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RANGER

The Evolution of the Role of a Protected Natural Resource Manager

by
Catriona L McBean
1992

**Thesis Presented to the
Department of Parks, Recreation and Tourism
Lincoln University**

**In Partial Fulfilment
of the Requirements for the Degree of
Masters of Parks and Recreation Management**

RANGER
THE EVOLUTION OF THE ROLE OF A PROTECTED NATURAL RESOURCE
MANAGER

Catriona L McBean

This thesis traces the evolution of the ranger in New Zealand's protected natural resource management from 1874-1987. Rangers were employed by three government departments - the Department of Lands and Survey, the New Zealand Forest Service, and the Wildlife Service, Department of Internal Affairs - at the operational level of protected natural resource management for over a century. Six types of rangers, from the three departments, were identified; forest ranger, environmental forest ranger, crown land ranger, national park ranger, reserves ranger, and wildlife ranger.

Archival data provided official information over the last 113 years. Interviews were conducted with former rangers from the three departments, (from a spectrum of positions of responsibility), and provided data on personal experiences, perceptions and attitudes towards protected natural resource management.

Stinchcombe's historicist explanation provided a theoretical perspective based upon two assumptions; the phenomenon is produced by a system of constant causes, and some social patterns cause their own reproduction. Historicist explanation can be used as a means to understanding and explaining social phenomenon. The evolution of the ranger was seen as a self replicating phenomenon.

Analysis of the evolution of the ranger highlighted six categories seen to influence ranger duties and responsibilities. These included the environmental, governmental, departmental policies, public pressure, key individuals, and other rangers and institutions.

'Meanings' of the New Zealand ranger were analysed. Meanings are considered both in terms of ranger duties and responsibilities, and meanings ascribed by those involved in protected natural resource management. Three distinct periods in the evolution of the ranger are identified; protection, control and management. These three represent changes in ranger duties and responsibilities, and management techniques.

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Full name of author: CATRIONA L McBEAN

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Degree: Masters of Parks and Recreation Management (M.P&R Mgt).

Year of presentation: 1992

University Department: Department of Parks, Recreation and Tourism

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Key words: *Ranger, history, protected natural resource management, New Zealand Forest Service, Department of Lands and Survey, Wildlife Service, Department of Internal Affairs, meanings.*

ACKNOWLEDGEMENTS

The issue is whether the past is more than just tradition to which we relate in a purely reactionary sense, whether it like wise contains utopian elements, whether there is a future in the past. The issue is whether this utopian factor, if it is to be more than mere abstract wishful thinking, empty reverie and quibbling over options that never were, should not then be part of that stream which flows from the past to the now, to the present, where it does anything but stands still, but rather flows on into the future. Time Motion Exhibition, BMW Museum, München 1989.

I would like to specially acknowledge and thank my father Keith McBean who has stood beside me and who has been totally supportive of me throughout all of my studies.

Thanks must also go to my supervisors Dr Pat Devlin and Dr David Simmons whose friendship and support have guided and directed my studies and research while at Lincoln. Thanks to Richard and Randa my room mates, Robin, Gyan, Steve, Sarah, Jeanette and Chrys who have through their friendship and humour, made this time enjoyable. Thank you Richard for your continuous editorial comment, no matter how droll!

To Pam, Jack and Adam, who have all supported me with their friendship and confidence in me, thanks. Thanks to Bridget and Nick; William, Christina and Thomas; and Nana who all gave me places to live while in Wellington.

I cannot thank all those people enough who have assisted me with information, interviews, and guidance during my research. Special thanks to the Department of Conservation Science and Research Division, Wellington who gave me a roof over my head while collecting my data. To all my interviewees - the rangers - thanks guys without your information none of this would have been possible. And to the staff at National Archives who were patient with my continual requests for dust covered files, thank you.

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CHAPTER ONE

INTRODUCTION

Introduction

This thesis traces the evolution of the role of rangers within New Zealand's protected natural resource management. The title ranger invokes many connotations, one former ranger (1991) stated it was

an all embracing term because they were technical people, they were professional people, they were interpreters, they were work staff, they were first aiders, they were individuals with a really broad base of experiences.

Rangers were involved at the operational level of protected natural resource management for over a century. This thesis considers the changes in ranger duties and responsibilities as a consequence of both natural (physical/environmental), political and social pressures. Six types of rangers, from three separate departments, are considered. They are the; forest ranger, environmental forest ranger, crown land ranger, national park ranger, reserves ranger, and wildlife ranger.

Analysis begins with the Forests Act 1874 and concludes with the passing of the Conservation Act 1987. The Forests Act 1874 was the first attempt to protect and manage the natural forest resources of New Zealand. In the interim period the administration of protected natural resource management responded to pressures by altering policies, legislation or departments. The Conservation Act 1987, represents the unification of protected natural resource management with the amalgamation of the New Zealand Forest Service, the Department of Lands and Survey, and the Wildlife Service, Department of Internal Affairs, and spelt an end to the official use of the term ranger.

The history of three government agencies employing rangers is chronicled - the New Zealand Forest Service, the Department of Lands and Survey, and the Wildlife Service. The evolution of these agencies, and their structure, were considered important both in terms of the direction of protected natural resource management, and consequently in the evolution of ranger duties and responsibilities.

The theoretical perspective of historicist explanation allowed for the explanation of the influences on both the government agencies and the rangers. Legislation, departmental policy changes, societal pressures, and individual ranger actions are all seen to be influential in the evolution of the ranger role.

Why a History on Rangers

The decision to study the history of rangers is a result of two factors; the limited documentation on rangers, and the establishment of the Department of Conservation. It is considered an appropriate time for documenting the history of rangers in protected natural resource management. Although rangers are mentioned within departmental histories, no documentation of rangers themselves has been undertaken. It was considered that the ranger at the operational level, was overlooked as an important contributor to protected natural resource management.

Department of Conservation

On 1 April 1987 the Department of Conservation was established by the fourth Labour Government as a consequence of major departmental restructuring. The Department incorporated environmental, conservation and preservation sections of the New Zealand Forest Service, the Department of Lands and Survey, the Wildlife Service, Department of Internal Affairs, the Department of Agriculture and Fisheries, and the Transport Department. This new department now controlled, administered, managed and patrolled national parks, reserves, forest parks, wildlife, rivers, and the sea-shore - the conservation estate - which had once been the domain of these other departments and the rangers.

The rangers, employed by the New Zealand Forest Service, Department of Lands and Survey, and Wildlife Service were 'lost' to the new Department of Conservation. Not only were they restructured, they were given new roles and responsibilities, and most importantly renamed conservation officers.

This thesis does not address the consequences of the decision by the Department of Conservation to change the title from ranger to conservation officer, nor the change in roles and responsibilities. What is attempted, is the illustration of the history of the six ranger types, their similarities and differences, in protected natural resource

management over the last 113 years.

Difficulties of Undertaking Such Research

A number of difficulties have been recognised while undertaking this research. The need to review three distinct government departments at once is both constraining and impractical. Each department and their ranger corp is considered separately as the influences, and consequent reactions in ranger duties and responsibilities are often unique to the department. This also allows for adequate consideration of one ranger type without being overshadowed by another.

A consequence of reviewing each department and ranger group may be a reiteration of events and influences (particularly major social and environmental events). This reflects not only the similar influences, but also the nature of ranger responsibilities and duties. Because of the nature of historical research a selection of important issues was necessary. Many events, influences and issues have been considered less important in the evolution of the ranger as a protected natural resource manager, and hence, not reviewed. Others have had a significant affect, and therefore, are considered in greater depth.

Research Criteria

A number of goals were proposed to provide structure and direction for this research into the evolution of the role of the ranger as a protected natural resource manager.

These goals are:

- i the determination of legislated duties, and responsibilities. Legislation was considered a framework within which ranger duties and responsibilities were established and directed; and
- ii change in ranger duties and responsibilities were expected to illustrate influences on rangers.

Analysis of the three government departments - the Department of Lands and Survey, the New Zealand Forest Service, and the Wildlife Service - would assist in illustrating differences, and similarities, in roles, duties and responsibilities of the ranger corps.

Hypotheses

Three hypotheses are tested:

1. That there has been a significant change in rangers' duties and responsibilities from an operational level to managerial level since 1874. This is because:
 - (a) an impetus for change has come from the physical environment, legislation, government policy, departmental policy, public pressure, and key individuals;
 - (b) advocacy for conservation has increased.
2. That there were significant differences between the Lands and Survey, Forest Service, and Wildlife Service rangers, in terms of their duties and responsibilities in protected natural resource management.
3. The requirements, experiences, and qualifications required to become a ranger have evolved in response to, or as a consequence of, changes in duties and responsibilities.

Study Boundaries

Bounds were placed upon this investigation in order to keep the data manageable. It is important to recognise that these limits do not represent areas believed unimportant or of no significance, but were areas too broad to be encompassed within this thesis. Boundaries are an attempt to provide a logical and practical framework for the research - the evolution of the role of the ranger as a protected natural resource manager.

Limits originally consisted of initial and terminal boundaries within which the role of the ranger was traced in relation to the development of protected natural resource management. The initial date, 1874, coincides with the first Forests Act when rangers were recognised within legislation. The terminal date, 1987, represents the establishment of the Department of Conservation and the disbandment of the Department of Lands and Survey, the New Zealand Forest Service, and the Wildlife Service.

Lateral boundaries were required to contain information retrieval. The boundaries set required that only employees of central government departments or employees under the control of a central government department (national park rangers pre-1969) were included, thereby excluding honorary rangers, acclimatisation rangers, and local

government rangers from direct analysis.

A number of other issues are not addressed within this history of rangers. These exclusions meant that rangers employed by other central government departments, such as the Marine Department and the Department of Agriculture and Fisheries were not considered. Other issues not addressed included race, gender and social status of rangers, and the informal employment of rangers' wives. These issues are not considered within this thesis but do provide areas for future research.

Thesis Outline

In chapter two the definitions of rangers are considered in a New Zealand and overseas context. Chapter three outlines the theoretical perspective used to provide explanation for the evolution of the role of the ranger as a protected natural resource manager. Also incorporated in chapter three are the research methods and sources of data. In order to provide a context from which the government departments and rangers evolved, chapter four reviews land and society in New Zealand between 1840 and 1987.

Chapters five, six and seven review the histories of the New Zealand Forest Service, the Department of Lands and Survey, and the Wildlife Service respectively. Legislation, policy and structural changes are covered in a chronological order. These chapters provide the basis from which the evolution of ranger duties and responsibilities can be explained.

Chapter eight provides a synthesis of these previous three chapters, and outlines the influences on ranger duties and responsibilities over the last 113 years. Chapter nine provides a conclusion, summarising the findings presented in this thesis.

CHAPTER TWO

DEFINITION OF RANGER

Kiwis had one perception of what a ranger was, and it was probably a person who was seven foot tall and walked over hills all day (Green, 1991).

Introduction

This chapter reviews the definition and meaning of the term ranger. It is separated into two sections, the first definitions; the second, meaning. The definitions of ranger are considered within a New Zealand and overseas context. Meaning, however, relates only to the New Zealand situation.

In reviewing the history and meaning of ranger, it was established that little has been published on rangers. In essence, this chapter is a literature review, providing definition and clarification of those rangers involved in protected natural resource management in New Zealand.

History of the Ranger

In order to determine the evolution of the ranger's role since 1874, it is necessary to define firstly what is a ranger, and secondly the different types of ranger involved in protected natural resource management in New Zealand.

The title ranger can be traced back to England where, primarily, rangers were employed as keepers of royal forests and hunting parks responsible for the protection of game and timber. The Charta Forest æ, Henry III 1225 stated:

When Rangers fhall make their Range in the Forest. Our Rangers fhall go through the Forest to make Range, as it hath been accuftomed at the time of the firft Coronation of King HENRY our Grandfather, and not otherwise (Round, 1987, np).

Although this provides the original definition of what duties a ranger was required to undertake, it is not generally considered the origin of contemporary rangers. The contemporary ranger has been modelled off the United States national park ranger. National park rangers can be traced back to the late nineteenth century.

The first national park ranger was employed in 1880 in Yellowstone as a gamekeeper. Park protection was added to the duties of the rangers, but by the mid 1880's rangers relinquished this responsibility which was transferred to the cavalry. By 1930 the position of the ranger had been formalised under the Civil Service Commission with duties classified as both protective and custodial (Dougher, 1988). The National Park Service, established in 1916, represented a vast array of natural features and areas which included world renowned national parks, historic and cultural sites, as well as urban areas.

Shiner (1986) noted that duties and responsibilities of park rangers include courtesy, information and safety services; search and rescue; interpretative services; resource management and maintenance; and administrative services. Rangers are often considered in somewhat of a romantic light as the following illustrates. In *Ranger* (1990, 8), the Journal of the Association of National Park Rangers, it was stated that American rangers are

the people charged with protection and management of this nation's heritage - its parks, forests, public lands and the wilderness, from the Californian desert to the Statue of Liberty.

Forest rangers, employed by the USDA Forest Service, according to Steen (1976), were appointed from the 1890's by the authority of the commissioner of the General Land Office. This authority was provided under the Forest Reserve Act 1891 that allowed for the reservation of forests as well as staffing (Dougher, 1988). Dougher (1988, 15) stated that staff appointed under the Forest Reserve Act 1891 came to be known as rangers because their primary responsibility was *monitoring range allotments*. Forest ranger duties included the enforcement of logging and grazing regulations, as well as forest protection from fire and damage from illegal activities.

In United Kingdom the contemporary title ranger was not evident until the early 1970's.

In the UK the first National Parks in 1951 chose the term 'warden', inferring guardianship or protection as its primary role and it was not until the 1970's that the title of 'ranger' was adopted to reflect more wide 'ranging' duties (Miller, 1985, 17).

The variety of ranger duties include surveillance of the parks and nature, education and interpretation, and resource management. Rangers also provide a central link between

park management, the local population, and the visitor.

The German ranger service - Nationalpark-Wacht - was established with the aims of: informing the public and interpreting nature; enforcing the law; assisting in emergencies; observing flora and fauna; and to ensure efficient and safe visitor services (Hopfner, 1985). Similar activities, according to Kermabon (1985), are undertaken in France by rangers.

The ranger role has evolved through time. Ranger duties and responsibilities, including such details as specific areas ranged and the requirements, both statutory and non-statutory, have all been influential in the evolution of the ranger role. In France, Combarous (1985) argued, the ranger is dependent upon the locality, history of the park, and local and national policies.

General similarities exist between rangers from different countries, their role often dependent upon mandate and priority placed by the governing body. The 1985 Training Seminar for European Park Rangers and Wardens (Losehill Hall, UK) identified a number of common roles of rangers:

- (1) resource management;
- (2) interpretation and visitor services;
- (3) law enforcement (Simpson, 1985).

Ranger Definitions

Ranger, Warden, Nationalpark-Wacht, Grades-Moniteurs,
Garde Général Adjoint, Opperboschwachter

The term ranger, or any of its translations, has been defined by a number of people, who, although representing the same role illustrate the different priorities placed upon it. Shiner (1986, 1:5) identified United States park rangers as *individuals who work in an outdoor setting.... [and] is looked up to by the public*. This definition was met with some ridicule from one former national park ranger who regarded it as inappropriate to New Zealand and noted *it is more appropriate for window-cleaners and parachutists* (Rennison, 1991).

Although Shiner's definition is a sweeping statement, it does encompass many of the specific definitions of ranger. According to the Association of National Park Rangers (US),

Rangers are expected to answer questions and present programs to groups and individuals at virtually every educational level. Rangers are expected to find you when you're lost, help you when you're hurt, rescue you when you're stuck, and enforce the law when you or others can't abide by it. Rangers are entrusted with the care of our irreplaceable cultural and natural treasures, and they're responsible for assuring that visitors have a safe, enjoyable and educational visit while they're there. And rangers are expected to be knowledgeable, courteous, helpful and professional (ANPR, 1989, 7).

Kaufman (1960, 47), after carrying out an intensive study of the ranger within the USDA Forest Service concluded that rangers *actually perform physically the duties of resource management, or directly supervise their physical performance*. Such duties of forest rangers included fire control, timber management, recreation and land uses, and range management.

During the 1985 Training Seminar for European Park Rangers and Wardens, participants iterated the importance of the ranger within a park context. Specifically that *every park should have, unspoilt nature, good planning, an unbureaucratic bureaucracy, enthusiasm, ... and rangers to be ambassadors* (Simpson, 1985, 82). For Robinson (1985, 7) *rangers can be seen as one example of the human face of the conservation outlook*. The ranger is an advocate for the conservation message, especially through interpretation and visitor services.

An investigation into ranger training programmes of the Australia National Park and Wildlife Service revealed ten major duties undertaken by rangers. These were identified as: resource management and evaluation; planning, designing, developing; maintenance; education and interpretation; public relations; control, enforcement, protection; search and rescue, first aid, disaster control; administration and clerical. In Australia, *it would appear that rangers see themselves as generalists* (Hermes, 1980, 6). Prince (1983) reiterated and expanded upon these duties including recreation responsibilities and wildlife protection.

Thom (1987a), in defining a New Zealand ranger presented a slightly different perspective of an 'on the spot' land manager, the representative of authority, and the 'guardian' of nature and people in the park.

These definitions of ranger cover a wide spectrum - from people who work in outdoor settings to ambassadors, and land managers. Each definition is valid. New Zealand ranger duties and responsibilities, and hence definitions, also cover a wide spectrum. A ranger, although at the operational level of the administrative hierarchy, plays a very important part in the structure of protected natural resource management. As such, it is necessary to consider the structure and development of protected natural resource management in New Zealand before a definition of the New Zealand ranger can be proposed.



New Zealand Rangers

Throughout New Zealand's protected natural resource management, rangers have been involved at the operational level, controlling, managing, and directing development. Three different agencies, employed a number of types of rangers which have been directly involved in the processes of protected natural resource management. The agencies and their respective ranger corps include the following.

Crown Land Ranger (1870-1925)

Crown land rangers were employed by the Crown Lands Department, and subsequently the Department of Lands and Survey. Crown land rangers were involved directly in the control and inspections of settler's leases and development of Crown lands. Priority was placed upon the control of Crown land exploitation, both the land itself and the timber resource. In 1925 the title crown land ranger was replaced by field inspector as the duties and responsibilities became primarily agricultural.

Forest Ranger (1875-1987)

Forest rangers were initially employed by the Forestry and Agriculture Branch of the Crown Lands Department (1875-1887). Subsequently they were employed by the Forest and Agriculture Department (1887-1915); the Forestry Branch, Department of Lands and Survey (1915-1919); the State Forest Service (1919-1949); and finally the New Zealand Forest Service (1949-1987). Fires were a constant danger to the forest, and hence, constituted a major component of a forest ranger's duty.

Subsequently rangers' duties and responsibilities separated into two fields. This division was based on the type of work undertaken. Production forest rangers (both indigenous and exotic) priority was the control and conservation of the timber resource.

Environmental forest rangers main priority was initially wild animal control, but this widened during the 1970's to include the management of State forest parks and the rise in backcountry recreation.

Wildlife Ranger (1930-1987)

Wildlife rangers were employed directly by the Department of Internal Affairs, and then by the Wildlife Branch, Department of Internal Affairs (1945-1968); renamed Wildlife Service (1968-1987). Wildlife rangers were primarily concerned with wildlife, both

indigenous and exotic. Control and management fell into two areas; fish and game, and protected species management. This mix afforded indigenous wildlife conservation, and exotic control and management.

The use of the term wildlife ranger is based upon the original title of employees by Department of Internal Affairs in 1941. The title wildlife ranger was changed to field officer in 1950, and finally to wildlife officer in 1980. Employees of the Wildlife Service, consider the differences in title representative of the differences in duties and responsibilities. The title ranger inferred fish and game control whereas officer assumed protected species management. Newcombe (1950), Director of Wildlife (1961-1967), however stated,

All field officers are rangers and as such can assist particularly as regards to native pigeon and protected ducks.¹

In 1970 clarification of the Wildlife Act 1953 stated

Subsection 38(1) says that wildlife rangers may be appointed "under the provisions of the Public Service Act 1912".... Instead, we have field officers, part of whose duties are ranger's ones. The Commission properly issues these officers with rangers' warrants, using the formula "I hereby certify that pursuant to the State Services Act 1962", so-and-so "has been appointed to be a ranger ... under the Wildlife Act 1953".²

National Park Ranger (1923-1987)

National park rangers were initially employed by individual National Park Boards and then by the National Parks Authority after the National Parks Act 1952 and the establishment of a New Zealand Park Service. In 1969 national park rangers were incorporated into the Public Service and became employees of the Department of Lands and Survey.

Rangers were modelled, to a large degree, upon the United States National Parks Service rangers, but instead of being allocated to specialist roles such as protection, interpretation, resource management and maintenance, they were involved with all of

¹ IA 78/15, 1950. Newcombe, F.L. "Work on Native Bird Preservation" in *Wildlife Branch Bulletin Field Staff Training Course 1950*.

² IA Accession 3546 23/1/1, 1970. Letter from Moore, Acting Executive Officer, Advisory and Research, Wildlife Service, Department of Internal Affairs.

these. As Thom (1987a, 190) described,

Rangers are the public representatives of parks and reserves, advising on routes and weather, interpreting the parks in summer programmes and ensuring that tracks and huts are maintained.

Reserves Ranger (1964-1987)

Reserves rangers were employed by the Department of Lands and Survey directly under the control and direction of the Commissioner of Crown Lands. Administration and control were transferred to the National Parks Authority in the early 1960's, and in 1969 reserves rangers, as with national park rangers, became direct employees of the Department of Lands and Survey. Reserve rangers were primarily urban based and were responsible for the large numbers of small pockets of reserves scattered around their areas of jurisdiction. Responsibility for reserves was removed from crown lands rangers when their duties and responsibilities were redefined.

There are two other types of New Zealand rangers which were involved in protected natural resource management since last century. These two rangers are honorary and acclimatisation rangers which are briefly defined below.

