Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.
The Recreational Value of the Ruahine Forest Park
A survey to look at the demands and concerns of the users of the Ruahine Forest Park

A thesis presented in partial fulfilment of the requirements of the degree of Master of Applied Science in Natural Resource Management at Massey University, New Zealand

Michael Gerd Röhrig
2000
ABSTRACT

More knowledge about the users of a park leads to better management. Management systems reflect only what we know about outdoor recreation and recreationists. Part of this comes from research; the rest comes from the experience and value judgements of managers. Research on outdoor recreation is very important and helpful to policy makers, planners and managers of natural resources.

The present survey provides data about the demands, concerns and general information about the two biggest user groups of the Ruahine Forest Park. These are the recreational hunters and the trampers, which belong to clubs. ‘User groups’ can also be defined here as ‘resource-based recreationists’. The resource is the Ruahine Forest Park and the satisfaction of the users is dependent on the natural environment of this particular Park.

The trends found within the present survey were a high participation of older age groups in the active outdoor activities, an increase in education level by the recreational hunters and an increase in the number of days people spend for hunting and tramping per year.

The hunters are mostly concerned about the competition with commercial hunters and about the aerial dropping of poison. This is the main reason for the inconsistent returning of the hunter diaries or kill returns and it shows the distrust towards DoC’s management activities. Although, in general, the management of DoC was rated as good to fair, most hunters do not want to provide DoC with much information about deer densities and locations, via hunting diaries.

Many respondents of the present survey would like to see more
development in the Ruahine Forest Park; these were more long and short tramping tracks, more signs for route marking, and more provision of information.

The concerns mentioned by hunters and trampers focused mainly on particular tracks and huts and on the new established standards for facilities and services. The appreciation of the provided facilities differs per user group in importance. However, luxurious huts with gas-heating and gas-stove are not ranked as important by both groups and it seems that the users of the Park are satisfied with the provided facilities present and do not want to see any changes in the amount and status of huts.
ACKNOWLEDGEMENTS

I would like to thank my supervisor Mike Touhy for his idea generation and editing, and Dr. John Holland for his advice and suggestions with planning the research proposal and developing the questionnaires.

I would also like to thank Denise Steward who assisted and supported me with sending and receiving the questionnaires, and Kevin Harris for the provision of the computer facilities and for the insider information about hunting in New Zealand.

Thanks to Joe Morrison, Stephen Horman, and Ken Hunt from the Department of Conservation for the provision of information about the Park and their advice.
TABLE OF CONTENTS

ABSTRACT .............................................................................................. i
ACKNOWLEDGEMENTS ....................................................................... iii
TABLE OF CONTENTS ........................................................................ iv
LIST OF MAPS AND TABLES ................................................................. ix
LIST OF FIGURES .............................................................................. x

CHAPTER ONE: - Introduction ............................................................... 1

CHAPTER TWO: - The Department of Conservation ................................ 4

CHAPTER THREE: - Objectives of the Research ...................................... 7
  3.1 Problem Statement ....................................................................... 7
  3.2 Null Hypotheses: ......................................................................... 7
  3.3 Aim of Research ......................................................................... 7
  3.4 Objectives ............................................................................... 7

CHAPTER FOUR: - The Ruahine Forest Park ......................................... 9
  4.1 Introduction ............................................................................... 9
  4.1 Topography and Climate ............................................................ 10
  4.3 The Geology and Soils ................................................................ 10
  4.4 The Vegetation of the Ruahine .................................................... 11
  4.5 The Fauna (Native and Introduced Species) ................................ 13
  4.6 Deer in the Park ...................................................................... 14
  4.7 Human history in the Park ......................................................... 15
4.8 The Present Uses of the Park and the Recreational Opportunities 16
4.9 Regional and District Planning ................................................. 21
4.10 The Ecological Significance of the Park .................................... 21

CHAPTER FIVE: - The Management of the Park ................................ 23
5.1 The Conservation Act ................................................................ 23
5.2 The Resource Management Act .............................................. 24
5.3 Management objectives .......................................................... 24
  5.3.1 Protection: ........................................................................ 25
  5.3.2 Recreation: ...................................................................... 25
  5.3.3 Management: .................................................................. 25
5.4 Major Park management issues ............................................... 25
  5.4.1 Erosion/Soil and water conservation: .............................. 26
  5.4.2 Wild animal management: ............................................... 26

CHAPTER SIX: - Methodology .................................................... 29
6.1 Literature Review ..................................................................... 29
6.2 Informal Interviews ............................................................... 29
6.3 Analysis of Hut Logbooks ....................................................... 30
6.4 Mail Survey ........................................................................... 30
6.5 Analysis of Data ..................................................................... 32

CHAPTER SEVEN: - Outdoor Recreation and its Management ......... 34
7.1 Outdoor recreation ................................................................. 34
7.2 Planning Tools ....................................................................... 37
7.3 Recent changes to Backcountry Hut and Camp Fees: .............. 40
7.4 Regional Councils: ............................................................... 41
7.5 NZ Deerstalkers Association: .................................................. 42
7.6 Royal Forest and Bird Society .................................................. 43
7.7 Fish and Game ................................................................. 43
7.8 Federated Farmers of New Zealand (Inc.) ...................... 44

CHAPTER EIGHT: - Recreational Hunting as a Management Tool ...... 45
8.1 The value of recreational hunters ...................................... 45
8.2 How is Deer managed in other countries? ......................... 51

