.8	1.9
Road-end		
- picnicking	7.7	3.8
- camping	7.7	1.3
- other	3.6	0.8
Water - based		
- fishing	8.3	2.6
- rafting	3.5	6.1
- kayaking	3.2	1.0

Three activities stand out as key pursuits in Kaweka and Kaimanawa Forest Parks. These are hunting, tramping and sightseeing.

In spite of the fact that the first of the user samples was taken in early January, hunting is seen as the dominant first activity choice. Table 3.9 demonstrates that hunting rises to 37% of main activities during Easter.

Tramping was not defined on the questionnaire, but left open to respondents' interpretation. As such, it can be undertaken in a variety of forms ranging from shorter walks to extensive trips across the two Parks. Tramping therefore is an activity undertaken in road-end, fringe and interior use categories, and in many respects, must be seen to underpin most of the other activities listed.

Sightseeing was the third main activity, but ranked first when averaged across the three activity choices. Sightseeing, however, was not rated highly at Lake Sumner Forest Park. The above results must be seen in terms of the Summer sample, interest generated by the Easter storms, and the proximity of Kaimanawa and Kaweka Forest Parks to popular holiday areas and State Highway 1. It is relevant to note again the 8% of users who had not previously heard about the Parks, but rather had discovered them by 'exploring'. Thus, the ability of park management to provide satisfying experiences for these groups, must be seen as a key to stimulating further interest in this and other similar areas.

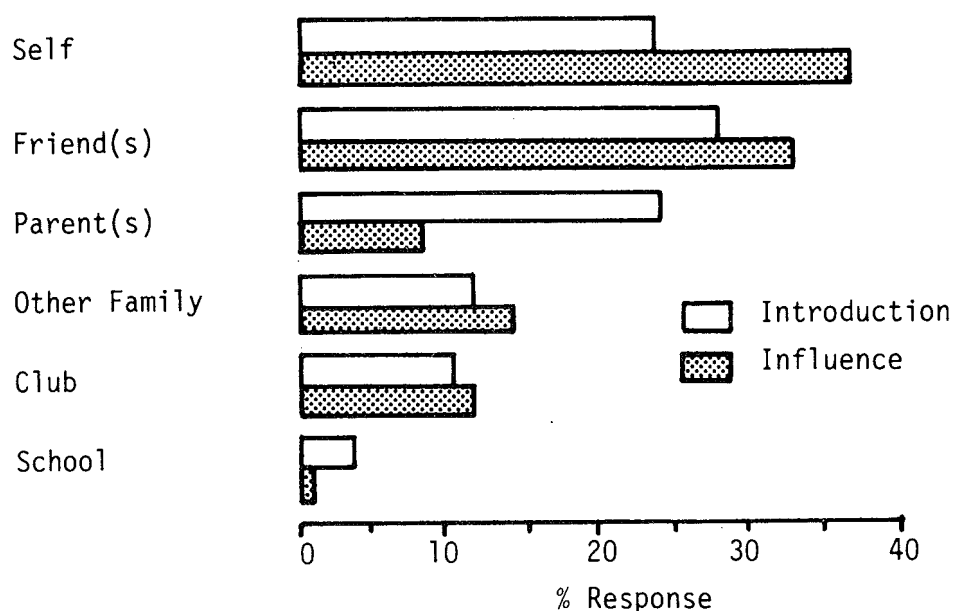
A final comment concerns the wide mix of activities. The strength of activities such as fishing, camping, nature study and picnicking, as second and third choices, suggests that Park users combine a series of activities during their visits. These activities, which may require additional management attention, are of equal importance as main activities, in generating user satisfaction.

3.3.2 OTHER ACTIVITIES

Approximately 40% of respondents indicated that they took part in different 'back country' activities at other times. Once again, tramping and hunting are the most popular with fishing, sightseeing and camping also featuring.

3.3.3 AGENTS OF INTRODUCTION AND INFLUENCE

FIGURE 3.4: Agents of Introduction and Influence on Main Activities in the Parks



Friends, parents and families are the most important agents of introduction. However, friends, clubs and one's own ambitions are also seen to be important, particularly in directing later experiences. The high incidence of family groups in this sample and continuing 'outdoor education' efforts are suggestive of increasing rather than diminishing user interest in the future.

3.3.4 YEARS OF EXPERIENCE

Respondents' years of experience have been separated for the six principle activity types.

TABLE 3.10: Years of Experience in Main Activity

Years in Main Activity	Hunting %	Tramping %	Appreciative %	Road-end %	Water-based %
1- 4	27.8	30.0	29.9	40.2	54.1
5-10	31.5	34.8	11.5	17.2	17.3
11+	40.7	35.2	58.6	42.6	28.6

The over-riding impression from the above table is the broad experience levels in most Park activity groups. Of note is the relatively high proportion of novices in the 'water based' and road-end categories. This may point the way to future use patterns for these Parks. Alternatively, the least active, 'appreciative' use group attracts high numbers of people experienced in these activities. It could be suggested that some of these are older users who no longer feel comfortable with more demanding pursuits, but who express the need to still have some Park contact.

3.3.5 NUMBER OF VISITS

TABLE 3.11: Visits to the Forest Parks in the Past Two Years
(1980-81)

Main Activity	First Visit %	Return Visit %
Hunting	18.9	81.1
Tramping	40.8	59.2
Appreciative	56.0	44.0
Road-end	48.1	51.9
Water-based	42.5	57.5
Average (numerical)	38.0	62.0

It is the hunters who make the most return visits. This reflects the nature of their specific activity and will be discussed in further detail later. Trampers and water-based users tend to be an equal mix of return visitors and first timers. It is the appreciative and road-end users who are over represented in the 'first visit' category. This again raises the question of appropriate facility provision for these groups and the ability of these areas to stimulate further visits. It could also be suggested that once the Parks become better known, some visitors will return to engage in more extensive pursuits. Overall, 38% of respondents were making their first visit to the Kaimanawa and Kaweka Forest Parks.

3.3.6 USE OF OTHER BACK-COUNTRY AREAS

Respondents were asked how many days they had spent undertaking their main recreational activities in other back-country areas in the past two years (1980-81). The second column in the following table shows the average number of days these visitors spent in the specific areas.

TABLE 3.12: Average Number of Days Spent in Other Back-Country Areas (1980-81) Undertaking Main Activity

Back-country Area	Users who have Visited Areas Listed %	Average Number of Days Spent Days
National Parks	52.8	9.6
Other Forest Parks	47.2	9.9
State Forests Native	30.6	7.3
Scenic Reserves	29.3	4.0
Private Farm/Forest	26.3	6.3
Maori Land	12.5	4.3
State Forests - Pine	12.2	4.5
Other	5.5	9.5

3.3.7 MEMBERSHIP OF ORGANISATIONS

TABLE 3.13: Membership of Conservation and Outdoor Recreation Groups

Conservation	%	Outdoor Recreation	%
N.Z. Forest and Bird Society	7.4	Tramping/Mountaineering	14.6
National and/or International Group	2.9	N.Z. Deerstalkers' Assoc.	9.2
Native Forests Action Council	1.7	Acclimatisation Society	5.4
Local Organisations	1.2	Sports Club	5.4
All Above	3.0	Angling Club	1.3
		Small Game S.S. Assoc.	0.7
		Big Game Hunters	0.5
		Bowhunters' Society	0.3
		Other	3.8
Do not belong to any	83.8	Do not belong to any	58.8

Greater insights can be gained by separating club members according to the January and Easter Samples. For example, the number of users belonging to Tramping and/or Mountaineering Clubs is higher for Easter (18.6%) than January (11.1%). Discussion with club members during Easter, showed that clubs usually organise longer trips over this holiday period. It is of interest to note that having committed themselves to planning

and preparation for their trip, these people were still determined to venture out, in spite of the storm.

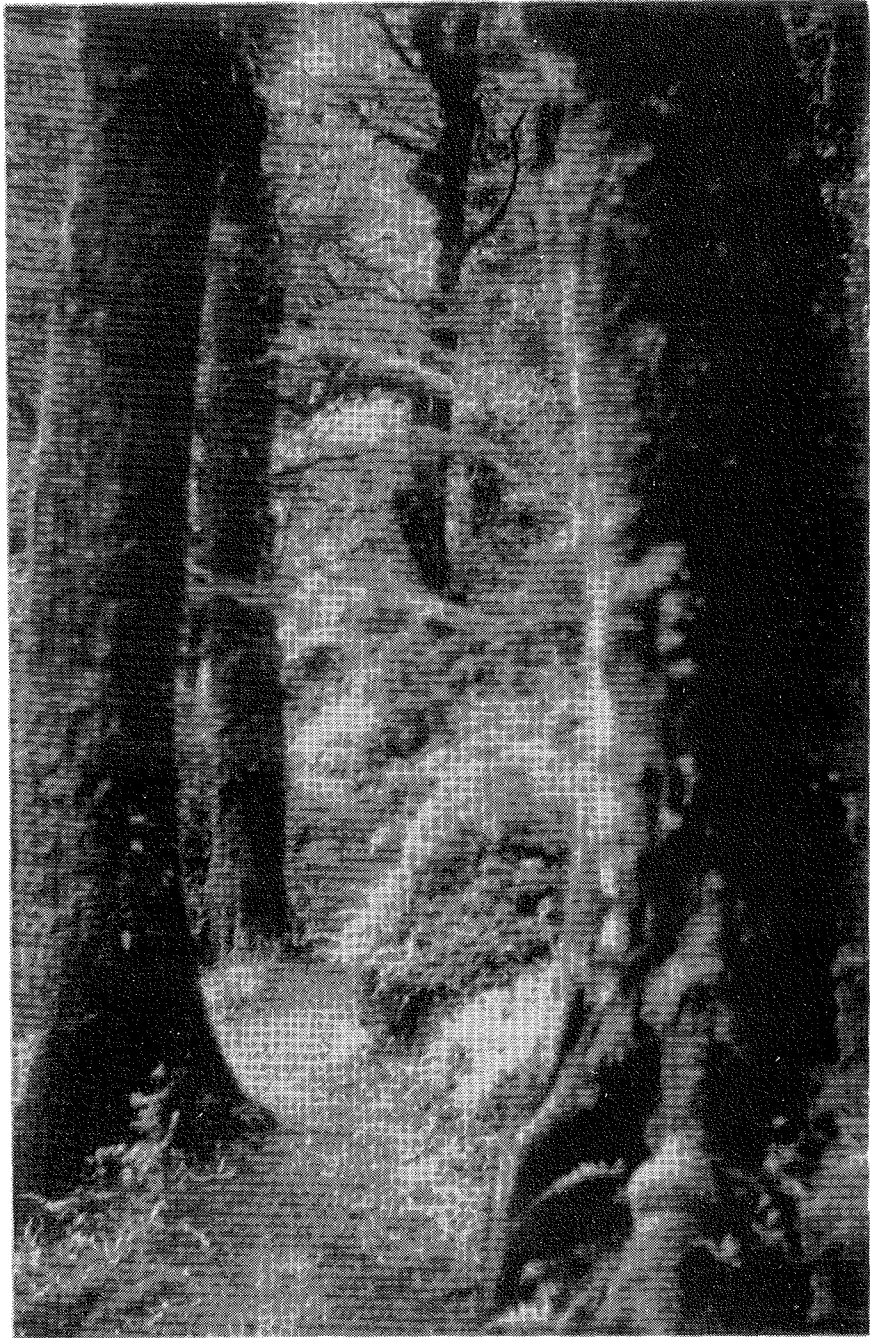
Users belonging to the N.Z.D.S.A. are also higher for Easter (14%) than January (7.5%), which is not unexpected for a popular hunting period such as April. When the hunting group is separated from the total user group, some 28% of active hunters belong to this organisation.

3.3.8 SUMMARY AND DISCUSSION

User responses highlight a diversity of activities that attract them to the Kaimanawa and Kaweka Forest Parks. While interest in traditional Park activities of hunting, tramping and fishing remains high, less physical and appreciative activities are seen both as first choice activities and important adjuncts to the main activities.

Kaimanawa and Kaweka Forest Parks attract users with a broad range in years of experience in all activity groups. Road-end and water-based users in particular, show recent influxes of novices which may spell future directions for Park management. These groups also contain high numbers of first-time visitors to these Parks, although the data also suggest that generally, users frequent a variety of recreational sites.

The relative importance of activities is seen to vary between the two sample times. Of all groups, hunters demonstrate a much higher return visitation rate to these Forest Parks. By and large, users do not belong to clubs, however, specific hunting organizations attract a sizable proportion of hunters.



3.4 Motivations

3.4.1 MOTIVATIONS

For 43% of respondents, their principle reason for visiting the Parks is to be able to undertake their chosen activity, whether it be sightseeing, picnicking, tramping or hunting. The Lake Sumner study suggested that a 'goal orientated' motive was likely to be more important for hunters and fishermen. This is verified by the present study, where 72% of hunters listed their activity as a first motive compared with only one third of trampers.

Taken on its own, such a motive could be interpreted as suggesting that the activity is more important than the area in which it occurs. Previous researchers have cautioned, however, that while a specific activity may appear the most important motive for Park visitation, it may not be the main source of visitor satisfaction.

Thus, the apparently low ranked motives of 'aesthetic-religious' (those suggesting a philosophical attachment to natural areas) and 'exit-civilisation' (to get away from the city) coupled with social motivations, paint a picture where the maintenance of a desired natural and social environment is, in fact, central to the users' activities and subsequent motivation to visit.

TABLE 3.14: The Four Most Important Reasons for Visiting
Kaimanawa/Kaweka Forest Parks

Motivation Category	First Motive	Second Motive	Third Motive	Fourth Motive
Specific activity	42.9	26.1	13.9	7.6
Aesthetic - religious	11.6	12.8	9.4	5.4
Exploring new areas	7.6	5.3	2.8	2.1
Exit - civilisation	6.7	8.0	7.6	6.3
Show family/friends	4.4	3.4	2.5	1.2
Just passing through	2.4	0.5	-	0.1
Physical exercise	2.3	3.2	2.2	2.0
Social	2.0	2.2	3.4	1.8
Nature study/photos	1.9	3.3	3.7	2.1
Other motivations	10.7	7.1	7.2	6.1
No response	7.5	28.1	47.3	65.3

3.4.2 SATISFACTION

TABLE 3.15: Satisfaction with the Visit

Satisfaction	%	Dissatisfaction	%
Very satisfied	41.3	Very dissatisfied	2.0
Satisfied	51.1	Dissatisfied	5.6
<u>Comments</u>		<u>Comments</u>	
Park environment	8.2	Bad weather	10.8
Specific activity	1.2	Lack of access/information facilities	4.2
Shot an animal	0.8	Behaviour of others	3.1
Good weather	0.7	Low deer numbers	2.7
Exit - civilisation	0.4	Hut complaints	0.9
No Comment - 67%			

The majority of people were satisfied or very satisfied with their visit. Of those who chose to comment, many noted they enjoyed the forest, rivers and other scenic qualities.

The complaints about bad weather predominantly came from the Easter Sample.

Other comments of note are those regarding the lack of information, access or facilities and tend to be similar to general comments made by some respondents at the end of the questionnaire (see Section 3.7). Further discussion of these specific items is presented in the section considering facility requirements.

3.4.3 SUMMARY AND DISCUSSION

The Kaimanawa and Kaweka Forest Parks are principally viewed as places to undertake chosen recreational activities. Supporting this activity orientation, however, is a complex mix of 'other' reasons. This suggests that the Parks' scenic and 'wilderness' values, and opportunities for visitation in small family or friendship groups, are an integral part of user motivations.

Overall, user satisfactions are very high and comments made suggest a strong link between high levels of satisfaction and the motivation to return again. It seems reasonable to assume that a visit once enjoyed will be repeated for self and others.

User expectations appear realistic enough to suggest that not all fishermen, hunters and trampers, will achieve their specific 'rewards', but that supporting reasons, discussed above, are currently generating the high levels of user satisfaction. The extent to which this is true, especially for hunting, which has a relatively low success rate, will be explored later. A further assumption is that on-site provision (facilities, access, etc.), is adequate for present visitor needs. This aspect will be considered in Section 3.5.

3.5 Facilities and Services

3.5.1 FACILITIES AND SERVICES

A question about specific facility needs for recreation in Kaimanawa and Kaweka Forest Parks was included in both the User and Hunter questionnaires. For ease of comparison, full data and discussion is presented in Section 4.5. A summary of key preferences only is provided here (in order of importance):

- . more trackmarking and signposting
- . increased information and publicity
- . more long and short tracks (including footbridges)
- . continued provision of camping sites, picnic areas, rubbish holes, toilets
- . small and large huts.

3.5.2 RUBBISH DISPOSAL

In a separate question each group was asked what it did with its rubbish.

TABLE 3.16: Rubbish Disposal

Method of Disposal	%
Used available facilities	25.8
Packed out	25.1
"Burnt, bashed and buried"	19.5
Had no rubbish	16.4
Used available facilities <u>and</u> packed out	4.5
Used available facilities <u>and</u> "burnt, bashed and buried"	3.1
Other	5.6

The traditional New Zealand custom of "burn, bash and bury" is still persisting among some users. This is also noted in the continued desire for rubbish holes.

To continue to provide rubbish holes, 'Kleensaks' in huts, etc., may cut across current attempts to change user behaviour by education to 'pack out what you pack in'.

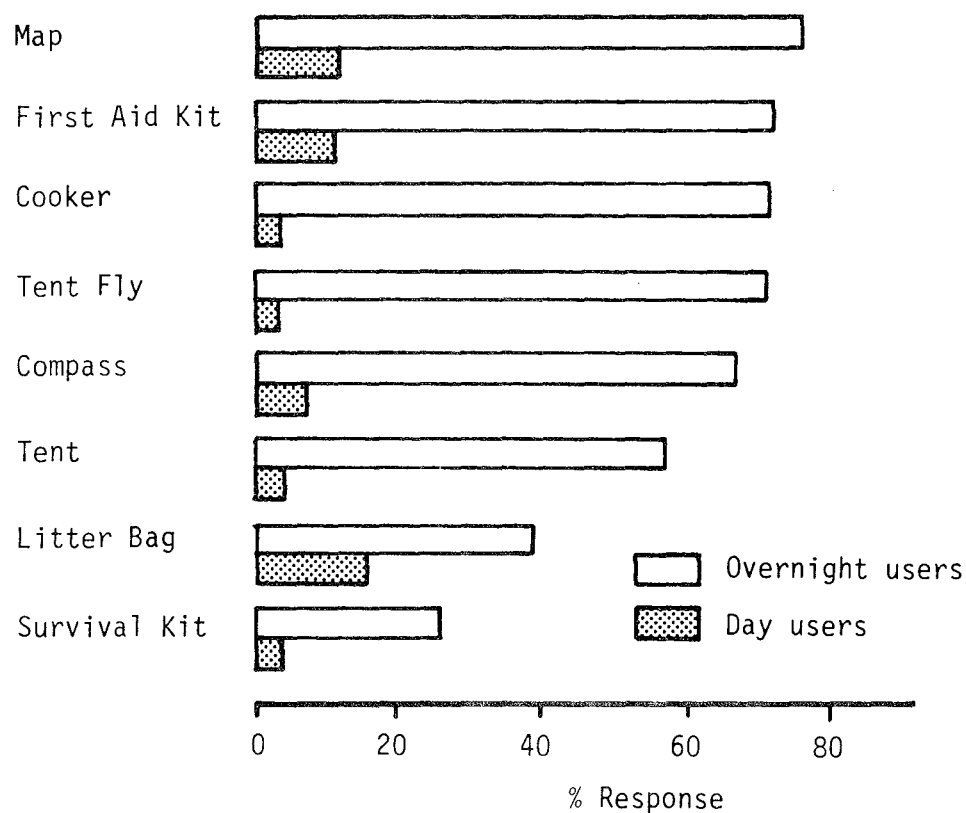
The Hunter

4



3.5.3 EQUIPMENT

FIGURE 3.5: Equipment Carried by Groups



As has already been noted, most people visiting for a day or part of a day, engage in road-end or appreciative activities which do not require much equipment.

For users staying overnight in the Park, however, most carry basic emergency equipment (maps, first-aid equipment, cookers, tents and/or flies and compass), which suggests that these users are generally prepared, and that Park managers would not necessarily concern themselves with additional provision

of this equipment.

Of groups who carried a tent, 82.4% used them, mostly in the forest or a river valley, but seldom near a hut.

3.5.4 SUMMARY AND DISCUSSION

Fuller discussion of both users' and hunters' preferences for new facilities is recorded in Section 4.5 (see also further report).

Twenty five percent of groups claim to have packed out their rubbish despite the fact that rubbish holes and other facilities are still provided. However, the traditional "burn, bash and bury" idea persists and, it is argued, will continue while rubbish disposal facilities are provided.

Most overnight users carry the basic emergency equipment.



3.6 Attitudes and Beliefs About Hunting

3.6.1 INTRODUCTION

This section examines the attitudes and beliefs of Forest Park users to recreational hunting. It includes questions on users' experience of hunting as well as their opinions on methods of animal control, environmental concerns, use compatability, and other aspects of hunting.

3.6.2 HUNTING EXPERIENCE

TABLE 3.17: Level of Contact with Hunting

	%
No interest in hunting	38.9
Current hunter	38.5
Ex hunter	11.1
Never hunted, but would like to	7.4
Other	4.1

These figures are very similar to those in the Lake Sumner Study, in that over half the respondents are active, have been active, or are interested in becoming active in hunting. However, the number of current hunters (38.5%) is higher than for the first study (25.9%). Section 3.3.1 reported that 31% of users were in the Park on this occasion to hunt, suggesting a further 7.5% had chosen other activities for their present trip. Of interest are the 7.4% of users who state that they have an interest in taking up hunting.¹

¹Data to be introduced in the hunter section suggests that the attraction of novice hunters is a key issue. As such, this group which already has some empathy with and experience in Parks, could be a useful source of recruitment. Refer Section 5.2.

3.6.3 ANIMAL CONTROL

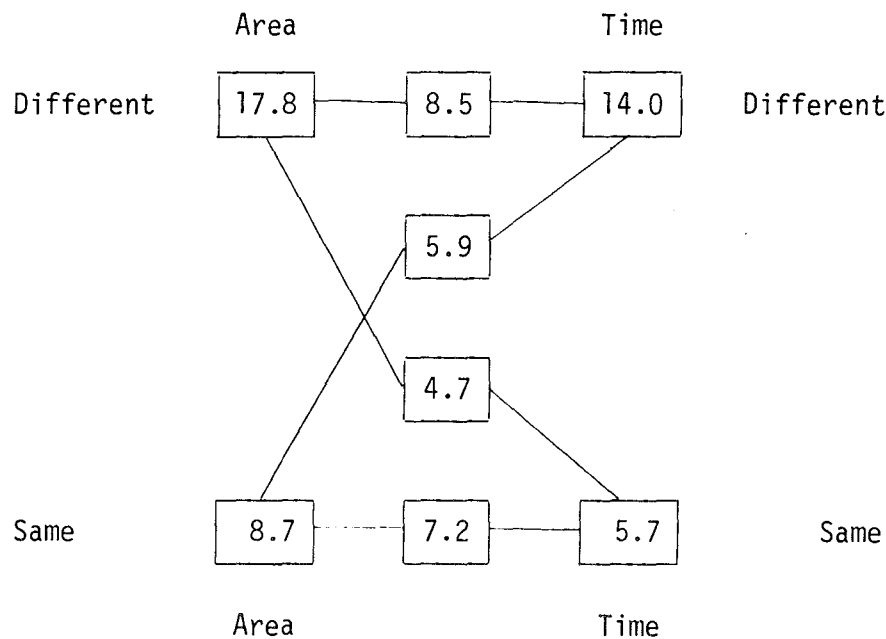
TABLE 3.18: Preferred Methods of Animal Control in Kaimanawa
and Kaweka Forest Parks

		First Preference	Second Preference
Foot hunting	- recreational	70.0	4.6
	- government	8.5	18.1
	- commercial	3.5	13.4
Helicopter hunting	- government	2.5	5.8
	- commercial	2.4	6.1
Poisoning	- government	1.4	4.2
No response		11.7	47.8

Recreational hunting is clearly a first preference for wild animal control for all user groups. Likewise, second preferences spell out control measures which would be seen to create minimal disruption to existing uses.

Those who chose recreational hunting were further asked how this should be administered in conjunction with other control methods.

TABLE 3.19: Options for Recreational Hunting Administration
Combined with Other Control Methods (percentage
reponse)



No Response = 27.5%

Explanation: The figures represent the percentage of respondents who preferred a particular way of separating recreational hunting from other control methods, e.g.: 4.7% of respondents opted for a combination of recreational hunting and other control methods being used in different areas at the same time, while 17.8% opted for separation by area, but did not indicate a preference for timing.

The over-riding impression from the above table is that there is a wide diversity of choices for the combination of recreational hunting with other wild animal control methods.

However, those opting for separation, either by time or by area, total 50.9% of respondents against 21.6% who preferred various methods in the same area and/or same time.

A similar question asked of the permit hunters (Section 4:6.1) demonstrates that they hold these same range of views, but more strongly prefer recreational hunting separated from other control measures.