Honorary Ranger

Honorary rangers were appointed by the New Zealand Forest Service, the Department of Lands and Survey, and the Wildlife Service. Appointment was predominantly as a result of a personal enthusiasm for nature and wildlife. Honorary rangers performed a vital function in protected natural resource management as often they were the only form of surveillance available in many areas. They have been influential in the control of flora, fauna, infringers (both human and animal), and recreationists within the New Zealand environment.

Acclimatisation Ranger

Acclimatisation rangers were as influential and necessary as honorary rangers. These rangers were employed solely by the acclimatisation societies to range the various acclimatisation districts and were primarily concerned with the game animals introduced by the societies. These rangers did assist wildlife rangers in some areas, Hokitika is one example. Acclimatisation rangers are not reviewed in this thesis as they were considered to be not directly engaged in the protection of indigenous flora and fauna, or

involved in New Zealand protected natural resource management.

The history of honorary and acclimatisation rangers in protected natural resource management is not reviewed because they do not fulfil the criterion of being employed by one of the following government departments - the Department of Lands and Survey, the New Zealand Forest Service, or the Wildlife Service, Department of Internal Affairs.

Protected Natural Resource Management

Protected natural resource management is a concept that encapsulates the spectrum of areas (territory), duties and roles under the control and management of the Department of Lands and Survey, the New Zealand Forest Service, and Wildlife Service. As such, the term protected natural resources provides for the inclusion of protected natural areas, protected species, protection and production forests, and fish and game.

In order to understand fully the term protected natural resource management, the concepts of protected natural area, and protected species require further explanation. Firstly, protected natural area. In 1984 the Department of Lands and Survey defined this concept as

a legally protected area, characterised by an indigenous species or ecosystems, in which the principal purpose of management is retention of the indigenous state (in Kelly & Park, 1986, 56).

This concept of protected natural area is used generally within New Zealand conservation and environmental spheres and is also gaining increasing international recognition (Kelly & Park, 1986). Figure 2.1. represents the ranks of protected natural areas according to two criteria, protection and use.

Secondly, protected species. The *Red Data Book of New Zealand* (Williams & Given, 1981) lists the rare and endangered endemic terrestrial vertebrates and vascular plants of New Zealand. Listings are categorised according to *the degree of threat to individual species in their wild habitats* (Williams & Given, 1981, 8). The four categories used - extinct, endangered, vulnerable and rare - differ by degree of threat from habitat destruction, over-exploitation, and population stability. Examples of endangered species are the kakapo, little spotted kiwi, and takahe. Vulnerable species include the short-

tailed bat and the North Island kokako, and rare species are the stitchbird, saddleback, and Hochstetter's frog (Williams & Given, 1981).

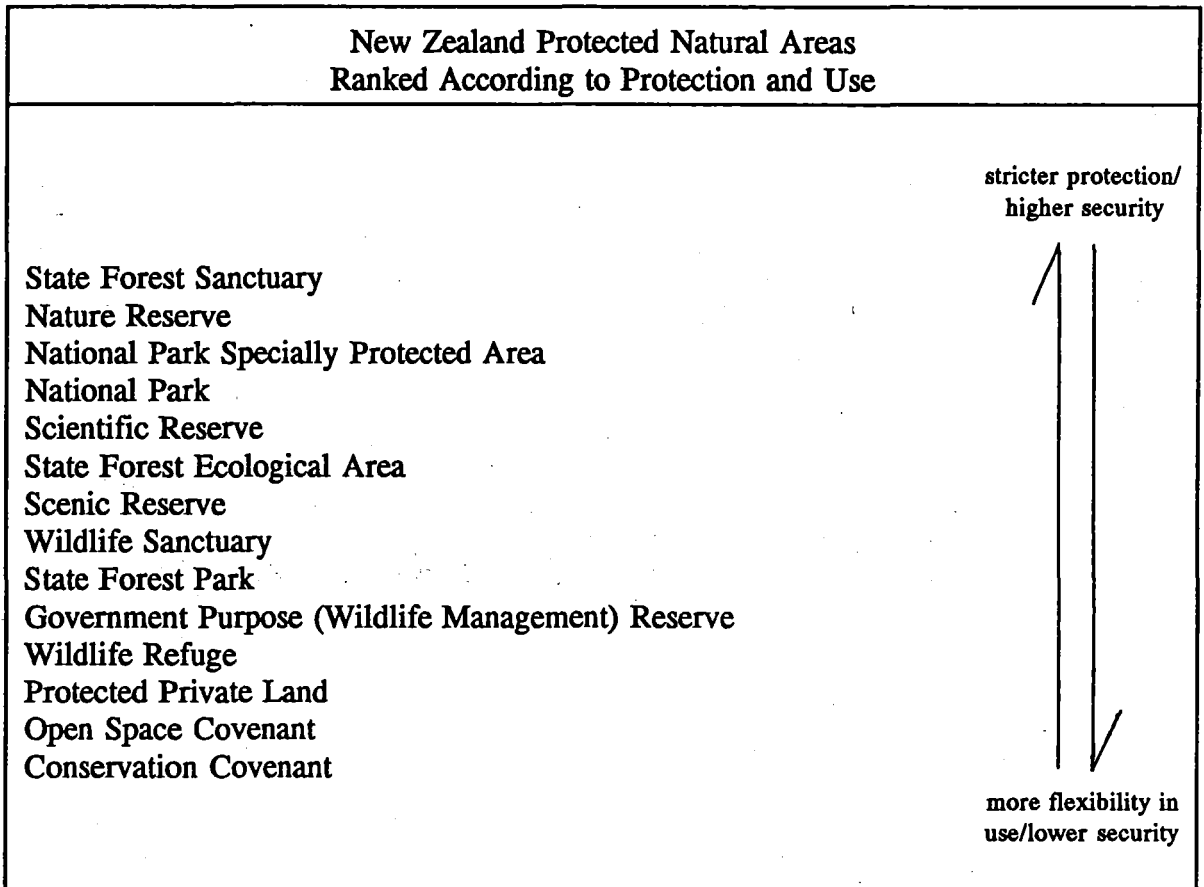


Figure 2.1 Protected Natural Areas (Kelly & Park, 1986, 56).

Protection within the context of protected natural resource management refers not only to protected natural areas (within the general understanding of national parks and reserves, state forest parks, scenic reserves etc.) and protected species, but also to other resources which have statutory protection. Other protected resources include crown land used for production and protection forest; and fish and game animals. Protected natural resources therefore include; national parks, reserves, state forest parks, state forests, protected species, fish and game animals. This incorporates the current Conservation estate under the Conservation Act 1987 with the exclusion of the sea shore

and marine animals.

It may appear incongruous that such a range of resources are considered together but, in many instances, the distribution of responsibilities between central government departments have been as a result of historic causes. These causes and their effects are elaborated upon in chapters five, six and seven. More recently, as a result of the formation of the Department of Conservation, most of these resources have been united within a single legislative agency.

Chapter Summary

This chapter has reviewed the history and definition of the term ranger internationally, and provided a brief outline of the six New Zealand rangers considered within this thesis. A number of points have been raised with regard to ranger duties and responsibilities.

1. The history of ranger can be traced to thirteenth century England where a ranger was responsible for the royal forests and hunting parks.
2. The image of the contemporary ranger is often based upon the United States national park ranger. This is not necessarily accurate for all New Zealand rangers, especially the forest rangers and wildlife rangers.
3. Ranger definitions in a New Zealand and overseas context, were reviewed. The overseas definitions especially were often very general. However, it is generally accepted that a ranger is a field operative.
4. The six types of New Zealand rangers covered by this thesis were introduced and described; crown land ranger, forest ranger, environmental forest ranger, national park ranger, reserves ranger, and wildlife ranger.
5. Protected natural resource management was outlined and defined. Protected natural resource management unites protected natural areas, protected species, forests, and fish and game.

The following chapter describes the theoretical perspective and research methods used which have allowed for the explanation of influences affecting the evolution of the ranger as a protected natural resource manager.

CHAPTER THREE

THEORY AND METHOD

Introduction

This chapter outlines the theoretical perspective and research methods used in describing and analysing the evolution of the role of the ranger as a protected natural resource manager. The theoretical perspective used allows for the explanation of influences on the evolution of the role of the ranger, and is referred to by Stinchcombe (1968) as historicist explanation. The historical nature of this thesis necessitated the use of two main sources of data; archival data, and interviews. These provided both an adequate coverage of the period 1874 to 1987 and a valuable source of information for cross-reference, verification, interpretation and integration.

Theoretical Perspective

Stinchcombe (1968, 5) stated that *the reasons for having theories of social phenomena is to explain the pattern in observation of the world*. In order to explain the evolution of the role of the ranger, as a protected natural resource manager, it was necessary to consider the influences and events which were seen to affect rangers' duties and responsibilities. Roche (1990, 8) in *History of Forestry* stated that the study of history *forces attention onto key episodes and the interplay of individuals and ideas in the context of the underlying constraints and opportunities provided by the social and economic climate of the times*.

Documentation and explanation of the history of the New Zealand ranger necessitates the identification of key events. Events which shaped the three departments - Department of Lands and Survey, New Zealand Forest Service, and Wildlife Service, Department of Internal Affairs - are traced, with attention being paid to influences on the ranger corps and their roles. Conversely, the relationship between these roles and the development of the respective departments is explained.

A theoretical perspective which allowed for the consideration of time, and an understanding of an essentially causal situation, without placing emphasis upon predictability, was seen as suitable for this research. Stinchcombe (1968) in *Constructing Social Theories*, provided a theoretical perspective which incorporated time, interaction, and causal links. Stinchcombe referred to this as *historicist explanation*.

Historicist Explanation

Stinchcombe (1968, 3) in stating *theory ought to create the capacity to invent explanations*, outlined a number of frameworks which allow for the explanation of social phenomena.

Historicist explanation allows for the explanation of social phenomena which once established tend to maintain themselves. *This gives rise to an infinite self-replicating causal loop, which preserves social effects of historical causes* (Figure 3.1)

(Stinchcombe, 1968, 8). The structure of historicist explanation is based upon the principle of causal law.

A causal law is a statement or proposition in a theory which says that there exist environments in which a change in the value of one variable is associated with a change in the value of another variable and can produce this change without any change in other variables in the environment (Stinchcombe, 1968, 31).

To illustrate causal law in relation to the evolution of the role of the ranger the Department of Lands and Survey will be used. Within the Department there are many sections working essentially as autonomous units, for example, National Parks and Reserves Division, Survey Division, and Land Administration. The proposition in this example is a change in the policy of the National Parks and Reserves Division will occur without a change in policy of the other divisions. A major policy change was the amalgamation of national park and reserves rangers. This change had no effect on either the Survey Division or the Land Administration division. Therefore the assumption of causal law that a change in one value will not change other values can be appropriately applied to the government departments. Other examples from any of the other departments would equally illustrate the point.

Historicist explanation, according to Stinchcombe, is based upon two assumptions;

1. the phenomenon is produced by a system of constant causes, and
2. some social patterns cause their own reproduction.

Given that these two assumptions are met, historicist explanation can be used as a means to understanding and explaining a social phenomenon.

Stinchcombe (1968, 58) elaborated historicist explanation to incorporate functional explanations. A functional explanation is applicable where a *structure or an activity is caused (indirectly) by its consequences*. Stinchcombe (1968, 59), further outlined functional explanations as consisting of *causal links among three variables: (1) a structure or structure activity which has as a consequence the maintenance of (2) a homeostatic variable, which in turn would not be maintained without the structure because of (3) tensions which tend to disturb it* (Figure 3.2).

Turner (1969) in reviewing Stinchcombe, explained the use of a functional explanation as appropriate when a recognised state remains relatively constant while the causes vary.

Turner (1969, 945) stated

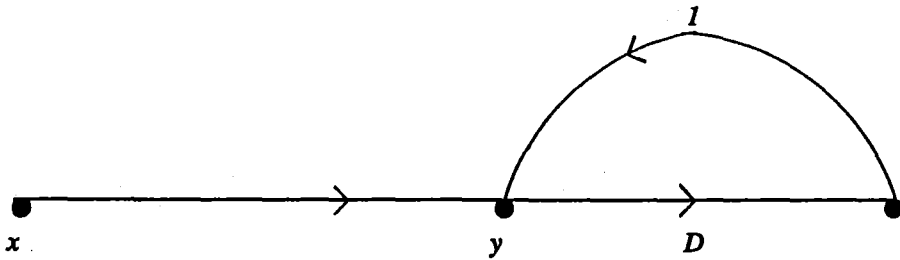
the historical continuity of social institutions is likewise explained functionally. Any of several structures may operate equally well to maintain H [homeostatic variable] against the onslaughts of T [tension]. Temporary historical causes determine which particular S [structure] gets involved in the causal loop. So long as T continues to threaten H and so long as S continues to be effective in counteracting T, S tends to be self-perpetuating.

Historicist explanation was seen to provide an abstract structure, or framework, which assisted in the analysis of data. Turner (1969), and Nett (1969) both maintained that causal models, are only skeletons from which more detailed and specific models can be built. In the context of this thesis, historicist explanation was used to provide a structure for analysis, and also to provide coherence in accounting for the numerous influences affecting the evolution of the role of the ranger as a protected natural resource manager.

Historicist explanation, therefore is used to guide the arrangement and organisation of the volume of data representing the influences on the role of the ranger as a protected natural resource manager over the last 113 years.

Rangers and Historicist Explanation

The use of historicist explanation for analysis of the evolution of the role of the ranger is useful at both the macro and micro levels. The position of the ranger within a government department tended to fit the functional explanation without much adaptation of the theory. Based upon these reasons it was seen that historicist explanation in the



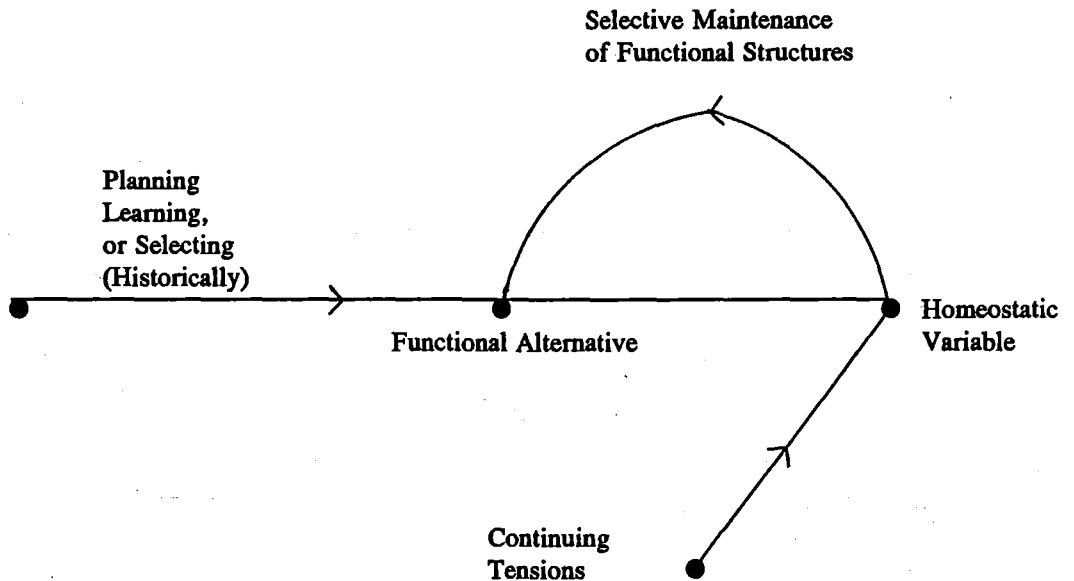
where:

x is the original historical cause of y

D represents a "delayor" so that y operates as a cause at a following time

I indicates that y as a cause in the succeeding time period reproduces itself as an effect.

Figure 3.1 Basic Structure of Historicist Explanations (Stinchcombe, 1968, 103)



where:

homeostatic variable is one which tends to be stable in empirical reality, even though there are forces which tend to change it.

tensions which tend to disturb the consequence, that is, the homeostatic variable.

Figure 3.2 Functional Form of Historicist Explanations (Stinchcombe, 1968, 105).

functional form provided a means with which the evolution of the role of the ranger could be explained.

The following examples will represent the macro and micro scale at which historicist explanation can be used. At the macro level the example relates to the establishment of a government department with the function of protecting the natural resources, and the consequences of the establishment. In terms of Figures 3.1 and 3.2, this would represent x , the original historical cause. The factor which represents x is the establishment of government departments.

The establishment of government departments has been argued by some as a means of providing special types of responsibility and functions (Wettenhall, 1986). This argument is expanded to provide the inclusion of staff within the departments. The staff in turn provide the expert knowledge which is required to allow for the fulfilment of the responsibilities and functions of the department.

In the case of protected natural resource management, the Forest and Agriculture Branch of the Crown Lands Department was established. The establishment of the Branch in 1887 was a result of a number of factors. The most predominant factor in the establishment of the Branch was the concern by some, including Vogel as Premier, at the apparent blatant destruction of the forest resource. In the context of Figures 3.1 and 3.2, the establishment of the Branch was y , the functional alternative.

As a result of the establishment of the Branch, and in order to fulfil the function of protection of the natural resources, rangers were appointed. The homeostatic variable represents the position of the ranger. This variable is influenced by the department, and by the tensions.

The selective maintenance of functional structures (feedback loop), represents the effect of ranger actions and impacts, that is the ranger duties and responsibilities which in turn impacts upon the Branch's ability to fulfil its functions.

The final component which is influential is the tensions. Tensions provide a disturbance to the homeostatic variable, or through the homeostatic variable to the functional

alternative. The tensions, in this example, include internal tensions such as Head Office directives, and legislative change; and external tensions such as the physical environment, public pressure and other government departments. These tensions influence both the ranger, and the function of the department.

A micro level example of an individual case can also be explained using this theory. For example, the problem of deer. Originally these animals were acclimatised into New Zealand for sport. Unfortunately the deer population growth placed pressure on the environment, one consequence of which was increased erosion in hill country. As an alternative to continued erosion, the Department of Internal Affairs appointed deer cullers. The effect of cullers on the deer population resulted in the Department altering policies, such as cull rates, methods, and man power. As a consequence of departmental changes, deer culling procedures altered. Although this example is explained only briefly, it does illustrate the use of historicist explanation at a micro scale.

These two examples illustrate the applicability of historicist explanation to this thesis. There are a few criticisms of the theory.

Criticisms of Historicist Explanation

There are three criticisms of using historicist explanation. The first criticism relates to the structure of the theory, being based on causal law. Causal law often infers predictability, however, this is neither accurate nor applicable for this research. A change in x can not be assumed to produce a specific change in y .

The second, and major criticism of historicist explanation is the point where tensions are included. In many cases, tensions only affect the homeostatic variable, which in turn influences the functional alternative. The criticism, therefore, is that there are cases when the functional alternative is directly affected by tensions without the intermediary influence of the homeostatic variable.

When considering the evolution of the rangers as a protected natural resource manager, the tensions are often directed initially towards the department, i.e., the functional alternative, rather than the ranger, the homeostatic variable. In such a case, Figure 3.2

can be modified so that tensions intervene at the point of the functional alternative. Given this criticism, the use of this theory is seen to be useful in allowing for the explanation of influences on the ranger. Basically, the influences on the ranger stem largely from the functional alternative which acts to mediate tensions.

The third criticism of historicist explanation is its skeleton characteristic. Historicist explanation may be said to provide only a framework, lack substance, and represent a simplistic causal model. These weaknesses, however, are also the theory's strength. If causal situation is evident from the data, and its explanation is assisted by a simplistic framework, then historicist explanation is useful. In order to explain the effects of various influences (of various strengths) on the ranger over the last 113 years, the characteristics of historicist explanation - a skeleton, provided a coherent framework for data analysis, and allowed for the simplification of complex data.

Interim Summary

The theoretical perspective used to assist explanation was historicist explanation. The characteristics of historicist explanation have been outlined, as well as the usefulness in assisting the explanation of the changing role of the ranger as a protected natural resource manager. Three major criticisms of historicist explanation have been described.

The following section describes the research methods and data sources used to provide the necessary information on the ranger as a protected natural resource manager.

Research Methods

The historic nature of this research necessitated the use of two primary data sources: archival data - the official record of the Department of Lands and Survey, the New Zealand Forest Service, and the Wildlife Service, Department of Internal Affairs; and interview data - interviews with people actively involved in protected natural resource management. Use of both sources allowed for the analysis and documentation of the ranger in protected natural resource management.

Archival Data

Archival information held both at the National Archives, Wellington, and the Department of Conservation, Head Office, was used to provide official information, dates and details of the period 1874 to 1987. Most records from the three departments have been transferred to National Archives since the establishment of the Department of Conservation.

A number of assumptions underlie the use of archival data. Firstly, archival data is considered representative of the official history, the activities, duties and responsibilities of rangers, and therefore was an authentic representation of the official records. Secondly, because archival data is authentic, the assumption was made that this information accurately portrays the period 1874 to 1987.

Due to the specific nature of this research and the large amount of information held at National Archives, a number of limitations were placed upon the retrieval and viewing of information.

File series³ were reviewed only if they specifically related to;

- a. the work of rangers,
- b. mentioned ranger in the title, or
- c. were annual, divisional or training reports.

These criteria were used for all three department archives covering the period of investigation. Information viewed included ranger letter books, correspondence, monthly reports, annual reports, and photographs.

National Archives hold the New Zealand Forest Service photographic collection, while the Department of Lands and Survey, and the Wildlife Service photographic collections are held at the Department of Conservation.⁴

³ A complete list of archive data accession numbers, file series, and titles are listed as an appendix to the bibliography.

⁴ The New Zealand Forest Service and the Wildlife Service, Department of Internal Affairs collections span the period early 1900's to 1987. The Department of Lands and Survey collection provides a visual archive from the 1960's to 1987. All collections provide a comprehensive visual archive of the conditions under which rangers worked.