CHAPTER NINE: - Results and Discussions .......................... 54
Response Rate ........................................................................ 55
9.1 SECTION ONE: - Hunters ................................................. 57
  9.1.1 Regions ..................................................................... 57
  9.1.2 Gender ...................................................................... 57
  9.1.3 Age group ................................................................. 58
  9.1.4 Education ................................................................. 60
  9.1.5 Number of days .......................................................... 62
  9.1.6 Other activities ........................................................... 63
  9.1.7 Why hunting in the Ruahine Forest Park? ..................... 64
  9.1.8 Importance of facilities and services ......................... 65
  9.1.9 Concerns about tracks and huts ................................. 67
  9.1.10 The rating of DoC's management ................................. 68
  9.1.11 Other Parks visited regularly ..................................... 70
  9.1.12 Most preferred Parks in the two regions .................... 70
  9.1.13 How often do you do the following? ......................... 73
  9.1.14 Trophy hunter .......................................................... 76
  9.1.15 Use of animals .......................................................... 77
  9.1.16 Size of hunting parties .............................................. 78
  9.1.17 Average number of days for hunting ....................... 79
  9.1.18 Overnight stay .......................................................... 80
  9.1.19 Summary of hunter survey outcome ......................... 80
Appendix 3: Concerns of Hunters and Trampers

Appendix 4: Animal Species Recorded in Ruahine Forest Park

Appendix 5: Endangered, Threatened and Rare Wildlife Species recorded in the Park

Appendix 6: Rare plants recorded in and adjacent to the Park

Appendix 7: Environmental Care Code

Appendix 8: Hunter diary

Appendix 9: Remind Letter
LIST OF MAPS AND TABLES

List of Maps:
Map 2.1 DoC Offices in New Zealand..................................................5
Map 4.1 Locality of the Ruahine Forest Park .....................................9
Map 4.2 Hut and Park Network of the Ruahine Forest Park...........20

List of Tables:
Table 4.1 The main changes in forest of the Ruahine Range from 1870 to 1970 .................................................................12
Table 7.1 Summary of planning tools ........................................... 37
Table 7.2 Hut Categories .................................................................40
Table 8.1 Number of animal harvested ...........................................48
Table 9.a Relative Importance of Appeals of Wilderness ............ 55
Table 9.b Response rate ................................................................. 56
Table 9.1.1 Survey Respondents by Regions ............................ 57
Table 9.1.2 Concerns about tracks or huts .................................. 67
Table 9.1.3 Return rate of kill returns ........................................75
Table 9.1.4 Trophy satisfaction for all Regions ......................... 76
Table 9.1.5 Use of animals .................................................................78
Table 9.1.6 Overnight stay .................................................................80
Table 9.1.7 Summary of hunter survey outcome ...................... 80
Table 9.2.1 Survey Respondents by Region ...................................86
Table 9.2.2 Concern about tracks or huts ................................... 96
Table 9.2.3 Overnight stay ................................................................. 103
Table 9.2.4 Summary of the tramper survey outcome ............. 104
Table 9.3.1 Hut Logbook Analyses (Western side) ................... 109
Table 9.3.2 Hut Logbook Analyses (Eastern side) .................... 110
LIST OF FIGURES

List of Figures
Figure 9.1.1 Age groups .............................................................................. 59
Figure 9.1.2 Education level ........................................................................ 60
Figure 9.1.3 Education level compared with the region ............................... 61
Figure 9.1.4 How often do you go hunting in the R.F.P.? ........................... 62
Figure 9.1.5 How often do you go hunting in other Parks? .......................... 62
Figure 9.1.6 Which of the activities do you do while hunting? ................. 63
Figure 9.1.7 Activity combined with age groups ......................................... 64
Figure 9.1.8 Reasons for hunting in the Ruahine combined with Region ...... 65
Figure 9.1.9 Importance of facilities per region ........................................... 66
Figure 9.1.10 Further development of the Park ........................................... 67
Figure 9.1.11 Further development of the Park combined with Region ........ 68
Figure 9.1.12 Rating of DoC's Management ................................................. 69
Figure 9.1.13 Management ranking per Region ........................................... 69
Figure 9.1.14 The most preferred Park ......................................................... 71
Figure 9.1.15 Park preference per Region ..................................................... 72
Figure 9.1.16 How often do you do the following, by Region? ...................... 73
Figure 9.1.17 How often do you do the following? ....................................... 74
Figure 9.1.18 Average number of people in hunting party ......................... 78
Figure 9.1.19 Average number of days in Park .......................................... 79
Figure 9.2.1 Age groups ............................................................................. 87
Figure 9.2.2 Education level ....................................................................... 88
Figure 9.2.3 Education level compared with region .................................... 89
Figure 9.2.4 How often do you go tramping in the Ruahine Forest Park? .... 90
Figure 9.2.5 How often do you go tramping in other Parks? ....................... 90
Figure 9.2.6 Which of the activity do you do while tramping? ...................... 91
Figure 9.2.7 Activity combined with Age group ..................................... 92
Figure 9.2.8 Reasons for tramping in the Ruahine combined with Region .................................................................................. 93
Figure 9.2.9 Importance per Region .................................................... 94
Figure 9.2.10 Further development of the Park combined with Region .................................................................................. 96
Figure 9.2.11 Rating of DoC’s Management ........................................... 97
Figure 9.2.12 Rating DoC’s Management .............................................. 98
Figure 9.2.13 What Park do you prefer most? ...................................... 99
Figure 9.2.14 Park preference per Region .............................................. 99
Figure 9.2.15 How often do you do the following ............................... 101
Figure 9.2.16 Size of tramping parties ................................................. 102
Figure 9.2.17 Average number of days for tramping ......................... 103