3.6.4 ATTITUDES TO HUNTING, ANIMAL CONTROL AND OTHER PARK USE

The following tables include a list of hypothetical statements designed to lead respondents to indicate their feelings. The same core statements were used in both the User and Permit Hunter Samples and are jointly presented here for ease of comparison. Seven additional statements were offered in the Permit Hunter questionnaire, the response to which is shown in Section 4.6.4.

Differing levels of response given by various groups are represented by the following symbols:

- T - trampers in the User Sample
- H - hunters in the User Sample
- F - 'fringe' users of the Parks; i.e. the remainder of the User Sample (campers, picnickers, sightseers, nature studiers, anglers, rafters, kayakers)
- P - Permit Hunter Sample - as in Ch. 4

An attitude scale of 1 to 7 was used where -

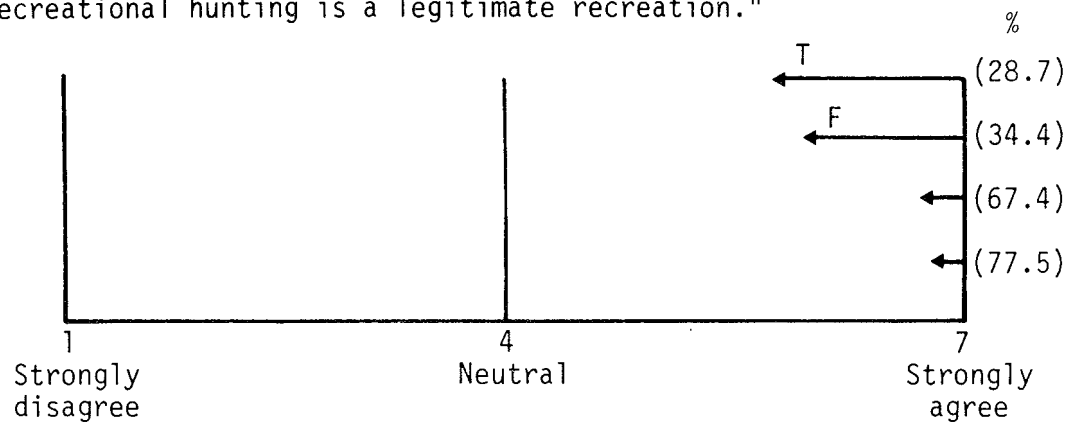
- 1 = strongly disagree
- 4 = neutral
- 7 = strongly agree

If more people strongly agreed than strongly disagreed with a statement then the percentage of respondents doing so are indicated in parenthesis on the right hand side of the table. If those disagreeing are dominant, then the figure is on the left hand side of the table.

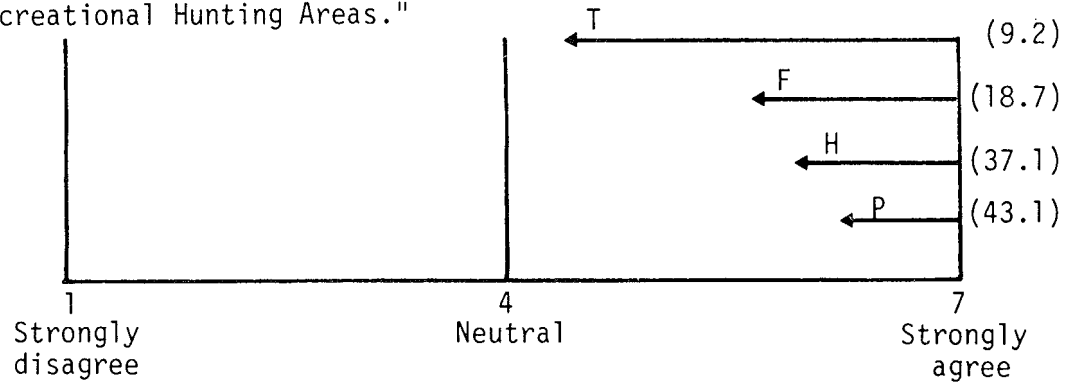
Arrows are then taken from the extreme side until the median mark is achieved. The longer the arrow the greater the spread of attitudes over the scale.

3.6.4.1 OVERVIEW

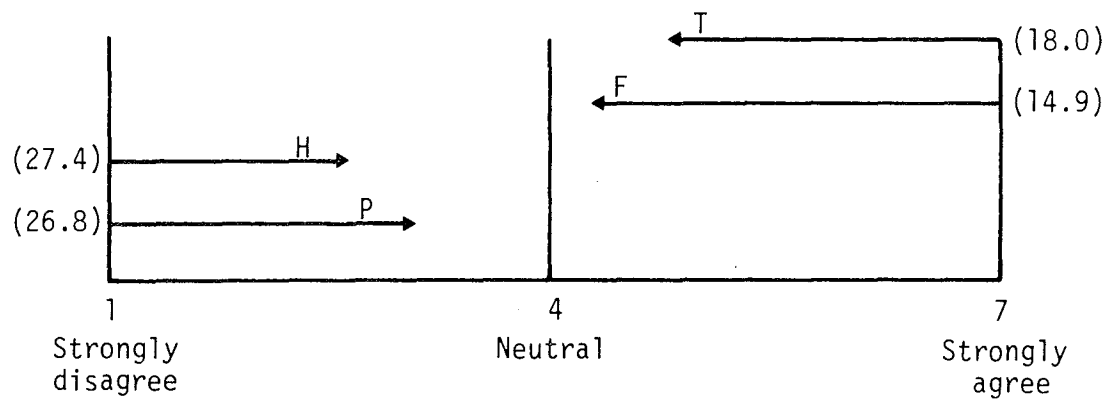
"Recreational hunting is a legitimate recreation."



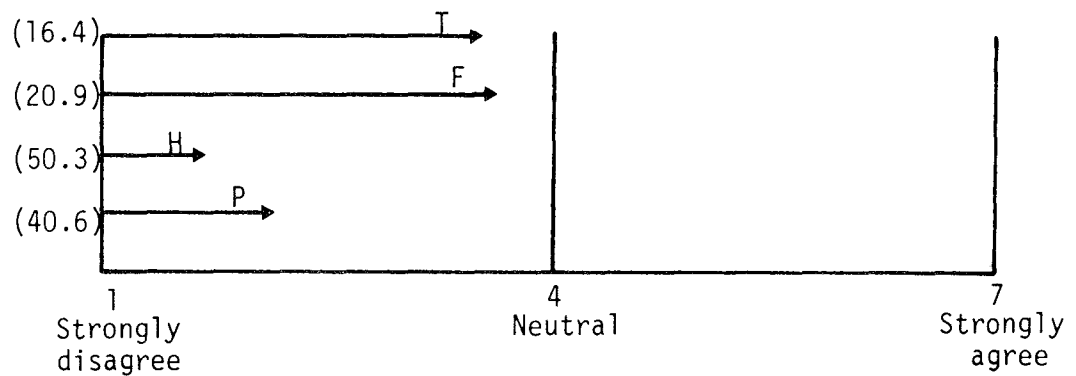
"Recreational and sport hunting can control wild animals in Recreational Hunting Areas."



"Browsing animals have caused irreparable damage to native forests."

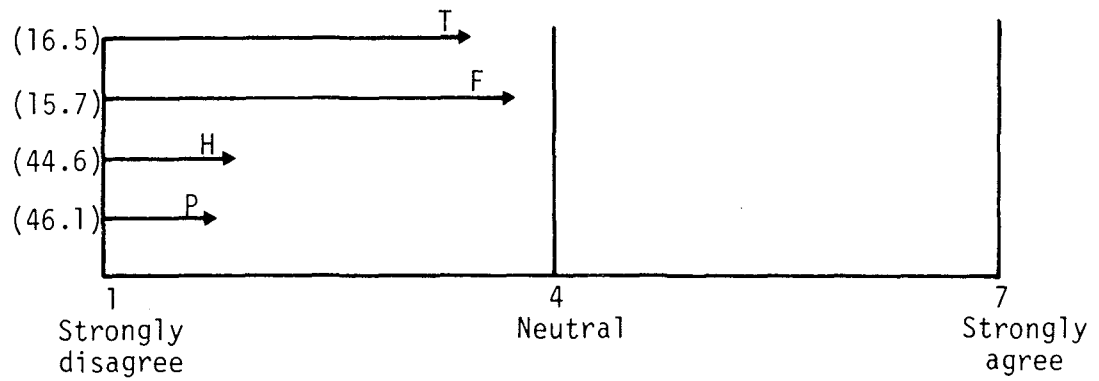


"Wild introduced animals (e.g. deer) can be exterminated from an area as large as Kaimanawa Forest Park."

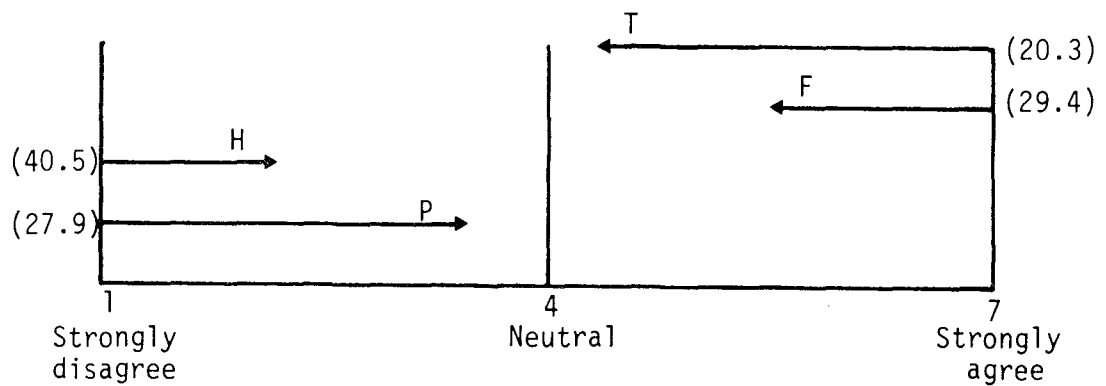


3.6.4.2 COMPATIBILITY

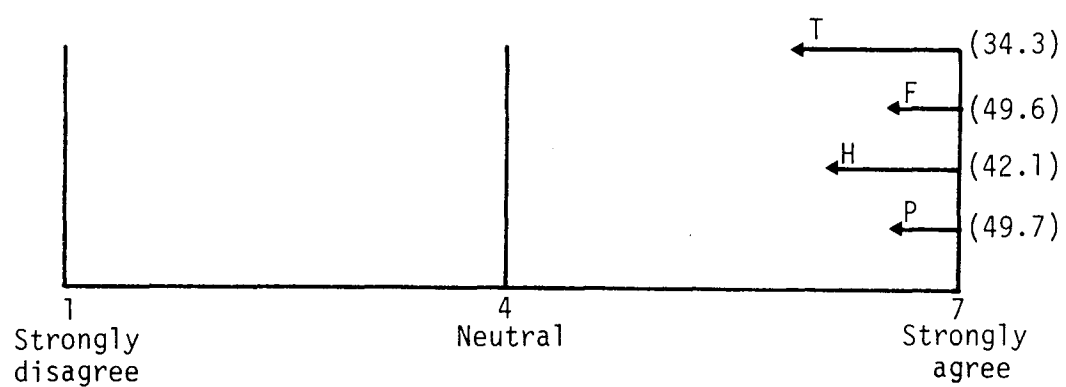
"Hunting is not compatible with other 'backcountry' recreational activities."



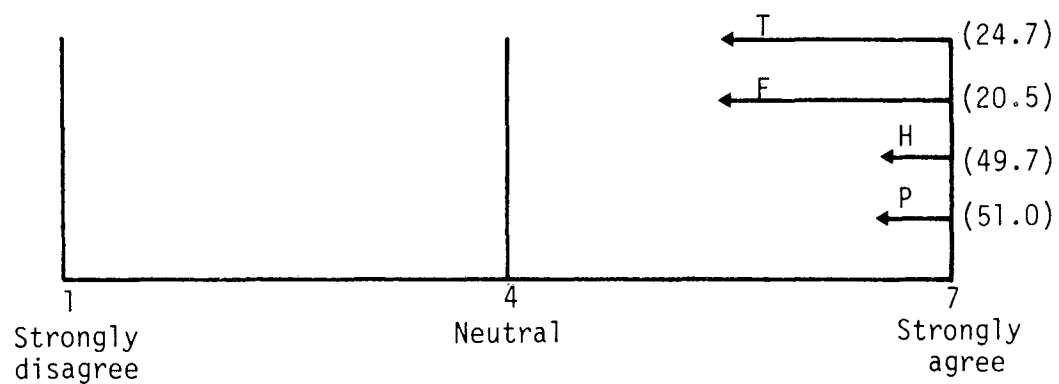
"Hunting should be in different parts of the forest from other recreational activities."



"I would avoid using an area where there are large numbers of hunters."

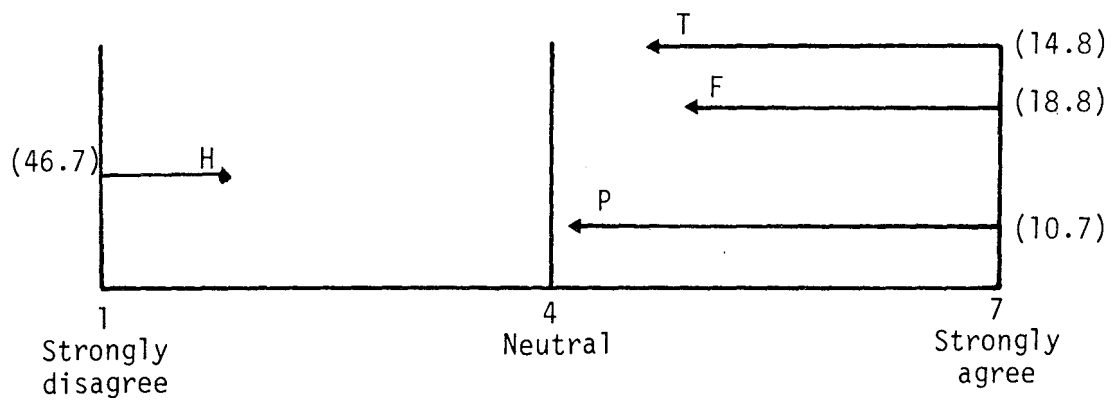


"I would be happy to share a hut or campsite with hunters."

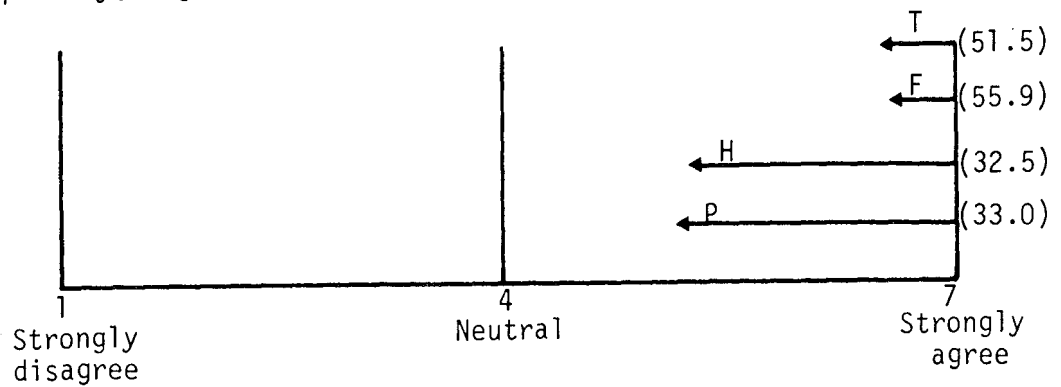


3.6.4.3 SAFETY

"Hunters pose a threat to the safety of other user groups."

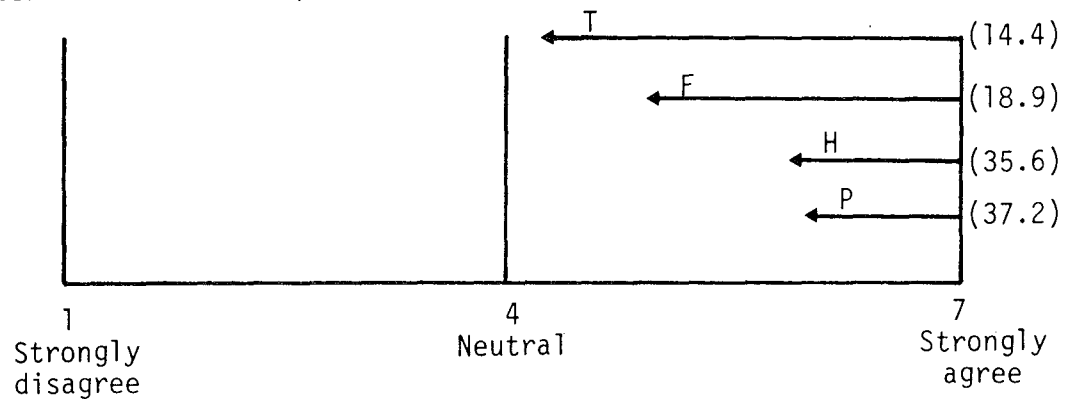


"Hunters should pass regular tests which examine their level of competency, e.g.: knowledge in rifle handling and safety procedures."

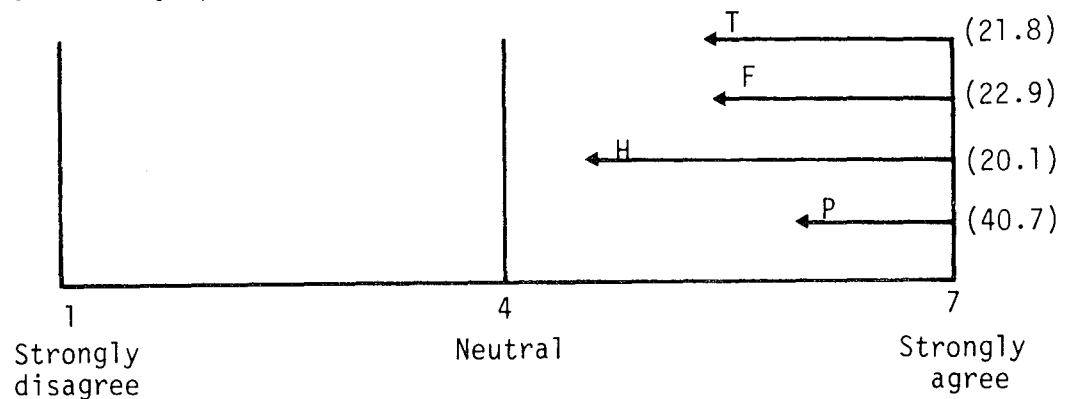


3.6.4.4 MANAGEMENT CONSIDERATIONS

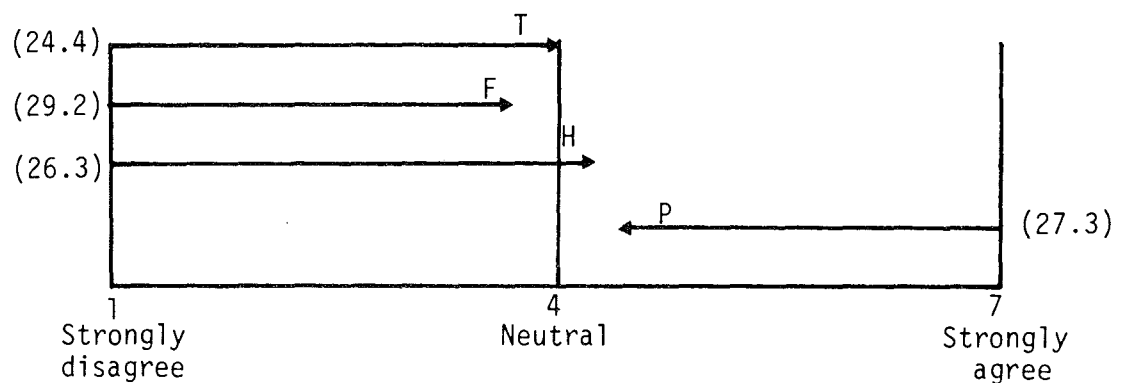
"Game management of recreational hunting herds would not interfere with other possible recreation activities in the forests."



"Because of restrictions on hunters on access to private land, hunters can jeopardise further access for other user groups."



"Hunters should be allowed to use hunting dogs."



3.6.5 SUMMARY AND DISCUSSION

In common with the Lake Sumner Study the data here presents a generally positive attitude to the compatibility of recreational hunting with other uses of the parks. Hunting is seen as a legitimate activity and hunters and trampers appear happy to share facilities.

Caution exists in two major areas. The first is the question of personal safety which continues to be a prominent issue for both hunters and non-hunters. It is significant that the most strongly held common belief is that hunters should pass regular tests in rifle handling and safety procedures..

The second area of caution relates to a wariness of concentrations of use. Neither hunters nor non-hunters appear keen on the prospect of being in the same areas as high numbers of hunters.

There are some conflicting beliefs about the damage done by deer, a wide spread of views on whether hunting dogs are appropriate in the parks and some variance of opinion on the interference that game management might have on recreational use. The need for continued data gathering on these issues and an improved flow of factual information to all users is suggested in order to establish a clear appreciation of what a Recreational Hunting Area is, what activities and levels of activities occur in one, and what are the implications of these activities.

3.7 Additional Comments

At the end of each questionnaire respondents were given the opportunity to make further comments, which prompted 21% to do so.

These varied from a demand for more access and/or facilities to a plea to protect 'wilderness areas'.

Typical comments on these subjects were:

"More short 2-3 mile walks to points of interest capable of being undertaken by families."

"Please don't spoil it with anymore roads, hydro schemes or allow horses, trail bikes and four wheel drive vehicles in the area."

"This is a beautiful place; don't change it too much."

The Forest Service received praise and criticism. Some of the praise was directed towards workers who cleared the roads after the Easter cyclone. Others were pleased with the areas, the facilities in general and the opportunity to be involved in this research.

Much of the criticism was from hunters and again, is similar to the comments discussed in Section 4.6.4. Strong comments against helicopters and commercial hunters also made up a number of the responses and are similar to those made in the Permit Hunter questionnaire.

A small percentage of users expressed nervousness about hunters in close vicinity, for example:

"Personally don't like men with guns. Am aware of the fact

of few fatalities, but still feel unhappy about bullets whistling through bush, and guns in huts."

"I would like to see hunting banned from areas suitable for introducing children to the hills (e.g.) the Oamaru-Kaipō areas."

Many of these 'anti-hunting' comments came from people using the Clements Road area of the Kaimanawas, and reiterates statements made in the previous section.

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The Hunter

4



4.0 Introduction

4.0.1 PARTICIPATION

The Canterbury Study discusses how participation rates for hunting in New Zealand have not been widely researched or recorded. Overall, it appears that 2% of the New Zealand population (an estimated 65,000 people) regard hunting in some form or another as one of their recreational activities.¹

Five to 12% of users in Lake Sumner Forest Park (April 1980) said they were there to hunt. Hunting use of Kaimanawa and Kaweka Parks is higher (25% January, 37.4% Easter). A recreation survey of the Motu River (Ritchie, et al, 1982) found that 40% of the river users specified hunting as their activity while in the area.

The high participation rates in these North Island studies are probably attributable more to the popularity of the Kaimanawas, Kawekas and Ureweras for hunting and their proximity to the majority of New Zealand's population, rather than major differences in the numbers of hunters in the population.

This study attempts to describe hunting groups from three perspectives:

- . hunters sampled as part of the general User Sample
 - . a random sample of permit holders
 - . rifle owners who regard themselves as active hunters,
- to construct a reliable picture of hunters and hunting use.

¹ Firearm Safety brochure, N.Z.F.S. cited in Rod and Rifle, November, 1982.

Differences in sampling frameworks can therefore highlight major issues and allow an examination of current hunting use of the Kaimanawa and Kaweka Forest Parks. In general, data presented in this study shows a remarkable similarity to the Canterbury study, especially in descriptive characteristics and use patterns. Canterbury recreational hunters were predominantly in the 20-30 year age range and possessed between four and ten years' hunting experience. Along with other factors, this suggested an attrition in the hunting population.

The North Island permit holders and rifle owners samples endorse this suggestion. However, the general user sample, which was a more extensive 'on-site' exercise, produced a profile of current hunting which shows a broader base, thus reflecting that the Kaimanawa and Kaweka forests are in fact attracting younger hunters.

4.0.2 METHODOLOGY

Chapter 4 draws principally on information from the Permit Hunter Sample. Fifteen hundred names and addresses were randomly taken from permits issued for Central North Island State Forests (Rotoaira,¹ Pukepoto,¹ Tongariro,¹ Rangitaiki, Whirinaki South, Waipunga), State Forest Parks (Kaimanawa, Kaweka, Pureora,¹ N.E. Ruahines) and Tongariro National Park between April 1980 and September 1981.

Approximately 64% (955 questionnaires) of the total sample was usable in the final analysis.

The following results and discussion deal with hunters' demographic characteristics, current and past patterns of use, their motivations and their attitudes.

¹These forests could not supply complete permit records and the sampling frame was adjusted appropriately.