Interviews

Interviews provided the second data source. Interviews were a source of data which provided a breadth of experiences and perspectives from those employed with the three departments, and allowed for a discussion on ranger duties and responsibilities, the importance of rangers within the departmental structure, and influences upon rangers. One assumption of using this data source was that interviews contribute opinions, attitudes, perceptions and interpretations of ranger duties and responsibilities, influences upon rangers, and the evolution of the ranger in protected natural resource management. The information related to actual work undertaken which may have differed from the official records.

Interviews were conducted with key informants. Key informants were people who had, during their employment within the respective departments, either been rangers, or had contributed to the policies which influenced the duties and responsibilities of the ranger corps. Informants provided information from the late 1920's through to 1987.

The key informants were representative of the following positions of responsibility:

Department of Lands and Survey officers

- Director-General of Lands
- Director of National Parks
- Supervisor of National Parks
- Assistant Supervising Ranger
- Chief Ranger
- National Park Ranger
- Reserves Ranger
- National Park Board member

New Zealand Forest Service officers

- Director-General of Forests
- Director of Environmental Forestry Division
- Conservator of Forests
- Principal Ranger
- District Ranger
- Environmental Forest Ranger
- Forester
- Forest Park Advisory Committee member

Wildlife Service, Department of Internal Affairs officers

- Controller of Wildlife
- Conservator of Wildlife
- Senior Wildlife Officer (Protected Species)
- Wildlife Ranger
- Field Officer
- Scientist
- Deer Culler

A number of informants held more than one position within, and between, departments during their career in protected natural resource management. An outline of those interviewed, and the positions they held is provided at the end of this thesis.

Problems of Archival Data

A number of problems of archival data collection and retrieval were experienced. First, the volume of data held at National Archives required limits placed as there was too much information. To reiterate, the limits on information reviewed related to work specifically related to the work of rangers, mentioned ranger in the title, or were annual, divisional or training reports.

Second, gaps in the information have been found. These are due to a fire destroying files and departmental restructuring. In 1952 the Department of Lands and Survey Head Office, Wellington suffered a fire in which many files were destroyed. Information received from a former government employee described how large quantities of information were destroyed or relocated to new government departments in 1987 with the establishment of the Department of Conservation. Such occurrences serve as a reminder that all information held at National Archives is only what has been presented by the various government departments, and therefore may not represent all information on a topic. There is no way of ascertaining whether the information destroyed or relocated would have been of use to this research, but it does illustrate the necessity and value of using a number of main data sources.

Interview Reliability

Interviews as a data source are subjective and are often unreliable. Johnson *et al* (1982, 241) state *memory is the sedimented form of past events, leaving traces that may be unearthed by appropriate questioning*. Therefore the quality of interview data is reliant upon the memory of the interviewee, and the articulation of the interviewer. This fact is well known and accepted as inherent when using interview data.

An area for concern when using interview data is the *whole way in which memories are constructed and reconstructed as part of a contemporary consciousness* (Johnson *et al*, 1982, 219).

Johnson *et al* (1982, 241) elaborate further

oral history testimonies do not form a simple record, more or less accurate, of past events; they are complex cultural products. They involve interrelationships, whose nature is not at all understood, between private memories and public representations, between past experiences and present situations.

In an attempt to minimise this influence of interview data, information gained from interviews was used in conjunction with information obtained from archival data. Another method that was used to minimise this influence was cross-reference between interviewees. Cross-reference provided data on duties and responsibilities, influences and events from different perspectives.

Chapter Summary

This chapter has reviewed the theoretical perspective and research methods used. Historicist explanation was considered an adequate theory which allowed for the explanation of influences on the role of the ranger as a protected natural resource manager. Archival data and interviews were used to provide information regarding ranger duties and responsibilities over the last 113 years.

The following chapter outlines land and society in New Zealand between 1840 and 1987. This information provides a context from which attitudes of environmental concern and conservation were founded. In relation to historicist explanation, the following chapter provides the information on the original historical causes which resulted in the establishment of government departments and rangers protecting the natural resources, and information on many of the tensions and influences which affected the rangers over the last 113 years.

CHAPTER FOUR

LAND AND SOCIETY IN NEW ZEALAND 1840-1987

Introduction

This chapter provides a context from which the themes in the following chapters evolve. A brief history of land and society in New Zealand between 1840 and 1987 provides an introduction to the influences which ultimately resulted in the establishment of government departments, the employment of rangers, and the subsequent changes in ranger duties and responsibilities. The chapter is divided into four parts: part one 1840-1870; part two 1870-1920; part three 1920-1960; and part four 1960-1987.

Part One: 1840-1870

Part one of this chapter provides an introduction to colonial New Zealand between 1840 and 1870. Information presented in this part provides a context within which protected natural resource management was originally established.

Treaty of Waitangi

The signing of the Treaty in 1840 established a notion of partnership between the Crown and the *tangata whenua*. Management of the natural resources of New Zealand was vested in the Crown under the second article of the Treaty. The second article gave Crown agents exclusive rights to purchase Maori land, and provided the means of controlling land for settlement (Orange, 1990). The Treaty of Waitangi represented the legitimization of Crown land administration of New Zealand. With sovereignty claimed over New Zealand the way was clear for the systematic development of the new colony by settlers.

Settlers

The formation of the New Zealand Company in London (1838), according to Gardner (1991, 59), included the proposal *to obliterate the raffish free-for-all of 'Old New Zealand' with a 'New Old England'*. This objective would be achieved with a balance of land, capital and labour in concentrated agricultural settlements around New Zealand.

Settlement of New Zealand was undertaken predominantly by Britons. Many different people emigrated for very similar reasons - a new country, a new life, a new start - to

aspire to opportunities that were not available in Britain. Migrants, according to Sinclair (1980), were selected by emigration agents for their suitability for the exclusive new country. Unfortunately for the designers, the ideal country did not come to fruition. Settlers were confronted with an environment which was neither welcoming nor hospitable, however, settlement and development did occur.

Geography of Settlement

Throughout New Zealand the pattern of settlement differed. These patterns were dependent upon physical characteristics, such as topography, climate and vegetation. The patterns also represented human characteristics associated with development, specifically areas which had resources which were desired or necessary. Four New Zealand Company settlements were established - Wellington (1840), Wanganui (1840), New Plymouth (1841), and Nelson (1842) - from which further development would diffuse (Gardner, 1991).

Northland, Canterbury (1850), West Coast, Otago (1848), and Southland were further areas where settlement and development occurred. In 1858 the total population of New Zealand was approximately 115,000, with approximately 80 percent located in the North Island (Department of Statistics, 1990). By 1874 the population had increased to 344,000 and the distribution had altered significantly, the South Island population constituted more than 50 percent of the total population (Department of Statistics, 1990).

The development of these areas was influential on the management of protected natural resources. It was in some of these areas where the forest resource had been exploited and destroyed over three decades that the first initiatives were taken to protect the forests through the appointment of rangers.

Land

Steven (1989, 30) argued that the key to New Zealand identity was land. For the settler

land proved a source of capitalist wealth in the form of differential rent which enabled male settlers to live immeasurably better than they had in Britain.

The attitude that was brought to the new country was one of taming the wilderness, and civilising the country. Hursthouse⁵ (Phillips, 1987, 5), in his guide for emigrants to New Zealand stated *it is the strong and the bold who go forth to subdue the wilderness and conquer new lands*. This statement captures the essence of the colonial attitude towards the New Zealand environment. The attitude of the land and environment as something to be conquered continued. Potts (1882, 1) eloquently summarised the development of the New Zealand environment;

the hand of Industry has awakened the slumbering wilderness from the silent trance of ages, from its dormant fertility, its undeveloped resources.

A consequence of this attitude towards the land and the environment was the wanton destruction of the forests. It has been estimated that approximately 40 percent (8 million Ha) of the original forest cover (20 million Ha) has been cleared since 1840⁶ (Nicholls, 1980).

Forestry

The New Zealand forestry industry, according to Roche (1990), dates back to the late eighteenth century. Prior to 1840, the majority of the spar and timber stations were based in the kauri forests of the Auckland province. Between 1840 and 1870 Crown involvement in the industry increased. Timber and milling licences were implemented in order to control the destruction of the forest resource, and as a result the first rangers were appointed not in the kauri forests but in Otago in 1862 (Roche, 1990).

Peterson (1965, 70) stated that

by the end of the sixties the urgent necessity for a progressive policy for opening up of forestlands had arisen.... The principal tracts of forestland that offered possibilities for settlement were in North Auckland, Taranaki, Manawatu and the Seventy Mile Bush districts of Wairarapa and Hawke's Bay. There was also, of course, the large forest area in the King Country, but this was to remain inaccessible for many years.

⁵ In 1857 Charles Hursthouse published a two-volume guide for emigrants to New Zealand (Phillips, 1987, 4). During the 1850's Hursthouse lectured on migration to New Zealand. Hursthouse spent a number of years in New Zealand during the 1840's.

⁶ Nicholls also estimates that 30 percent (6 million Ha) was destroyed by the Maori prior to European settlement.

Access to these tracts of forest and Maori land by settlers was provided in the Native Lands Act 1862. According to Smith (1960, 12) one of the stated objectives of the 1862 Act was

to bring the great bulk of the lands in the Northern Island which belonged to the Maoris, and which, before the passing of that Act, were extra commercium - except through the means of the old purchase system, which had entirely broken down, within the reach of colonisation.

The 1862 Act, and the later Native Lands Act 1865, abolished Crown pre-emptive rights of purchase, permitted settlers to purchase Maori lands, and gave the Maori individual land title (Asher & Naulls, 1987; Sorrenson, 1991).

By the mid 1870's the timber industry had developed on a regional basis as local markets grew in response to settlement. In 1874 Hector⁷ estimated the forest resource had diminished by 3.3 million hectares between 1830 and 1873 (Roche, 1984a). The increased use of timber, and the consequent reduction in the forest resource ultimately resulted in pressures for the establishment of the Forests and Agriculture Department in 1885.

Gold

According to Cumberland (1981, 84) gold had *profound effects on the course of New Zealand's history, and on the evolution of its society and economy*. Otago (1861) and Westland (1864) were the two main areas where gold was found, however, Auckland, Nelson and Marlborough also had producing goldfields (Department of Statistics, 1990). Cumberland (1981, 89) described gold mining as the cause of *widespread devastation of the landscape, and the creation of more and more obvious and persistent landmarks*.

Miners, from California, Victoria and later China, inundated goldfields. Forrest (1965) estimated a sixfold increase in Otago's population between 1861 and 1871. As a consequence of the gold rushes the majority of the population were resident in the South Island - prior to the gold rushes most settlers lived in the North Island (Sinclair, 1980). Land and forests were cleared as dams, sluices, dredges and townships were erected in the search for gold. As the gold rushes ended miners, who had nowhere else to go,

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Dr James Hector Government Geologist, and Director of the Colonial Museum.

stayed in New Zealand and took up land.

Pastoralism

New Zealand developed rapidly as a pastoral colony. Sheep were first introduced in the late 1840's, and cattle during the 1850's. By 1870, an estimated ten million sheep, and half a million cattle were being farmed (Department of Statistics, 1990). Sinclair (1980) stated that land holding tended to be either as large sheep stations (pastoralism), or small family farms.

Pastoralism not only provided an economic base for the new colony, it also provided an incentive to explore, survey and map the colony (Thom, 1987a). The rapid development of pastoralism also resulted in increased pressure on the forest resource. Potts (1882, 32 & 34) recognised the problems of pastoralism on the New Zealand environment, in the *ruthless determination* of forest clearance, and the European farming system which was *far less friendly to bird life than the comparatively cramped cultivations of the Maoris*.

Acclimatisation: Flora and Fauna

It has been estimated that well over six hundred plants and animals have been introduced into New Zealand (Hillaby, 1960). Introduced plants which have had a major effect on the indigenous fauna include gorse, broom, thistle, blackberry and old man's beard. Animals included rabbits, mustelids, deer, rats, and possum⁸ to name just a few.

The reasons for the introduction of plants and animals into New Zealand were just as vast. Thomson (1922) stated that the early settlers considered some of the New Zealand environment a reproduction of Britain.

They recalled the sport which was forbidden to all but a favoured few, but which they had often longed to share in - the game preserves, the deer on the mountains or in the parks, the grouse on the heather-clad hills, the pheasants in the copses and plantations, the hares and partridges in the stubbles and turnip fields, the rabbits in the hedgerows and sandy warrens, and the salmon of forbidden price in the rivers - and there rose up before their vision a land where all these desirable things might be found and achieved (Thomson, 1922, 21).

⁸ The name possum was originally opossum but was changed to avoid confusion between the Australian brushtailed opossum and the North American opossum. For continuity it will be referred to as possum.

The keenness with which plants and animals were introduced illustrates the displeasure the New Zealand environment held for emigrants. Acclimatisation was a significant component of the conquering ideology. The conquering of the wilderness, land and animals could be achieved through the introduction of plants and animals that were considered superior to the indigenous flora and fauna (Galbreath, 1989).

The advantages of acclimatisation, that is the emulation of Britain, were recognised by the emigrants. The disadvantages - ecological, biological and environmental - were recognised later by others. In *Nature* (1872, 219) the following statement was made.

This is the silly mania for "acclimatisation" which has been so warmly fostered by many well-meaning though ill-advised persons, both at home and in the colonies, and nowhere more than in New Zealand.... In a reckless way animals of extremely doubtful advantage have been transported to the antipodes, and there it seems impossible to deny that they will in a few years be found not only ousting the kinds which are less specialised, and therefore less able to meet them on an equal footing; but, unaccompanied by any of those checks which keep the whole of a natural fauna balanced, the importations will inevitably become the greatest of nuisances.

Acclimatisation, primarily of fauna, provided the catalyst that would ultimately result in the establishment of a government agency controlling wildlife.

Provincial Government

Prior to the 1870's concern for the state of the forests had been recognised within the provinces. Provincial governments controlled and were responsible for land administration (including forests) and roading (Dalziel, 1991). To lure provincial control of colonisation and development, and delegation of responsibility for the forest resource, provincial governments were promised a share in land revenues and customs revenues (Dalziel, 1991).

Roche (1990) noted that the concern over the control of the resource led the Otago Waste Land Board, in the early 1860's, to recommend stricter policing through the appointment of forest rangers. Accordingly three rangers were appointed in 1863 to inspect timber reserves, check the operation of sawmills and cutters, and report to the

Board. Similarly the Southland Waste Land Board appointed a ranger in 1875.⁹

Central Government

The establishment of government departments occurred as they were seen to be necessary, and were functional. Thynne (1988) described the New Zealand departmental organisation as an administrative device which performed certain functions, and was subject to ministerial direction. Thynne (1988, 5) also stated that *the departmental form of organisation is a feature of central government administration in New Zealand which dates from the introduction of responsible government in 1856*. Wettenhall (1986) contended that the British Westminster system of public administration containing government departments was transferred directly to the colonies, New Zealand included.

The first government department with functions that included natural resource management was the Crown Lands Department.¹⁰ The Department administered land survey and land allocation through two branches, the Survey Department and the Crown Lands Office. The Department was the predecessor to the Department of Lands and Survey.

Pioneering to Consolidation

New Zealand had undergone extensive environmental, social and economical change in three decades. Gardner (1991, 70), summarised this development.

During the late 1860's and early 1870's New Zealand was passing through a stage of transition. The pioneering phase was over, and the colony had to enter a secondary phase of consolidation; the individualism of the frontier had to be supplemented by collective action on a new scale.

Political and economic forces were influential in the developing colony. New infrastructural development progressed, roads and railways improved provincial contact. Investment, predominately in the agricultural sector was redirected into housing and

⁹ LS 1 53/8 88/86 (87/1269), 1881. Letter from ranger Campbell regarding his dissatisfaction with notification of dispensement of services. Campbell stated he was appointed as a ranger by the Southland Waste Land Board in 1875. Subsequently appointed as forest ranger for the Southland Land District under S17 of the Land Act 1877, then a crown land ranger.

¹⁰ In 1849 the Crown Lands Ordinances provided effective administration through the appointment of commissioners of Crown lands. It was not until 1858 and the passing of the Waste Lands Act that a Land portfolio was established - Secretary of Crown Lands (Department of Lands and Survey, 1977).

commercial development (Gardner, 1991). Consolidation resulted not only in increasing the links within New Zealand, but also increased the economic ties to Britain, an apparently unintended result (Gardner, 1991).

Interim Summary

Part one of this chapter has briefly reviewed land and society in New Zealand between 1840 and 1870. The factors covered are considered to have been influential in the development of protected natural resource management. The attitude of settlers towards land, and the acclimatisation of flora and fauna, government, the development of commercial forestry and pastoralism all contributed to the necessity for the protection of New Zealand's natural resources.

A number of issues have been recognised which should be kept in mind when the histories of the three departments are reviewed. These are:

1. The settler's attitude towards the New Zealand environment and land was one of conqueror and designer.
2. Settlement of New Zealand was continually expanding. Between 1858 and 1874 the total population had tripled, and the distribution had spread from the North Island to the South Island.
3. Pastoralism was rapidly expanding. Later pastoralism was to become the backbone of the New Zealand economy.

Part Two: 1870-1920

Part two of this chapter reviews the history of land and society in New Zealand between 1870 and 1920. This period is characterised by economic recession, agricultural development, rapid population growth and continued forest clearance.

Economic Recession

By the end of the 1870's some sectors of the New Zealand economy were in a depressed state; low wages, unemployment and poverty were prevalent. During this period, however, the timber industry continued to grow and according to Gardner (1991, 79) *was the colony's largest manufacturing enterprise.*

By the mid 1890's economic growth was occurring as a result of increased dairy product returns. Increased economic activity provided greater taxation revenue for the government while providing an opportunity for greater State intervention (Barber, 1989). Economic growth continued and was enhanced by World War 1. Post war recession occurred, however, as *few understood why the meat, wool and dairy products New Zealand produced in abundance no longer won premium prices on the British markets* (Barber, 1989, 116). New Zealand soon realised that the New Zealand economy was dependent upon the British economy.

Agriculture

Prior to the advent of refrigerated shipping, wool was New Zealand's major export. Frozen meat shipments to the United Kingdom began in 1882, providing an opportunity to export of meat and dairy produce (Department of Statistics, 1990). By the early 1890's there were 21 freezing works in New Zealand, and frozen meat had become the second major export commodity behind timber (Gardner, 1991).

Small agricultural land holdings, as opposed to the large pastoral runs, was encouraged through government policy (Land Act 1892). According to Cumberland (1981, 135)

between 1891 and 1911 the area of land owned privately in estates ... was reduced from 2.8 million to 1.2 million hectares... [and] the number of individual land holdings increased from less than 44,000 to nearly 74,000.

Turn of the Century

The turn of the century saw continued immigration to New Zealand, and further development of the country. Farmers unions were formed with the purpose of improving animal and field husbandry. According to Barber (1989) union advocates soon became a political lobby insisting that farming was the backbone of the nation. The North Island became wealthier, more populous, and politically more influential than the South Island as a result of the growth in the dairy industry (Sinclair, 1980).

Life in New Zealand was changing as changing attitudes, and new leisure pursuits were available. Rural communities considered the city dwellers as parasites living off the productivity of the farmers (Sinclair, 1980), while unionists protested against working conditions and wages (Barber, 1989). The new leisure pursuits - picture theatres, cars,

and electric trams, however, were more representative of a modern society.

Population Growth

During this period the population of New Zealand expanded significantly from c.344,000 in 1874, to c.1,150,000 in 1916, a four-fold increase (Department of Statistics, 1990). Demands for land - settlement (the need for housing materials), agriculture and industry - all contributed to the decline of the forest stands.

Approximately six million hectares of Crown land (25 percent of the total land area of New Zealand) were disposed of through deferred payment and cash sales during this period.

World War One

The declaration of war in 1914 brought New Zealand into a new period of patriotism. While troops were overseas, agricultural, pastoral and forestry industries maintained the economy by providing for Britain's needs. Little development in protected natural resource management occurred during this period. Price controls on timber and land were implemented to ensure a local supply, and minimise post war inflation.

Interim Summary

The period 1870 to 1920 was a period of transition from a traditional rural society to an increasingly modern society. Attitudes were also changing with economic recession, the establishment of unions, and the outbreak of World War One. Jourdain (1925, 25) wrote of the period;

*The pioneers of settlement
Were hardy men, and bold,
O'er ranges, creeks, and forest tracks
They searched for land and gold.*

*Their axes ringing in the bush
Made the forest disappear,
And following fast came burn and grass
And homesteads everywhere.*

*A thousand hills and valleys
Saw changes ever new,
And as the flocks and herds increased
The towns and cities grew.*

*Beringed by leagues of ocean,
Yet rich in all we prize,
The land our pioneers explored
Has seen a nation rise.*

Part Three: 1920-1960

Part three reviews the history of land and society in New Zealand between 1920 and 1960. During this period the New Zealand economy progressed from a state of depression in the 1930's to post-war economic prosperity. Tourism to areas of scenic beauty or natural wonder grew, especially during the 1950's.

Economic Depression

The New Zealand economy was founded on primary products - meat, wool and butter. As a consequence of falling export prices in the early 1920's the New Zealand economy experienced economic recession. World-wide economic depression in the 1930's also affected New Zealand. The government of the day responded by taking increasing control of economic and social affairs.

The depression assisted the development of protected natural resource management in New Zealand. During the depression unemployed workers were used to assist in the planting of exotic forests. Kaingaroa, Golden Downs, Maramarua forests were just some of the forests developed under the relief labour scheme (Roche, 1990). Forestry graduates were engaged to run and coordinate the unemployment camps (Poole, 1991).

In 1935 the Labour Government was elected to power. As one consequence of the effects of the depression, the Labour Government founded the welfare state where *the old, the poor, the unemployed, and children benefited* (Olssen, 1991, 277). An example of welfare policies was the construction of 30,000 state houses around the country between 1935 and 1950 (Department of Statistics, 1990).

Post-war economic recovery was assisted by new export commodities, forestry products, and expanding export markets. This trend away from the reliance on the 'traditional' exports (meat, wool and butter) and markets (United Kingdom), which began in the post-war period, has continued through into the 1990's.

World War Two & Soldier Resettlement

World War Two had an impact on the New Zealand environment with the forest industry supplying war-time needs, and the returned servicemen resettlement programme. Returned servicemen, like those returned from World War One, were

offered the opportunity to farm (Cumberland, 1981). Ballots for land covering the breadth of New Zealand. By 1955 12,236 ex-servicemen were resettled (Dunstall, 1991).

Much of the areas under ballot were bush and scrub covered, often unsuitable land for farming. Much of the land provided for resettlement was so unsuitable, and unsustainable that many farms were left to return to bush, this is echoed in places such as the bridge to nowhere on the Whanganui River.

Tourism

Tourism began in New Zealand in the 1870's with the development of the railways. Natural curiosities were a major focus for tourism, such as the Pink and White Terraces at Rotorua (until the Tarawera eruption in 1886). By the late 1880's the government had taken an active interest in tourism through the Lands Department. The Tourist and Health Resorts¹¹ section of Railways took control of areas formally controlled by the Department of Lands and Survey in 1901, for example Kapiti Island, and Waitomo Caves.

The Tourist and Health Resorts section was also given the task of running a chain of resort hotels (Tourist Hotel Corporation THC), nation-wide. These resorts were located in such locations as; Waitomo, Waikaremoana, Tongariro, Mt Cook, Te Anau, Milford, and Franz Josef (NZTP, 1976), further increasing the popularity of these areas.

During the 1920's and 1930's tourist numbers progressively increased despite a number of events - avalanches on the Milford Track, earthquakes in Hawkes Bay, fire at the Hermitage Mt Cook - and world-wide economic depression (NZTP, 1976). Tourism was actively encouraged in such places as Mt Cook by both the government and private tourism operators (Wigley, 1979).

Tourist numbers continued to rise, especially *following the introduction of international jet air services in the mid-1960s and an accompanying expansion of the tourist industry, both in New Zealand and abroad, to serve and promote the developing mass tourist*

¹¹

The department has undergone a number of name changes, and has been amalgamated with a number of other government departments over the last 90 years.

market (Pearce, 1980, 82). According to Pearce (1980) the number of visitors to Mt Cook National Park rose from 40,000 in 1962-63 to nearly 200,000 in 1978.

Soil and Water Conservation

Recognition of the effect of blatant forest clearance of last century, acclimatised fauna, and over grazing in the high country was eventually recognised in the late 1930's, largely as a result of enormous flood damage. Cumberland (1981, 207) wrote that

Nature's most serious attempt so far to repel man's rough and ruthless intrusion into the corrugated terrain of New Zealand was starved off. The matter came to a head, and the crisis was met in the nick of time.

In 1941 the Soil Conservation and Rivers Control Act was passed. The Act promoted soil conservation, and erosion and flood prevention. McCaskill (1973, 30) wrote of the Act

These were far-reaching provisions to enable control of land use in a country where the landowner claimed a traditional right to treat the land as he saw fit.

Provisions for soil conservation and water control included improved patterns of landuse, tree planting was encouraged as one method of high country erosion control, and the construction of *structures to hold rivers within their banks and to constrict them to their accustomed courses* (Cumberland, 1988, 248).

Interim Summary

The period 1920-1960 represented a time of many changes for New Zealand, both environmentally and socially. The major influences included:

1. A progression from economic depression to post-war economic recovery.
2. The increase in tourist numbers to New Zealand, and the protected areas.
3. The passing of the Soil and Water Conservation Act which provided for some environmental protection and control.

Part Four: 1960-1987

Part four reviews the history of land and society in New Zealand between 1960 and 1987. This period can be characterised as passing from economic boom to economic recession. This period is significant in the history of protected natural resource management because of greater environmental awareness, a boom in back country

recreation, and ultimately government department restructuring.

Economic Prosperity

The 1960's were a period of post-war economic prosperity. By the late 1960's New Zealand had achieved a situation of full employment, a growth in per-capita income, and visible changes in the standard of living - *improvements in housing, ... the availability of household durables, and the increased mobility afforded by cars and roads* (Hawke, 1991, 370).

During this period the composition of New Zealand employment progressively became white-collar. Dunstall (1991, 406) stated *New Zealand showed signs of becoming a post-industrial society, characterized by a service economy, by the pre-eminence of a professional and technical class*. The significance of this trend was recognised in a number of recreation surveys¹² undertaken since the late 1970's where results indicated a dominance of higher educated and middle to high income earners in outdoor recreation.

Backcountry Boom

As a consequence of economic prosperity, recreation and leisure demands increased. Backcountry recreation was increasingly popular as *widespread public acceptance of adventurous recreations* occurred (Mason, 1975, 28).

Increased mobility, increased disposable income, and better access to parks assisted in the rise in back country recreation. Gray (in Simmons 1980) estimated the number of visitors to Arthur's Pass National Park increased from 8000 to 28,000 between 1962 and 1964. Simmons (1980) calculated the number of visitors to Arthur's Pass increased to approximately 300,000 by 1974, and argued that this was a result of improved road access.

¹² Robb & Howorth 1977 *New Zealand Recreation Survey* for the New Zealand Council for Recreation and Sport. Grant, Crozier & Marx 1977 *Off-Road Vehicle Recreation Study* for the Wellington Regional Planning Authority. Outdoor Recreation Planning Task Force 1985 *Policy for Outdoor Recreation in New Zealand* for the New Zealand Council for Recreation and Sport. Tourism Resource Consultants 1988 *The Wellington Regional Recreation Study* for the Wellington Regional Council.

In State forest parks the same phenomenon was occurring. In the Tararua State Forest Park visits to Holdsworth road-end rose from 2000 in 1966 to 14,000 in 1967/68 also as a result of road access and the establishment of the Lodge (Ure, 1970). In 1981 the number of visitations had risen to 34,600 (NZFS, 1982).

By the late 1970's early 1980's back country recreation was entrenched within the New Zealand psyche.¹³ New issues arose out of the increasing recreation pressure. One issue was that of wilderness preservation. In 1981 the Federated Mountain Clubs¹⁴ celebrated fifty years of mountain recreation with a conference on wilderness. Molloy (1983, preface) stated that

concern for wilderness preservation is nothing new. The whole public thrust for nature conservation during the 1970s overshadowed a less dramatic, but steady, campaign for the retention of the most important of New Zealand's wild landscapes. This remaining wilderness was valued not just for its intrinsic worth (which is considerable) but, rather, as a fragment of primeval New Zealand free of the paraphernalia [sic] of modern society where puny man could freely enter - but "on nature's terms".

Back country recreation demand continued to increase throughout the 1980's as non-traditional pursuits - canoeing, rafting, parapenting, mountain biking - gained in popularity.

Environmental Concern

During the 1960's concern for the environment heightened. Cocklin (1989) stated that a number of events both nationally and internationally were influential in protected natural resource management. Many events were centred in national parks, reserves or State forests, others were global.

¹³ Phillips (1987, 288) stated in relation to the male stereotype that *the third fiction maintained by the mythology was the perception of New Zealand as a rural, even frontier society. The male stereotype in New Zealand was based initially upon pioneer traditions and later versions ... continued to view backblocks experience and outdoor strength as the most distinctive element of Kiwi malehood. Yet for most of this century the majority of men have lived and worked in the city. Although they attempted to maintain their outdoor identity through suburban gardening or deer-hunting trips at the weekend...*

¹⁴ In 1981 the Federated Mountain Clubs represented 91 member and 41 associate clubs containing over 16,000 members (Molloy, 1983).

In New Zealand the catalyst of public concern over the environment came in late 1960's when the Government allowed the raising of the Lakes Te Anau and Manapouri for hydroelectric power generation. Support for the Manapouri campaign *was a major factor in the shaping of the New Zealand environmental movement* (Wilson, 1982, 14).

Wilson (1982, 171) maintained that new environmental lobby groups¹⁵ established as a consequence of the growing awareness of environmental issues had more political orientation than *the pioneers of the New Zealand environmental movement*.¹⁶ These lobby groups continued to challenge the government over environmental issues including the Aromoana smelter, the South Island beech forests, and mining on the West Coast of the South Island and the Coromandel peninsula (Wilson, 1982; Harper, 1991).

Internationally issues such as French atmospheric nuclear testing at Mururoa Atoll in the early 1970's, and the New Zealand nuclear-free policy in 1985 kept the wider environmental issues at the fore of the public and decision-makers.

Departmental Restructuring

During the 1980's new moves were made by the government to restructure the government departments, including those involved in protected natural resource management. Cocklin (1989) maintained that one of the reasons for the restructure of protected natural resource management was the dual responsibility for conservation and development included within mandates of the Department of Lands and Survey and the New Zealand Forest Service.

Restructure, and proposed restructure of protected natural resource administration is not a new phenomenon. Periodically over the last 113 years the following departments have been restructured - the New Zealand Forest Service, in 1918 when it was separated from the Department of Lands and Survey for the last time; the Department of Lands and Survey was affected by restructure in 1979 with the establishment of the Government Caucus Committee review into the administrative structure of national parks and reserves; and the Wildlife Service, Department of Internal Affairs in 1968

¹⁵ Native Forests Action Council, Friends of the Earth (FOE), and Greenpeace.

¹⁶ Royal Forest and Bird Protection Society

after the Commission of Inquiry into wildlife management and research in New Zealand.

In 1981 the OECD were commissioned by the Government to review environmental management policies and practices. The review examined *the impact of present, and possible future, developments of the human, physical and biological environment of the country* (OECD, 1981, 5). Specifically, the review considered the institutional framework of environmental management, town and country planning, agriculture and forestry, water and energy. According to Cocklin (1989, 314), *on the basis of the review, the OECD put forward several recommendations for institutional reform*. These recommendations included greater coordination in environmental policy, the enhancement of advice and information services, improved public participation, and institutional reorganisation (OECD, 1981).

The Nature Conservation Council in 1981 also recommended administrative reorganisation of the New Zealand environmental agencies.¹⁷ The Nature Conservation Council identified a number of major failings in the system at that time. These failings included the lack of coordination among environmental agencies; the conflicting responsibilities of some agencies, that is some were *biased towards production rather than protection*; and the overlapping administrative responsibilities (Nature Conservation Council, 1981, 39).

With the election of the fourth Labour Government in 1984 the push for restructure within government departments accelerated. Review of the departments involved in protected natural resource management and the environment began in 1985. The Environmental Forum in 1985 was the initial process of administrative reform. The Forum agreed that a new department should be established with the mission *to promote the conservation of the nation's natural and historic heritage; to manage protected areas and other parts of the Crown estate* (Working Party on Environmental Administration in New Zealand, 1985, 46).

¹⁷ Until 1987 there were a number of government departments and agencies involved in environmental administration. These include; the Department of Lands and Survey, the New Zealand Forest Service, the Wildlife Service, Department of Internal Affairs, the Ministry for the Environment, the Ministry of Energy, the Ministry of Agriculture and Fisheries, and the Department of Maori Affairs. Also included were a number of quangos; the Nature Conservation Council, the Environmental Council, Commission for the Environment, Historic Places Trust, National Water and Soil Conservation Authority, Queen Elizabeth II National Trust, National Parks and Reserves Authority, and the Clean Air Council (Cocklin, 1989).

In 1987 the Department of Conservation was established under the Conservation Act. Under the Act (S6), the function of the new department was

- (a) *To manage for conservation purposes, all land, and all other natural and historic resources, ...*
- (b) *To advocate the conservation of natural and historic resources ...*
- (c) *To promote the benefits to present and future generations of*
 - (i) *The conservation of natural and historic resources ...*

The projected results of restructure were improved efficiency, 'transparency' through the separation of functions into commercial and non-commercial agencies, and accountability (Cocklin, 1989). The consequence of restructure of environmental administration was the disbandment of a five departments and agencies, and the establishment of seven new departments and agencies (Figure 4.1).

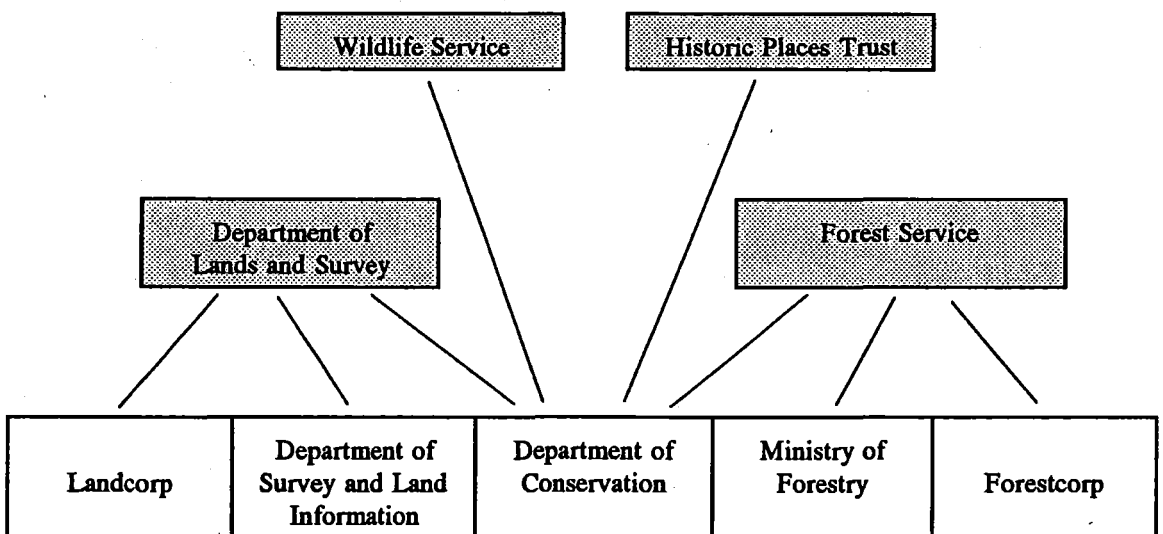


Figure 4.1 The distribution of environmental administration after the 1987 restructure. The shaded departments represent the disbanded departments, and the arrows represent the redistribution of their responsibilities (adapted from Cocklin, 1989 after the Nature Conservation Council 1981).

The Department of Conservation represents the culmination of 113 years of protected natural resource management under the control of number of different government departments, and the amalgamation of legislation relating to protected natural resources.

Chapter Summary

The period 1960-1987 is characterised by the dramatic increase in back country recreation, the rise in environmental awareness, and a change in government orientation.

Over the last 113 years New Zealand has transformed from a pioneer society to a modern society. In this period a number of key events have occurred which have been influential on protected natural resource management. These events are:

1. The settler's attitude of the environment and land as something to be conquered and redesigned has been replaced by an attitude to protect and conserve the environment. The conqueror attitude is still evident although it has been redefined from conquering through blatant destruction to conquering through physical recreation;
2. New Zealand became progressively urban as the population, not only made the transition from rural to urban communities but also migrated from the south to the north;
3. Tourism was encouraged in national parks, reserves and State forests, by private enterprise and the government;
4. The economy fluctuated from recession to prosperity as New Zealand provided necessary commodities for the world market - meat, wool, timber and dairy products;
5. Outdoor recreation grew in popularity as increased mobility, economic stability and access to the backcountry improved. During the 1960s backcountry recreation was booming, a trend which continued into the 1980's as new recreational pursuits gained in popularity; and
6. Continued government reorganisation of departments, and departmental responsibility resulted ultimately in the disbandment of the Department of Lands and Survey, New Zealand Forest Service, and Wildlife Service, Department of Internal Affairs and the establishment of the Department of Conservation in 1987.

This chapter has identified a number of historical causes leading to the establishment of the three government departments, and their ranger corps. The chapter also identifies a variety of tensions which have provided continual influences on the departments and the rangers. The tensions and influences identified have acted as catalysts in the evolution

of the role of the ranger as a protected natural resource manager. The context within which these tensions have acted has also been identified. Economic, social, political and world events have all played a part in defining the context of protected natural resource management in New Zealand.

The following chapters describe and analyse the history of the three government departments and their respective ranger staff. Key events and their consequences on the are considered in relation to the departments and the rangers.



CHAPTER FIVE
HISTORY OF THE FOREST SERVICE

The Rangers have to be perpetually on the watch against illicit gum-bleeders, and have to be out in all weathers, forcing a way through the trackless forest, or riding along forest paths which are a mixture of fallen timber and swamp up to the horses' girths in wet weather. Getting benighted in this dripping winter climate, or among the summer mosquitoes and sandflies, is no light hardship (Hutchins, 1918, 31).

Introduction

In this chapter I present a history of the New Zealand Forest Service (from 1874 to 1987). Principal legislation affecting the New Zealand Forest Service is also traced. This legislation provides a framework around which the history is explored. The development of legislation is viewed as an indicator of the various factors influencing forest development. Figure 5.1 below illustrates the legislation concerned.

This history traces not only the development of the department but also the resulting development of the forest ranger. Attention is paid to the important developments of the New Zealand Forest Service and the effect on the ranger corp.

Forest Service	
1870	Forests Act 1874
1880	State Forests Act 1885
1890	
1900	
1910	
1920	Forests Act 1921-22
1930	
1940	Forest Act 1949
1950	Noxious Animal Act 1956
1960	
1970	Forests Amendment Act 1976

Figure 5.1 Principal legislation affecting the New Zealand Forest Service

Forests Act 1874

Concern for the state of the forests led to the passing of the Forests Act 1874. The Forests Act 1874 allowed for the designation of forests for the preservation of soil and climate, provision of timber for future commercial use, and for skilled management and control. Included within the Act was provision for the appointment of a Conservator of Forests at the national level. The appointment of an outsider, Campbell Walker¹⁸ as Conservator of Forests was unfavourably received because many considered such a position should have been given to someone who knew the New Zealand situation (Brown & McKinnon, 1966).

Campbell Walker accepted the position and proceeded to undertake an inspection tour of the country. Walker's 1877 *Report of the Conservator of State Forests, with proposals for the organisation and working of The State Forest Department* concluded with a number of suggestions, including the establishment of a State Forests Department, the passing of a new Act, and the provision for permanent skilled staff to manage the forest resource (Roche, 1990).

The Forest Act 1874 never had wide public support. Opinion at the time suggested a lack of acceptance of the limitations imposed by the Act (A.E.W.S.N.Z., 1944). Brown and McKinnon (1966) also proposed the lack of support was based upon Vogel's decision to abolish Provincial Governments. Although never repealed, the Forest Act was not enforced. This Act was superseded in 1885 with the passing of the New Zealand State Forests Act.

Between the mid 1870's and mid 1880's the forests continued to be cleared for settlement and timber. In some provinces, such as Otago and Canterbury, however tree planting was encouraged through the Forest Trees Plantation Encouragement Act. Under the Act, crown land rangers were required to report on tree forest plantations.¹⁹

¹⁸ Captain Inches Campbell Walker was Conservator of Forests, Madras, Indian Forest Service. Walker's appointment was only 10 months in duration.

¹⁹ LS 1 53/10 89/81 (88/41), 1888. Memorandum from the Commissioner of Crown Lands.

State Forests Act 1885

The New Zealand State Forests Act 1885, again the work of Vogel, provided the foundation from which the management of forests²⁰ and the appointment of rangers developed (Brown, 1968; Roche, 1990). Rangers' duties and regulations, as stated in the Act included: the administration of applications for licenses and grants for the cutting and removal of timber; the prevention of unnecessary destruction of timber; the prevention of fire; the prohibition of trespass; and the regulation and control of tramways, railways and roads within the state forest.

In a memorandum regarding the establishment of the new Department Elliot (1885), Under-secretary of Lands, stated

Forest Rangers or Foresters would have to be appointed to carry out the provisions of the Act [New Zealand State Forests Act 1885] and generally to protect State Forests. These could be persons who are employed by Counties, and the Rangers of Crown Lands appointed under the provisions of the Land Act.²¹

Throughout these early years, the main concern was the misuse and apparent waste of the resource. A dichotomy existed in the attitude towards the forest resource. The forest was considered both a commercial asset as well as a 'flaw' of the New Zealand environment. Settlers promoted the blatant destruction of the forests, whilst the control and maximisation of the commercial potential was desired by government. Rangers' duties and responsibilities were the protection of the forest resource. Such sentiments were often reiterated in letters of appointment to rangers stating the reasons for appointment and their assigned duties.

His [the forest ranger] chief duty is to protect the forest reserves in the Hawkes Bay from depredation and fire.²²

²⁰ *Lands and Survey Forests and Agriculture Branch 1885-89. An ephemeral, State Forest Department was formed in 1876, but a separate forest administration was not established until the State Forests Act 1885. A new branch was created and made responsible for both forests and the dissemination of information on agriculture. The Forests and Agriculture Branch was abolished in the retrenchment campaign 1888. Forests continued to be managed by the Department of Lands and Survey until 1919, through a Forests Branch established in 1896 (National Archives, Lands and Survey Index).*

²¹ LS 1 53/1 85/22, 1885. Elliot, H.J.H. Under-Secretary of Lands. "Organisation of Forests and Agriculture Branch".

²² LS 1 53/8 88/104 (86/256), 1886. Letter from Kirk, Conservator of Forests to von Porat, forest ranger.

Within three years of passing the Act, six forest rangers had been appointed, one of whom had previously been a ranger for the Southland Waste Land Board. Rangers were appointed under S12 of the Act which allowed for the appointment of officers for the purposes of the Act.

Rangers were involved in the fulfilment of duties and regulations laid out in the Act. Many duties were dependent upon the region or district in which the ranger was engaged. No matter what region, fire was a constant danger to the forest. In the north, this provided for the special appointment of a ranger to the Puhi Puhi Forest in 1885.