4.1 Demographic Characteristics

4.1.1 AGE

TABLE 4.1: Age of Hunters

Age Group	Central North Island %	Canterbury %	New Zealand %
15-19	5.0	7.5	13.1
20-24	17.7	27.6	11.8
25-29	20.7	21.5	10.4
30-39	32.0	27.9	18.6
40-49	17.0	7.2	13.8
50-59	6.2	4.1	13.1
≥ 60	1.4	1.7	19.2

Although hunters of the Central North Island are young compared with the adult New Zealand population, they are older than both their Canterbury hunting colleagues and other users of the Kaimanawa and Kaweka Forest Parks.

Respondents to the 'on-site' Users Sample who listed their main activity as hunting in the two parks are, however, somewhat younger (57% less than 30 years). This suggests that these particular parks

at least do offer opportunities for younger hunters.

The methodological issue of not being able to contact all names on permits in the permit sample is raised again here. It can be speculated that older hunters who are party leaders will place their names on the permit first.

4.1.2 SEX RATIO

Respondents are 99.6% males.

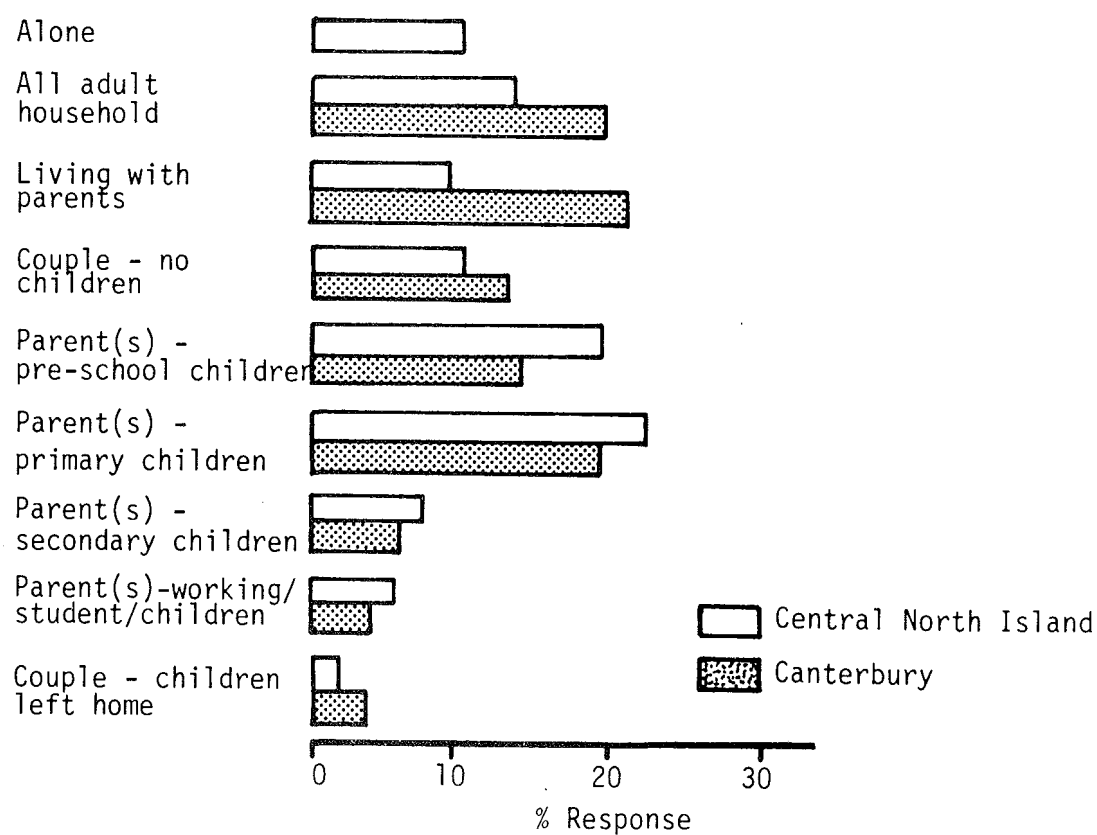
4.1.3 MARITAL STATUS

TABLE 4.2: Hunters' Marital Status

Marital Status	Central North Island %	Canterbury %	New Zealand %
Single	28.7	38.1	26.9
Married	67.0	57.3	58.2
Other	4.3	4.5	14.9

4.1.4 HOME SITUATION

FIGURE 4.1: Hunters' Home Situation



When this figure is compared with the home situation for Forest Park Users (Section 3.2.4, Figure 3.2), it can be seen that hunters are more highly represented in the family situation where there are pre-school or primary school children. There are less hunters living alone or with parents.

4.1.5 EDUCATIONTABLE 4.3: Highest Attained Educational Qualification

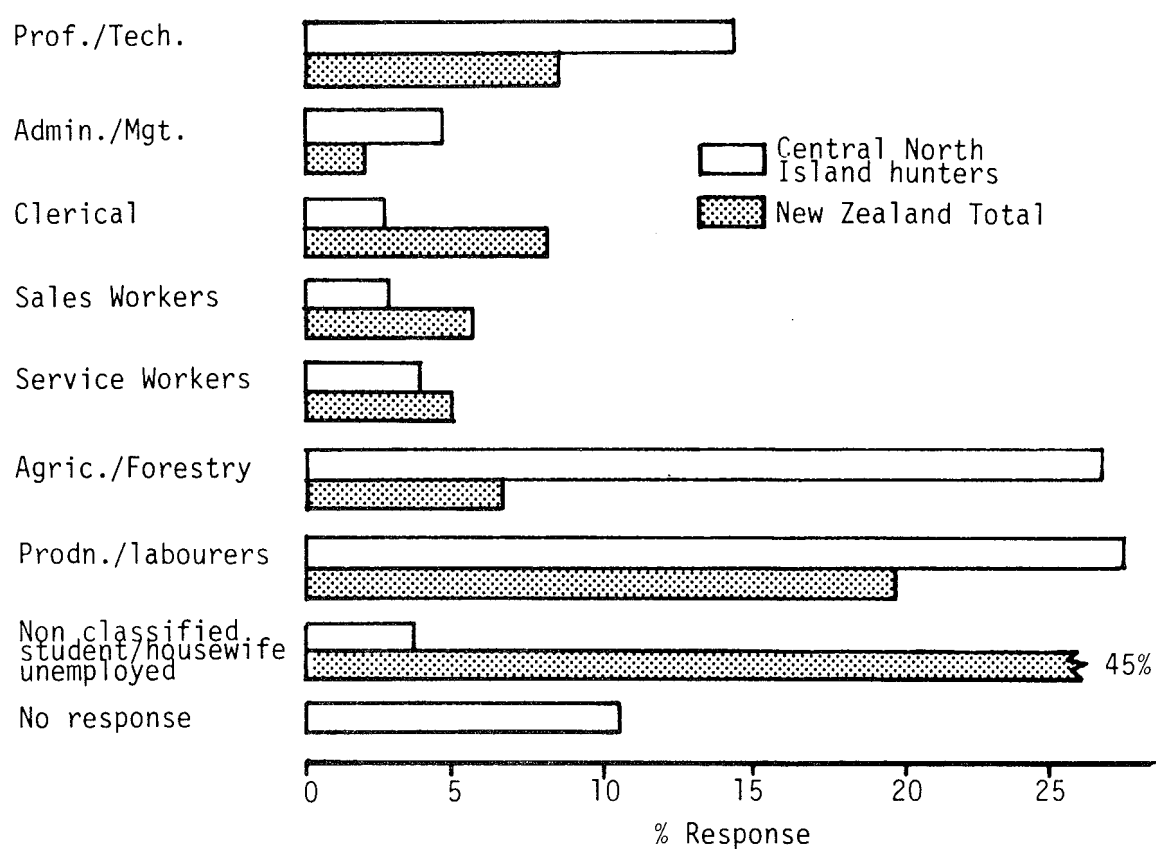
Highest ^a Qualification	Central North Island %	Canterbury %	New ^b Zealand %
Primary School	2.4	1.7	20.1
Some secondary	28.0	19.3	} 41.5
School Certificate	13.7	11.1	
U.E./6th Form Certificate	6.7	7.7	7.8
7th Form	1.9	3.6	2.0
Trade qualifications	29.4	32.1	} 20.6
Tertiary/professional	6.6	7.7	
Degree or Part-degree	11.3	16.8	5.2

^aAll figures relate to people aged 15 years and over.

^bNo qualification specified by 2.8%.

4.1.6 OCCUPATION

FIGURE 4.2: Hunters' Occupations



4.1.7 ORIGIN

TABLE 4.4: Residence of Hunters

Residence	Central North Island %	Canterbury ^a (S.I. equivalents) %	North Island %
North Island - City	45.2	65.9	65.8
- Town	20.3	13.5	7.9
- Rural Town	12.5	17.7	4.0
- Rural Area	20.2	2.9	22.3
South Island Total	1.6	-	-
Overseas/unspecified	0.2	-	-

^aCanterbury figures are for the South Island equivalents of city (>20,000), town (5-20,000), rural town (>5,000), rural area. N.I. figures are approximate because Census data does not have equivalent categories.

Figures from both studies suggest that hunting is distinct from other forest uses, in that it tends to be relatively more attractive to rural dwellers. The relative reduction in the proportion of hunters from cities and comparative strength of the Central North Island 'rural area' figure is probably more indicative of the permit stations sampled and population distributions between the two islands, than changes within the hunting group itself.

TABLE 4.5: Hunters' Residence During Upbringing

Residence During Upbringing	Central North Island %	Canterbury %
City (>20,000)	32.9	55.0
Town (5-20,000)	16.7	
Rural Town (>5,000)	14.2	19.3
Rural Area	32.3	25.6
Overseas	3.9	-

4.1.8 SUMMARY AND DISCUSSION

Overall, hunters in the Central North Island demonstrate similar demographic characteristics to those in Canterbury which suggests that recreational hunters comprise a distinct group of back-country users.

Hunters (in the Central North Island) differ from other user groups (in the Kaimanawa and Kaweka Forest Parks) in some potentially significant ways. Most (52.7%) are in the 25 to 39 years old age group, and another 17.1% are in the 40 to 49 age bracket. Hunters in the Permit Hunters sample are not only older than most other users groups, but are also older than hunters in the Canterbury permit sample and this is reflected in other descriptive characteristics such as marital status and home situations.

The age profile of hunters actually using the Kaimanawa and Kaweka Forest Parks during the User Sample period do not fit such an extreme picture. While all age groups are still represented, the Parks do attract some use from younger hunters.

Hunters are over-represented in the agricultural/forestry and skilled trade occupation groups and slightly over-represented in the professional/technical group (from which large numbers of trampers are drawn). Overall, hunters are more representative of the total New Zealand population on these variables than trampers.

More than other user groups, hunters were brought up in, or currently reside in rural areas.

4.2 Current Hunting Patterns

4.2.1 LAST HUNTING TRIP

Questionnaires were posted to the random sample of permit hunters in mid-January 1982. The following results would therefore be based around the months before this.

TABLE 4.6: Time Since Last Hunting Trip

Number of Months	% Respondents
Less than 1 month	48.3
1 month	12.6
2- 3 months	16.9
4- 6 months	9.6
7- 9 months	6.0
10-12 months	4.1
13-17 months	0.9
18-24 months	0.9
More than two years	0.7

Respondents indicated that 78% had been hunting within the previous three months (November, December, January).

Although these months are not regarded as the major hunting season, they are a time when many people are able to take holidays and engage in some hunting.

It is of interest to note that these are very similar results to those for the Canterbury Study which was sampled in June. This could be interpreted as suggesting a high level of activity among those who are enthusiastic about their recreation.

Over half (54.6%) of the respondents indicated that they preferred to go hunting in April. For most hunters this was because of the 'roar', but others preferred the weather in autumn.

4.2.2 HUNTING TRIP DURATION

TABLE 4.7: Trip Duration and Frequency in Last Two Years
(1980-81)

Trip Duration	Respondents Undertaking Trips %	Median Number of Trips %
Weekends	73.6	4.8
Day trips	71.4	5.9
Week trips	49.7	2.0
Long weekends (Public Holidays)	44.2	2.1
Long weekends (other than Public Holidays)	34.3	1.9
Extended trips (long than one week)	25.0	0.7

One and two day trips are the most popular which is further indicated in the following table.

TABLE 4.8: Length of Last Hunting Trip

Days	<1	1	2	3	4	5-6	7-8	9-10	11-20	>20
Response %	11.2	18.9	22.9	17.1	9.6	8.2	6.0	2.5	1.8	2.0

4.2.3 HUNTING GROUP STRUCTURE

Hunting trips were divided into two categories, 'day' and 'overnight'. Differences between 'travel' and 'hunting' arrangements were also sought.

FIGURE 4.3: Number of People in Groups (to Base Camp, Actual Hunt)

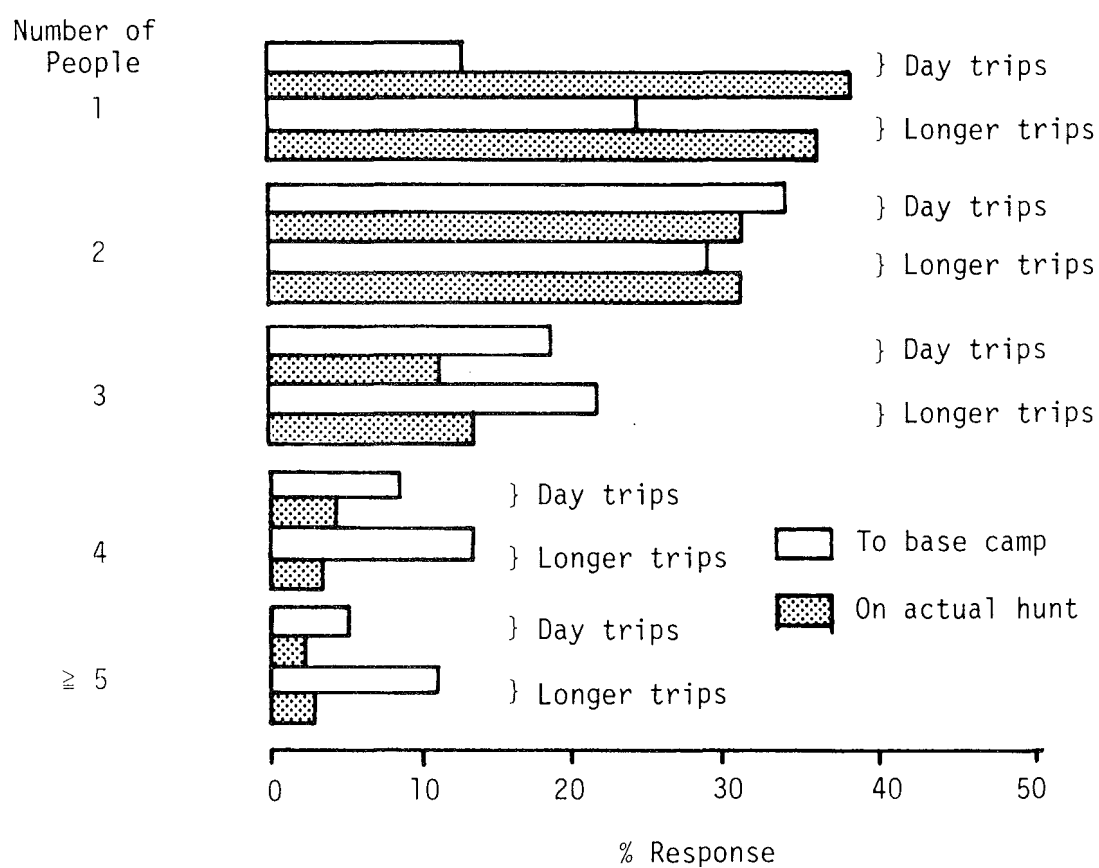
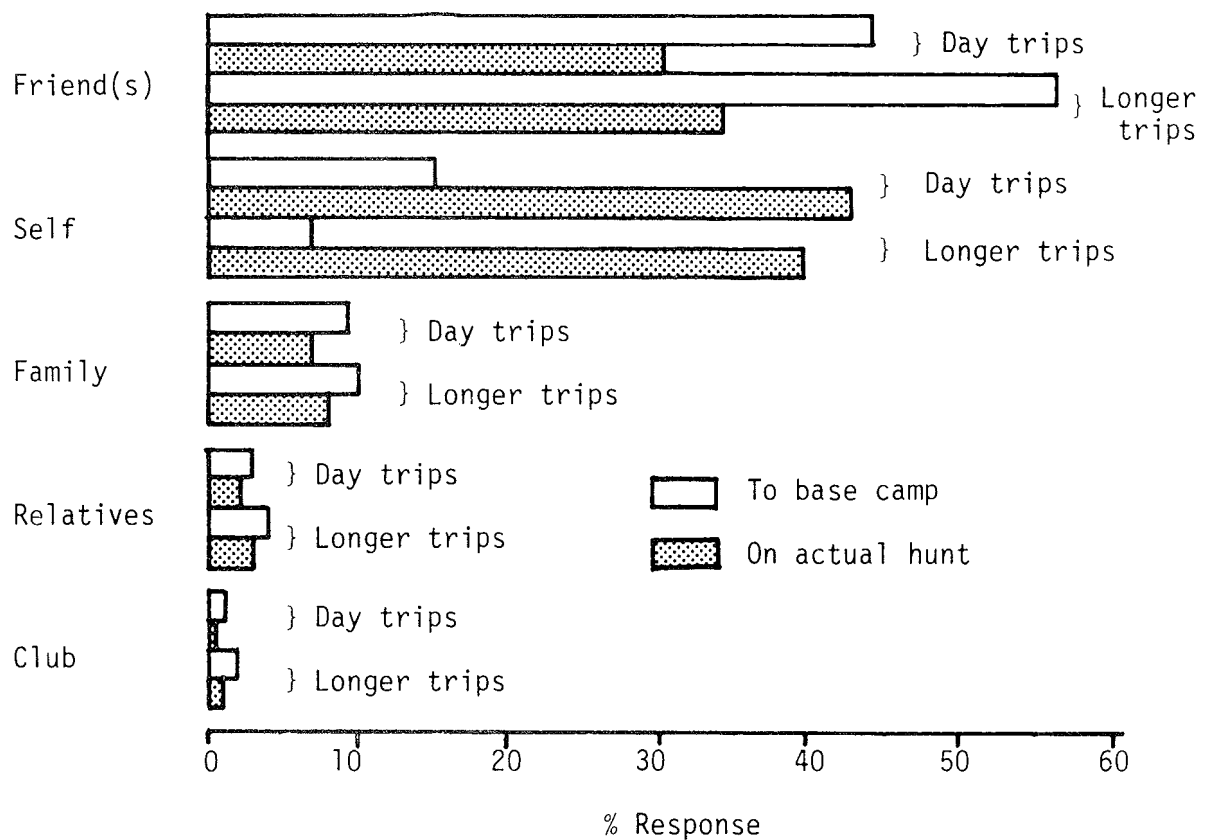


FIGURE 4.4: Hunting Companions (to Base Camp, Actual Hunt)



As reported in the Lake Sumner Study, most hunters travel with one or two friends to their hunting areas and then actually hunt alone or in pairs.

Data to be introduced later show many hunters belong to hunting organisations (Section 4.3.5), however, club trips do not feature strongly as the 'usual' hunting arrangement.

4.2.4 CHOICE OF HUNTING AREA

TABLE 4.9: Popularity of, and Number of Days Spent in,
Selected Hunting Areas in Last Two Years

Hunting Areas	Respondents Who Hunted Area %	Median Number of Days (1980-81) %
Kaimanawa Forest Park	63.0	14.7
Kaweka Forest Park	40.9	13.6
Other Forest Parks	40.2	12.8
Private Areas	37.9	10.0
State Forest - Native	37.0	8.4
National Parks	32.0	8.4
State Forest - Pine	22.6	8.4
Maori Land	14.8	7.7
Scenic Reserves	11.2	7.7
Other	7.2	7.2

Respondents were asked to name their three preferred areas for hunting. The sample of hunters was drawn from permits at specific forests (see Section 4.0.2) and these areas could be expected to be over-represented in the results. The request for three hunting areas and breadth of sampling to encompass a wide range of hunting opportunities in the Central North Island were designed to compensate for this sample bias. The effectiveness of these moves remains unknown.

The above tables suggest a variety of factors which may affect the popularity of a particular hunting area. Key factors in this are the combination of available time and physical access. For example, it could be argued that time constraints imposed by work promote weekend and day trips as prime hunting times. Such time constraints, and in recent times cost factors, serve to limit the amount of travelling that can be undertaken. Thus, all areas appear to attract significant numbers of local residents.

Kaimanawa and Kaweka Forest Parks were named most frequently. Of those who chose to hunt in the Kaimanawas, 21% came from Auckland, less than 6% from Wellington and much of the remainder originated from Taupo, Turangi, Rotorua and Tokoroa. Over half of those who preferred the Kawekas came from Napier, Hastings or elsewhere in Hawke's Bay.

Pureora, one of the other forests included in the sample, featured strongly in the 'Other Forest Park' category as did Urewera in the 'National Parks' category. Pureora Forest Park has a broad appeal in the northern half of the North Island; Ruahine the local Hawke's Bay area, while Rimutaka and Haurangi largely serve the Wellington hunting population.

The use of private land for hunting is common, but less marked than among Canterbury hunters. Increased commercial interest in wild animals over recent years has served to cut across traditional access to private lands in many areas as land owners have leased out hunting rights or included deer farming in their operations. It could be suggested that this has affected the urban hunter more than those living in rural areas.

FIGURE 4.5: Main Reason for Hunting in a Certain Area

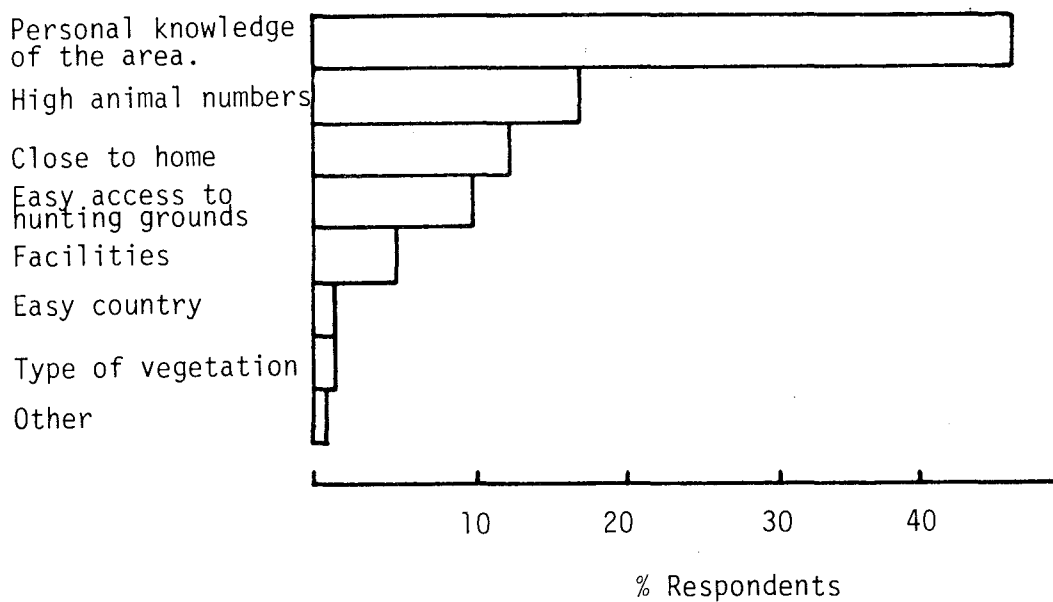


Figure 4.5 highlights a feature of the use of hunting areas not immediately apparent from previous data. That is, unlike trampers and other forest users, hunters tend to have a limited number of choice hunting areas about which they build up an intimate knowledge over many trips.

Presumably this time is spent obtaining information on animal behaviour and the surrounding environment. At other times hunters may travel longer distances to explore new areas, in the hope of good hunting.

4.2.5 ANIMAL SPECIES HUNTED

Sika deer were, by far, the most popular first choice of animal to hunt (46.4%), while red deer were next (36.8%) and then pigs (9.8%).

However, red deer were the most popular second choice (41.9%), followed by pigs (21.9%) and then sika (19.6%).

4.2.6 HUNTING SUCCESS

Hunters were asked to complete an extensive chart listing their successes in sighting and shooting specific animals in selected areas.

This information focuses firstly on hunting within the Kaimanawa and Kaweka Forest Parks and then broadens to include hunting opportunities elsewhere in the North and South Islands.

Table 4.10 classifies hunters' success according to animal species. Column 1 simply lists the percentage of hunters who have pursued the specific animal in the areas listed within the previous two years (1980-81).

The remaining columns (2-5) have been adjusted to base Column 1 figures as 100% and thereby form the basis for an equitable comparison of the success rates. For example, the first item in Column 2 is interpreted - 'of all those hunters seeking sika in Kaimanawa Forest Park, 5.7% have not sighted an animal within the past two years'.

TABLE 4.10: Hunting Success - Selected Areas by Animal Species

	Column 1	Column 2
	Usage % of hunters ^a using specified area	Adjusted hunters ^b who have not seen an animal
<u>Sika</u>		
Kaimanawa	54.2	5.7
Kaweka	32.8	8.9
<u>Other Deer</u>		
Kaimanawa	32.9	13.1
Kaweka	23.7	11.5
Remainder N.I.	66.3	7.1
<u>Pig</u>		
Kaimanawa ^C	9.0	19.8
Kaweka ^C	6.3	18.3
Remainder N.I.	38.5	16.8
<u>Goat</u>		
Kaweka	2.7	n/a ^d
Remainder N.I.	33.3	9.1
<u>Deer, South Island</u>	9.5	7.7
<u>Pig, South Island</u>	1.9	n/a
<u>Goat, South Island</u>	1.5	n/a

^a Usage is the percentage of permit acquiring hunters within the previous two years (1980-81) pursuing the specific animal, as listed.

^b Columns 2-5 have been adjusted to base column 1 figures as 100%.

Column 3	Column 4	Column 5
Adjusted hunters ^b % who have not killed an animal	Adjusted hunters ^b % who have killed at least one animal	Adjusted hunters % who have killed 10+ animals
22.9 24.0	77.1 76.0	11.6 10.9
27.2 33.0 18.3	72.8 67.0 81.7	7.2 7.3 19.9
29.6 29.5 20.1	70.4 70.5 79.9	16.0 9.8 23.7
n/a 11.5	n/a 88.5	n/a 49.0
25.3 n/a n/a	74.7 n/a n/a	4.6 n/a n/a

^cPigs are present in very low numbers, in localised pockets.

^dWhere numbers hunting selected species were less than 5% of the total sample figures, success rates have not been calculated.

Column 2 highlights those who have not sighted an animal, Column 3, those who have not killed one animal, and Column 4, those who have killed one only. Column 5 takes an arbitrary level of 10 animals over two years as representing a high level of success, and lists the percentage of hunters achieving this mark.

Figures from hunters in the North Island show remarkably similar levels of success to their South Island colleagues. If deer species are assumed to be the principal focus of hunting activity, then the figures suggest an average success rate in killing at least one animal in the past two years as about 74%.

What is of concern however, is the 26% who do not kill, or 9% who do not even sight a deer. Although goats are not a popular species, their hunters exhibit the best success rates.

While the question of the importance of sighting animals, or their sign, as a motivating factor is discussed elsewhere in this report (Section 4.4.4), there comes a time when failure to achieve success may lead to the rejection of hunting as a recreational activity.

The relationships between attitudes, motivations and actual behaviour, are always difficult to interpret, due to a myriad of possible other factors that may influence any direct relationship. Hence, the reports of the actual experiences of ex-hunters¹ become a most valuable source of information.

¹ Respondents who consider themselves ex-hunters comprise 26.8% of the Rifle Owners Sample. See Section 5.0.

Ex-hunters were specifically asked both how long it was since they last went hunting, and how long since they last shot an animal.

Crosstabulation of these data indicate that of hunters who have given up the sport -

- 81.4% had withdrawn between one and two years after their last successful trip, and another
- 7.1% had withdrawn in the following year.

When combined with the known levels of current hunting success (Table 4.10), these figures suggest that most of the 26% of current hunters who have neither shot nor sighted deer in the past two years, may well be about to forfeit hunting these animals altogether. They may take up other similar recreational activities such as fishing.

Likewise, continued success in actually killing animals is seen as a crucial factor in hunters' continued motivation to hunt (see Section 4.4).

The above combination of results and their indication of possible further reductions in the numbers of recreational hunters is seen by the authors as a major finding of both the Canterbury and present studies.

4.2.7 SUMMARY AND DISCUSSION

Hunters' current patterns of use demonstrate a substantial core of enthusiastic hunters who make many return trips with small groups of friends or family, to familiar hunting areas.

It has been argued that constraints operating in society at large promote weekend or day trips to local forest resources. To this is coupled hunters' desire to build an intimate knowledge of favourite hunting areas. More extensive trips in search of new opportunities are, however, undertaken from time to time. Within a region RHA's need to be able to encompass this range of hunting patterns.

Reports from hunters on their success at hunting different animal species suggest that while there are not great numbers of highly successful hunters, many have shot at least one animal in the past two years. Data constructed from the experience of ex-hunters raises concerns that up to one quarter of present deer hunters may be about to give up their sport due to lack of hunting success. This again argues for a diversity of opportunities for successful hunting.

4.3 Experience

4.3.1 INTRODUCTION

A variety of aspects relating to hunters' levels of hunting experience were considered. This information is a key variable to understanding their facility requirements, the significance of their comments and the implications of these for management policies.

4.3.2 INTRODUCTION TO HUNTING

4.3.2.1 Agents of Introduction to Hunting

Hunters were asked who first introduced or taught them to hunt, so that insights into growth trends of the activity could be gained.

TABLE 4.11: Agents of Introduction to Hunting

Agent	% Respondents
Friend	28.6
Self	28.5
Parent	26.8
Brother/sister/relative	13.7
Club	2.2
School	0.2

Central North Island hunters have been introduced to hunting in exactly the same way that Canterbury hunters have. Parents or other family members introduced 40.5% of hunters, while self-introduction and introduction by friends are equally important. However, only 2.2% were initially introduced by a club.

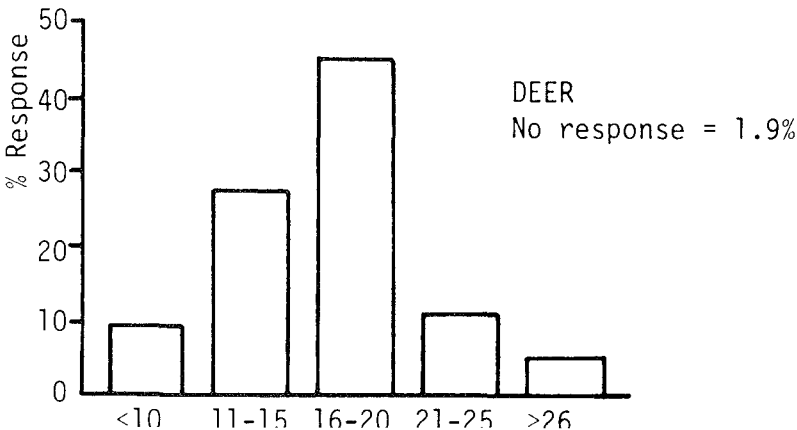
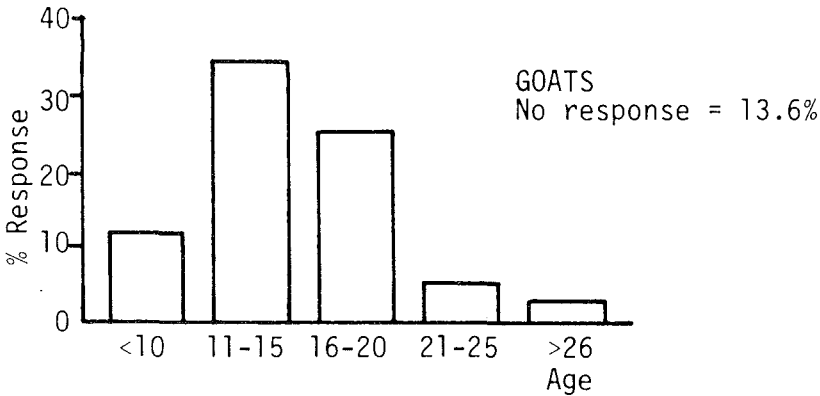
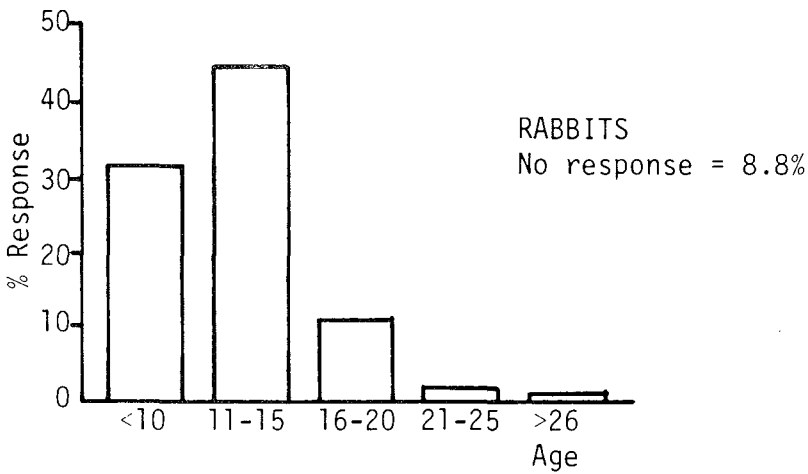
It would appear then, that in common with many other backcountry recreational groups, hunters share similar interests to their family and friends. Those who are self-introduced probably had the ideas and enthusiasm also instilled by family.

Section 4.3.5 will show that almost 30% of respondents belong to some type of hunting organisation, yet very few hunters are initially introduced to the sport by these clubs. This conforms to the pattern found among Canterbury hunters although club membership in the North Island is higher.

4.3.2.2 Ages of Introduction to Hunting

A second factor in attempting to piece together hunters' introductory experiences is a consideration of age at the time of introduction to hunting different animal species. (See Fig. 4.6.)

FIGURE 4.6: Ages of Introduction to Hunting Animal Species



Several features are apparent from the data. First, the high number who indicate they have hunted all animal species suggests that choice of prey proceeds with the development of hunting skills. For example, 91.2% indicate that they have hunted rabbits and 98.2%, deer. Crosstabulation of their ages of introduction to hunting these animals demonstrates that almost without exception, skills and experience are first developed in rabbit hunting.¹

Secondly, few hunters are introduced directly to hunting the more difficult animal species such as deer. The past experiences of hunters demonstrates their use of a variety of hunting opportunities early in life. Age profiles for hunters in both the Permit and User Samples show that there are few people now hunting from the age group where most of the present hunters were introduced. Increased urbanisation, more restrictions on access to farmlands and few small game opportunities, could all be argued to cut across this traditional introductory pattern.

¹Control of rabbits comes within the Agricultural Pests Destruction Act administered by the Agricultural Pests Destruction Council, rather than the Wild Animal Control Act administered by the Forest Service. This fact may hinder any moves to broaden the range of recreational hunting opportunities to include areas for 'introductory hunting' of lesser game such as rabbits. Such moves are suggested later in this report.

4.3.3 YEARS OF EXPERIENCE IN HUNTING

The following table demonstrates the similarity of results between samples taken in Canterbury and the Central North Island. In the Central North Island, people who started hunting more than ten years ago represent 61.9% of the respondents and another 24.5% have been hunting for five to ten years. Of concern, however, is the finding that only 13.6% possess less than five years' experience. This declines to very few with one or two years' experience.

TABLE 4.12: Years of Experience in Hunting (Permit Sample)
Canterbury and Central North Island

Years	Canterbury %	Central North Island %
< 1 } 1	1.1	0.9 0.9
2	2.5	2.5
3	3.9	4.8
4	8.3	4.5
5- 6	13.6	7.8
7- 8	10.3	7.1
9-10	11.9	9.6
11-20	29.4	32.2
> 20	18.9	29.7

Previous sections of this chapter have highlighted the greater proportionate use of these Forest Parks for hunting and apparent stronger interest by Central North Island hunters toward their sport. Data from the 'on site' User Sample has demonstrated that younger hunters currently use the Kaimanawa and Kaweka Forest Parks and this is also borne out by the group's experience profile.

Hunting and tramping data from the User Sample are compared below. The strong physical orientation of these activities would suggest a similar experience profile which is demonstrably the case in these Parks.

TABLE 4.13: Years of Experience: Hunters and Trampers
(User Sample)

Years	Trampers %	Hunters %
< 1	6.6	8.3
1	3.1	2.9
2	5.5	5.2
3	7.6	5.4
4	7.2	6.0
5- 6	16.9	10.6
7- 8	7.9	7.4
9-10	10.0	13.5
11-20	16.2	24.6
> 20	19.0	16.0

4.3.4 CONTINUITY OF HUNTING EXPERIENCE

The majority of hunters (70%) indicated that their hunting experience had been continuous (i.e. without a break of more than one year). This result is identical to that found in the Canterbury Study.

Of the 30%, however, who had taken a break or no longer hunt regularly, 6.7% said this was because of a decline in animal numbers (compared with 18% who said this in Canterbury). A higher number than those in Canterbury had family commitments which is probably a reflection of the fact that there are more married hunters in the North Island sample.

A breakdown of reasons for not hunting are outlined below.

Table 4.14: Reasons for Interruption to Hunting Experience

Reason	% Respondents
Family commitments	25.7
Work/overseas trip	25.3
Other interests	24.5
Access problems	8.2
Decline in animal numbers	6.7
Health problems	5.2
No-one to go with	2.2
Cost of hunt	1.5
Age	0.7

4.3.5 MEMBERSHIP OF ORGANISATIONS

Information on membership of organisations from the Permit Sample confirms data found in the User Sample. On the one hand few hunters (10%) belong to a conservation organisation such as the Royal Forest and Bird Protection Society or Native Forests Action Council. On the other hand, just over half of them belong to an outdoor recreation organisation of some sort.

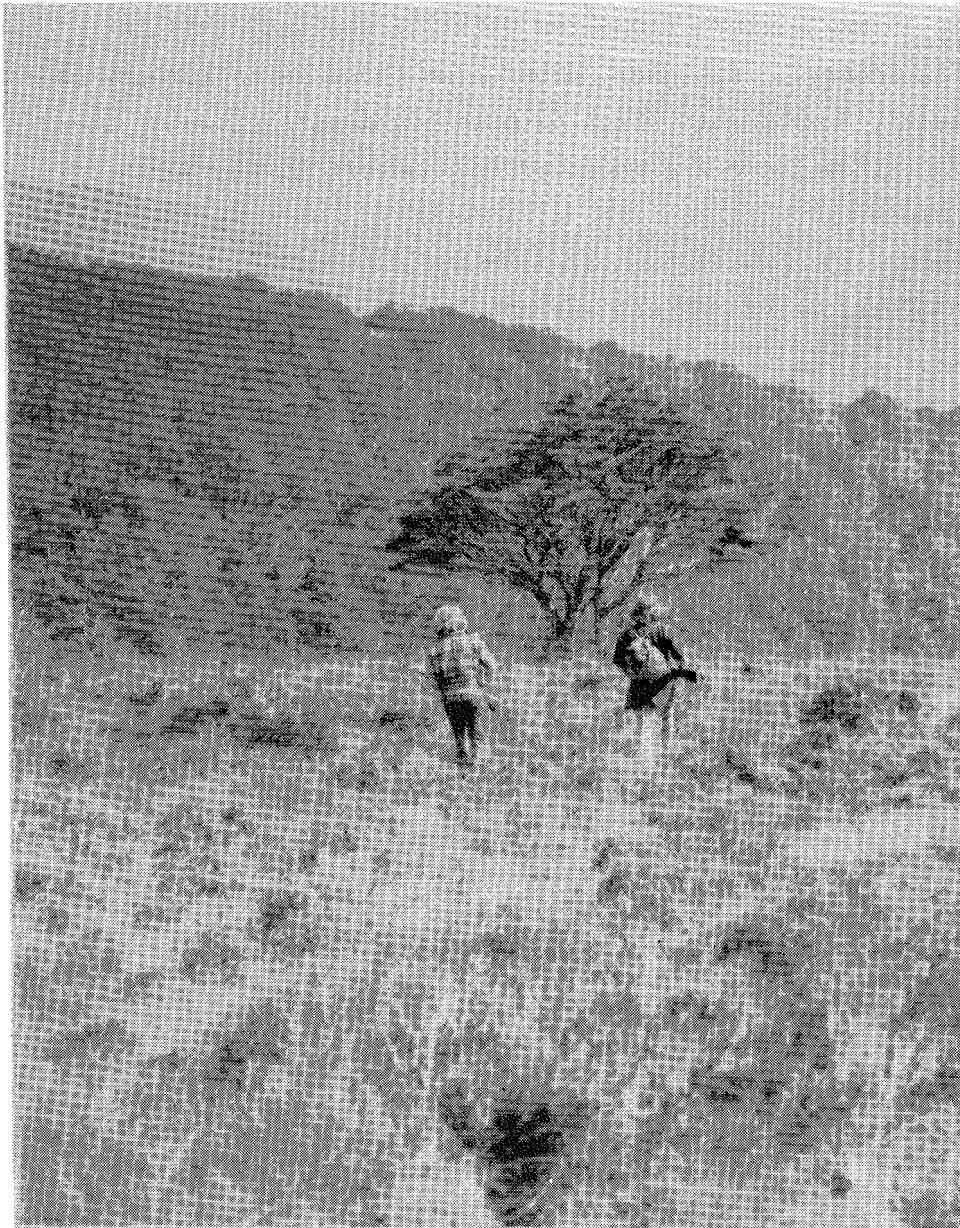


Photo by N. Borst

TABLE 4.15: Hunters' Membership of Outdoor Recreation Organisations

Organisation	"Permit" Hunter Sample %	"User" Hunter Sample %	Active Rifle-owners %
- Deerstalkers Association	25.9	23.7	16.8
- Big Game Hunters	2.2	1.4	0.9
- Small Game Shooters Sporting Association	1.0	1.1	1.1
- Bowhunters Society	0.8	0.6	0.2
Hunting Organization (total)	(29.9)	(26.8)	(19.0)
Acclimatisation Society/Angling Sports Club	9.6 4.3	9.2 1.4	8.4 6.6
Tramping or Mountaineering Club	2.1	2.0	2.4
Other Backcountry Clubs	6.6	4.6	2.8
Do not belong to any	47.5	56.0	60.8

Membership of the various hunting organisations, in particular, the N.Z. Deerstalkers Association, is higher for the Central North Island Sample than the Canterbury hunters.

Club membership was crosstabulated with the residence of hunters and it was found that 15.5% of hunting organisation members came from Napier or Hastings. Another 13.8% came from Auckland, and nearly 10% came from Wellington. Much of the remainder were from Hamilton (5.6%), Taupo (5.6%) Tokoroa (4.9%). This closely resembled the total hunting group's residential pattern except for Wellington where N.Z.D.A. members were nearly double that expected.

Non-club, or ex-club members, were invited to comment on their reasons for not participating in clubs. Sixty-six percent preferred not to comment. Nine percent preferred to hunt with friends or by themselves rather than be organised into club activities. Seven percent said they did not have the time to commit to a club. The other 17.5% gave a variety of reasons including 'not liking the type of people who belonged to clubs'; 'clubs spend too much time talking and arguing instead of hunting'; or they 'haven't got around to joining'.

4.3.6 SUMMARY AND DISCUSSION

The study of Canterbury hunters suggests that recreational hunting is not attracting, at present, sufficient novices to maintain its strength.

By studying the data for ages of introduction to a variety of game animals, years of experience in hunting and the experience of present hunters, it appears (from the Permit Sample) that Central North Island hunters are equally, if not more experienced and 'aged' than in Canterbury, thus reinforcing this conclusion. However, hunters in the User Sample suggest that Kaimanawa and Kaweka Forest Parks are successfully providing a training ground for novice deer hunters.

Other data also suggests that traditionally hunting skills have been developed on lowland game species.

The provision of training opportunities whether it be by access to a variety of game, comprehensive training programmes, and/or club involvement, is seen as necessary to encourage new hunters if recreational hunting is to retain its popularity.

4.4 Motivations

4.4.1 MOTIVATIONS

Hunters were asked to list up to four main reasons why they go hunting. The following table is a summary of these responses based on a standard set of categories.

As in the Canterbury study the numerically strongest first ranked motivation is the "environmental" category. This grouping includes such reasons as "getting away from the city"....."the wife and kids" or strong affinity with natural elements - "the beauty of the bush". This serves to highlight that 'good' hunting is dependent on the same over-riding values as other Forest Park use.

Also featuring consistently were reasons centred on hunting itself:

- the development and testing of skills
 - the physical rewards gained (meat, money, trophies)
 - a subjective dimension normally focusing on intense personal excitement or thrill generated by hunting
 - a residual category describing the hunting activity itself.
- Hunting is, after all, the *raison d'être* of hunters.

'Physical exercise' and 'social' reasons are important, but also need to be viewed as part of the total package that compels hunters to continue their activity.

Factors which could influence satisfactions from anyone of these key areas will result in changes to hunters' motivations. Thus, good hunting country, facility provision and the like will be unable to continue to draw hunters without the opportunities for 'getting onto' animals.

TABLE 4.16: Motivations for Hunting

Motivation Category	First Reason %	Second Reason %	Third Reason %	Fourth Reason %
Environmental				
- exit-civilisation	42.9	30.7	24.6	17.7
- aesthetic-religious				
Activity				
- thrill of hunt				
- challenge/skill	38.7	37.4	31.2	28.4
- meat/money/trophy				
- activity itself				
Physical Exercise	5.7	11.2	8.9	6.5
Social	0.8	2.4	6.8	3.4
New Area/Other	2.7	4.1	5.5	7.1
No Response	9.2	14.2	23.0	36.9

4.4.2 OTHER BACKCOUNTRY ACTIVITIES

Hunters were asked if they take part in any other 'backcountry' activities when they are hunting or at other times. The following table summarises their responses.

TABLE 4.17: Hunters' Other Backcountry Activities

Activity	When Hunting	Other Times
Camping	13.8	9.3
Fishing	12.9	13.3
Photography	12.7	7.3
Tramping	10.2	8.2
Sightseeing	9.0	7.8
Nature Study	4.5	2.2
Other	2.2	7.0
No response	34.7	44.9

The above levels of response, when compared with similar data from the Canterbury study, reinforce the earlier suggestion that hunters of the Central North Island appear more intent on hunting than their Canterbury counterparts. This is seen in the levels of non-response which suggest that visits for many are purely hunting based. Likewise, the motivational profile

(Table 4.16) also demonstrates that North Island hunters tend to be more intent on hunting itself. Notwithstanding this, many can be seen to combine their hunting trips with other activities or undertake these activities as primary goals at different times.

4.4.3 IMPORTANCE OF THE HUNT

Hunters were asked to indicate on a scale of one to five (one = not important, five = essential), the importance of seeing 'sign', animals and of killing an animal. The following table illustrates this for both day hunting trips and longer trips.

TABLE 4.18 Importance of Animal Observation on Hunting Trips
(median response)

	Not Important		Neutral		Essential	
	1	2	3	4	5	
Seeing animal sign				D	L	
Seeing fresh sign					D L	
Sighting animals				D	L	
Killing			D	L		

Key: D = day hunting trips

L = overnight or longer hunting trips

As in the Canterbury Study, hunters are relatively neutral about the importance of killing an animal, but it is more essential for them to actually see fresh sign or an animal. For day hunters all values are slightly less than for overnight trips.

The percentage of values at extremes of the above scale for killing an animal are presented below.

TABLE 4.19: The Importance of Killing an Animal - (% of respondents at extremes of scale)

	Not Important	Neutral	Essential
Day hunts	14.8	35.0	18.8
Longer trips	9.8	29.4	28.1

While the 'not important' and 'neutral' values are similar to those reported by Canterbury hunters, the 'essential' categories are substantially higher (9.5% and 18.4% for day and longer trips respectively were the Canterbury responses). This would suggest that Central North Island hunters are the more achievement oriented of the two groups.

However, this general interpretation needs to be balanced with the view that other hunters appear relatively flexible with regard to hunting success and gain satisfaction from other values or substitute activities.

The experiences of ex-hunters (Section 5.1) will suggest, however, that continued lack of hunting success leads to a rapid retirement from the sport.

4.4.4 REASONS FOR HUNTING

Hunters were asked what parts of an animal they carried out if they had made a kill. This included whether it was for their own use or to sell.

TABLE 4.20: Disposal of Animals

	First Animal		^a Second and Subsequent Animals	
	Own Use	Sell	Own Use	Sell
Take whole carcass	36.9	9.2	22.2	15.8
Take meat and trophy	30.7	1.3	22.6	2.3
Take meat only	11.1	0.6	10.3	0.9
Take meat and byproducts	8.6	0.8	7.9	2.4
Take trophy only	0.4	0.1	1.3	0.2
No Response	12.3	88.0	35.7	78.4

^aSuccess rates of hunters outlined in Section 4.2.6 suggest limited success of most hunters over a two year period and few taking more than one animal on any one particular trip.

The reward of gaining meat for personal use is most important, as was also reported by Canterbury hunters. There are some who would sell a first animal, but the idea of selling a second animal is more widespread.

In a separate attitude statement (Section 4.6.3) hunters strongly disagreed with the statement that they 'would not use RHA's because they could not sell their kill'. The above data is reinforced by discussion with hunters where they indicate that selling or 'trading' a carcass, meat or by-products is a long-standing and widely practised means of offsetting costs.

Faced with increasing costs associated with the sport, it is likely that hunters would still use RHA's, but ignore any regulations regarding 'pecuniary gain'.

A second caution arising from the above, is that data presented elsewhere in this report suggests that generally New Zealand hunting is already experiencing difficulties maintaining current numbers and activity levels. Additional restrictions on traditional behaviour may only serve to worsen this situation.

4.4.5 VALUE OF TROPHIES

Respondents indicated that 91% of them would be satisfied with shooting a deer without obtaining a trophy.

When asked whether they believed controlling the number of sika deer would improve their development as a trophy animal, 47% answered 'no', 27% answered 'yes' and 26% were 'not sure'.

4.4.6 SUMMARY AND DISCUSSION

Hunters portray a wide range of motivations for undertaking their chosen recreational activity, such as 'exit-civilisation' or 'aesthetic-religious' reasons. Central to these, however, is the activity itself (including rewards, the thrill and challenge) as being an important reason for hunting.