A request was received for the

*appointment of a ranger to look after Puhi Puhi Forest during the summer months, to prevent it being set on fire, as I have been informed that there are at present gundiggers at work in the forest, and unless some precautionary measures are at once adopted, very serious damage may be done by the end of the hot weather.*²³

Protection of the forest resource was necessary for both legal and illegal activities. Such as the seizure of illegally cut timber, and the apprehension of unauthorised persons cutting and receiving timber or forest resources. Rangers, and forest legislation, were provided as they were seen to fulfil a need; they were functional requirements for a developing colony.

Forests and Agriculture Branch

In 1887 the Forest and Agriculture Branch, Crown Lands Department was transferred to the Forests and Agriculture Branch, Department of Lands and Survey. This new Branch was short-lived. As a consequence of economic recession within the colony it was disbanded a few years later (Roche, 1990).

The conflict between forest use and conservation continued to be a problem. Pressure came from both the expansion of land settlement, and the activities of the Maori. The activities of the Maori were a constant source of complaint for the forest rangers as represented by the numerous mentions made in ranger reports. Rangers were

²³

LS 1 53/1 85/28, 1885. Letter from Thompson, R. "Government Intentions under the Forest Acts".

continually trying to stop them cutting timber and 'stealing totara'.²⁴ A report by ranger Maxwell (1887) stated he was *Laying wateing [sic] to try and catch them stealing totara*.²⁵ It was a situation of enforcement of colonial constraint upon traditional use. Little mention was made of this issue after the late 1880's, obviously the Maori stopped infringing upon the forest resource, or forest rangers abandoned reporting incidents.

In addition to protecting the forest from exploitation, rangers also engaged in the collection, drying, storage, and shipping of a number of species seed. Species included kauri (*Agathis australis*), manaoa,²⁶ totara (*Podocarpus totara*), miro (*Prumnopitys ferrugineus*), kahikatea (*Dacrycarpus dacrydioides*), ironwood rata (*Metrosideros umbellata*), and nikau (*Rhopalostylis sapida*). This effort was in an attempt to propagate native species for commercial planting and cropping. Unfortunately, the New Zealand flora proved too difficult for collection of seeds due to annual variation. Propagation was near impossible, due mainly to the lack of understanding and knowledge of the species concerned.

Under the Forest Act 1874, and pursued by Kirk, Chief Conservator and an advocate of scientific forestry, a School of Forestry, Pomology and Agriculture was established at Whangarei (Brown, 1968). The forest ranger located in this area was charged with the duty of working at the school establishing ground in preparation for planting.²⁷ This new duty was undertaken in addition to the usual forest duties of patrols for fires, gumdiggers, trespassers and illegal cutters.

General development and use of the forest resource required rangers to undertake the somewhat routine duties of track cutting for access to the forests, road building - presumably for cutting and milling of the resource, control of fires, determination of the

²⁴ LS 1 53/4 87/9, 1887. Report by Maxwell, forest ranger. Many ranger reports during the period 1887 commented that much of their time was spent in controlling Maori use of the forest resources.

²⁵ *ibid.*

²⁶ LS 1 53/5 87/145, 1887. Report from Maxwell, forest ranger. There are no species called manaoa, it is believed Maxwell was referring to manaoa (*Dacrydium kirki*). It is, however, considered more realistic that Maxwell in fact meant silver pine (*Dacrydium colensoi*) that was used in ship building.

²⁷ LS 1 53/7 87/500 and 87/530, 1887. Work reports from Wilson, forest ranger Hobson County.

forest boundary, and recommendation of areas for reserves.²⁸

The transfer of responsibility for the forest resource to the Department of Lands and Survey in 1892 resulted in little protection being undertaken. During the 1880's and early 1890's the New Zealand economy was in recession. Government concern was for the stabilisation of the economy, not the protection of the environment. An account regarding this period stated the continued protection of the forest resource was undertaken by rangers (Phillips Turner, 1932). Phillips Turner, Director-General (1928-1931), maintained that with regard to forestry, all that rangers were required to know was how to determine the quantity of millable timber.

Roche (1990) noted that the timber industry, from the period 1880-1920, underwent change as a result of significant changes occurring within New Zealand. These changes included the restructure of forest administration, the peak in land settlement, and the expansion of farming. Rangers were not exempt from these changes. Rangers' duties and responsibilities were influenced by the demands on the forest resource by social, political and physical factors.

Royal Commission on Forestry 1913

During 1909 the issues of the forest resource and the inefficiencies of the timber sales system were raised in Parliament (Thomson, 1985). In response to these issues in 1913 a Royal Commission on Forestry was established with wide ranging terms of reference. These included: the identification of existing forest lands which could be retained permanently under forest - categorised as climatic reserve, scenic reserve, or milling forest; those forest lands suitable for settlement or commercial purposes; the control and management of a number of species, kahikatea was specifically mentioned; and the condition of the State nurseries and plantations (Thomson, 1985; Roche, 1990).

Climatic reserves were for the *purposes of protection of soil, prevention of denudation, water-conservation, prevention of floods, and, in addition shelter from wind* (Royal

²⁸ LS 1 53/15 3/1/117, 1886. Letter from Kirk, Conservator of Forests to McIhorne, forest ranger. *Duties chiefly protective, ... and other forest work.* LS 1 53/3 86/545, 1886. Report from Garsed, forest ranger. *Work principally track cutting. Also taking fern samples for Dr Hector.* LS 1 53/3 86/581, 1886. Report from Maxwell, forest ranger. *Ascertaining what timber is on the blocks, e.g. 100,000-150,000 ft of dry Kauri which should be got rid of.* LS 1 53/14 3/3/417, 1887. Memorandum from Kirk to Campbell, forest ranger.

Commission of Forestry, 1913, xiv). Scenic reserves could be established for: the preservation of scenery; the protection of historic places; in the vicinity of hot springs; for the preservation of examples of vegetation with its accompanying birds and other animals; and forest that may serve as resorts for picnics and recreation.

The Commission recommended the creation of a forest authority, adequate statutory cover of forests, improved administration, and an increased planting programme (Ellis, 1923). The recommendations of the Commission were not implemented for a number of years, however. Reasons attributed for this include the outbreak of World War One and internal politics of the Department of Lands and Survey. Thomson (1985), however, maintained that the recommendations were so comprehensive that a delay would have occurred whether or not these other factors were involved.

During this period it appears that there were no forest rangers employed, their duties were undertaken by crown land rangers with authority under the respective Land Acts. This is presumed a consequence of the disorganised nature of forest administration at that time.

State Forest Service

The Forestry Department, as an entity separate from the Department of Lands and Survey, was established in 1918. It was yet another reorganisation of forest administration and control. The Department was renamed the State Forest Service after the passing of the Forests Act 1921-22. This reorganisation saw a redefinition of the New Zealand forestry which was facilitated by the employment of overseas foresters.

In 1919 Ellis was appointed Director of Forestry (1919-1928), and immediately undertook a review of forestry in New Zealand. This provided the basis for the Forests Act 1921-22. Ellis proposed forest policy which, he claimed, was *based on an independent and original consideration of New Zealand problems* (Allsop, 1973, 5).

One of the problems referred to by Ellis was the supply of timber. The timber supply was seen by many as not being sufficient to meet future demand.

The 1921-22 Act charged the State Forest Service with a number of functions, including: control and management of all matters of forest policy; control and

management of permanent and provisional State forest; planting and maintenance of nurseries; enforcement of leases, permits and licences; and collection of rents, fees and royalties.

In the 1922 annual report the structure and organisation of the new department was described as decentralized and efficient. Regional executives - Conservators of Forests - were appointed to seven conservancies (Auckland, Rotorua, Wellington, Nelson-Marlborough, West Coast, Canterbury, and Otago-Southland) to ensure the Act was observed. Within this decentralized structure conservancies contained ranger districts, each of which had a ranger in charge

who functions as local executant as regards to cruising and appraisal of timber-sales, trespass, forest-protection, and generally all activities relating to State forests (AJHR, 1921-22, C3, 2).

Recreation in State Forests

It has been argued that increased mobility, as the use of the motor car increased, was instrumental in the increase in recreational use of Crown land during the 1920's. Ellis stated, in an instruction on defining timber sales boundaries, that the aesthetic value of the forest should be considered, such as areas bordering lakes, road, camp sites and summer resorts. Ellis recognised the use of the forests, by the public, for recreation.

As the national economy of New Zealand develops and her population increases the recreational value of State Forests will likewise increase. The time will come when the national forests will be extensively utilised as vacation playgrounds by the people.²⁹

The effect of Ellis' encouragement was to provide legitimate access for public recreation in the forest resource. This encouragement of recreational use of the forest resource was expounded in the 1923 annual report which outlined

probably some thirty thousand persons found relaxation and recreation in hunting, fishing, tramping and picnicking within the precincts of State forests during the past year (in McKinnon & Coughlan, 1960, 2:15).

Forbes & McNab (1986), calculated seventeen North Island tramping, mountaineering and ski clubs were established between 1919 and 1930. This establishment of clubs can

²⁹

Held by Paul Mahoney, Senior Conservation Officer, Department of Conservation Head Office, Wellington. 10 November 1921. Circular from Ellis, Director of the State Forest Service, to all Conservators and Field Staff. Circular No 26 *Scenery and Timber Sales*.

be seen as representative of the rise in outdoor recreation, and recreational use of Crown land. Between 1930 and 1940 a further eight North Island clubs were formed.

Recreation in State forests progressed as tramping, hunting and mountain climbing gained in popularity. During the 1960's the rise in back country recreation was a consequence of economic prosperity within New Zealand. Increased mobility and disposable income assisted in the pursuit of outdoor recreation.

In 1954, as a result of pressure from recreationists, the first State forest park was designated. The continued development of State forest parks provided increased opportunities for back country recreationists through the provision of a network of huts and tracks. Kerr (1977; 1981; 1987) documented the development of 51 huts and bivouacs in the Tararua Range between 1950 and 1987 (peaking in the 1960's with the development of 22 huts and bivouacs). Huts and bivouacs were built to provide shelter for trampers and recreational hunters, as well as government hunters.

Wild Animal Control

The State Forest Service was active in the control of wild animals in the forest resource. Forest rangers often held authority under other Acts that allowed for active control. Appointment of rangers was generally under the Animal Protection Act 1908, or the Fisheries Act 1908. In 1922 the State Forest Service annual report stated that

through its Ranger staff the Service was active in allocating trapping grounds, repressing poaching and trespass and in advising on proposed release for propagation purposes (in McKinnon & Coughlan, 1960, 2:14).

By 1929 the damage to the forest resource by wild animals was recognised.

It is clear that the waterflow from forested lands is being appreciably affected in many localities owing to these other agents, which unnecessarily disturb Nature's balance ... that much land is being ruined by over-grazing by wild animals, and the consequence erosion of steep and unstable mountainsides (in McKinnon & Coughlan, 1960, 2:25).

The protected status of deer was relinquished in 1930. For a five year prior to the change in status both the State Forest Service and Department of Internal Affairs had instigated a government funded bounty on deer in the State forests. In 1930 deer control was undertaken by the Department of Internal Affairs, under the Animals

Protection and Game Act 1921. The control programme expanded with the organisation and management of teams of deer hunters. However, deer continued to be a problem within forests.

In 1956 the control of noxious animals was transferred back to the New Zealand Forest Service. It was not until the 1960's early 1970's that better organised and probably more effective deer control was reached. As a consequence of the commercial operations, and live capture operations in the 1970's the numbers of deer declined. Caughley (1983) estimated the 1973 cull rate was 127,000, the highest ever, (Thom (1987a), estimated 130,000 carcasses were exported in 1971).

Ellis at the Helm

During the period when Ellis was Director of Forests (1919-1928), rangers primarily engaged in indigenous forests, were occupied with the requirements of production, namely patrol, protection - fire and trespass, and cruising. Timber cruising was the dominant duty. According to Lawn (1991), Assistant Conservator of Forests, Hokitika (1980-1983), timber cruising meant

you went out and measured a block of timber ahead of a sawmill. When you do a tree you blaze the bark and the pink shows up so you know what lines you have done. You keep to the lines as you are working your block out. I'm talking about blocks of 200 or 300 acres at a time. You measured the diameter of the tree at breast height, DBH, and the height of the millable timber. This was recorded and you would have millions of board feet of wood that could be sold.

Not only did Ellis directly develop State involvement in the timber industry, he also developed the personnel resource including the establishment of sub-professional (ranger) training. The first ranger course was held at Whakarewarewa in 1924 (Hutchinson, 1966). Two Schools of Forestry were established, one at Auckland University and one at Canterbury University in 1925 and 1926 respectively (Boyd, 1980). Courses included B.Sc. in Forestry, ranger courses, and associate courses.

The curriculum at Canterbury for the ranger course included; elements of forestry, forest botany, elementary silviculture, elementary wood technology, physical geology,

forest mensuration, and forest utilisation³⁰ (*Te Kura Ngahere*, 1925; 1926). The Auckland School, according to Hutchinson (1966), at no time provided ranger or sub-professional training.

The Auckland School of Forestry closed in 1930 and Canterbury in 1934 reportedly as a consequence of the depression (Thomson, 1991). Although a report by the Training Committee for the Secretary of State for the Colonies, 1930, noted that it considered two forestry schools in New Zealand excessive (*Empire Forestry Journal*, 1931). It would be difficult to determine the relative influence of each of these factors on the closures but the economic impact of the depression would have been significant.

These training courses were important as they represent the first ranger training. Poole (1991), maintained that Ellis could not build up an efficient Forest Service without trained professional foresters. Thomson (1991), argued that after Ellis left the State Forest Service professional training was not favoured by the new Directors-General. The establishment of the courses was important but not as significant as subsequent training for rangers or foresters.

The Initiation of Exotic Forestry

This period under the direction of Ellis (1919-1928) is best described as a phase of development, expansion and land acquisition for exotic forestry. It was a critical period for both the timber industry and the New Zealand environment, as *many people in the country could see the end of native forests* (Poole, 1991). The stocks of indigenous timber had continued to decline. Estimates at the end of World War One gave the total remaining forest area as 5.18 million hectares (19.25% of total land area), one third of the area in 1840 (State Forest Service, 1923).

New Zealand was a timber country. Many facets of life were based around timber, housing and construction to name but a few activities. This heavy dependence upon the forest resource resulted in the planting of *Pinus radiata* for milling and industry, and less indigenous cutting. Had no exotic forests been planted, the *official assessment [in 1924] was that in 80 years three-quarters of the virgin forest would be gone* (Roche,

³⁰ Held by Dave Field, District Conservator, Department of Conservation Rotorua. Canterbury College School of Forestry certificates for the Ranger Course, dated July 1932.

1990, 190). During the early 1920's a national forest inventory was undertaken, resulting in a new exotic afforestation strategy in 1924 (Roche, 1990).

Ellis was given a free hand to develop the exotic forest resource, this was made easier by the fact that Kaingaroa was Crown land with 100,000-124,000 hectares ready to plant and *nothing to stop him* (Poole, 1991). Ellis was fortunate that the Rotorua nursery was already established (c.1898) and progress in planting had occurred, Ellis simply expanded from there - land, forest and staff (primarily ranger staff).

The significance of Ellis's directorship can be represented by the fact that in 1989 the total forested land in New Zealand constituted 26.8 percent of the land area (7.2 million hectares), a seven percent increase in 60 years (Department of Statistics, 1990). The effect of the exotic planting was a reorientation of the New Zealand Forest Service from a production unit to a conservation unit (Dawe, 1991).

Forest Ranger - Exotic Forests

A distinction can be made between the roles of the forest ranger involved with indigenous timber from that of exotic timber. Requirements of the jobs, the types of environment concerned, and the gradual decline in the use of the indigenous timber led to the reorientation of rangers' duties.

Forest rangers engaged in exotic forests were responsible at the operational level in establishment, tending, and protection of forests (both from fires and noxious animals), as well as timber appraisal and survey. Forest work gangs, although under the direction of a leading hand, foreman or supervisor, often required the experience and supervision available only from forest rangers.

Drower (1991), while Officer-in-Charge Kaingaroa State Forest, maintained that little changed in the duties of production forest rangers over the period 1920's-1980's, but the equipment used did.

Thinning, instead of being done with a cross cut saw or an axe, was done with a power saw. The same with harvesting, you went from the horse era to steam hawlers to crawler tractors.

Priority was placed upon the control and management of the exotic resource. Utilisation and management of the resource dictated planting and rotation sequences, as well as ranger duties.

Forest rangers involved in indigenous forestry were primarily occupied with patrol, protection - fire and trespass, and timber cruising. These remained the basis of the indigenous forest ranger's duties and responsibilities until the demise of the New Zealand Forest Service in 1987.

Economic Depression and World War Two

Between 1929 and 1939 the effects of the depression, and World War Two were felt in all sectors of New Zealand. One outcome of the depression was the availability of labour being used for exotic planting. Exotic forest plantations expanded rapidly, building upon the programmes established by Ellis (Allsop, 1973). According to the Department of Statistics (1990), between 1923 and 1936 no less than 150,000 hectares were planted by the State Forest Service. According to Poole (1991), Director-General of Forests (1961-1971), after Ellis left the State Forest Service *Phillips Turner (1920-1928) and McGavock (1931-1939) just carried the Service along until Entrican came and built up the utilisation side.*

The effect of World War Two was twofold. First, statutory control of timber prices was implemented and timber production was directed towards war requirements (Allsop, 1973). Second, after the war, some forest rangers had the opportunity to experience and train in European forest management (Poole, 1991; Cleland, 1991).

Forestry Training Centre, Whakarewarewa

Entrican, Director-General of Forests (1939-1961), followed some of the initiatives established by Ellis but recognised the need to train staff at all levels if the forestry potential were to be developed (Poole, 1969). The Forestry Training Centre at Whakarewarewa (Rotorua) was established in 1945 and received the first intake of trainees that same year. Initiative for a school had come five years earlier, but the Second World War intervened and put a temporary halt to its implementation (Boyd, 1980). Training included schemes for woodsmen, technical trainees (rangers), and professional foresters.

Training was aimed mainly towards returned servicemen and the re-establishment of the forest industry. During the war indigenous cutting had continued but only maintenance had been undertaken in the exotic forests. Training was separated into two classes, the professional and the technical or ranger (sub-professional). The distinction between the professional and technical trainees lay in their subsequent training. Professional trainees, after completion of their courses at Forestry Training Centre, continued onto university and became professional foresters. All were sent to universities overseas as the Canterbury School of Forestry was not re-established until a later date. Technical or ranger training finished upon completion of the Training Centre courses.

The Forestry Training Centre was not the only Forest Service location for training, Tapanui (Otago) also ran technical trainee courses, although the Forestry Training Centre became the dominant training institution in the country. During the late 1950's a ranger training school was established at Reefton specifically for ranger training. The school lasted until 1967 when it was disbanded³¹ as the structure of training was altered and certification responsibility came under the Technicians Certification Authority.

Forests Act 1949

The Forests Act 1949 established the New Zealand Forest Service, taking over the responsibilities of the State Forest Service. The functions included the exclusive responsibility for carrying out forest policy affecting State forest land, and control and management of

all State forest land, whether for the production of timber or other forest produce, or for the protection of the land with a view to water conservation or soil stabilisation, or for ensuring the balanced use of the land, or for scientific purposes, or for recreational or amenity purposes not prejudicial to forestry (S14(a)).

Under the 1949 Act conservancies had responsibility for the management and administration of state forests within their jurisdiction. Conservancies were at the operational level of Forest Service policy, involved with the day-to-day management of the forests. Conservancy implementation of the Act was dependent upon whether

³¹ Forest Service Accession W 3129 13/11/2/3, 1967. Newspaper articles in the *Greymouth Evening Star (GES)* 15 February 1967 "Reefton Forestry School is to Close: Rangers, 27 now, for Rotorua"; *GES* 8 March 1967 "Economic Loss for Reefton if Ranger School is Closed"; *GES* 8 March 1967 "Ranger School Closing Upsets League"; *GES* 5 April 1967 "Closing of Reefton Forestry School"; *GES* 17 June 1967 "'Twilight' for Reefton Forest School".

forests were designated for production or protection (the existing situation), and the priorities of management.

Recreation within forests was legitimatised under the Act with the New Zealand Forest Service empowered to acquire land for recreational purposes. McKelvey (1965), believed that the New Zealand Forest Service attitude towards recreation at this time was conservative and it was not until the 1950's that the situation began to change.

The administrative structure which was established under this Act (and amended under the 1976 Act) illustrates the wide mandate that was vested in the New Zealand Forest Service (Figure 5.2.). This structure remained until the Service was disbanded in 1987 and the redistribution of commercial and conservation fields into the Ministry of Forestry, and the Department of Conservation.

Entrican and Forest Utilisation

In 1946 Entrican engaged Thomson, (later to become Director-General of Forests (1971-1976)), to direct a survey of the remaining forest resource. According to Roche (1990) the objectives were: to estimate the volume of millable timber; to revise the national forest inventory undertaken by Ellis in the 1920's; and to prepare vegetation maps. One result of the survey was the instigation of sustainable use policies for indigenous timber. These policies, however, were fraught with problems, such as the high demand for indigenous timber as a result of the post-war housing boom (Roche, 1990).

Entrican, encouraged exotic forest utilisation and initiated planning for the second planting of exotics (the first under Ellis's direction in the 1920's). This second planting was eventually implemented in 1960 - Entrican's final year (Roche, 1990). The distribution of exotic timber production to indigenous production increased from 29.1 percent to 49.3 percent between 1946 and 1956 (Roche, 1990 after Carter 1956).