Few undertake other back-country activities, but fishing, however, is ranked reasonably high as an activity at times other than when hunting.

Central North Island hunters appear more achievement oriented than Canterbury hunters, in that actually killing an animal is fairly important - but this does not have to be a trophy.

There are some hunters who would sell their first animal kill, but selling is more likely if they get at least two.

4.5 Facilities and Services

4.5.1 INTRODUCTION

An understanding of Park users' facility and service requirements, whether 'wished for' or necessary, is useful in management planning.

Both the User Sample and the Permit Hunter Sample were asked whether less, the same or more of a particular facility or service was preferred. Section 3.5 outlined the User Sample preferences, but for ease of comparison and discussion the data from both samples are analysed here.

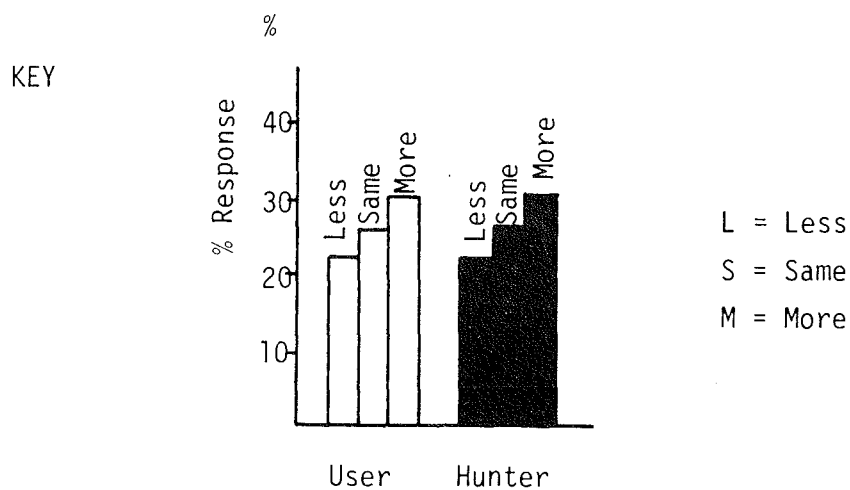
Approximately 40% of both samples chose not to answer this question. This serves to highlight one of the dangers inherent in questions of this type, that is, a tendency for people to opt for the *status quo*. This is coupled with any change being viewed cautiously, especially those changes which may seem to threaten the Parks as current users know and enjoy them. 'Any further visitors should come to the Park under the same conditions that we had to.'

Another problem with questions of this type is the possibility of generating a 'wish list' without acknowledgement of management or resource constraints. Respondents were therefore asked to 'rank' their first three choices in the belief that this would bring additional consideration to their responses.

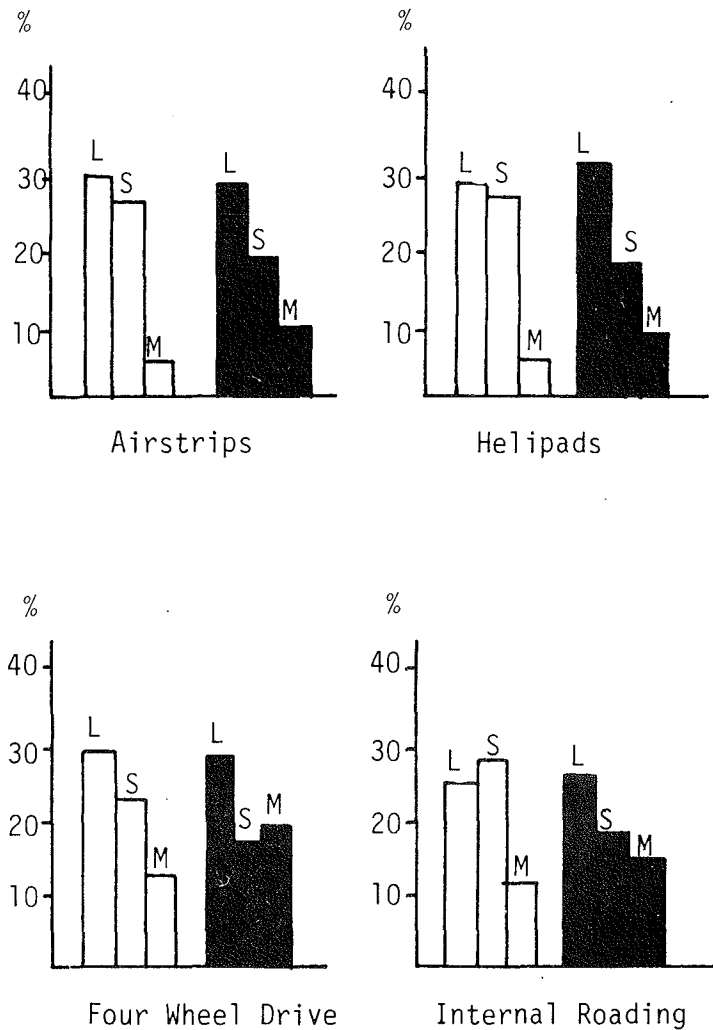
Observations would also suggest that some users, particularly 'first time' visitors and fringe users, did not view this

question as relevant to them or perhaps felt that they did not possess sufficient experience/knowledge to justify their choices. Likewise for the Permit Hunter Sample, information was specifically sought for the Kaimanawa and Kaweka areas and not all permit hunters had been to these areas in the last two years (see Section 4.2.4).

Facilities have been divided into five main groups (access, tracks, huts, amenities and services) and are discussed separately below. A graph for each facility or service shows the percentage of respondents preferring less, the same, or more of each one. The user sample (white) and Permit Hunter Sample (black) are separated for comparison.

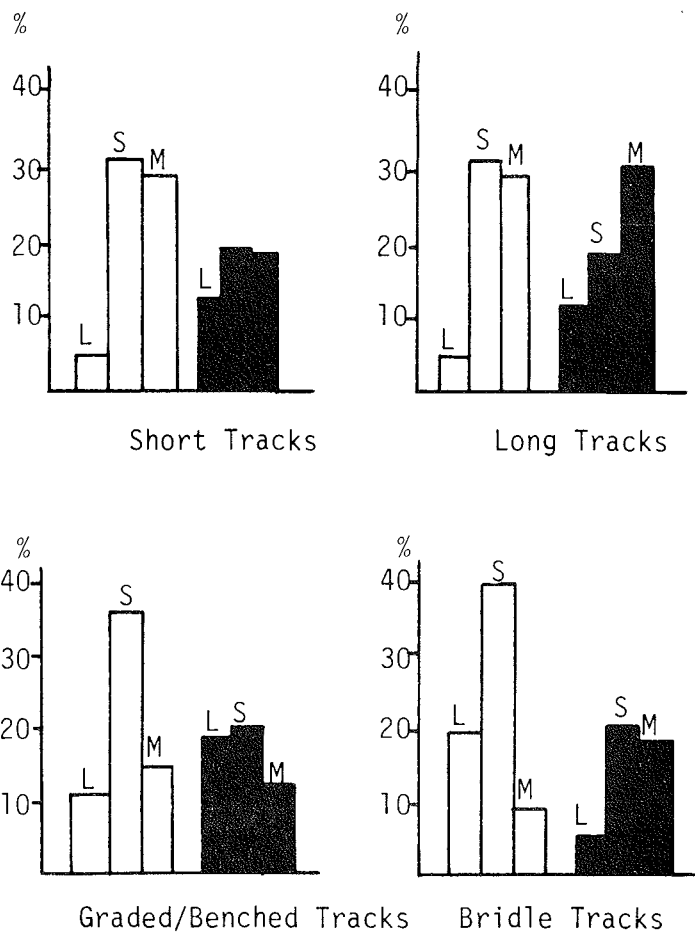


4.5.2 ACCESS



It could be argued that the level and type of access is the issue which existing users view as most likely to have an impact on their use. Thus, both general users and hunters are strongly against helipads and airstrips; the former being associated with helicopter hunting. Access for off-road vehicles receives more sympathy from hunters (presumably for game recovery). The question of more access to the edge of the Forest Park often received positive support by way of comments made at the end of the question or questionnaire.

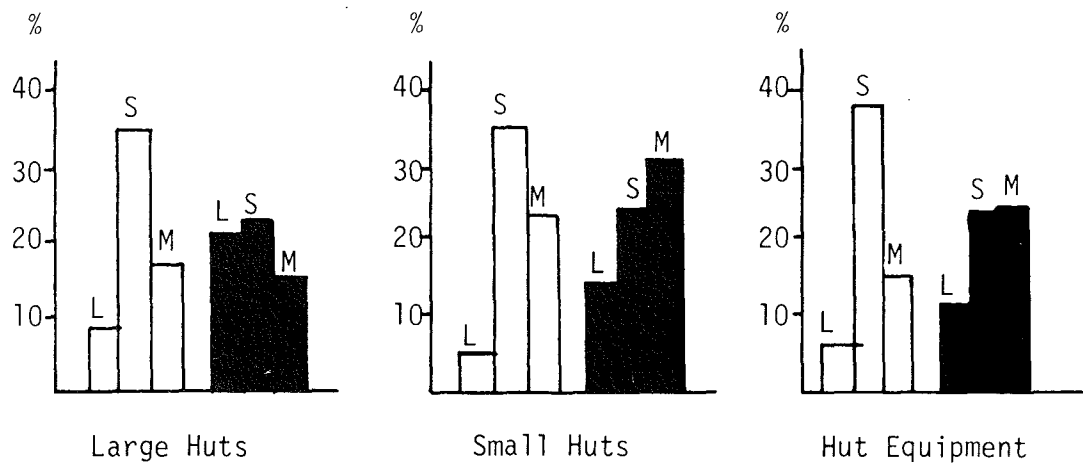
4.5.3 TRACKS



In general, user groups tend to express preferences for facilities which enhance their own style of activity. For example, hunters record no need for increased internal roading, but at the same time express a desire for four-wheel drive and horse access.

As would be expected, the general users preferred more short tracks than hunters who have a strong preference for more long tracks. Most were fairly neutral about graded and benched tracks, but bridle tracks were not as popular amongst the general users as they were with hunters.

4.5.4 HUTS

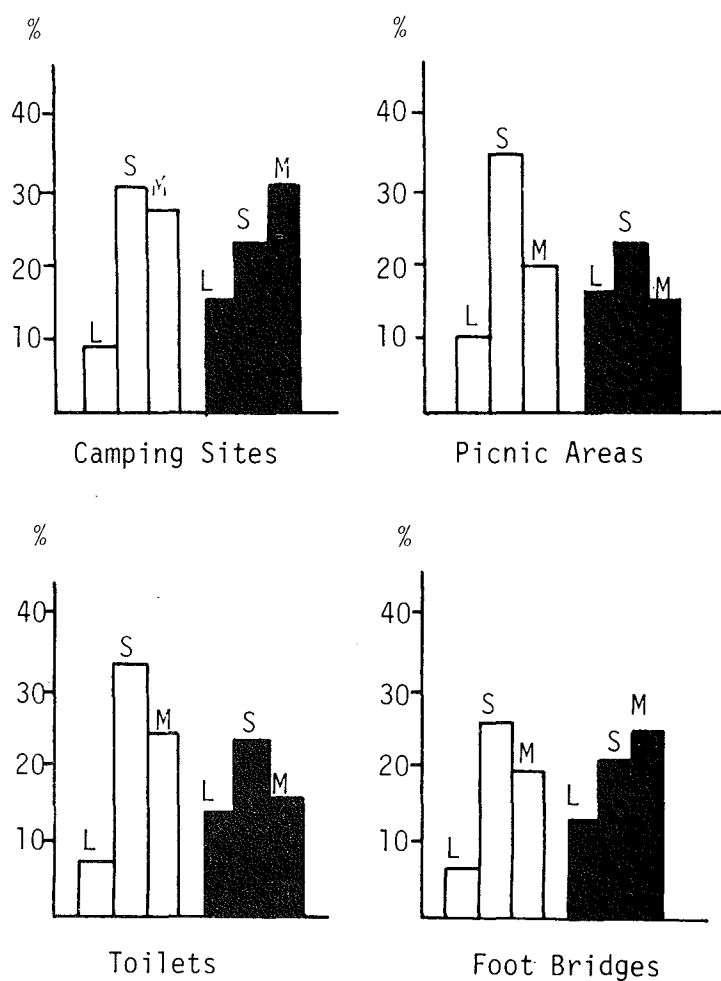


Additional small huts are preferred by both samples, but particularly by hunters.

Comments from tramping club members in the Easter User Sample suggest a need among these bigger groups for larger huts. During the Easter sample period both Boyd and Oamaru huts were reported as sheltering up to three times their bunking capacity. Easter is, however, a traditional period for tramping club activity and in 1982 the poor weather made onward travel difficult.

In terms of hut equipment the user sample appears relatively satisfied. The stronger desire for more hut equipment among the hunting group may be a reflection of the small amount of equipment they carry to keep their packs light for carrying carcasses, trophies, etc. (see Section 4.5.7).

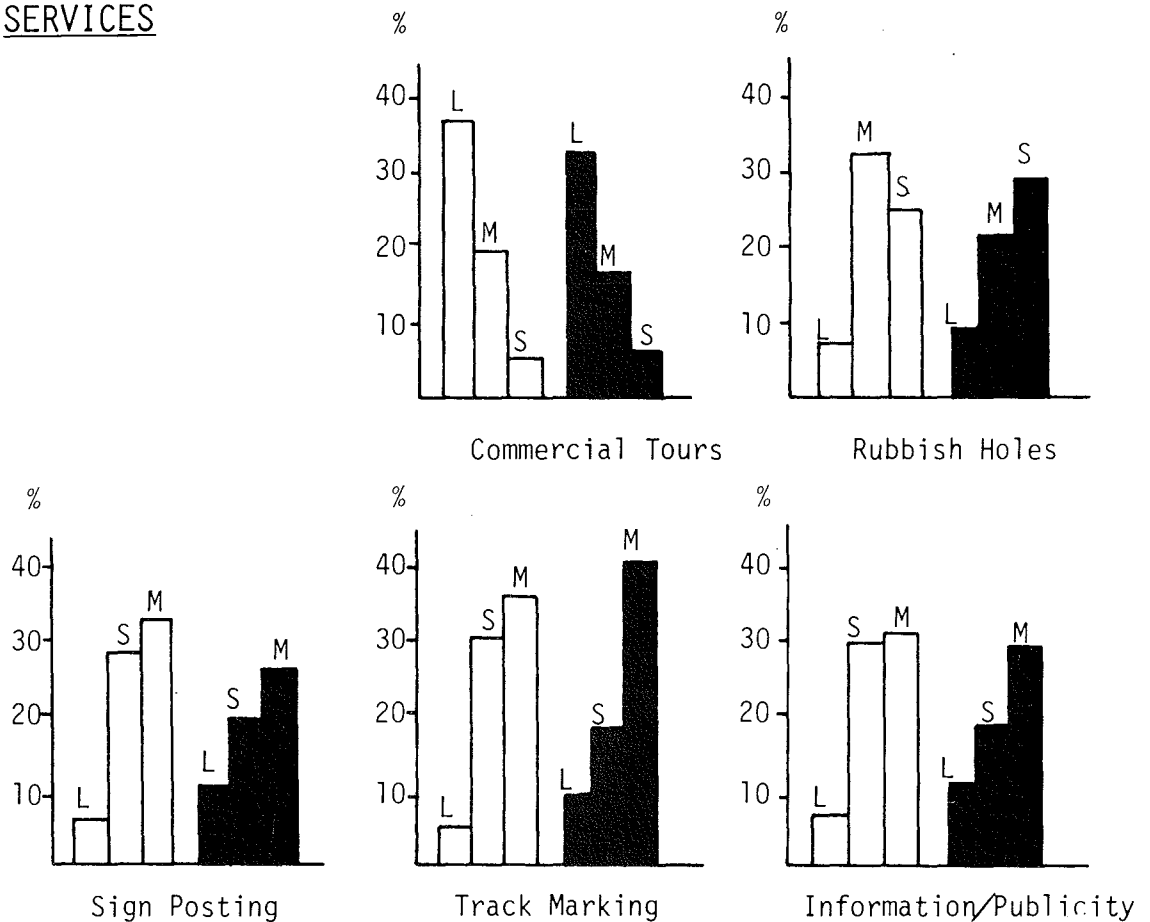
4.5.5 AMENITIES



Camping sites were defined as comprising a fixed fireplace and toilet. As such, they received support for more from all users and from hunters in particular.

Existing numbers of picnic areas and toilets are generally expressed as being adequate, while additional footbridges receive support from both groups.

4.5.6 SERVICES



Commercial tours were the facility or service all users desired less of on the total list.

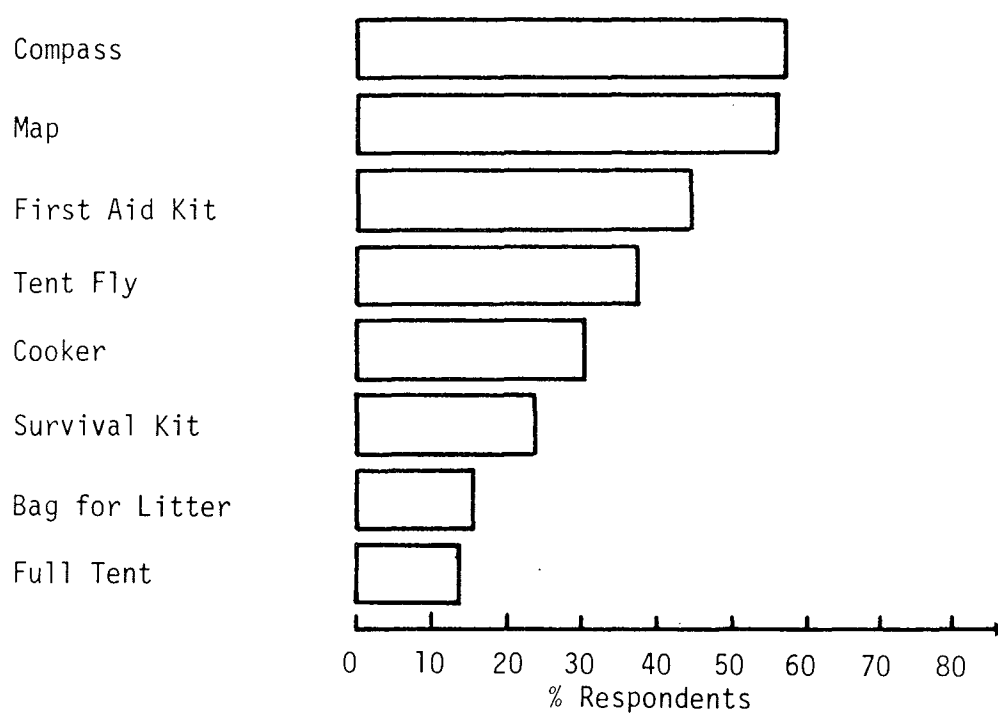
Track marking and signposting were the additional services most wanted. More information and/or publicity was also desired and received additional support in comments made at the end of the questionnaires.

The continued provision of adequate numbers of rubbish holes is seen as desirable by both groups. The whole question of rubbish disposal has been discussed in greater detail in Section 3.5.2.

4.5.7 EQUIPMENT

Respondents were asked to show whether they "usually", or did "not usually", carry a particular item. The following figure illustrates the percentage of hunters who usually carried the named piece of equipment.

FIGURE 4.7: Equipment Usually Carried by Hunters

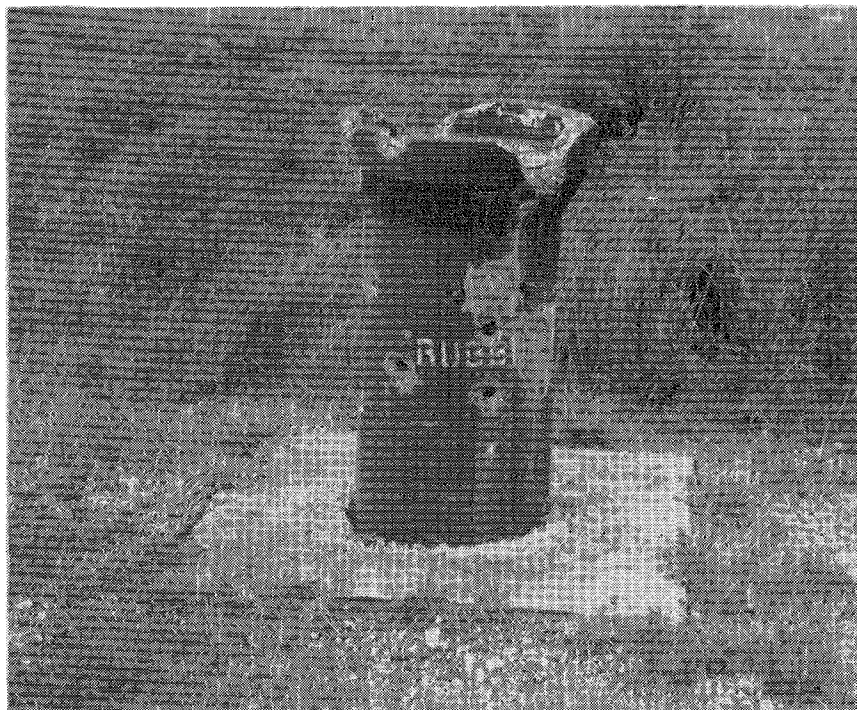


No distinction has been made between overnight hunters and day hunters, however, most carried basic equipment such as compass, map and first-aid kit regardless of the length of their trip.

Only 14.5% of respondents usually carried a tent when they hunted. This may indicate either a greater reliance on the hut network, or greater experience than other park users, or a high number of day trips.

Few hunters carry a bag for litter - something that was also found for hunters in the User Sample. As was suggested in Section 3.5.2, it would appear that the "burn, bash and bury" or use available facilities custom, is just as widespread among hunters as among other users of Forest Parks.

During informal conversations with hunters, the general impression is that the older and more experienced the hunter, the less equipment he is likely to carry. Central North Island hunters appear to carry less equipment than their Canterbury counterparts.



4.5.8 SUMMARY AND DISCUSSION

The above results and discussion would suggest that current levels of facility provision in the Kaimanawa and Kaweka Forest Parks are generally adequate.

In both samples respondents have focused attention on facilities that would enhance their present use. Hunters have drawn attention to information and publicity, signposting and trackmarking, small huts and hut equipment.

Questions concerning the provision of access are the most vexing and cannot be resolved without recourse to management objectives. All groups have commented on the need for good access to the forest edge, but the question of the level and type of internal access must be seen from the perspective of the separate user groups. Thus, bridle tracks and off-road vehicle access are seen by some as requisites for hunting while commercial activities and their requirements are rejected by most.

4.6 Attitudes and Beliefs

4.6.1 WILD ANIMAL MANAGEMENT OPTIONS

4.6.1.1 Preferred Methods of Animal Control

Not unexpectedly, the majority of hunters preferred recreational hunting as a means of wild animal control. Some respondents were acute enough to highlight their views by suggesting the question wording should be 'wild animal management'.

TABLE 4.21: Preferred Methods of Deer Control

Method of Control	Central North Island %	Canterbury %
Recreational Hunting		
- foot only	72.0	72.2
- foot and helicopter	5.5	
Government Control		
- foot	2.6	6.4
- helicopter	0.6	1.7
- poison	-	0.3
Commercial Hunting		
- foot only	3.7	13.3
- foot and helicopter	1.5	3.9
No Response	14.1	2.2

Hunters were also asked to indicate their preference for the method of control over pigs and goats. The majority (60.4%) preferred recreational hunting for pigs and goats, although 15% wanted government control of goats.

4.6.1.2 Recreational Hunting and Other Control Methods

Those who chose recreational hunting were further asked how this should be administered in conjunction with other control methods.

TABLE 4.22: Options for Recreational Hunting Administration
Combined with other Control Methods

<u>Recreational Hunting and Other Methods</u>	<u>Response %</u>
- in different areas	44.3
- at different times	28.3
- in the same area	9.4
- at the same time	6.0
- other	1.4
No Response	10.6

Clearly, hunters (72.6%) see a need for recreational hunting to be separated from other methods of wild animal control. As was discussed in Section 3.6.3, Forest Park Users hold similar views, but in the Hunter Sample they are expressed more strongly.

4.6.1.3 Hunting Restrictions on Deer

Hunters were asked if there was a need for hunting restrictions on deer during certain times; 40.5% replied that there was no need for any restriction.

Restrictions on hinds in the fawn season combined with restrictions on stags in their velvet season was favoured by 23.6% of hunters. Another 21% wanted a restriction on both hinds and stags during the fawn season.

The remaining respondents' preferences varied between different combinations of restrictions during the fawn, velvet and roar seasons.

4.6.2 HUNTER ADMINISTRATION

4.6.2.1 Hunting Block Administration

Hunters were asked which method of hunting block administration they preferred. Their choices are fairly evenly spread over the list of options.

TABLE 4. 23: Preferred Method of Hunting Block Administration

Method of Administration	Respondents %
Limit on total number of hunters	
- open forest (no blocks)	23.8
- more than two hunters per block	25.3
- two hunters per block	16.1
- one hunter per block	5.8
No limit on total numbers	
- open forest (no blocks)	17.9
- more than two hunters per block	3.0
Not Sure	8.1

Hunters from the Central North Island and South Island both accept the concept of limits on hunting numbers. However, while South Island hunters appeared comfortable with their single hunting blocks, hunters of the Central North Island appear to want limits, but at the same time preserving more of the flexibility which they currently enjoy.

Choices limiting the total numbers of hunters, however, outweigh the 'open' forest responses.

4.6.2.2 Length of Permit

When asked how long a permit should be issued for, most hunters opted for what they are familiar with in the Central North Island, i.e. a 30 day permit.

TABLE 4.24 : Length of Permit

Length	Response %
< 7 days	4.5
7 - 14 days	17.0
15 - 21 days	4.7
22 - 30 days	65.1
other	8.7

4.6.3 ATTITUDES ABOUT PERMIT ADMINISTRATION

The following diagram sets out how hunters view 'their own' and 'other' hunters' behaviour. It highlights the need for a clear and strong block/permit administration system.

TABLE 4.25: Attitudes About Permit Administration
(% response at extremes of scale)

Attitude Statement (m = median)	Never		Neutral			Always	
	1	2	3	4	5	6	7
a. In your experience, do hunters always obtain permits before hunting?	0.8		26.4		m		13.3
b. To what extent do you consider that other hunters accurately complete kill return details?	5.4		40.1	m		2.0	
c. When you obtain a permit for a certain time period, do you always go hunting then?	2.0		20.4		m		26.6
d. Do you consider a new permit should be issued if a previous one has not been completed and returned?	15.7		23.5		m		28.2

The difficulties in tying attitudes to specific behaviours have been mentioned elsewhere in this and the Canterbury report. Nevertheless, the suspicion that hunters demonstrate towards other hunters probably reflects not only their own experience of others, but also to an extent, their own behaviour.

Of note is the moderately strongly held views that other hunters do not always obtain permits or accurately complete their kill returns. In discussion, hunters have said that kill returns are seldom completed correctly because of misunderstandings about the ways in which this information might be used.

Hunters, as well as managers, are faced with the double bind of recognising the desirability of restricting others, but not themselves. This is demonstrated by the final item where hunters report that they are fairly neutral about the proposal that new permits should not be issued unless the previous one has been completed.

4.6.4 ATTITUDES ABOUT RECREATIONAL HUNTING

Section 3.5.4 has discussed both users' and hunters' attitudes towards various aspects of the compatibility of Forest Park use and Recreational Hunting.

In addition to these statements, respondents in the Permit Hunter Sample were asked to indicate their opinion regarding a further seven items. These are shown in Table 4.26.

TABLE 4.26: Attitude Statements - Permit Hunter Sample Only
(% response at extremes of scale)

Attitude Statement (M = median)	Attitude Scale						
	Strongly Disagree		Neutral			Strongly Agree	
	1	2	3	4	5	6	7
a. Some day I may go on a safari guided hunting trip.	44.7%	M		20.3%			5.8%
b. RHA's will not be used because hunters cannot legally sell the carcass.	42.5%	M		21.1%			7.0%
c. Hunters have not adapted to changing animal behaviour. There are still plenty of animals left.	18.9%			17.41% M			12.3%
d. Hunting organisations adequately reflect the overall views of all hunters	20.4%			25.5% M			9.8%
e. I would use RHA's in preference to other potential hunting grounds.	8.5%			46.1% M			10.7%
f. 1080 poison is highly persistent in meat.	4.2%			49.9% M			22.6%
g. Information should be provided on the areas of highest game numbers	16.1%			21.3	M		26.5%

4.6.5 OTHER ATTITUDES AND BELIEFS

Respondents were given the opportunity at the end of the questionnaire to make further comments. The strength of current feelings about hunting and enthusiasm of hunters for their recreation led half of them to make additional comments. Some also wrote letters of considerable length. These comments have been grouped into broad categories.

Feelings by 28% were expressed as "anti-helicopters and commercial hunters" and by and large, tended to be in favour of Recreational Hunting Areas. The following two are typical of comments which were made:

"I find it very frustrating and annoying on nearly every hunting trip to be constantly watching commercial helicopter operators (many operating illegally) disturbing and ruining my chosen sport."

"Helicopter operations should be more strictly controlled, e.g. poaching etc. Choppers should not be allowed in areas to which foot hunters have access. Penalties for breaches of this control should be increased. It is obvious that breaches currently detected are being soft soaped by courts, because of instruction by govt., due to revenue received, i.e. export money, sales tax, etc., on choppers."

Many comments also included opinions on whether animals were actually causing damage or not. There seems to be some confusion among hunters with regard to this complicated subject. For example

"I think the so called damage deer do is overexaggerated. The areas I have been where the Parks board has culled the deer right down, the bush is virtually impenetrable. This makes me wonder what the use of Parks are if hunters and trampers can't get into them."

Another 8% of those who made comments were very much 'anti' the New Zealand Forest Service. These feelings seemed to be based on misunderstanding or a lack of knowledge about the department's management priorities and activities. This is perhaps due to a lack of information or communication.

The Forest Service has a very poor 'image' amongst these hunters and suggests a need for continued public relations efforts - not only in the form of publications, but also by staff in the field and office.

Comments relating to these issues included:

"Since the N.Z.F.S. seems to have a policy of eradicating deer and at the same time keep areas of high numbers secret and limits access to private individuals some of your questions seem to be rather irrelevant."

"I feel that certain blocks should not be closed for forestry workers own use. Also that if it is good enough for forestry workers and rangers to go spotlighting it is good enough for other hunters as well."

"I think all the people that want deer exterminated, are a bunch of idiots, after all, most of them have never been in the bush in their lives."

Comments were also made about reinforcing the need for better access and facilities and more information on animal numbers. Others said that hunting was a N.Z. heritage and would help keep "young people out of mischief".

Additional comments were very general or highlighted aspects of the questionnaire itself.

4.7.3.2 Animal Species Hunted

As would be expected, active rifle owners did not seek sika deer as much as did the hunters from the permit sample (13.5% and 46.4% respectively). Red deer were the most popular, followed by pigs, then water fowl and rabbits.

TABLE 4.28: Choice of Animals - Active Rifle Owners

Animal Hunted	<u>Percentage Response</u>	
	First Choice	Second Choice
Red deer	58.0	20.2
Sika deer	13.5	20.4
Pig	11.6	30.9
Waterfowl	6.6	9.0
Other deer	4.6	6.6
Rabbit	3.9	8.5
Goat	1.8	4.4

Non-active Rifleowner

5



5.0 Introduction

The inclusion of non-active rifle owners in a study on recreational hunting gives further insights into the reasons for non-hunting and strengthens the understandings of certain responses from the active hunters.

Of course this chapter does not adequately represent the opinions of many New Zealanders who do not hunt. The sample is based on rifle ownership only, but it does provide some basis for comparison.

The 'non-active' represent 33% of the total Rifle Owner Sample (c.f. Canterbury - 52%). Of the 'non-active' 80.2% regarded themselves as ex-hunters (c.f. Canterbury - 82.7%).

The following sections separately discuss ex-hunters, potential hunters and those with no interest in hunting.

5.1 Ex-hunters

5.1.1 INTRODUCTION

Rifle owners who classified themselves as ex-hunters (i.e. were no longer hunting), made up 26.8% of the total sample.

All of them were male; 80.8% were married and most were older than 30. Their age profile is considerably older than the current hunters. Consequently, their home situation tends to indicate they have an older family, or that their children have left home.

Educational background and occupations are similar to the current hunters as is their membership of conservation organisations, which demonstrates that hunting appeals to a recognisable profile of society. However, there are fewer members of outdoor recreation organisations. Of the 21.4% who do belong to a club, most are in an angling club, the Acclimatisation Society, or a sports club. This reinforces the suggestion that many ex-hunters turned to fishing as an alternative form of recreational 'hunting' (Section 4.2.6).

Ex-hunters' present residences, and areas in which they were mainly brought up, are similar to those of current hunters in the Rifle Owners' Sample. Differences between these data and the Permit Hunter Sample appear more a reflection of the sampling procedure than the groups themselves.

5.1.2 REASONS FOR RETIREMENT FROM HUNTING

In Sections 4.3.4. and 4.7 reasons why current hunters have interrupted their hunting continuity were discussed.

Ex-hunters' reasons for retirement from hunting are very similar to these and to those given by Canterbury ex-hunters.

Respondents were asked to make three choices which are outlined in the following table:

TABLE 5.1: Reasons for Retirement from Hunting

Reason	First %	Second %	Third %
Lack of time	28.0	12.1	2.2
Change in family circumstances	18.7	9.9	3.8
Decline in animal numbers	10.4	3.3	8.8
Lack of hunting areas/access	6.6	11.0	4.9
Decline in physical fitness	6.6	4.0	5.5
Age	5.5	5.5	6.0
Lack of money	2.7	0.5	1.1
Lack of transport	-	1.1	-
Other	9.9	2.7	2.7
No Response	11.6	49.9	65.0

The two major reasons for discontinuing hunting are likely to be interrelated. Lack of time to hunt can be influenced by

many things, one of them being a change in family circumstances, such as marriage and the presence of young children.

One notable difference from the Canterbury Study is that a decrease in animal numbers was not seen as being such an influential factor as in the South Island (21.4%, first choice in Canterbury study). Likewise, a lack of hunting areas or access to them was also not as important, but this may be attributable to regional differences in land ownership. In Canterbury, hunting areas often buffered by private land, whereas North Island hunting areas are more directly accessible.

Other physical factors such as age and a decline in fitness were not as influential as expected, considering the older age structure of the ex-hunters. Perhaps this is something that respondents did not want to admit to.

The following two sections suggest that a lack of animal numbers and 'age' are perhaps more important than was indicated in the response to this particular question.

5.1.3 HUNTING CONTINUITY SINCE LAST SUCCESSFUL KILL

Section 4.2.6 has earlier compared data on the last animal ex-hunters had shot and their last hunting trip with the hunting success of current hunters.

The major consideration here is that 81.4% of ex-hunters withdrew from the activity within one year of their last successful trip.

Another 12.4% withdrew in the following two year period.

It would appear that to continue hunting for extended periods without taking an animal soon dissipates hunters' enthusiasm.

5.1.4 LAST ANIMAL HUNTED

A comparison between the last animal ex-hunters shot and current hunters' first choice of animal to hunt, suggests a similar finding to that in the Canterbury Study. Data below demonstrates that the last animal shot by retiring hunters is distinct from the nominated preference of current hunters.

TABLE 5.2: Last Animal Hunted

	Last animal (ex hunters) %	First Choice of Animal (Permit Hunters) %
Sika deer	8.2	46.4
Red deer	40.1	36.8
Other deer	2.2	5.1
Pig	17.6	9.8
Goat	9.3	0.5
Rabbit	8.8	0.4
Waterfowl	3.8	1.0
No Response	10.0	-

Such data reinforces the earlier call for the provision of a range of recreational hunting opportunities.

5.2 Potential Hunters

A small percentage (2%) of the Rifle Owner Sample identified themselves as non-hunters, but they would like to try hunting sometime. They therefore represent a possible source of future novice hunters. Overall, they tend to be slightly younger than current or ex-hunters, but otherwise have similar demographic characteristics.

From the data it appears that their main reasons for non-involvement in the activity are similar to ex-hunters' reasons for retirement. That is half of them said a lack of time was the main factor preventing them and family commitments were the next most important factor.

Some also stated that they need an introduction to the sport and/or they did not have enough knowledge of hunting areas.

Section 3.6.2 discussed the hunting experience of the Forest Park Users, and it was found that 7.4% of the sample had never hunted, but would like to. This group also makes up a valid source of possible hunter recruitment, particularly as they already have some empathy with and experience of back-country areas.

5.3 No Interest In Hunting

The remaining 4.6% of respondents owned rifle(s), but had no interest in recreational hunting.

Comments made at the end of questionnaires indicate that these people are mostly collectors of weapons or have inherited them.

Management Implications **6**



6.0 SUMMARY

This research has elicited three levels of information concerning:

1. The users of Kaimanawa and Kaweka Forest Parks and their relationships to recreational hunting.
2. The recreational hunters of the central North Island and their use of Kaimanawa and Kaweka Forest Parks and other areas.
3. The active and non-active rifle-owners of three North Island districts.

In accordance with the study objectives, the above information was to provide a comparison with data obtained from a similar Study of Canterbury hunters and their use of Lake Sumner Forest Park (Simmons, D.G. and Devlin, P.J., 1981).

A further report considers Forest Park User groups in greater detail. Consequently, only those implications from the research which have direct relevance to recreational hunting are considered here.

This chapter will look at the various sections of data and discuss management implications from the Canterbury Study that have been reinforced or conversely, any new material arising from the Central North Island Study. It must be noted that the following discussion originates from research data and should not be considered in isolation from the previous

chapters. Each section in these earlier chapters also contains a short summary and discussion.

Taken together the findings of this Study of recreational hunters in the Central North Island endorse the major findings of the Canterbury Study. On key variables such as hunters' demographic characteristics, hunting patterns, methods of introduction, hunters' success rates and their motivations toward hunting, the data demonstrate a remarkable similarity between the two Study groups. Major concerns are again expressed about the apparent 'running down' of the existing recreational hunting population, not only through a slowing of introduction to the sport, but also through a lack of successful hunting for those who have already developed an interest. In such a climate fears for the future of hunters' sport become paramount. Currently, this is expressed in recreational hunters' deeply felt concerns about competition from commercial interests and misunderstandings about other management requirements. Both of these have become a focus for their frustrations.

While RHA legislation has served to provide for recreational hunting opportunities this research suggests the need for a continued broadening of the concept to provide, maintain and interpret greater opportunities for novice and less successful hunters. It has been argued that the broader base and intensity of interest in hunting the Kaimanawa and Kaweka Forest Parks indicates that these forests are successfully attracting younger and less experienced deer hunters. Given its existing use patterns the Kaimanawa area appears to be fulfilling RHA objectives.

MANAGEMENT IMPLICATIONS

6.1 Demographic Characteristics

Data on demographic characteristics from both the User Sample and Hunter Sample reinforce the Canterbury study.

Central North Island hunters are slightly less represented in the 'higher' educational and occupational groups than Canterbury hunters. In this aspect both studies have shown that hunting appears to appeal to a more representative cross-section of New Zealand society than other forest activities such as tramping. Nevertheless, hunters are still generally better educated and more skilled than the New Zealand population.

North Island hunters are slightly older than those in the South Island and this is borne out in other factors such as marital status (more married respondents) and home situation (more families with young children).

The Lake Sumner Study pointed out that this older age structure could be cause for concern as the strong physical orientation of hunting and tramping should suggest a similar youthful age profile for both. However, comparisons of the age profiles of hunters and trampers actually in the Kaimanawa and Kaweka Parks during the user sample periods showed a high similarity, indicating that at least these two parks are successfully attracting younger hunters. The methodological issues of not being able to contact all names on permits raises the speculation that older hunters, who are party leaders, may place their names first on a permit.

Implications

1. The relative absence of younger aged hunters demonstrated by the Canterbury study and the permit sample in the North Island could be a cause for concern as the data suggests that hunting has traditionally been first attractive to people in their early teens. As such, hunters' age profiles are the first of a number of variables that suggest deer hunting is generally not attracting sufficient numbers to maintain its present numerical status. However, age data from hunters currently using the Kaimanawa and Kaweka Forest Parks suggest that these specific parks are examples of areas that attract younger hunters.
2. Many hunters (relative to the New Zealand population) are well educated and skilled. Therefore, they are likely to be receptive to statements on management policies and education programmes.

6.2 Current Hunting Patterns

6.2.1 GROUP STRUCTURE

Most hunters travel with one or two close friends or relations to their hunting areas and then actually hunt alone or in pairs.

Implication: As in Canterbury - it is suggested that management policies should enhance the existing patterns of small friendship groups for hunters. Practical examples are through the provision of small huts (Section 4.5.4) and block administration (Section 4.6.2).

6.2.2 HUNTING AREAS AND TIMES

The over-riding constraints of work, available finance and time, all serve to promote hunting trips of one or two days' duration, in areas near to hunters' homes. 'Personal knowledge' is the main reason a hunter prefers any particular area. This means they are likely to revisit the same area, unlike other user groups who more frequently seek new areas.

Implication: The above factors reinforce findings from the Canterbury Study and point toward a need for some hunting areas to be easily accessible and within convenient travelling distance. In as much as hunters tend to have 'favourite' hunting areas, it also suggests the need for recreational hunting areas to provide opportunities to cover the full spectrum of hunting styles.

6.2.3 ANIMALS HUNTED

For hunters who frequent the Kaimanawa and Kaweka Forest Parks, sika deer are the most popular first choice of animal. Other hunters were interested in red deer or pigs. The majority of present hunters recognize animals need not have trophy potential.

Half of the respondents saw a need for a restricted season on does and a lesser number advocated restrictions on stags in velvet. An equally large group saw no need for any restrictions.

Implications

1. Hunters' choices of animal species reflect both the availability of suitable game and their past hunting experiences. The presence of a range of species in any RHA offers differing hunting opportunities to hunters who may have different objectives and levels of experience.
2. Any requests for a restricted hunting season need to be considered in conjunction with other management policies on wild animal control and carefully interpreted to hunting groups.

6.2.4 HUNTING SUCCESS

Figures from hunters in the Central North Island show remarkably similar levels of success to their Canterbury counterparts. For deer hunters only three out of four report that they have been successful in killing one animal in the past two years. Significant numbers have not killed, and some have not even seen, their chosen game species in this time. The experiences of ex-hunters suggest that up to 80% of this group may withdraw from the sport should they remain unsuccessful.

Goat hunters report the highest success rates.

Implications

1. Successful hunting has been discussed as a central factor in hunters' continued motivations to hunt. Other sections of this and the Canterbury report have raised concerns about the lack of novices entering hunting and the lack of hunting success must be seen as a further source of attrition to the numbers currently hunting. The more experienced and skilful hunters, however, appear to be able to take game animals even where animal numbers are controlled by other means.
2. A range of hunting opportunities (e.g. RHA's focussed on goat control, rabbit hunting opportunities, helicopter free zones in other State Forests and comprehensive training programmes) might be ways to provide 'stepping stones' to encourage new hunters into the sport and to support the less successful hunter.
3. Alternatively, for recreational hunting to maintain its present numerical strength, existing RHA's may require higher levels of animal numbers.

6.2.5 OTHER ACTIVITIES

Tramping, hunting and 'fringe' recreation (sightseeing, picnicking, etc.) are numerically the major activities in Kaimanawa and Kaweka Forest Parks. The fringe activities comprise a much larger proportion of respondents than at Lake Sumner Forest Park and along with trampers and water-based recreationists, are the basis for a further report.

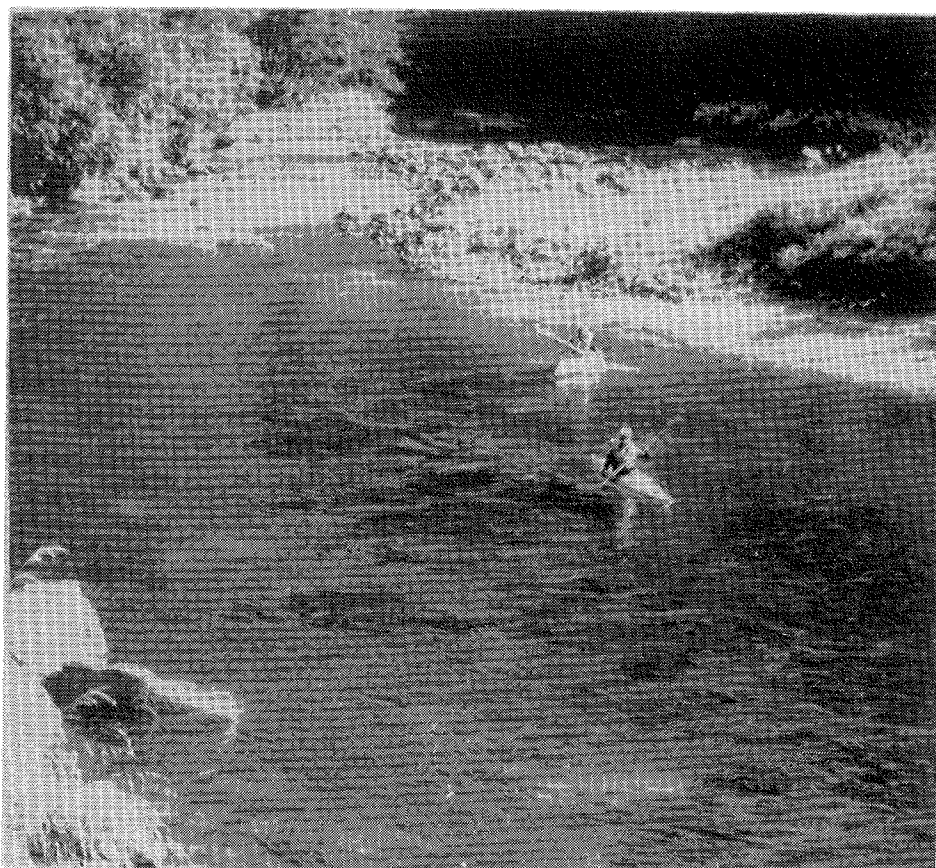
The Forest Park User Sample demonstrates a variety of factors suggesting a good understanding of, and empathy with, hunting. In fact, a small proportion expressed an interest in taking up hunting. Almost half of all the users were current or ex-hunters (but not necessarily hunting at the time of the survey). Although less Central North Island hunters than Canterbury ones, undertook other activities while hunting, many do undertake other backcountry activities at other times.

One quarter of Users of Kaimanawa and Kaweka Forest Parks stated that they went into the 'interior' of the Parks. Of this group almost two-thirds were hunters.

Implications

1. The considerable interchange of activities between other Forest Park user groups and hunters is suggestive of a broad general understanding between these groups (Refer 6.6.3).
2. The group of Forest Park Users demonstrating an interest in taking up hunting could be a most valuable source of recruitment because they already have some understanding of, and skills in, backcountry use.

3. RHA's carefully designed to avoid high use fringe areas offer good potential for separation of activities, thus reducing possible conflicts between user groups, without artificial controls. While future RHAs also need to include fringe areas, they should avoid areas of high use by other users.



6.3 Experience

6.3.1 INTRODUCTION TO HUNTING AND YEARS OF EXPERIENCE

Family members and friends are the major agents of introduction to hunting while clubs and school play a very minor role. Data concerning hunters' ages at introduction to different animal species have again highlighted the fact that many hunters traditionally gained experience on smaller species (rabbits, hares, goats), before proceeding to the more difficult deer. The majority of hunters report that they were introduced to hunting before the age of 20, but limited numbers are now in this corresponding age category.

Those who started to hunt more than ten years ago represent the majority of respondents, and few hunters (from the permit sample) now possess less than five years' experience. However, hunters in the Kaimanawa and Kaweka Forest Parks (from the User Sample) demonstrate that at least in these areas there is an experience profile of hunters which corresponds well with similar physical activities, such as tramping. In these terms the Kaimanawa RHA appears to be fulfilling RHA objectives.

Implications

1. If the maintenance of recreational hunting is seen as a priority, more RHA's must be managed to provide a range of conditions and facilities favourable to the introduction and subsequent development of novice hunters. Kaimanawa and Kaweka Forest Parks are areas where opportunities exist to develop tramping and backcountry skills as well as those associated with hunting itself. They therefore appear to be fulfilling this aspect of the RHA role.

2. Perhaps the most significant contribution that future RHA's could make to recreational hunting would be to provide areas containing easier game species such as rabbits and goats. RHA's deliberately established to cater for this objective need not be confined to rugged back-country forest areas.
3. The introduction and training of novices is an area in which clubs could significantly develop and increase their activities. Likewise, there is potential for experienced Forest Service hunters to assist. Section 6.2 has highlighted the fact that there are other park users with an interest in taking up hunting.

6.3.2 CONTINUITY OF HUNTING EXPERIENCE

The proportion of people who have been hunting continuously is the same for both this and the Canterbury study. However, of the third who had taken a break, few of these indicated that this was because of a 'decrease in animal numbers', whereas this was an important reason for those in Canterbury.

Family and other commitments were more important reasons for a break in hunting in the Central North Island. The similarity of reasons for breaking from hunting between the Hunter Sample and the ex-hunter sample reflect the wide-spread effects of these factors.

Implication: The older age structure of the Central North Island hunting group suggests that they will be more vulnerable to changes in family commitments than their South Island counterparts. Nevertheless, hunters who begin to take breaks from hunting (whatever their reasons), tend to be those who ultimately 'retire', and demonstrates that without continued replenishment from new hunters, numbers of recreational hunters will gradually diminish.

6.3.3 MEMBERSHIP OF CLUBS

Membership of the various hunting organisations, in particular, the New Zealand Deerstalkers' Association, is higher in the North Island than Canterbury. Overall, a quarter of respondents belonged to a hunting organisation although others did belong to Acclimatisation Societies and Clubs with a 'back country' orientation. Only half as many 'active rifleowners' belong to a club.

Implications

1. As in Canterbury, there is the potential for non-members to question the views of a numerically relatively small group, even though they may accurately reflect opinions held by other users.
2. Attempts to communicate with hunters solely through organizations will only reach a proportion of them, and could become a source of conflict.