Utilisation of the forest resource not only included timber, but also other forest products. Pulp and paper had been conceived as a way to utilise 'unusable' timber. Two independent large scale forestry enterprises were established, Tasman Pulp and Paper at Kawerau and New Zealand Forest Products at Kinleith. During the late 1940's exotic sawn timber production, for the first time, significantly exceeded

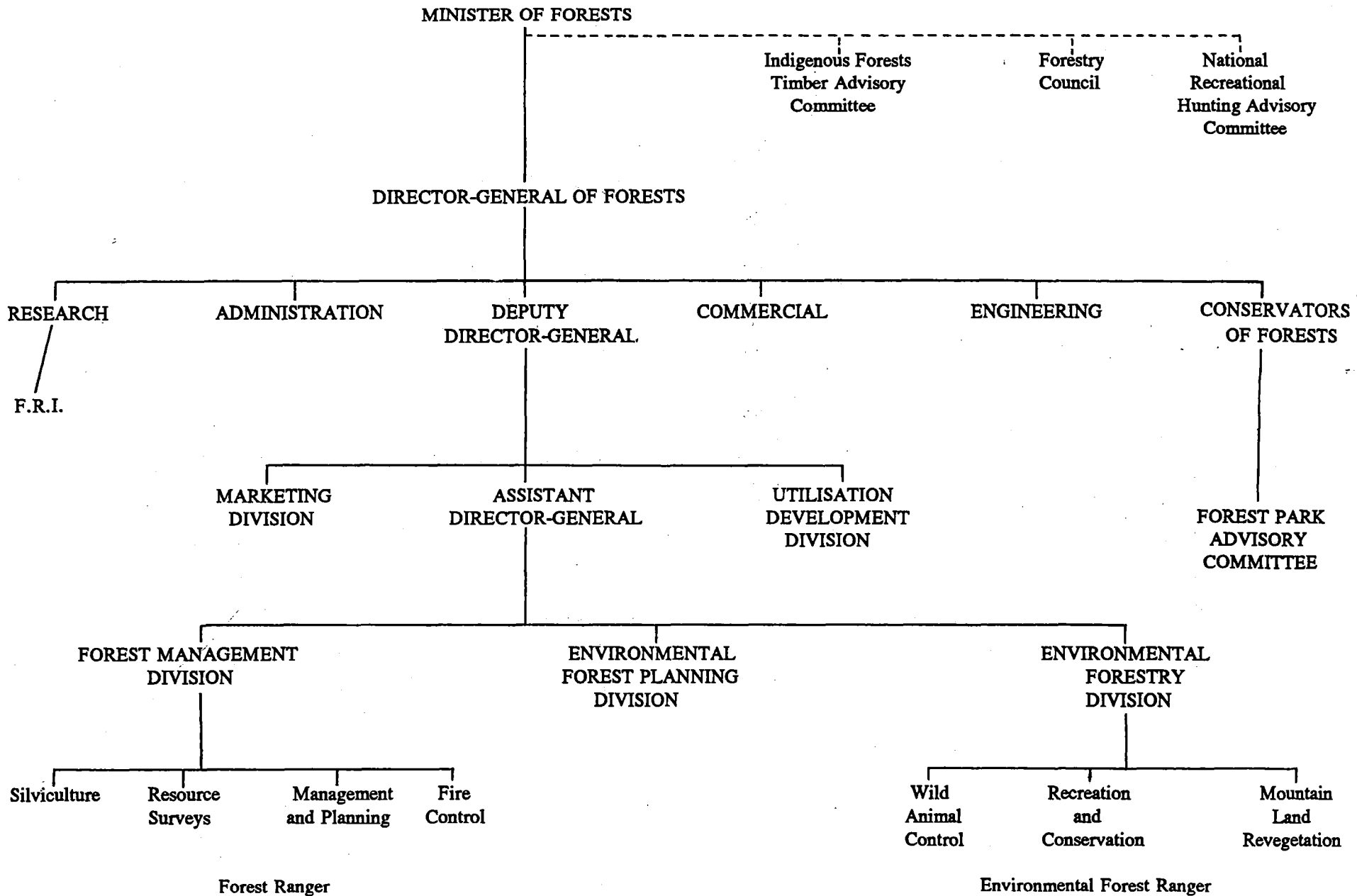


Figure 5.2 Administrative structure of the New Zealand Forest Service (after Wells, 1984).

indigenous as the now mature plantations of the 1920's were able to be utilised.

The development of timber treatment technology made a major contribution to the New Zealand Forest Service. Prior to the development of borer treatment and ground treatment *Pinus radiata* had only been good for paper pulp, with indigenous timber being used for everything else. With the introduction of timber treatment, indigenous timber could systematically be replaced by *Pinus radiata*, encouraging the conservation of the remaining indigenous timber.

The post-war period was a time of expansion of the exotic resource, and increasing conservation interest in the indigenous forests. The expansion of the Forest Service mandate also included noxious animal control after the transfer from the Wildlife Branch, Department of Internal Affairs.

Environmental Forest Rangers

In 1956 the Wildlife Branch returned the control and responsibility of wild and noxious animals to the New Zealand Forest Service - three decades after the Branch assumed control. In response to the

*alarming degenerate state of many protection forests throughout the country, the Forest Service made strong representations for the control of deer, etc. to be passed from the Wildlife Branch of the Department of Internal Affairs.*³²

The long title of the Noxious Animals Act 1956 stated the Act made provision for the control and eradication of harmful species of wild animals. The Act empowered the New Zealand Forest Service to undertake control of noxious animals on land under all tenure (not only Crown land but also private land).

Employees of the Wildlife Branch were transferred directly with little adjustment except title, from field officers to environmental forest rangers (Protection Forestry Division, later called Environmental Forestry Division). The main areas for concern remained deer, goats and chamois in the high country, and deer, goats and possums in the forests. Environmental forest rangers were field operatives who had spent the majority of their

³²

Forest Service Accession W 3129 41/25/2/1, 1968. New Zealand Forest Service submission to the Commission of Enquiry on the Organisation of Wildlife Management and Research.

time as hunters and shooters, they were quite different from the exotic and indigenous production forest rangers.

Multiple Use

Multiple use of the forest resource became an issue during the mid 1960's. The multiple use concept incorporated the vast spectrum of forest resources within New Zealand, both production forests (indigenous and exotic), and protection forests (watershed protection).

The concept, already existing in the broadest sense, became an integral component of the Forest Service mandate. All lands controlled by the New Zealand Forest Service were required to accommodate other uses of the forest resource. Advocation of multiple use policies was seen by MacLachlan (Director-General of Lands), in particular, as an indication of a major split in policy direction for national park and State forest park management.

Taylor *et al* (1969), however, stated that there is no reason why recreation, preservation of scenery, and fauna protection, could not be compatible with the primary object of forest management for a particular forest. Use compatibility was recognised within the multiple use concept, that is to say, protection forests could, without alteration of existing management policies incorporate fauna protection or scenery preservation.

The multiple use concept was far sighted in design as it acknowledged the array of forest resources and the various combinations of use. The concept was designed for implementation on the national scale, not a single forest, and as such was often misinterpreted by many 'conservationists', environmentalists and recreationists. Misunderstandings often arose because of the opinion that it was a *fait accompli* that multiple use provided the New Zealand Forest Service the 'right' to log and mill indigenous forests designated as protection forests.

According to Roche (1990, 417) the multiple use concept gave *further recognition to recreation as one of the uses and objectives of management of these State forests*. The result of the advocacy of multiple use, a new National Parks Act 1952, and the Federated Mountain Clubs' (FMC) unsuccessful attempt to have the Tararua State Forest

designated as a national park, was the creation of the forest park concept (Burrell, 1982).

State Forest Parks

Thomson, Director-General of Forests (1971-1976), as a member of the Executive of Federated Mountain Clubs was instrumental in introducing the idea of a Forest Park in the Tararua Range in 1954. The creation of the forest park concept allowed for the management of the area to develop recreational use and amenities on the assumption that these would be compatible with the primary designated values of soil and water conservation.

The Forest Amendment Act 1965 allowed for the establishment of further forest parks for the purpose of recreational use (NZFS, 1970). Prior to the amendment, recreational use was not a priority for the New Zealand Forest Service, although under the 1949 Forests Act the Forest Service had the power to acquire land for recreational purposes. Within five years of the Amendment, five state forest parks had been gazetted, and four others approved. In total, 875,000 hectares was allocated for State forest parks. By 1987 the number of state forest parks had risen to 21 (1.68 million Ha), covering the breadth of the country (Figures 5.3, and 5.4).

By the late 1970's outdoor recreation was entrenched in management and encouraged in forests. Management philosophies included the promotion of multiple use of the forests, and the encouragement of public involvement in management (NZFS, 1983). Direct public involvement in forest park policy had been accommodated in the establishment of advisory committees.

Advisory committees (eight to ten members) formed an association between the park users, representatives of the Federated Mountain Clubs, and managers (Burrell, 1982). According to McConchie (1991), committees would represent a range of interest groups, provide management expertise from beyond the New Zealand Forest Service, and advise the Minister.

State forest parks became established as areas for recreation that are more diverse and less restrictive than national parks and reserves. Recreation policy allowed for a variety

State Forest Park	Est.	Hectares	Area ¹
Tararua	1954 ²	116 169	0.43
Craigieburn	1967	17 000	0.06
Kaimanawa	1969	74 811	0.28
North-west Nelson	1970	376 572 ³	1.40
Coromandel	1971	71 700	0.26
Pirongia	1971	14 277	0.05
Rimutaka	1972	14 085	0.05
Kaweka	1974	64 515	0.24
Lake Sumner	1974	73 895	0.27
Haurangi	1974	15 683	0.06
Catlins	1974	56 586	0.21
Kaimai-Mamaku	1975	37 165	0.14
Whakarewarewa	1975	3 830	0.01
Ruahine	1976	90 174	0.33
Mount Richmond	1977	177 109	0.66
Hanmer	1978	16 844	0.06
Pureora	1978	71 177	0.26
Raukumara	1979	115 102	0.42
Victoria	c.1983	200 000	0.74
Whirinaki	1984	60 900	0.22
Northland	1984		

¹ Percentage of New Zealand based upon total land area of 26,868,400 hectares.

² Gazetted in 1967.

³ In 1984 a further 24 055 Ha were added making the total 400 627, increasing the area to 1.49%.

Figure 5.3 State Forest Parks (after AJHR, 1980; AJHR, 1984-85; New Zealand Forest Service, 1980; Chavasse & Johns, 1983; Morton *et al.*, 1984).

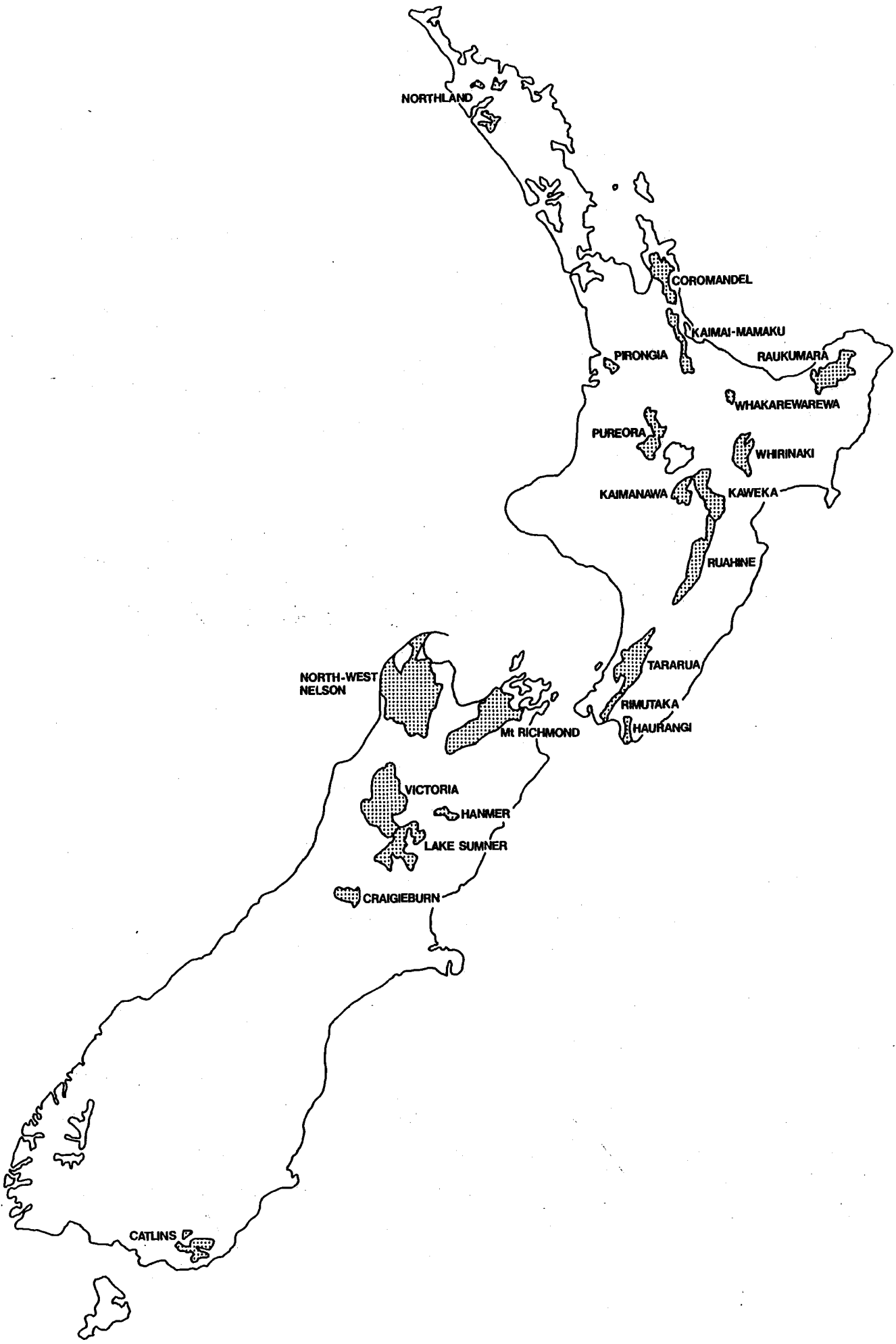


Figure 5.4 Location of State Forest Parks (after Devlin *et al*, 1990).

of recreational opportunities, such as motorised vehicle use or helicopter use, as well as hunting, tramping, horse riding, and dogs.

The gazetting of state forest parks established yet another spectrum of duties and responsibilities for forest rangers. Many forest rangers transferred to forest parks from environmental forestry as they often had the knowledge and experience of the area from culling operations. Protection Forestry Division (later to be known as the Environmental Forestry Division) and the work undertaken by their rangers provided a large component of the vast network of recreation facilities existing. This extended the work previously undertaken by environmental forest rangers, such as track construction and hut building for noxious animal control.

Kirkland (1991), Director-General of Forests (1983-1986), explained that a consequence of establishing State forest parks was that the New Zealand Forest Service

found itself running a series of formally identified recreation forests and [fostering] the progressive development of staff with the right skills. Quite a few of those rangers came out of what was originally called the noxious animal division. They knew the country, they were very skilled people and they were used to living in the conditions. The huts they used for control purposes became the core of huts utilised for recreation use in mountain areas.

As recreation within forest parks increased and management became more specific, rangers often became specialists. O'Connor (1991), Recreation Forest Ranger, Head Office (1983-1986), described the duties and responsibilities for rangers engaged in recreation as being *directly involved with the public, especially school groups.*

Interpretation and education activities were important methods of communication between the public and the New Zealand Forest Service.

Saving the Forests

During the 1970's a number of campaigns against forestry were undertaken by a number of pressure groups as a result of proposed milling of South Island beech forests. These groups represented new conservation, environmental and preservation interests, such as the Beech Forests Action Council (later the Native Forests Action Council), and Friends of the Earth (Wilson, 1982).

Roche (1990) outlined the contents of the petition - the Maruia Declaration, presented by these groups to the New Zealand Forest Service. The declaration included six principals aimed at ending the logging and milling of indigenous timber. Included within the proposal was the recommended amalgamation of the Environmental Forestry Division of the New Zealand Forest Service and the National Parks and Reserves Division, Department of Lands and Survey.

By the late 1970's indigenous timber policy, and recreational policies had been reviewed by the New Zealand Forest Service. Ultimately, the decision was to continue logging indigenous timber on a sustainable yield basis (Roche, 1990). Activists not satisfied with the decision continued to protest, this time not with petitions but by climbing trees marked for logging and blocking roads in Pureora and Whirinaki State forests. During the 1980's government policies changed towards phasing out commercial logging in many indigenous forests.

These pressure groups became focused on new issues during the mid 1980's as the proposed restructuring of New Zealand's environmental and conservation departments began.

'Rogernomics' and Restructuring

During the early 1980's new government policy forged a new direction in the New Zealand economy. Roche (1990, 373) identified the early motivations for restructuring in the early 1970's. *These in essence fall into two main areas: an environmentalist challenge to Forest Service management philosophies and practices, and quite separately, a Government emphasis on an increasingly cost-competitive, market-oriented approach to the business of growing State wood.*

Skudder (1991), Deputy Conservator of Forests, Rotorua (1983-1987), was adamant that the impact of 'Rogernomics' should not be ignored. Pressure for accountability and transparency of expenditure meant many impromptu duties, such as clearing a slip on a neighbouring national park access road, could not be undertaken. The loser of such a policy was the public, the recreational user.

Kirkland (1991) as the last Director-General of Forests, believed that *a small country like New Zealand could not have the luxury of two government departments indulging in similar things*. Kirkland advanced the notion that had restructuring not occurred in 1987, and in the absence of corporatisation, that those administrative similarities would have been united. Namely, the Environmental Forestry Division of the New Zealand Forest Service, and National Parks and Reserves Division of the Department of Lands and Survey would have merged.

Chapter Summary

In this chapter the history of the New Zealand Forest Service and the forest ranger has been traced. Important periods have been identified which are considered influential in the development and evolution of the forest ranger.

1. By 1874 a number of people, including the Premier Vogel, had expressed concern over the uncontrolled use and destruction of New Zealand's forests (Brown & McKinnon, 1966; Roche, 1990). The commercial potential of the forests had been recognised and resource management was imperative.
2. The effectiveness of forest management varied considerably up to 1920. There were a number of departmental reorganisations with varying degrees of success. Throughout, the forests deteriorated. The basic ranger duties, however, were as they had always been: the protection of the forests from a number of agents - natural and human.
3. Utilisation of the forest resource and training of New Zealand Forest Service personnel characterised the period from the late 1930's through to the 1960's. Entrican, as Director-General, led and directed the expansion of forestry further than his predecessors. Changes in ranger duties were a response to the expansion and diversity of pursuits undertaken within the New Zealand Forest Service mandate.
4. The development and gazetting of State Forest Parks provided a new arena into which forest rangers moved. The development of the Environmental Forestry Division and environmental forest rangers focused on the forest resource as a legitimate area for recreation. The transfer of noxious animal control and personnel from Wildlife Service, Department of Internal Affairs, provided experienced ranger staff for the Environmental Forestry Division.

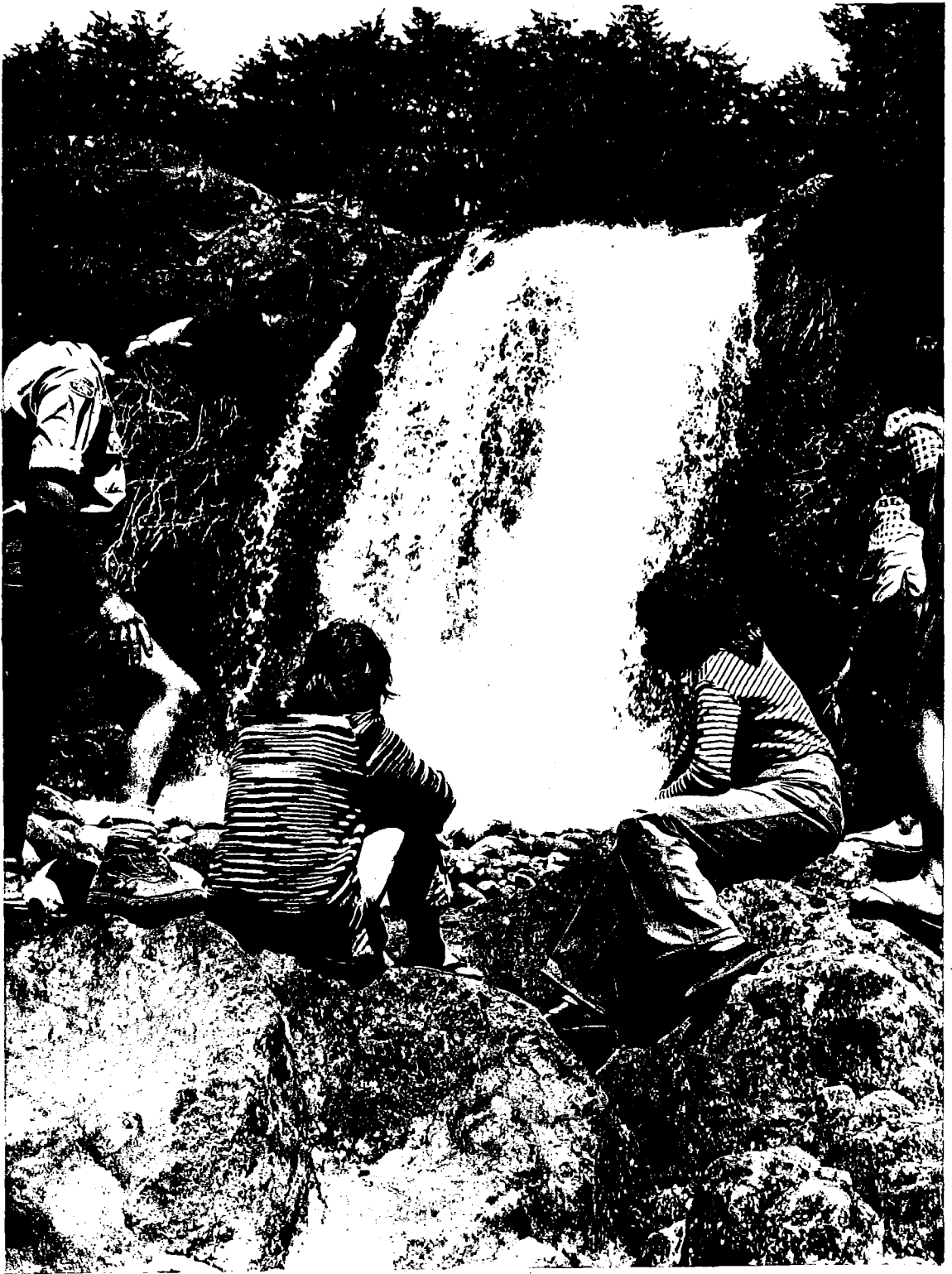
By the end of the New Zealand Forest Service's 113 years of control of its development and management of the forest resource that the duties and roles of the original forest rangers were still valid. Evolution of the ranger corp had occurred as the resource was expanded and the Forest Service mandate became larger in response to growing demands.