6.4 Motivations

6.4.1 MOTIVATIONS

Hunters and non-hunters of both regions (Canterbury and Central North Island) express similar motivations for undertaking their activity:

- the 'natural' environment
- the actual hunt/or activity
- personal, social or physical reasons.

These factors work in combination with each other. Thus a maintenance of scenic and wilderness values are important to hunters, but not enough on their own, without opportunities for 'getting onto' animals and satisfying the 'hunting' motive.

However, in contrast with Canterbury, Central North Island hunters appear to be more achievement oriented as is shown by an increased importance assigned to the 'hunting' motive as well as on attitudinal statements reflecting the importance of actually killing an animal.

Non hunting groups gain stronger satisfactions from their activity directly because of the natural environment.

Implications

1. The importance of factors surrounding hunting itself and satisfactions gained from achieving hunting success are central to hunters' desire to continue their activity.
2. As well as being dependent on successful kills, hunters' motivations are also dependent on the maintenance of scenic

and wilderness values and opportunities which enhance physical and social enjoyment.

6.4.2 REASONS FOR HUNTING

While success in taking an animal on any single trip is not paramount, evidence of an animal's presence, and eventual hunting success is a necessary requirement for hunters' long-term participation.

The reward of gaining meat for personal use is most important. However, as also demonstrated by Canterbury hunters, selling an extra carcass, meat or by-products is a long-standing and widely practised means of offsetting costs.

Implications

1. The provision of hunting opportunities for skill development alongside opportunities for successful hunting is seen as being necessary in light of diversity of hunting interest and experience.
2. The caution made in the Canterbury Study is reinforced. Any statutory framework which serves to cut across traditional behaviour may need further consideration. The clearest example of this is the restrictions on 'pecuniary gain'.

6.5 Facilities and Services

6.5.1 FACILITIES

As with the Canterbury Study a large proportion of both the User and Hunter Sample opted for the *status quo* with regard to the provision of facilities and services. From what initially appears to be a wide diversity of opinion on facility requirements, different user groups can be seen to focus attention on facilities which enhance their own particular style of activity. Increased information, signposting and track marking were, however, seen by all groups as major requirements.

Implications

1. The question of facility provision needs to be approached with caution. This research confirms previous research findings that Users' activities, group arrangements, age and previous experience all influence Users' facility preferences. Thus, levels of facility provision will, in some part, determine the nature of Park use. They must therefore be clearly established within the framework of management policies.
2. Research findings have highlighted the need for RHA's to attract novices and support less experienced hunters and suggests that this would be a suitable direction for management policy for some parts of the Kaimanawa RHA.

6.5.2 EQUIPMENT CARRIED

Many hunters carry basic safety equipment such as a compass, map and first aid kit, but few carry equipment such as a tent, bag for litter, or emergency survival gear.

Implications

1. From information presented it would appear that facility provision for basic user safety is currently adequate. In this regard, hut systems and equipment are heavily relied on by hunters.
2. Areas specifically earmarked for the novice hunter, either in the Kaimanawas or future RHA's, will require a careful regard to the level of facility provision for their safety.

6.6 Attitudes and Beliefs

6.6.1 WILD ANIMAL MANAGEMENT OPTIONS

It is clear from both studies that for all users (hunters and non-hunters) recreational hunting was the most favoured method of animal control. If recreational hunting is to be combined with any other control methods then they would be preferred in different areas and/or times.

Implication: Data presented spells out all users' clear views on this matter.

6.6.2 HUNTING ADMINISTRATION

The way hunters prefer their activity to be administered, in terms of hunting blocks and permit length, illustrates the influence of the systems they are used to. While both central North Island and Canterbury hunters recognise the need to limit total numbers, the extent to which limits are advocated reflects the existing administration systems in the respective areas.

The North Island hunter would like to see a limit on the total number of hunters in an area, but they are almost equally divided over whether this should be operated on multiple hunter blocks or an open forest system.

The majority of hunters are happy with the present 30 day permit although a small group considered one to two weeks to be adequate.

Implication: It appears that the present system (operating in Kaimanawa and Kaweka Forest Parks) of issuing permits without any control of total numbers may need to be reviewed. Data demonstrates that there is a climate of readiness to accept limits on the total number of hunters, particularly at peak hunting times.

6.6.3 ATTITUDES TO RECREATIONAL HUNTING

The Forest Park Users' responses to a diverse range of attitude statements suggest that, with certain provisos, recreational hunting is compatible with other Park Uses in the areas studied. While User groups report that they would be happy to share facilities and resources they have also highlighted factors which suggest a genuine concern for their safety.

Hunters' attitudes reinforce the notion of a high level of compatibility between activities. Both hunting and other user groups argue for some separation from highly used hunting areas, however, in practice this by and large occurs.

A sizable proportion of hunters take the opportunity to make additional comments on their questionnaires. These highlight two major issues:

- i. A deeply felt concern that the 'good intentions' and expectations of RHA's will continue to be undermined by illicit hunting from commercial interests.
- ii. A general misunderstanding of other Forest management priorities and frustration at the difficulties managers have in safeguarding recreational hunting interests.

Implications

1. User groups demonstrate a good general understanding of the values associated with each others' recreations. Given a continuation of this support it is argued that the Kaimanawa RHA is a socially viable land use option.
2. Although there is little overlap between prime hunting and 'other' use areas, or the timing of activities, all forest user groups, including hunters themselves, demonstrate concerns about safety and overcrowding. There was favourable response to the idea of regular testing of hunters' knowledge of rifle handling and safety procedures.
3. In light of comments made all aspects of Park management which have regular contact with the public must promote understanding through communication. This is particularly effective through personal contact with professional field staff. The tenor of comments also suggests that managers must be seen to protect hunting opportunities in accordance with designated management plans.
4. The extent and nature of comments made both in response to questionnaire items and informally to research staff suggest misunderstandings of the Forest Service's role and management requirements. The 'image' of the Forest Service in hunters' minds, is seen as a stumbling block to improving communication (Section 4.6.5). Improved public relations, especially personal contact with staff, and publications, would help and should cover such topics as:
 - reasons for 'kill' returns, and animal number assessment procedures
 - information on areas to hunt and how to hunt them
 - education on the Minimum Impact Code
 - RHA purpose and policy.

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Appendices



Appendix 1

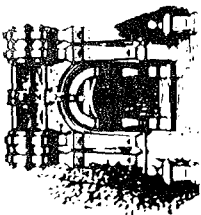
METHODOLOGICAL FRAMEWORK

APPENDIX I: METHODOLOGICAL FRAMEWORK

Sample	Group	Methodology	Sample %	Total Response (Usable)	No. of Cases	Estimated Respondent Error (95%) C.I.
I	Forest Park Users (January)	1. Site Questionnaire	99.9 est.	69.5	Kaimanawa 341	n/a
		2. Personal Contact (Informal)			Kaweka 180	
II	Forest Park Users	1. Site Questionnaire	99.9 est.	60.1	Kaimanawa 503	n/a
		2. Personal Contact (Informal)			Kaweka 153	
					1177	
III	Hunters from a Sample of Permits	1. Postal Questionnaire (Permittees last 18 months, Central N.I.)	10.0	77.0 (63.8)	955	1.7%
		2. Personal Contact (Informal)				
IV	Rifle Owners	1. Postal Questionnaire	2.0	65.6 (45.6)	679	2.8%

Appendix 2

USER QUESTIONNAIRE FOR INDIVIDUALS



Lincoln College

Lincoln College
Canterbury
New Zealand

UNIVERSITY COLLEGE OF AGRICULTURE

Telephone Christchurch 232811

Kaimanawa and Kaweka Forest Parks

Easter 1982

USER QUESTIONNAIRE

To be completed by all members of each party aged 15 and over.

The following questionnaire has been designed to sample the opinions and experiences of users in Kaimanawa and Kaweka Forest Parks.

Managers of these Parks need clear and accurate information on user's views if they are to manage in ways that best serve the public. As current users, your views are most important in shaping the future management of these Parks.

If you are fifteen or over your co-operation in completing the following questionnaire would be much appreciated. It looks long but only takes about 15 minutes to complete.

While we are hoping for all questionnaires to be returned fully answered, please return it even if you are unable to complete it. Please give the questionnaire to your representative or leader for returning. He/she should also have a coloured sheet seeking information on the whole group. These may be left at one of the sampling points as you leave the Park between 8 and 13 April or posted in the stamped addressed envelope provided.

All replies are confidential to the researchers and only a summary will be published. This publication will be available from the Bookshop, Lincoln College, in about twelve months.

Many thanks for your co-operation.

K. Groome
Kathryn Groome and David Simmons
Parks and Recreation
LINCOLN COLLEGE

FOR OFFICE USE ONLY	
2	ACCESS
3	WALK
4	STAND

This first section is to gather general information about your use of Parks.

1. List the most important activities undertaken by you in this park; a) on this visit b) at other times

(List no more than 3 and number them 1 to 3).

	This visit	Other times
Tramping		
Hunting		
Fishing		
Camping		
Picnicking		
Rafting		
Kayaking/canoeing		
Nature Study		
Sightseeing		
Other (specify)		

OFFICE USE ONLY
CO 1

31	32
33	34
35	

The next four questions relate to the activity you listed above as your most important in question 1 on "this visit" (ie left hand column).



2. How many years have you been undertaking the main activity you listed above?

Less than 1 year

☐ 0

1 year

☐ 1

2 years

☐ 2

3 years

☐ 3

4 years

☐ 4

5-6 years

☐ 5

7-8 years

☐ 6

9-10 years

☐ 7

10-20 years

☐ 8

More than 20 years

☐ 9

3. a) Who first introduced you to, or taught you this main activity? (Tick one box only.)

Parent(s)

☐ 0

Other family

☐ 1

Friend(s)

☐ 2

School

☐ 3

Club

☐ 4

Self

☐ 5

- b) Who has most influenced your present use of this park? (Tick one box only.)

Parent(s)

☐ 0

Other family

☐ 1

Friend(s)

☐ 2

School

☐ 3

Club

☐ 4

Self

☐ 5

CD 1-36

☐

CD 1-37

☐

CD 1-38

☐

4. In what other 'back country' areas have you undertaken your main activity, during the past two years? (Please estimate the number of days you spent and tick the appropriate box in the following table.)

	Estimated number of days								
	None	1-4	5-9	10-19	20-29	30-39	40-49	50-99	100+
Other Forest Parks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
State Forests - Pine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Native	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
National Parks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scenic Reserves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maori Land	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Private farm/forest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Specify: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CD 1-

☐ 58
☐ 59
☐ 60
☐ 61
☐ 62
☐ 63
☐ 64
☐ 65

End CD 1

5. How did you hear about Kaimanawa and/or Kaweka Forest Parks? (Tick one box only.)

Family

☐ 1

Other word of mouth

☐ 2

Forest Service Publication

☐ 3

Other publication

☐ 4

Exploring (did not know previously)

☐ 5

Other (specify) _____

☐ 6

☐ ☐ ☐ 191
☐ ☐ ☐

The following section asks specific questions about your use of this Park.

6. a) Is this your first visit to this Forest Park?

No

☐

Yes

☐

- b) If no, how many visits have you made in the past two years?

1 visit

☐

5-9 visits

☐

2 visits

☐

10-14 visits

☐

3 visits

☐

15-19 visits

☐

4 visits

☐

20+

☐

7. If possible, can you list four reasons (motivations) for coming on this visit?

1. _____
2. _____
3. _____
4. _____

8. Overall, are you satisfied or dissatisfied with this visit to the Park?

Very satisfied

☐

Dissatisfied

☐

Satisfied

☐

Very dissatisfied

☐

Comment: _____

OFFICE USE ONLY

CO 2-

☐

21

☐

22

☐

23

☐

24

☐

25

☐

26

END CO 2.
NO CO 3
ENTER CO 4 *☐

CO 4-8

☐

4-9

9. The following is a list of facilities and services within the Forest Park.

Can you please indicate whether you would like to see more, less, or the same amount of each one?

- a) Circle the letter in the appropriate column.

	MORE	SAME	LESS
Large huts (more than 6 bunks)	M	S	L
Small huts (6 bunks or less)	M	S	L
Hut equipment	M	S	L
Airstrips	M	S	L
Helipads	M	S	L
4 wheel drive access	M	S	L
Internal roading	M	S	L
Short tracks	M	S	L
Long tracks	M	S	L
Graded/benched tracks	M	S	L
Bridle (horse) tracks	M	S	L
Camping sites (fireplace and toilet)	M	S	L
Picnic areas	M	S	L
Toilets	M	S	L
Foot bridges	M	S	L
Commercial guided tours	M	S	L
Rubbish holes, bins, etc.	M	S	L
Signposting	M	S	L
Track marking	M	S	L
Information/publicity	M	S	L

CO 4

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

- b) From this list, what are the three facilities and/or services you would most like to see MORE of? Please list.

1.

2.

3.

- c) What are the three facilities and/or services you would most like to see LESS of? Please list.

1.

2.

3.

10. What has been your level of hunting experience?

- Ex hunter ☐ 1
- Current hunter ☐ 2
- Never hunted, but would like to ☐ 3
- No interest in hunting ☐ 4
- Other (specify) ☐ 5

11. How do you think wild animals should be managed in the Forest Park? (list up to two preferences with '1' the most important).

- Recreational hunting - foot hunting ☐ 1
- Commercial hunting - foot hunting ☐ 2
- Government hunting - helicopter hunting ☐ 3
- foot hunting ☐ 4
- helicopter hunting ☐ 5
- poisoning ☐ 6
- ☐ 7

12. If recreational hunting is to be combined with another form of animal management in the Forest Park, how do you think this should be done? (tick one box).

Recreational hunting and other methods at same time.	Recreational hunting and other methods in same areas.	Recreational hunting and other methods in different areas.
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6

CO4 - 30

☐

Skip 31

☐ CO4
☐ 32
☐ 33

Skip 34

☐ CO4
☐ 35

13. Recreational Hunting: Under recent legislation, Recreational Hunting Areas (RHA) may be declared over certain tracts of Crown Land. In these areas wild animals (eg: deer, pigs, goats) are to be controlled principally by recreational hunting, so long as soil, water, and vegetation values are not threatened. Recreational hunting is defined in the legislation as a pastime without gaining from the sale of any wild animal carcass taken from RHA. Because of its status, the animal species present and its location, the north-eastern half of the Kaimanawa Forest Park has been proposed as one such area. Such a use must be compatible with existing and future use of the area.

Please indicate your opinion on the following statements by circling the number closest to your view.

	Strongly Disagree			Neutral			Strongly Agree		
a) Browsing animals have caused irreparable damage to native forests.	1	2	3	4	5	6	7	<input type="checkbox"/>	CO4 4-36
b) Wild introduced animals (eg: deer) can be exterminated from an area as large as Kaimanawa Forest Park.	1	2	3	4	5	6	7	<input type="checkbox"/>	37
c) Recreational hunting is a legitimate recreation.	1	2	3	4	5	6	7	<input type="checkbox"/>	38
d) Game management of recreational hunting herds would not interfere with other possible recreation activities in the forests.	1	2	3	4	5	6	7	<input type="checkbox"/>	39
e) Hunters should pass regular tests which examine their level of competency, eg: knowledge in rifle handling and safety procedures.	1	2	3	4	5	6	7	<input type="checkbox"/>	40
f) Because of restrictions on hunters on access to private land, hunters can jeopardise further access for other user groups.	1	2	3	4	5	6	7	<input type="checkbox"/>	41
g) Recreational and sport hunting can control wild animals in recreational hunting areas.	1	2	3	4	5	6	7	<input type="checkbox"/>	42
h) Hunting is not compatible with other 'back country' recreational activities.	1	2	3	4	5	6	7	<input type="checkbox"/>	43
i) Hunting should be in different parts of the forest from other recreational activities.	1	2	3	4	5	6	7	<input type="checkbox"/>	44
j) I would be happy to share a hut or camp-site with hunters.	1	2	3	4	5	6	7	<input type="checkbox"/>	45
k) Hunters pose a threat to the safety of other user groups.	1	2	3	4	5	6	7	<input type="checkbox"/>	46
l) I would avoid using an area where there are large numbers of hunters.	1	2	3	4	5	6	7	<input type="checkbox"/>	47
m) Hunters should be allowed to use hunting dogs.	1	2	3	4	5	6	7	<input type="checkbox"/>	48

OFFICE USE

This final section is designed to gather simple data about the people who use the Forest Park. Because some of this information may seem to invade your privacy we assure you that YOU WILL REMAIN ANONYMOUS.

14. Are you female?

male?

15. How old are you?

15-19

20-24

25-29

30-39

40-49

50-59

60+

16. What is your marital status?

Single

Married

Other

CD 4

4-65

4-66

4-67

17. What is the highest level of education you have achieved?

Primary School

Some secondary

School Certificate

U.E./6th Form Certificate

7th Form

Trade qualifications

Tertiary professional
(eg: nursing, teaching)

Degree or part degree

Please tick this box if you are still at an educational institution.

18. What is your occupation? (Please be specific, eg: Polytech student, self employed builder.)

19. Do you belong to any of the following conservation organisations?

No

Forest and Bird Society

NFAC

Local conservation organisation
(specify) _____

National and/or international organisation
(specify) _____

4-68

4-69

4-70

4-71

10

20. Do you belong to any of the following outdoor recreation organisations?

No

Tramping or Mountaineering Club

Angling Club

Acclimatisation Society

Sports Club (eg: canoe)

NZ Deerstalkers Association

Big Game Hunters Association

NZ Small Game Shooters Sporting Association

NZ Bowhunters Society

Other (specify) _____

4-72

21. Which of the following best describes your home situation? (If you have children at home, please tick the box corresponding to the youngest child.)

By yourself

All adult household (eg: flat)

Living with parents

Couple, no children

Parent(s) and pre-school children

Parent(s) and primary school children

Parent(s) and secondary school children

Parent(s) and working/student children

Couple with children no longer at home

Skip 73

4-74

11

22. Where do you live? (Please name the city, town, rural town, or rural area you live in. If overseas, please name the country.)

23. Including travel costs, what is the approximate cost of the trip for you?

Less than \$10

\$10-19

\$20-29

\$30-39

\$40-49

\$50-59

\$60+

Many thanks for your co-operation.

PLEASE FEEL FREE TO MAKE ANY FURTHER COMMENTS ON YOUR USE OF THE PARK OR THE PROPOSED RECREATIONAL HUNTING AREAS.

Skip 75, 76

4-80

Appendix 3

USER QUESTIONNAIRE FOR EACH GROUP (COLOURED GREEN)

Kaimanawa and Kaweka Forest Parks

Easter 1982

GROUP QUESTIONNAIRE

To be completed by one member of each party
(including parties of one).

This small checklist is designed to be answered by one representative of your group. It seeks information about your party and the organisation of your trip.

As a final favour, may we ask that the group's representative collect the party's individual questionnaires and return all forms to the survey personnel as you leave the Park, or post them in the stamped addressed envelope provided.

Many thanks for your co-operation.

Kathryn Groome
David Simmons
Kathryn Groome and David Simmons
Parks and Recreation
LINCOLN COLLEGE

FOR OFFICE USE ONLY

		ACCESS
		DATA
		TOTAL

Group Plans

1. What was the group's main way of travelling to this Forest Park? (Tick one only.)

Car (including hitchhiking)

Bus/Minibus

Motorcycle

Bicycle

Four Wheel Drive Vehicle

Helicopter

Fixed Wing Plane

Horse

Walk

2. Can you please describe briefly your group's visit (eg: tracks, routes or roads used, huts or campsites, picnic sites, hunting areas, etc.)

3. How much time was spent in the Forest Park on this visit?

Less than 2 Hours

Less than half a day

Day only

One night

Two nights

Three nights

Four nights

More than four nights

CO 1/9

☐
☐

CO 1/11

☐

4. Is the Forest Park

Your major destination

Part of a longer trip:

Group Equipment

5. Within the group, which of the following was carried?

Bag for litter

Map of the area

Complete first aid kit

"Emergency survival kit" (purchased)

Cooker

Compass

Tent fly or s/bag cover

Full tent

6. If a tent was carried, where was it mainly used? (Tick one box.)

Did not use

In forest

Open river valley

Edge of forest

Open tops

Near a hut

Road end

Other (specify)

CD 1/12

	13
	14
	15
	16
	17
	18
	19
	20

CD 1/21

7. What did your group do with its rubbish?

Used available facilities
(eg: rubbish holes, kleen sacks at huts, bins, etc)

Packed out

"Burnt, bashed, and buried"

Other

Had none

Group size and composition8. What is the composition of your group?
(Please write the number of males and females in each age category.)

Age category	No. females	No. males
0-8 years		
9-14 years		
15 and over		

9. Which of the following best describes your group on this trip?

Alone

Family - adults only

Family - parent(s) and children

Family and friends

Friends

Commercial Tour

Organised group (eg: School, Club)

Other

(specify)

Many thanks for your help.
Please return this with your group's individual questionnaire.

CD 1/1

CD 1/21

Appendix 4

PERMIT HUNTER QUESTIONNAIRE



Lincoln College

Lincoln College
Canterbury
New Zealand

UNIVERSITY COLLEGE OF AGRICULTURE

Telephone: Christchurch 252 811

HUNTER QUESTIONNAIRE

The following questionnaire has been designed to sample the experiences and opinions of hunters from the Central North Island. It follows a similar study undertaken in Canterbury last year.

Under recent legislation, Recreational Hunting Areas (RHAs) may be declared over certain tracts of Crown Land. In these areas wild animals (eg: deer, pigs) are to be controlled mainly by recreational hunters, so long as soil, water, and vegetation values are not threatened. Recreational hunting is defined in the same legislation as a pastime without gaining from the sale of any wild animal carcass taken from a RHA.

Because of its location, historical use and species of animals present, the north-eastern half of the Kaimanawa Forest Park has been proposed as one such area. As a RHA is designated primarily to meet the needs of hunters, your views are of particular interest in the development of plans for these areas. Like-wise the views of all hunters, not just the most enthusiastic, are necessary.

Your co-operation in completing the following questionnaire would therefore be much appreciated. It looks long, but only takes about 20 minutes to complete. While we are hoping for all questionnaires to be returned fully answered, please return it even if you are unable to complete it.

All replies are confidential to the researchers and a summary only will be published. This will be available from the Bookshop, Lincoln College in about fifteen months.

Many thanks for your help

KH Groome

David Simmons



Kathryn Groome and David Simmons
Parks and Recreation
LINCOLN COLLEGE

HUNTING QUESTIONNAIRE

000444

This first section concerns your present level of hunting activity.

1. How many months is it since your last hunting trip?

- Less than 1 month ☐
- 1 month ☐
- 2-3 months ☐
- 4-6 months ☐
- 7-9 months ☐
- 10-12 months ☐
- 13-17 months ☐
- 18-24 months ☐
- More than two years ☐

2. How many years ago did you start hunting?

- Less than 1 year ago ☐
- 1 year ago ☐
- 2 years ago ☐
- 3 years ago ☐
- 4 years ago ☐
- 5-6 years ago ☐
- 7-8 years ago ☐
- 9-10 years ago ☐
- 11-20 years ago ☐
- More than 20 years ago ☐

FOR OFFICE USE

CDI

1			

SKIP 6-39

CDI-40

1-41

2

3. a) Has this hunting experience been -

Continuous ☐

Interrupted (a break of more than 1 year) ☐

b) If you have had a break from hunting, or no longer hunt regularly, can you indicate why? (Tick the main reason only.)

Decline in animal numbers ☐

Family commitments ☐

Cost of hunting ☐

Access problems ☐

Health problems ☐

Other interests ☐

No-one to go hunting with ☐

Age ☐

Other (Please specify) ☐

The following series of questions discuss the time you have available for hunting.

4. How long was your last hunting trip?

Less than one day ☐

1 day ☐

2 days ☐

3 days ☐

4 days ☐

5-6 days ☐

7-8 days ☐

9-10 days ☐

11-20 days ☐

More than 20 days ☐

FOR OFFICE USE

1-42

1-43

SKIP 44-45

1-44

3

5. Please indicate the number of hunting trips you have made in each of the following times during the past two years.

Time	Number of trips									
	NO	1	2	3	4	5-9	10-14	15-20	20+	
Day trips	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Weekends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Week trips	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Long weekends (public holidays)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Long weekends (other than public holidays)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Extended trips (longer than one week)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. a) What are your preferred months for longer hunting trips? (Up to two months.)

January	<input type="checkbox"/>	July	<input type="checkbox"/>
February	<input type="checkbox"/>	August	<input type="checkbox"/>
March	<input type="checkbox"/>	September	<input type="checkbox"/>
April	<input type="checkbox"/>	October	<input type="checkbox"/>
May	<input type="checkbox"/>	November	<input type="checkbox"/>
June	<input type="checkbox"/>	December	<input type="checkbox"/>

- b) Why do you prefer to hunt at this time?
(Please tick one main reason.)

Weather	<input type="checkbox"/>
Roar season	<input type="checkbox"/>
Time of year/number of other people hunting	<input type="checkbox"/>
Other (Please specify) _____	<input type="checkbox"/>

The next questions discuss your choice of hunting area.

7. a) How many days have you spent hunting in the following areas in the past two years?
(Please tick the appropriate box for each area.)