Recreation provision was encouraged, especially in the indigenous mountain forests, production was ever increasing in the exotic forests, and noxious animals were a continuing problem. The forest ranger (whether engaged in indigenous and exotic forestry or State forest parks), were still an integral component in the structure at the operational level.

The ranger role had expanded from being purely protective of the forest resource to an active conservationist. Promotion of aspects of forest use were encouraged, whilst preservation of mountain forests, and development and sustainable use of the exotic forests continued.

A number of important events in the history of forest rangers, the New Zealand Forest Service and its predecessors have been identified. Political, economic, environmental and social factors have all influenced the directions taken by the New Zealand Forest Service and forest rangers over the last 113 years. Within the department influences on rangers have come from government legislation, departmental policy, key individuals, and the rangers themselves. Each factor influenced the evolution of the role of the ranger as a protected natural resource manager in different ways, and at different times. Each influence cannot be considered separately, nor in isolation from the social, economic and political context of land in New Zealand.

The following chapter reviews the events which have influenced the evolution of the crown lands ranger, national park ranger and reserves ranger. The chapter also describes and analyses the history of the Department of Lands and Survey and its effect on these rangers.



Ranger, N. Clifton discussion waterfall formation with school group, Tawhai Falls, Tongariro National Park 1978 (*Department of Conservation, photo P. Green.*)

CHAPTER SIX
HISTORY OF DEPARTMENT OF LANDS AND SURVEY

It must not be assumed that the Rangers' visits are always distasteful to the settlers. As a rule they are of material advantage to the tenants, as they are enabled to obtain the friendly advice of the Ranger (AJHR, 1903, C1 x)

The work of our Crown Land Rangers is not only very onerous, but is at best a thankless task (AJHR, 1907, C1, 4).

Introduction

The history of the Department of Lands and Survey is reviewed in this chapter. The parallel development of national parks, and reserves rangers is chronicled in relation to legislation and other major influences. The principal legislation affecting rangers of the Department of Lands and Survey can be seen in Figure 6.1.

Lands and Survey	
1870	Land Act 1877
1880	
1890	Land Act 1892 Tongariro National Park Act 1894
1900	Egmont National Park Act 1900 Scenery Preservation Act 1903
1910	
1920	Public Reserves, Domains and National Park Act 1928
1930	
1940	
1950	National Park Act 1952 Reserves and Domains Act 1953
1960	
1970	Walkways Act 1975 Reserves Act 1977
1980	National Park Act 1980

Figure 6.1 Principal legislation affecting the Department of Lands and Survey

Land Act 1877 and Crown Lands

Following the abolition of the provinces, the Land Act 1877 was passed which allowed for a unified disposal of Crown land. The Act dealt with Crown land in a uniform manner and laid the foundation for the identification of areas for protection. The Act consolidated fifty-six primarily provincial statutes (Jourdain, 1925).

Crown lands, as defined under the Land Act 1877, included *all demesne³³ lands of the Crown which have not been dedicated to any public purpose, ... and shall include all lands heretofore designated waste lands, Crown lands, and confiscated lands respectively* (S5).

Preceding Land Acts dealt specifically with settlement provisions. Changes in lease provisions, grazing-runs and special settlement provisions were the main emphases of the Land Acts during the 1880's.

Crown Land Rangers

Rangers were employed by the Crown Lands Department during the 1880's. Their duties encompassed the variety of interests held by the Department at this time, namely forests and saw mills; the inspections of settlements;³⁴ reporting on the fulfilment of conditions by Crown tenants; and ensuring compliance of the Act (Jourdain, 1925).

At this time a priority of the Department of Lands and Survey was to assist the development of New Zealand for settlement, agriculture and industry. Bagnall (1976, 280) described the effect land settlement schemes on rangers' duties.

The surveillance of these villages, ..., as of all other Crown tenancies, was the responsibility of the Crown Land Ranger for the District. [It required] those whose lot it was to carry through this physically demanding often thankless task with judgement, discretion and sympathy.

³³ Demesne - land surrounding a house or manor; realm, domain; a region or district. Within the Land Act 1877 demesne lands were *deemed and taken to be all lands vested in Her Majesty wherein the title of the aboriginal inhabitants of New Zealand has been extinguished* (S5).

³⁴ LS 1 53(8) 88/86 (84/2406), 1884. Memorandum from Chands to Campbell, crown land ranger. *Appointment of Campbell as Crown Lands Ranger whose duties are confined principally to forests and saw mills unlike Mussen whose duties are chiefly the inspection of Deferred Payment Settlement.*

A dichotomy existed between this priority of land settlement, and the concern for the rapid exploitation of the forest resource. Settlement and development occurred at the cost of decreasing the forest resource, the commercial potential of which had been recognised. The consequence of these often conflicting interests were seen in the appointment of crown land rangers.

Under the Scenery Preservation Act 1903, and the Public Reserves, Domains and National Parks Act 1928, crown land rangers were involved in the administration and inspection of reserves. Crown land rangers were retained until 1925 after which their duties and responsibilities which were primarily agricultural resulted in a reorientation and name change to field inspectors, and subsequently field officers (Lucas, 1991).

Department of Lands and Survey

The Department of Lands and Survey was formed in 1892 as a result of the unification of the Crown Lands Office and the Survey Department.³⁵ Land administration was the major responsibility of the department. Ten land districts (corresponding to the provincial boundaries) were established to allow for greater administration and control of Crown land development. The land districts were controlled by a Commissioner of Crown lands under the administration of a Land Board.

In latter years the department responsibilities included: administration of Crown land; disposal of housing, commercial, and industrial sections; development and settlement of farm land; administration of Land Settlement Promotion and Land Acquisition legislation; administration and control of surveys, aerial photography and land inventory mapping. The department was the *Government's traditional land holding and disposal agency* (Department of Lands and Survey, 1977, 4).

National Parks

The introduction of national parks within New Zealand as protected natural areas can be dated back to 1887. Over the last 104 years the number of national parks has increased to 12, covering the breadth of the country (refer Figures 6.2 and 6.3). National parks

³⁵

The department had its origin in 1876 with the appointment of John Turnbull Thomson as first Surveyor-General (Thom, 1987, 186). Many other famous explorers were associated with the department. Mueller became Chief Surveyor of Westland in 1871. Douglas surveyed and explored many parts of the South Island and in 1891 was appointed Commissioner of Crown Lands.

have been described as the 'jewel in the crown' of the New Zealand environment, a number have also been received into the ranks of the 'world crown' through the designation of world heritage sites. The establishment of national parks provided a new concept which required protection. Rangers were appointed to protect the areas preserved in perpetuity.

Te Heuheu IV Tukino

In 1887 Te Heuheu IV Tukino (paramount chief of Ngati Tuwharetoa) voiced concern of the Native Land Court decisions to subdivide land for sale to settlers. Te Heuheu asked that the land including the sacred peaks of Tongariro, Ngauruhoe, and Ruapehu *be awarded to the Crown as a gift from himself for the purpose of a National Park* (Lucas, 1974, 3). In 1894 the Tongariro National Park Act was passed by Parliament, seven years after the first Tongariro National Park Bill was unsuccessfully introduced into Parliament (Roche, 1987b).

National Parks

Fifteen years after Yellowstone National Park (United States of America) became the first national park in the world in 1872, Tongariro National Park was gazetted. Roche (1987a, 104) argued that in New Zealand the national park idea was in vogue as early as 1874 when Premier Fox suggested the Rotorua thermal area be utilised for *sanitary purposes*.

Proponents of the national park idea declared various reasons for the necessity to conserve and preserve areas. Cockayne, from as early as 1902, advocated for the establishment of a national park at Arthur's Pass. Cockayne principally acknowledged the preservation of scientific and ecological representativeness. One of the concerns for which Egmont National Park was established was the potential flooding of areas surrounding the mountain.

The passing of the Tongariro National Park Act set the stage for a concerted and continual effort to save areas within New Zealand which were 'special'. In 1900 Egmont National Park was established, and in 1905 Fiordland was set aside as a public reserve (later to become Fiordland National Park). In 1929 Arthur's Pass and in 1942 Abel Tasman were gazetted national parks.

National and Maritime Park	Est.	Hectares	Area¹
Tongariro	1887 ²	78 761	0.29
Egmont or Taranaki	1900	35 543	0.13
Fiordland	1952 ³	1 252 297	4.66
Arthur's Pass	1929 ⁴	99 270	0.37
Abel Tasman	1942	22 530	0.08
Mt Cook	1953	69 923	0.26
Te Urewera	1954	212 672	0.79
Nelson Lakes	1956	96 121	0.35
Westland	1960	117 547	0.44
Mt Aspiring	1964	355 518	1.32
Whanganui	1986	74 231	0.27
Paparoa	1987	30 560	0.11
Hauraki Gulf Maritime Park	1967		
Marlborough Sounds Maritime Park	1973		
Bay of Islands Maritime & Historic Park	1978		

¹ Percentage of New Zealand based upon total land area of 26,868,400 hectares.

² Gazetted in 1894 under the Tongariro National Park Act.

³ In 1905 reserved for the purpose of a national park.

⁴ In 1901 69,583 hectares in the Otira and Waimakariri Valleys were reserved for the purpose of a national park under the Land Act 1882.

Figure 6.2 National and Maritime Parks (after Thom, 1987a).

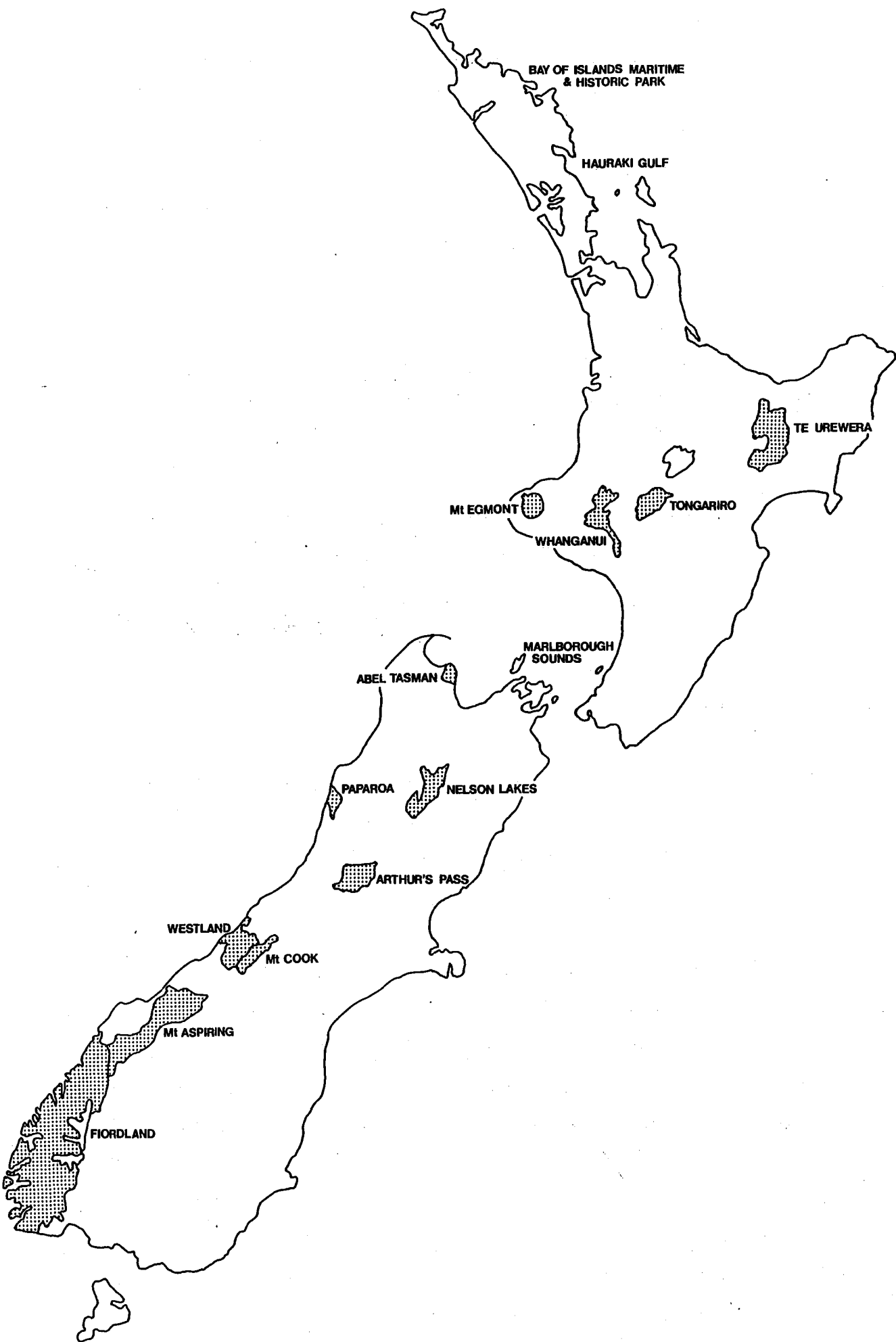


Figure 6.3 Location of National and Maritime Parks (after Devlin *et al*, 1990).

By the late 1940's four national parks existed, however, they were representative of an uncoordinated, unstructured system. Each park was not only autonomous and controlled by an appointed board, but also administered under separate Acts - Tongariro and Egmont under specific Acts, and Arthur's Pass and Abel Tasman under the Public Reserves, Domains and National Parks Act 1928 (Lucas, 1974; Thomson, 1978; Working Party on National Parks Administration, 1966).

Public Reserves, Domains and National Parks Act 1928

The Public Reserves, Domains and National Parks Act 1928 provided for the better control, management and development of these areas. Public reserves did not include reserves gazetted under the Scenery Preservation Act 1908 or the Forests Act 1921-22.

Arthur's Pass and Abel Tasman National Parks were both gazetted under this 1928 Act. The Act provided a greater coverage than previous acts and allowed for the provision of national parks under one act.

Recreation and Interest Groups

Pressure from recreation and interest groups were influential in the direction of protected natural resource management. The Federated Mountain Clubs (FMC), the Royal Forest and Bird Protection Society, and the Royal Society of New Zealand were three groups concerned with the state of New Zealand's protected natural resources. From the 1930's the FMC were badgering the government to provide adequate protection of mountainous areas through a national park system.

Burrell (1986) in documenting the first fifty years of the FMC, outlined the 1938 national park policy of the FMC. The policy included the establishment of a national authority and park boards, functions of the authority, club representatives on park boards, and the responsibilities of the authority and boards. Although policy concerns were initially and primarily recreation oriented, conservation was soon incorporated (Thomson, 1978).

Thom (1987a) outlined the influence of the Royal Forest and Bird Protection Society, and the Royal Society of New Zealand in the advocacy for conservation of native fauna and flora. These two societies were involved in the campaign for the control of wild

animals and the introduction of new legislation, the Soil Conservation and Rivers Control Act 1941, and the National Parks Act 1952.

National Parks Act 1952

The passing of the National Parks Act 1952 was hailed as 'non-political' (Thomson, 1978). The Act provided for

the purpose of preserving in perpetuity as National Parks, for the benefit and enjoyment of the public, areas of New Zealand that contain scenery of such distinctive quality or natural features so beautiful or unique that their preservation is in the national interest (S3 s1).

Also significant was the incorporation of recreation as a legitimate use of national parks (S3 s2D). Recreation use was subject to the maintenance of conditions for which a park maybe preserved, namely the retention of the natural state; preservation of natural flora and fauna; and soil, water and forest conservation.

The Act provided a national administrative structure that consolidated the previously autonomous park administration in an effort to coordinate and develop a park system. The National Parks Authority provided the central structure of control and administration of national parks. Under the Authority, National Park Boards were established to control and administer individual parks within the bounds of the Act and consistent with preservation considerations (Commission for the Environment, 1976).

The Authority consisted of nine members representing a number of interested parties, including government departments. Representatives from the departments of Lands and Survey, Internal Affairs, Tourism and Publicity, New Zealand Forest Service; and representatives from the National Park Boards, Royal Society of New Zealand, Federated Mountain Clubs, and the Royal Forest and Bird Protection Society (Lucas, 1974).

The Authority was vested with four major functions: the advocacy and adoption of schemes for the protection and development of national parks; the recommendation for enlargement of existing parks; the recommendation to the Minister of Lands on the allocation of finance; and control and administration of national parks in the national interest (Commission for the Environment, 1976).

The National Park Boards were vested six specific functions. These were: the setting apart areas for specified purposes; the appropriation of areas for camping and parking; the granting of leases; the authorization of building recreational facilities; control of watercourses (under the provisions of the Soil Conservation and Rivers Control Act 1941); and the making of bylaws (Commission for the Environment, 1976).

The period mid 1960's-1980 has been described by Thom (1987a) as *the reign of the boards* whereby boards were totally responsible for the administration of the parks, and the appointment of rangers. Unfortunately, the administrative structure of the Authority and boards appeared at times to be ineffective, as McCaskill stated, *an unresolved gap seemed to exist*, indicating the extent of difference between the hierarchy both in terms of geographic distance and in the understanding of park policy direction (Thom, 1987a). Thom (1987a) stated that one of the duties of the Supervisor of National Parks was to foster a closer relationship between the Authority and boards.

National Park Rangers

Provision for the first national park ranger was made explicit in the Egmont National Park Act 1900. The Act stated that for *the more effective management and control of the said park the Board may also appoint rangers* (S9 s2). Under the National Parks Act 1952 rangers could act to prevent the actual or attempted breach of the Act (S52).

In 1929 the first resident ranger was appointed to Arthur's Pass National Park. According to Adams (1968, 102) the 1931 annual report of the Board of Control noted that

the Board's ranger had carried out his duties to everyone's satisfaction, his services for guidance and information having been constantly sought after by the public. He had amicably settled disputes (due chiefly to straying stock) and was continuing the good work of erecting signs.

Until 1969 rangers were employed by individual national park boards. Because there was no unified administration it was like

a whole lot of little individual services with very often no more than two people locally recruited with no salary structure and little facility for movement around for people to progress (Lucas, 1991).

After the Department of Lands and Survey took direct control of national parks, a career structure was established for rangers. This structure provided rangers with the opportunity to work in different parks and reserves without resigning or changing salary.

Lucas (1991), Director-General of Lands (1981-1986), maintained that the national park ranger was

the person in the structure of protected natural area management who was the most visible to the public on the ground.

The person who was available to provide information, guidance and was the visible image of the institution.

The varied duties and responsibilities of national park rangers exemplified the type of person these rangers were. Nicholls (1991) recalled an incident while Chief Ranger at Westland National Park (1963-1967), when a visitor asked with some amazement "*Do you mean to tell me that you give a lecture, like you have just given, and you clean toilets too!*"

I said "we make the tracks, we do all the work in the park, we clean toilets, we keep up the tracks, we build the mountain huts, we maintain the mountain huts, and if there is a search and rescue, we are there".

Lucas (1991) characterised the early rangers as *rough diamonds, the right people for that time, they had a general understanding of park management and the park concept.*

Trade Skills

Many national park rangers were appointed to their positions because of the trade or skill they possessed. Trade skills were seen as useful to park management. Carpentry, building, engineering, mountaineering and bushcraft experience allowed rangers to undertake all manner of duties and responsibilities.

Lyon (1991), Chief Ranger at Nelson Lakes National Park (1959-1980), recalled that during the 1950's when parks were developing *most of the rangers got the jobs because of their various skills, because we were the ones that did the actual work in the park.*

Croft (1991), Assistant Supervisor of National Parks and Reserves (1977-1978), recollected with pride the rangers that were very versatile people with a host of skills,

trades and professions. According to Croft *almost no job was too big or too small or too complicated.*

The demise of the trade skills occurred as a repercussion of the increasing demands on rangers to be involved with the public, for example interpretation including escalating visits by schools; increasing pressure on protected areas by tourism, and hydro-electric power development; and a necessity for a professionally trained ranger staff. In a description of the staff system at Tongariro National Park (1980) the following was stated.

At one time rangers did most of the work within the park - both administration and advisors and at the other end of the scale toilets, rubbish, tracks, weed control.

Those rangers were usually tradesmen (the classic trade being a carpenter) practical men capable of doing almost anything within the Park. Isolation brought upon this resourceful being (restricted finance also contributed) [sic].

Times have changed, the transition has gone from tradesmen, to, University graduate (with specialist knowledge of the environment e.g. geology, botany, plus a proven interest in the outdoors) to, at the moment Lincoln graduates.

This all goes back to where the ranger and workstaff fits in today - what the ranger does not do, the workstaff takes over.

The late 1970's early 1980's was a period when national park rangers transferred many of the physical maintenance duties for administrative and supervisory responsibilities. Virtually overnight rangers became supervisors for government funded work schemes - TEP (temporary employment programme), PEP (project employment programme), SES (special employment scheme), and contract work scheme.

The TEP and PEP work programmes, funded directly by the Department of Labour, involved the development of walkways and tracks, and the clearing of *Pinus* plantations in national parks. Most programmes were labour intensive which required rangers to manage, administer and supervise work gangs. For many rangers employment programme supervision became a major component of their duties and responsibilities. The result of these two programmes was the development of a vast track network which is now impossible to maintain.