AREA

Number of days

	Number of days									
	No Days	1-4	5-9	10-19	20-29	30-39	40-49	50-99	100+	
Kaimanawa Forest Park	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kaweka Forest Park	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Forest Parks*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other State Forests:										
- Pine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Native	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
National Parks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scenic Reserves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maori Land	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Private Land	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unalienated Crown Land	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. b) If you hunt in either State Forest Parks or State Forests (marked with an '*' in question 7) can you please list your main choices of forest?

- _____
- _____
- _____

6

8. What is your main reason for hunting in a certain part of a forest. (Tick the main reason only.)

High animal numbers	<input type="checkbox"/>
Facilities (eg: huts, tracks, etc)	<input type="checkbox"/>
Easy access to hunting ground	<input type="checkbox"/>
Close to home	<input type="checkbox"/>
Easy country	<input type="checkbox"/>
Personal knowledge of the area	<input type="checkbox"/>
Type of vegetation (please specify) _____	<input type="checkbox"/>
Other (please specify) _____	<input type="checkbox"/>

The following questions concern your main hunting companions and how you became interested in hunting.

9. a) With whom do you usually go hunting?
(Please tick the appropriate boxes in the following list.)

Friend(s) Family Relatives Club School Self

i) On day hunting trips	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- to base camp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- on actual hunt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) On overnight or longer trips	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- to base camp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- on actual hunt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

/-72

9. b) How many other people do you usually go hunting with? (Please tick the appropriate box in the following list.)

	NUMBER OF OTHER PEOPLE									
	0	1	2	3	4	5-6	7-8	9-10	10+	
i) On day hunting trips										
- to base camp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- on actual hunt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) On overnight or longer trips										
- to base camp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- on actual hunt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. Who first introduced you to, or taught you hunting?
(Please tick the main one only.)

Parent	<input type="checkbox"/>
Brother/Sister/Relative	<input type="checkbox"/>
Friend	<input type="checkbox"/>
School	<input type="checkbox"/>
Club	<input type="checkbox"/>
Self	<input type="checkbox"/>

CD 1/-

☐☐☐☐

CD 1

☐☐☐☐

ENTER CD 2

☐☐

SKIP 6, 7.

☐

11. At what age were you first introduced to hunting the following animals? (Please tick the appropriate box for each animal.)

	AGE INTRODUCED TO HUNTING							
	Less than 10	10-15	16-20	21-25	26-30	31-35	36-40	41-45 45+
Deer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pigs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rabbits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Goats	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Waterfowl	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. What other back country recreation activities do you take part in a) when hunting b) at other times (List up to 3 with '1' the most important.)

	a) when hunting	b) at other times
Tramping	<input type="checkbox"/>	<input type="checkbox"/>
Photography	<input type="checkbox"/>	<input type="checkbox"/>
Fishing	<input type="checkbox"/>	<input type="checkbox"/>
Camping	<input type="checkbox"/>	<input type="checkbox"/>
Picnicking	<input type="checkbox"/>	<input type="checkbox"/>
Rafting	<input type="checkbox"/>	<input type="checkbox"/>
Kayaking/canoeing	<input type="checkbox"/>	<input type="checkbox"/>
Nature study	<input type="checkbox"/>	<input type="checkbox"/>
Sightseeing	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify)	<input type="checkbox"/>	<input type="checkbox"/>

CD1-

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The next few questions are concerned with why you hunt and what you do with the animals you shoot.

Skip 20, 21, 22

13. If possible, can you list the four most important reasons (motivations) why you go hunting?

1. _____

2. _____

3. _____

4. _____

14. When hunting, what is your first and second choice of animals? (Please list them as 1 and 2).

Red deer

Sika deer

Other deer

Pig

Rabbit

Goat

Waterfowl

☐ 1
☐ 2
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15. a) If deer hunting, would you be satisfied with shooting a deer but not obtaining a trophy?

Yes

No

Not sure

☐ 1
☐ 2
☐ 3
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CD2-

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2-29

9

5. b) Do you believe that controlling the number of Sika deer will improve their development as a trophy animal?

Yes

☐

No

☐

Not sure

☐

6. How important to you is actually seeing signs, sighting or killing an animal? The first part is for day trips, the second for overnight trips. Please indicate your opinion by circling the number closest to your opinion.

	Not Important	Neutral	Essential
a) Day hunting trips			
Seeing animal signs	1	2	3
Seeing fresh signs	1	2	3
Sighting animal(s)	1	2	3
Killing	1	2	3
b) Overnight/longer hunting trips			
Seeing animal signs	1	2	3
Seeing fresh signs	1	2	3
Sighting animal(s)	1	2	3
Killing	1	2	3

a) Day hunting trips

Seeing animal signs	1	2	3	4	5	2-31
Seeing fresh signs	1	2	3	4	5	2-32
Sighting animal(s)	1	2	3	4	5	2-33
Killing	1	2	3	4	5	2-34

b) Overnight/longer hunting trips

Seeing animal signs	1	2	3	4	5	2-35
Seeing fresh signs	1	2	3	4	5	2-36
Sighting animal(s)	1	2	3	4	5	2-37
Killing	1	2	3	4	5	2-38

10

17. When you shoot an animal what do you do usually do with it? (Please tick the appropriate box.)

	First animal		Second and other animals	
	own use	sell	own use	Sell
Take meat only	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Take meat and by-products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Take whole carcass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Take trophy only	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Take meat and trophy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

18. How many animals have you sighted, shot at, killed in the following areas, in the past two years? (Please write the number in the appropriate box for each area and animal.) If you have not hunted a particular animal in the areas listed simply put a cross through the boxes.

	Sika	Other Deer	Pig	Goat
a) Kaimanawa Forest Park				
Sighted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shot at	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Killed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Kaweka Forest Park				
Sighted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shot at	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Killed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CD 2 -

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☐

41

☐

42

SKIP 43, 44

INSET

CD 2-45:
CD 1-67.

11

8. c) Rest of North Island

Sighted

Shot at

Killed

Deer Pig Goat

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

d) South Island

Sighted

Shot at

Killed

Deer Chamois Thar Pig Goat

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. When hunting, do you usually carry any of the following?

Map of the area

Complete First Aid Kit

Emergency Survival Kit
(purchased)

Cooker

Compass

Tent fly or s/bag cover

Full tent

Bag for litter

Not usually Usually

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

END INSET.

CARD 3.
CONT'D.

3-68

3-69

3-70

3-71

3-72

3-73

3-74

3-75

12

The following questions refer to your opinions on management of hunting areas.

20. Please indicate your answers to the following four questions by circling the number closest to your opinion.

	Never	Neutral			Always		
	1	2	3	4	5	6	7
a) In your experience, do hunters obtain permits before hunting?							
b) To what extent do you consider that other hunters accurately complete kill return details?							
c) When you obtain a permit for a certain time period, do you always go hunting then (ie: not stopped by weather, illness, etc)?							
d) Do you consider a new permit should be issued if a previous one has not been completed and returned?							

21. Do you see any need for a hunting restriction on deer during the following times? (Tick the appropriate box.)

	Hinds	Stags
Fawn season (Nov-Jan)	<input type="checkbox"/>	<input type="checkbox"/>
Velvet season (Oct-Feb)	<input type="checkbox"/>	<input type="checkbox"/>
Roar season (April-May)	<input type="checkbox"/>	<input type="checkbox"/>
All of these	<input type="checkbox"/>	<input type="checkbox"/>
None of these	<input type="checkbox"/>	<input type="checkbox"/>

ENTER C. 4

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------

4

208

C03-

-76

-77

-78

-79

3-80

14

- If you prefer more or less list up to three (with '1' as the most important and '3' as the least important) in the columns below.

Larger huts (more than 6 bunks)
Smaller huts (6 bunks or less)
Hut equipment

Airstrips
Helipads
4 wheel drive access
Internal roading

Short tracks
Long tracks
Graded tracks
Bridled tracks

Camping sites
(ie: fire place and pit toilet)
Picnic areas
Toilets
Foot bridges

- Commercial guided tours
- Rubbish bins, holes, etc
- Signposting
- Track marking
- Information/publicity

[illegible]

CD 4

11)			

- Single hunter per block

- Two hunters per block

- More than two hunters per block
(limit on total number)

- More than two hunters per block
(no limit on total number)

- Open forest
(limit on total numbers)

- Open forest
(no limit on total numbers)

- Not sure

- b) For how long should a permit be issued?

- Less than 7 days

- 7-14 days

- 15-21 days

- 22-30 days

- Other
(Please specify)

24. a)

Which option or combination of options would you favour for controlling deer, pigs, goats in the Forest Park(s)? (If choosing more than one option, please list with '1' as your first choice.)

	Deer	Pig	Goat
Recreational hunting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- foot only	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- foot and helicopter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Commercial hunting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- foot only	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- foot and helicopter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Government control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- foot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- poison	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- helicopter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

b)

Deer control: If recreational hunting is to be one of two or more control methods, how do you think the combination should be managed? (Tick one only.)

Recreational hunting and other method(s) in the same area	<input type="checkbox"/>
Recreational hunting and other method(s) in different areas	<input type="checkbox"/>
Recreational hunting and other method(s) at the same time	<input type="checkbox"/>
Recreational hunting and other method(s) at different times	<input type="checkbox"/>

FOR OFFICE USE

FOR OFFICE USE

C0

26. Please indicate your opinion to the following statements on Recreational Hunting by circling the number closest to your view.

	Strongly Disagree			Neutral			Strongly Agree	
a) Browsing animals have caused irreparable damage to native forests.	1	2	3	4	5	6	7	21
b) Wild introduced animals (eg: deer) can be exterminated from an area as large as Kaimanawa Forest Parks.	1	2	3	4	5	6	7	22
c) Recreational hunting is a legitimate recreation.	1	2	3	4	5	6	7	23
d) Game management of recreational hunting herds would not interfere with the other recreational potentials of the forests.	1	2	3	4	5	6	7	24
e) Hunters should pass <u>regular</u> tests which examine their level of competency, eg: knowledge in rifle handling and safety procedures.	1	2	3	4	5	6	7	25
f) The biggest problem facing hunters today are problems of legal access to hunting grounds.	1	2	3	4	5	6	7	26
g) Recreational and sport hunting can control wild animals in Recreational Hunting Areas.	1	2	3	4	5	6	7	27
h) Hunting is <u>not</u> compatible with other 'back country' recreational activities.	1	2	3	4	5	6	7	28
i) Hunting should be in different parts of the forest from other recreational activities.	1	2	3	4	5	6	7	29
j) I would be happy to share a hut or campsite with other park users.	1	2	3	4	5	6	7	30
k) I would use Recreational Hunting Areas in preference to other potential hunting grounds.	1	2	3	4	5	6	7	31
l) I would avoid using an area where there are large numbers of Park users.	1	2	3	4	5	6	7	32
m) Hunters should be allowed to use hunting dogs.	1	2	3	4	5	6	7	33
n) Hunting organisations adequately reflect the overall views of all hunters.	1	2	3	4	5	6	7	34
o) Hunters have not adapted to changing animal behaviour: there are still plenty of animals left.	1	2	3	4	5	6	7	35
p) Some day I may go on a safari guided hunting trip.	1	2	3	4	5	6	7	36
q) Information should be provided on the areas of highest game numbers.	1	2	3	4	5	6	7	37
r) 1080 poison is highly persistent in meat.	1	2	3	4	5	6	7	38
s) Recreational Hunting Areas will not be used because hunters cannot legally sell the carcass.	1	2	3	4	5	6	7	39

4-28

C04-

This final section is included to gather simple data about the people who are hunters. Because some of this information may seem to invade your privacy we assure you that you will remain anonymous.

27. Are you: female ☐
male ☐

28. How old are you?
15-19 ☐
20-24 ☐
25-29 ☐
30-39 ☐
40-49 ☐
50-59 ☐
60+ ☐

29. What is your marital status?
Single ☐
Married ☐
Other ☐

30. What is the highest level of education you have achieved?

Primary School ☐
Some Secondary School ☐
School Certificate ☐
U.E./6th Form Certificate ☐
7th Form ☐
Trade qualifications ☐
Tertiary professional
(eg: nursing, teaching) ☐
Degree or part degree ☐

Please tick this box if you are still at an educational institution.

☐

31. What is your occupation? (Please be specific, eg: Polytech student, self employed builder.)

32. Do you belong to any of the following organisations?

No ☐
Forest and Bird Protection Society ☐
NFAC ☐
Local conservation organisation
specify: ☐
National and/or international organisation
specify: ☐

- a) Do you belong to any of the following outdoor recreation organisations?

No ☐

Tramping or Mountaineering Club ☐

Canoe/Kyak or other back country club ☐

Acclimatisation Society/Angling Club ☐

Sports Club (eg: harriers) ☐

NZ Deerstalkers Association ☐

Big Game Hunters Association ☐

NZ Small Game Shooters Sporting Association ☐

NZ Bowhunters Society ☐

Other (specify) ☐

4-72

- b) If you do not belong to any of the above, or you once belonged but do not anymore, please comment on why.

☐

Which of the following best describes your home situation? (If you have children at home please tick the box corresponding to the youngest child.)

By yourself ☐

All adult household ☐

Living with parents ☐

Couple, no children ☐

Parent(s) and pre school children ☐

Parent(s) and primary school children ☐

Parent(s) and secondary school children ☐

Parent(s) and working/student children ☐

Couple with children no longer at home ☐

4-74

35. Where do you live? (Please name the city, town, rural town, or rural area you live in. If overseas please name the country.)

36. Were you mainly brought up in a:

City (more than 20,000 pop) eg: Rotorua ☐

Town (5,000-20,000 pop) eg: Taupo ☐

Rural town (less than 5,000 pop) eg: Raetihi ☐

Rural area ☐

Overseas
(Please specify) ☐

SKIP 72

4-78

MANY THANKS FOR YOUR HELP

4-79

Any further comments you wish to make would be gratefully received:

☐

Please return this as soon as possible in the postage paid envelope provided.

END

Appendix 5

RIFLE OWNERS QUESTIONNAIRE



Lincoln College

Lincoln College
Canterbury
New Zealand

UNIVERSITY COLLEGE OF AGRICULTURE

Telephone: Christchurch 252 811

RIFLE OWNERS QUESTIONNAIRE

The following questionnaire is being sent to a random sample of North Island sport rifle owners. It is part of a wider study into the needs and requirements for Recreational Hunting Areas. At the same time as you receive this questionnaire a sample of hunters who have recently been issued with permits will be receiving a more detailed form.

Under recent legislation, Recreational Hunting Areas may be declared over certain tracts of crown land. In these areas wild animals (eg: deer, pigs) are to be controlled mainly by recreational huntings, so long as soil, water and vegetation values are not threatened. Recreational hunting is defined in the same legislation as a pastime without gaining from the sale of any wild animal carcass.

Information gained from this research will be used in two main ways:

- to piece together a history of hunting activity by current rifle owners.
- to gain your opinions on Recreational Hunting Areas.

Your co-operation in completing the following questionnaire would be much appreciated, and of benefit to you in helping formulate management policies. It only takes a few minutes to complete. While we are hoping for all questionnaires to be returned fully answered, please return it in the envelope provided even if you are unable to complete it.

The number on the top of this questionnaire is for administrative purposes only, and will be used solely to avoid unnecessary duplication and expense. If you wish to remain totally anonymous please tear off this number.

All replies are strictly confidential to the researchers and only a summary will be published. This will be available from the Bookshop, Lincoln College in about 15 months.

Many thanks for your help.

Kathryn Groome

David Simmons

Kathryn Groome and David Simmons
Parks and Recreation
Lincoln College



RIFLE OWNER'S QUESTIONNAIRE

1. Which of the following best describes your own situation? (Tick one box and go on to the question number listed.)

- | | | |
|--------------------------------|--------------------------|-----------|
| Current hunter | <input type="checkbox"/> | Go to Q2 |
| Ex-hunter, no longer hunting | <input type="checkbox"/> | Go to Q6 |
| Never hunted but would like to | <input type="checkbox"/> | Go to Q9 |
| No interest in hunting | <input type="checkbox"/> | Go to Q10 |

Current Hunter

2. How many years ago did you start hunting?

- | | |
|------------------------|--------------------------|
| Less than 1 year ago | <input type="checkbox"/> |
| 1 year ago | <input type="checkbox"/> |
| 2 years ago | <input type="checkbox"/> |
| 3 years ago | <input type="checkbox"/> |
| 4 years ago | <input type="checkbox"/> |
| 5-6 years ago | <input type="checkbox"/> |
| 7-8 years ago | <input type="checkbox"/> |
| 9-10 years ago | <input type="checkbox"/> |
| 11-20 years ago | <input type="checkbox"/> |
| More than 20 years ago | <input type="checkbox"/> |

3. a) Has this hunting experience been:

- | | |
|---|--------------------------|
| Continuous | <input type="checkbox"/> |
| OR: | |
| Interrupted (a break of more than 1 year) | <input type="checkbox"/> |

FOR OFFICE
USE
1
CD 2
SKIP 6-38

1-39

SKIP 40

1-41

1-42

2

OFFICE USE

3. b) If you have had a break from hunting (of more than a year) or no longer hunt regularly, can you indicate why? (Tick the main reason only.)

- | | |
|---------------------------|--------------------------|
| Decline in animal numbers | <input type="checkbox"/> |
| Family commitments | <input type="checkbox"/> |
| Cost of hunting | <input type="checkbox"/> |
| Access problems | <input type="checkbox"/> |
| Health problems | <input type="checkbox"/> |
| Other interests | <input type="checkbox"/> |
| No-one to go hunting with | <input type="checkbox"/> |
| Age | <input type="checkbox"/> |
| Other (please specify) | <input type="checkbox"/> |

4. When hunting, what is your first and second choice of animals (List them as 1 and 2.)

- | | |
|------------|--------------------------|
| Red deer | <input type="checkbox"/> |
| Sika deer | <input type="checkbox"/> |
| Other deer | <input type="checkbox"/> |
| Pig | <input type="checkbox"/> |
| Rabbit | <input type="checkbox"/> |
| Goat | <input type="checkbox"/> |
| Waterfowl | <input type="checkbox"/> |

1-43

☐

5. How many days have you spent hunting in the following areas in the past two years?
(Please tick the appropriate box for each area.)

AREA	Number of days										
	0	1-4	5-9	10-19	20-29	30-39	40-49	50-99	100+		
Kaimanawa Forest Park	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	56
Kaweka Forest Park	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	57
Other Forest Parks*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	58
Other State Forests:*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	59
- Pine*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	60
- Native*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	61
National Parks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	62
Scenic Reserves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	63
Maori Land	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	64
Private Land	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	65
Unalienated Crown Land	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

5. b) If you hunt in other State Forest Parks or State Forests (marked with an '*' in question 5) can you please list your main choices of forest?

1. _____
2. _____
3. _____

Please go to Question 10 (page 7) to complete this questionnaire.

EX-HUNTER, NO LONGER HUNTING

6. Please indicate which factors you view as being most important in stopping you hunting. (Number them from 1 to 3.)

Decline in animal numbers	<input type="checkbox"/>
Lack of time	<input type="checkbox"/>
Change in family circumstances (eg: marriage)	<input type="checkbox"/>
Lack of money	<input type="checkbox"/>
Lack of transport	<input type="checkbox"/>
Lack of hunting areas or access	<input type="checkbox"/>
Decline in physical fitness	<input type="checkbox"/>
Age	<input type="checkbox"/>
Other (Please specify)	<input type="checkbox"/>

7. a) How many years is it since you were last on a hunting trip?

_____ years

- b) How many years since you last shot an animal on a hunting trip?

_____ years

CD4/

54		56
----	--	----

57	58
----	----

59	60
----	----

5

FOR OFFICE USE

8. What was the animal you last shot on a hunting trip?

Sika deer
Red deer
Other deer
Pig
Thar
Chamois
Goat
Rabbit
Waterfowl

Please go to question 10 (page 7) to complete this questionnaire.

44-61

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6

NEVER HUNTED BUT WOULD LIKE TO

9. What are the 3 most important factors that prevent you from hunting. (Please number these in order from 1 to 3.)

Lack of time

Lack of money

Family commitments

Lack of hunting skill

Need an introduction to the sport

Transport difficulties

Insufficient motivation

Lack of knowledge of hunting areas

Other
(Please specify) _____

CD4/

62

63

64

Please go to question 10 (page 7) to complete this questionnaire.

FOR OFFICE USE

ENTER CD 2
3
4
SKIP 4/6 - 61

ALL GROUPS TO COMPLETE

This final section is to gather simple data about the people who are rifle owners. Because some of this information may seem to invade your privacy we assure you that you will remain anonymous.

10. Are you female? ☐ 1.
male? ☐ 2.

11. How old are you?

15-19 ☐ 1,
20-24 ☐ 2,
25-29 ☐ 3,
30-39 ☐ 4,
40-49 ☐ 5,
50-59 ☐ 6,
60+ ☐ 7

12. What is your marital status?

Single ☐ 1
Married ☐ 2
Other ☐ 3

4-65

☐

4-66

☐

4-67

☐

13. What is the highest level of education you have achieved?

Primary School ☐ 1
Some Secondary School ☐ 2
School Certificate ☐ 3
U.E./6th Form Certificate ☐ 4
7th Form ☐ 5
Trade qualifications ☐ 6
Tertiary professional
(eg: nursing, teaching) ☐ 7
Degree or part-degree ☐ 8

Please tick this box if you are still at an educational institution. ☐ 1.

14. What is your occupation? (Please be specific, eg: polytech student, self employed builder.)

15. Do you belong to any of the following organisations?

No ☐ 1
Forest and Bird Protection Society ☐ 2
NFAC ☐ 3
Local Conservation organisation
(please specify) ☐ 4
National and/or International Conservation
organisation
(please specify) ☐ 5

4-68
☐4-69
☐☐ 70

4-71

☐

16. Do you belong to any of the following outdoor recreation organisations?

No ☐

Tramping or Mountaineering Club ☐

Angling Club/Acclimatization Society ☐

Canoe/Kyak Club or other 'back country' club ☐

Sports Club (eg: Harriers) ☐

NZ Deerstalkers Association ☐

Big Game Hunters Association ☐

NZ Small Game Shooters Sporting Association ☐

NZ Bowhunters Society ☐

Other
(please specify) ☐

17. Which of the following best describes your home situation? (If you have children at home please tick the box corresponding to the youngest child.)

By yourself ☐

All adult household ☐

Living with parents ☐

Couple, no children ☐

Parent(s) and pre-school children ☐

Parent(s) and primary school children ☐

Parent(s) and secondary school children ☐

Parent(s) and working/student children ☐

Couple with children no longer at home ☐

4-71

Skip 73

4-74

18. Where do you live? (Please name the city, town, rural town or rural area you live in. If overseas please name the country.)

19. Were you brought up mainly in a:

City (more than 20,000 pop.) eg: Rotorua ☐

Town (5,000-20,000 pop.) eg: Taupo ☐

Rural town (less than 5,000 pop.) eg: Raetihi ☐

Rural area ☐

Please tick this box if you were brought up overseas. ☐

20. Finally, can you list the calibre of the rifles you own?

MANY THANKS FOR YOUR HELP. PLEASE FEEL FREE TO MAKE ANY FURTHER COMMENTS:

Please return this questionnaire as soon as possible to the researchers in the stamped addressed envelope.

4-75

Skip 77

4-78

4-79

4-80

Appendix 6

COMPARISON TABLES

(ACTIVE RIFLE OWNER AND PERMIT HUNTER SAMPLE)

5. Education

Highest Educational Qualification	Active Rifle Owner	Permit Hunter
Primary school	3.4	2.4
Some secondary	31.5	28.0
School certificate	13.9	13.7
U.E./Sixth Form		
Certificate	8.9	6.7
Seventh Form	1.1	1.9
Trade Qualification	28.2	29.4
Tertiary/professional	5.0	6.6
Degree or part-degree	8.2	11.3

6. Educational Institution

Education	Active Rifle Owner	Permit Hunter
Still at an educational institution	5.3	3.3

7. Occupation

Occupational Category	Active Rifle Owner	Permit Hunter
Professional/technical	5.8	13.1
Admin./managerial	4.0	5.0
Clerical workers	1.3	2.5
Sales workers	2.9	2.8
Service workers	2.4	4.4
Agric./Forestry	27.7	28.9
Production/labourers	38.9	29.6
Unspecified/housewife/ student/unemployed	8.0	6.1
No response	9.0	7.6

8. Membership of Conservation Organisations

Conservation Organisation	Active Rifle Owner	Permit Hunter
Do not belong	93.6	89.9
N.Z. Forest and Bird Society	3.0	2.7
Native Forest Action Council	0.5	0.4
Local conservation organisation	1.6	1.4
National/International	1.3	5.4

9. Membership of Outdoor Recreation Organisations

See Table 4.16.

10. Place of Residence

Area	Active Rifle Owner	Permit Hunter
City (>20,000)	54.9	45.2
Town (5-20,000)	14.3	20.3
Rural Town (<5,000)	4.7	12.5
Rural Area	25.4	20.2
Other	0.7	1.8

11. Place of Upbringing

Area	Active Rifle Owner	Permit Hunter
City	29.7	32.9
Town	13.3	16.7
Rural Town	15.2	14.2
Rural Area	37.0	32.3
Overseas	4.8	3.9