The SES scheme was administered to provide for more skilled people, such as botanists and planners who could undertake projects without the direct supervision from rangers. Harper (1991) argued that the impact of these externally funded schemes was the development of new interpretive initiatives and expanded holiday programmes.

Supervisor of National Parks

As the number of national parks increased a new Head Office position was established, Supervisor of National Parks, to provide leadership in the ranger field, and foster closer relations between the Authority and the boards. Cleland was appointed to the position in 1959, he was seen as a model ranger (Lucas, 1991). Cleland developed national park policy, and provided guidelines for ranger roles. The standards established by Cleland were continued and developed as successive people were appointed to the position. Appointment criteria was primarily based upon field experience.

A number of positions, Assistant Supervisor,³⁶ were established to provide assistance to the Supervisor of National Parks. The positions allowed for field input into the management of national parks and reserves. These positions, according to Bamford (1991) Assistant Supervising Ranger (1981-1986), *were used as a step for those who wanted to become a chief ranger, giving them the opportunity to improve their skills or show that they had what it takes to manage a national park or reserve.*

Administrative Reorganisation

By 1965 the necessity for administrative restructuring was recognised by the Director-General of Lands who appointed a Working Party on national parks administration. Pressures upon national parks had progressively changed from domestic recreationists to an expanding international tourist industry and associated demands, and in some areas to the threat of large scale development. The Working Party's terms of reference included the examination of:

- i. the role of the National Parks Authority;
- ii. the role of the National Park Boards;
- iii. the relationship between the Authority and the Boards; and
- iv. the strengthening of reserves and national parks administration in the Department of Lands and Survey (Working Party on National Park Administration, 1966).

³⁶

This position had undergone a number of name changes since its establishment. It is often referred to as Assistant Supervisor of National Parks, Assistant Supervising Ranger, and Senior Supervising Ranger.

A number of reasons were stated for the establishment of a Working Party. Included were the increase in national parks, and national park boards, from four to ten, an eight-fold increase in rangers, the doubling of park visitors in the early 1960's, and the ability to cater for further increases in visitations in the future (Working Party on National Park Administration, 1966).

The result of the Working Party was a new approach and a new attitude towards administration, policy and development. This was represented by the transfer of ranger employment from individual boards to the National Park Service (Department of Lands and Survey) in 1969.

Ranger Training

Ranger training commenced in 1959 at the rangers' forum at Arthurs' Pass. Thom (1987a, 161) described the training programme as covering

conservation philosophy through interpretation to the practicalities of signs, buildings, fire control and equipment.... the speaker on park interpretation was Professor L.W. McCaskill, who talked about the needs of park visitors, communication, illustrated talks and nature trails.

In response to some of the 1965 Working Party recommendations, increased pressure on the parks, and concern regarding ranger requirements, formal ranger training courses were established. These commenced in 1970 as in-house courses under the direction of Lucas, the recently appointed Director of National Parks (1969-1975), and were soon superseded by block and diploma courses at Lincoln College in 1975 (Wilcox, 1974; Thom, 1987a).

Lincoln College (now Lincoln University) was already engaged in teaching a Diploma in Parks and Recreation Administration with specific reference to urban parks and recreation areas, and an emphasis on horticulture. The ranger training would be associated with this diploma, differentiated by the title - National Parks option.³⁷ The diploma was designed for a five year period incorporating academic studies and practical experience. The Diploma in Parks and Recreation Management was superseded in 1988 by the Degree in Parks and Recreation Management.

³⁷

PKS 1/1/3/3, 1975. Memorandum from Noel Coad, Director-General Department of Lands and Survey to all Commissioners of Crown Lands "Ranger Training Scheme".

Ranger block courses were also initiated at Lincoln College. Block courses were designed to provide an academic opportunity to rangers in the service. Five courses, each of six weeks duration, were designed to provide a spectrum of knowledge needed for the management of parks, these courses were: basic sciences; management; social sciences; landscape design; and landscape engineering. Block courses were an overwhelming success in terms of participation,³⁸ approximately 68 rangers completed the courses. Block courses ended in 1984 having provided training for New Zealand Forest Service forest rangers as well as national park and reserves rangers.

Conservation Issues

Miers (1991), Supervisor of National Parks (1966), holds no doubt that the Royal Forest and Bird Protection Society (founded in 1923) kept conservation issues before the public. Throughout the 1930's and 1940's a protection philosophy was advocated by the Society, a consequence of which was the designation of the Waipoua Kauri Forest as a forest sanctuary in 1952.

Throughout the 1960's a number of conservation issues centred in national parks added to the social consciousness of the New Zealand population. These included, firstly the Government decision in 1960 to allow hydroelectric power generation from Lakes Te Anau and Manapouri, an issue which continued into the mid-1970's with the eventual construction of the Manapouri Power Station.

The New Zealand heritage that had largely been taken for granted as being impregnable was suddenly seen as being threatened. This was an important part of the departments drive towards raising a political and public awareness, an environmental consciousness (Lucas, 1991).

Secondly, problems with introduced animals, specifically deer, goats and possums, and their extensive destruction of the forests. Large and sophisticated methods of animal control - helicopter and commercial operations - during the late 1960's and early 1970's provided spectacular capture and cull rates. Private and commercial operations supplemented the noxious animal control programmes undertaken by the New Zealand

³⁸ PKS 1/1/3/3, 1977. Memorandum from John Mazey, Supervisor of National Parks and Reserves to Director of National Parks and Reserves "Diploma in Parks and Recreation. Block Courses for Rangers". Instead of an expected 20 to 25 rangers electing to take the course, it was found that about two thirds of all rangers were keen to have the opportunity to expand their ability in park management. At this time there were 102 rangers employed.

Forest Service.

During the 1980's conservation issues in national parks focused on protected species management in association with the Wildlife Service, and conservation advocacy through interpretation programmes, summer holiday programmes, and visitor centres.

Recreation in National Parks

In 1964 park visits totalled 500,000. By 1970 approximately 1.5-2 million visitors entered the national parks (Thom, 1987a; Medway, 1973; Lucas, 1976). Visitations further increased to 2.5 million in 1975/76 (Lands and Survey, 1977). The speed at which visitations increased was significant, actively representing the impact of increased mobility, discretionary income, and development of access to national parks and reserves.

Harper (1991) attributed the rise in park visitations to a number of factors, including better access to parks, and the promotion of national parks. Interpretive programmes were increasingly highlighted and advertised. Harper (1991, 62) noted *interpretation and summer holiday programmes were promoted as draw-cards to the parks.*

Rangers as Interpreters

As interpretation became increasingly important to national parks, the duties of the ranger increased. Visitor services and interpretation became another duty for the ranger. The Chief Ranger at Mount Cook estimated 51,000 visitors including school parties, 6,000 greater than the previous year.

These parties were taken by Rangers on guided trips to the Tasman Glacier, Hooker Valley and Mt Sebastopol and attended illustrated lectures at Park Headquarters and scenic films at the Hermitage (National Park News 1964, 4).

The importance of interpretation in national parks was recognised with the establishment of the position Assistant Supervisor (Interpretation) in 1971. The position was established to provide expertise in interpretation and co-ordination of national parks for educational purposes. The aim was the effective promotion of national parks through interpretive programmes, displays and publications (Harper, 1991).

Ranger Exchange

Experiences of overseas national parks was enthusiastically encouraged by the Winston Churchill Memorial Trust. Winston Churchill scholarships were awarded to Nicholls (1968), Lucas (1969), Mazey (1969), Nikora (1971), and Bamford (1981), all of whom visited the United States and studied various aspects of the National Park Service.³⁹

The knowledge gained from these experiences was assimilated into New Zealand park management.

Lucas (1991), while first Director of National Parks (1969-1975), recognised the importance of the New Zealand national park system for developing countries while attending the 1972 World Parks Conference at Yellowstone National Park.

A delegate from one country was suddenly exposed to visitor centres that probably cost the annual budget of his country. It demonstrated to me that there was a vast gulf between many countries and what the American system could demonstrate. In fact, the way New Zealand was going we had a contribution we could make on the international scene which would be good for conservation.

The opportunity for ranger staff to experience other countries and national parks was promoted as a prize to attain (Lucas, 1991). A number of countries benefitted from the ranger exchange, Nepal (through the contact made by Sir Edmund Hillary), Peru, Western Samoa as well as Australia and the United Kingdom.

Government Caucus Committee on National Parks and Reserves

In 1979 a Government Caucus Committee was established to review the administrative structure of national parks and reserves with respect to the present day needs (Burrell, 1982). The review recommended many 'radical' changes in administration including placing the Department of Lands and Survey in direct control of national parks and reducing the Authority and Boards to advisory roles. After much debate and opposition to the recommendations the National Parks Bill was sent to the Lands and Agriculture Select Committee for the hearing of submissions. As a consequence of this review, some recommendations were included in the National Parks Act 1980.

³⁹ Nicholls, G.E. 1968 *A New Zealander Looks at National Parks and Reserves in North America*. Mazey, J. 1969 *Report to Winston Churchill Memorial Trust on a Study Tour on National Parks of United States of America*. Lucas, P.H.C. 1970 *Conserving New Zealand's Heritage. Report on a Study Tour of National Parks and Allied Areas in Canada and the United States*.

National Park Act 1980

The National Parks Act 1952 was superseded with the passing of the National Parks Act 1980. The new Act when incorporated with the Reserves Act 1977 provided for a new administrative base for national parks and reserves (Lands and Survey and NZFS, 1983) (see Figure 6.4). The Act focused upon two major alterations, the inclusion of new criteria for national parks; and a partnership between the National Park Authority and Boards which were now to be appointed primarily on the basis of public nomination.

The new Act stated parks were to be maintained

for the purpose of preserving in perpetuity as national parks, for their intrinsic worth and for the benefit, use, and enjoyment of the public, areas of New Zealand that contain scenery of such distinctive quality, ecological systems, or natural features or beautiful or unique, or scientifically important, that their preservation is in the national interest (S3 s1).

The inclusion of new criteria (highlighted above) for national parks considerably extended the purposes for which parks could be gazetted. Most important was the recognition of the intrinsic worth of an area. This was an acknowledgement of the special and unique nature of these areas as reason enough for preservation.

The explicit statement of use as a legitimate purpose of national parks was another inclusion. Prior to this addition, use was subsumed in the statement of the *benefit and enjoyment of the public* (National Park Act 1952, S3 s1). Although mention was made of access and entry to national parks.

The preservation of areas of distinctive nature was also amended to include ecological systems and scientifically important areas. This amendment allowed for corresponding criteria for both the National Parks Act and the Reserves Act 1977.⁴⁰ The underlying reason for this clarification was to allow for the incorporation of reserves under National Parks Authority administration. Cultural aspects were also taken into consideration,

⁴⁰ The Reserves Act 1977 (S3a) was administered for the purposes of *providing, for the preservation and management for the benefit and enjoyment of the public, areas of New Zealand possessing recreational use or potential, wildlife, indigenous flora or fauna, environmental and landscape amenity or interest, or natural, scenic, historic, cultural, archaeological, biological, community, or other special features*. Under the National Parks Act 1980, national parks could be preserved in perpetuity for their intrinsic worth; benefit, use and enjoyment of the public; contain scenery of distinctive quality; ecological systems; or natural features.

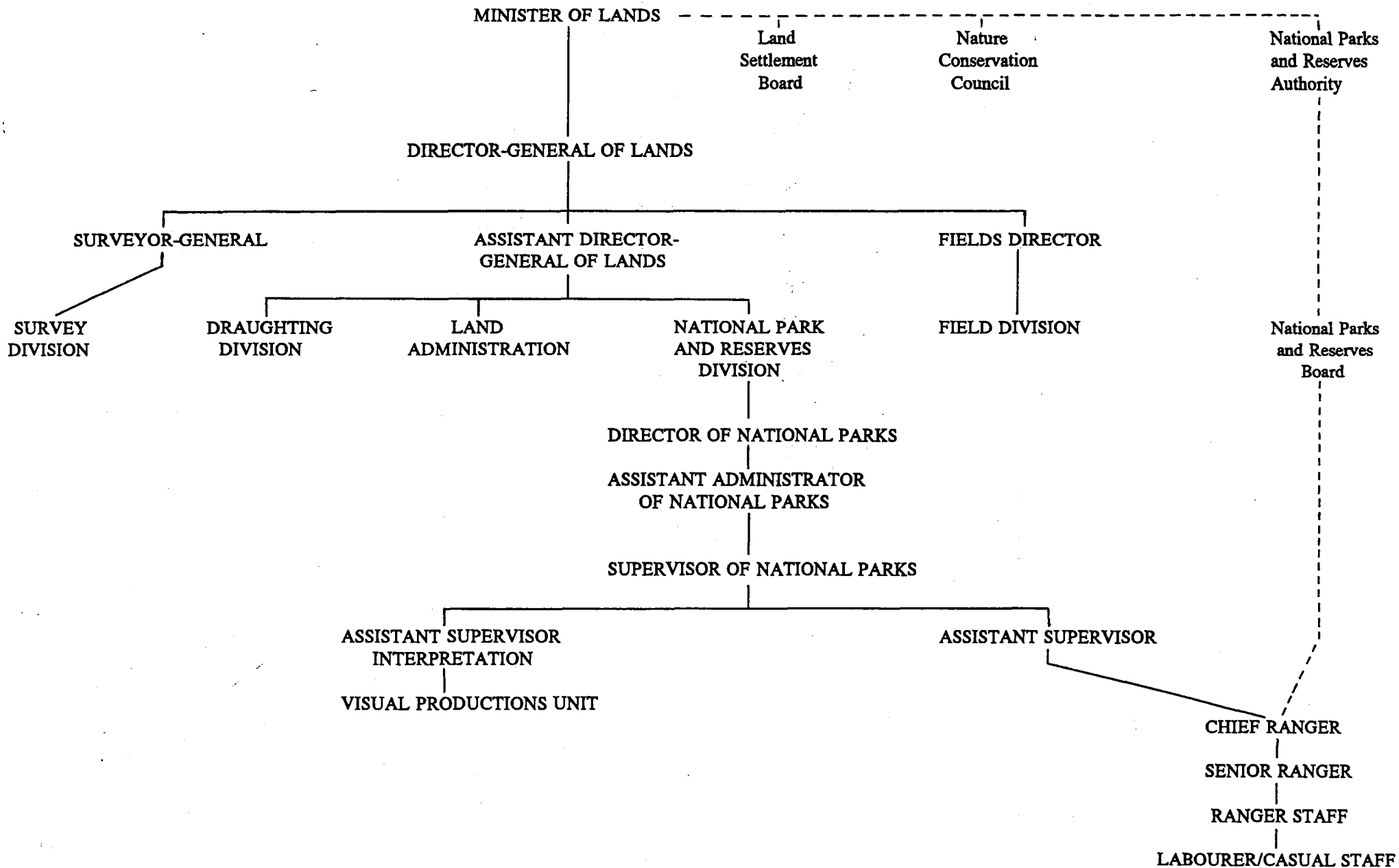


Figure 6.4 Administrative hierarchy Department of Lands and Survey (after Wells, 1984).

allowing for archaeological or historic interest and importance.

The 1980 Act amended the Authority and Board membership. Previously members were appointed by the Minister of Lands (Commission for the Environment, 1976) but this was altered to provide for public nomination under the 1980 Act. Greater emphasis on public involvement in policy making was required by the Act. It stated the right of the public to know and understand the policies undertaken by the Boards and Authority (S44 s1).

The intention of the new legislation was towards ensuring a balance between preservation and use of national parks (National Parks Authority, 1983).

1987 Restructuring

By the mid 1980's the Department of Lands and Survey and New Zealand Forest Service were undertaking parallel work within the recreation-conservation field. Departmental interaction allowed for the development of common approaches to ski field development, concessions, clubs and huts (Lucas, 1991). Lucas and Kirkland, Directors-General of Lands and Forests respectively, worked on a concept of restructuring the two departments. The restructuring in 1987 occurred in a *revolutionary way, where as we had been already thinking about it in an evolutionary way* (Lucas, 1991).

The outcome of the 1987 restructuring was the division of Department of Lands and Survey into commercial and non-commercial enterprises. The non-commercial - National Parks and Reserves Division - amalgamated with similar conservation oriented divisions from other departments. The result, the Department of Conservation.

Reserves

They are, in fact, open-air museums where the unique plants and animals of New Zealand may remain unmolested for the benefit of future generations (Royal Commission on Forestry, 1913, xvii).

Until the full amalgamation with the National Parks Authority in 1960, reserves were controlled, administered and managed independent of national parks. Reserves often provided a foundation from which a national park was formed. The Whanganui

National Park, gazetted in 1986, resulted from a reserve network along the Whanganui River gazetted as early as 1910 (McCaskill, 1972; Ombler, 1991).

Land Act 1892

From its foundation the Department of Lands has aimed to conserve suitable areas of forest lands as State forests, public-recreation reserves, domains, thermal-spring reserves, areas of protection for water-supply, &c. Although under the numerous Land Acts power was given to reserve land for such purposes as the above, it was not until the Land Act 1892 came into force that scenery-preservation was added to the object (Royal Commission on Forestry, 1913, xvii).

Jourdain (1925) argued that the first attempt to legitimate protection of land for parks and domains was in the Land Act 1877 but it did not provide sufficient cover. The passing of the Land Act 1884 represented a definite attempt to enable natural curiosities to be reserved and made available to the public.

It was not until the passing of the Land Act 1892 that adequate statutory cover was made for reserves. The Act vested the power to permanently reserve areas of forest for a number of purposes in the Department of Lands and Survey. These purposes included; State forests, public recreation, water supplies, 'climatic reasons', for headwater protection, and scenery preservation (McCaskill, 1972).

Tourist and Health Resorts

Control, administration and responsibility of the reserves was taken over by the newly established Tourist and Health Resorts section of Railways between 1901-1909.

McCaskill (1972) argued that Sir Joseph Ward was responsible for the separation of the Department of Lands and Survey functions and the transfer of reserve responsibility to the Tourist and Health Resorts section. McCaskill also implied that the retirement of the General Manager of the Tourist and Health Resorts section in 1909 resulted in the return of scenic reserve administration and control to Department of Lands and Survey.

Scenery Preservation Act 1903

The passing of the Scenery Preservation Act 1903, which provided for the acquisition of lands of scenic, or historic interest, or on which there are thermal springs, was the

climax of Ell's⁴¹ campaign for nature conservation (Dingwall, 1981b).

Scenic reserves were designated into several distinct classes: the preservation of scenery; the protection of historic places; reserves in the vicinity of hot springs; the preservation of vegetation, together with accompanying birds and other animals; and reserves which may serve as resorts for picnics and recreation (Royal Commission on Forestry, 1913).

The Act provided for the creation of a Royal Commission for the inspection of areas which possessed scenic or historic interests suitable for reservation, no matter the tenure. The Commission was sustained for two years after which, through the passing of the Scenery Preservation Amendment Act 1906, a government appointed board was established. The board - Scenery Preservation Board - consisted of the Surveyor-General, the head of Tourist and Health Resorts and the Commissioner of Crown Lands for each land district (AJHR, 1907, C6).

In the determination of a reserve, consideration was not only given to the commercial value of the land, whether as a timber resource or arable farm land, but also to the tourist value of attractive regions adjacent to main routes of travel.

The one aim Government and people have alike - namely, the preservation of the picturesque scenery of New Zealand for the benefit and delight of its inhabitants, and of the ever-increasing army of tourists and visitors (AJHR, 1907, C6 3).

Many reserves designated under this Act, and during this period, became a *focus of an expanding national park system* (Dingwall, 1981b, 25). Fiordland National Park, and the Whanganui National Park both had their formation based on reserves gazetted originally under this Act.

Royal Commission on Forestry 1913

In 1913 a Royal Commission on Forestry was established to identify existing forest lands which could be retained permanently under forest. A number of categories were outlined, including climatic reserves, and scenic reserves (Thomson, 1985; Roche,

⁴¹ Harry Ell MP for Christchurch South 1899 to 1919. Ell was involved with many social issues during his time in Parliament including, the establishment of sanatoriums for tuberculosis, the introduction of the 40-hour working week, and widows and old-age pensions. Ell was an advocate for nature conservation, aware of the aesthetic values of forest while recognising the role of forests in catchment protection, and the consequences of wasteful use of timber (Dingwall, 1981b).

1990).

Climatic reserves were for the *purposes of protection of soil, prevention of denudation, water-conservation, prevention of floods, and, in addition shelter from wind* (Royal Commission of Forestry, 1913, xiv). Scenic reserves could be established for: the preservation of scenery; the protection of historic places; in the vicinity of hot springs; for the preservation of examples of vegetation with its accompanying birds and other animals; and forest that may serve as resorts for picnics and recreation.

Recommendations from the Commission included the creation of a forest authority, adequate statutory cover of forests, and improved administration. One outcome was the establishment of the Forests Department in 1918. The administration and control of reserves, however, remained with the Department of Lands and Survey.

Reserves were administered and controlled by the Department of Lands and Survey. Crown land ranger duties under the Scenery Preservation Act 1903, and the Public Reserves, Domains and National Parks Act 1928 included the inspection of scenic reserves.

*The direct administration of Scenery Reserves is under the various Commissioners of Crown Lands who instruct the Crown Lands Rangers to inspect the reserves from time to time.*⁴²

In the 1924 annual report of the State Forest Service it was stated *that forest officers act as Scenic Reserve Inspectors* (AJHR 1924, C3, 3). The responsibility of reserves was undertaken by forest rangers as crown land rangers' duties had become predominantly agricultural and *largely occupied with special inspections and work in connection with the settlement of discharged soldiers* (AJHR 1921-22, C1, 5). The responsibility of crown land rangers for reserves was resurrected with the appointment of reserves ranger in the 1960's.

⁴² F1 1/1/58, 1920. Report by Ellis, Director of Forests, on scenery reserves administration.

Reserves and Domains Act 1953

The Reserves and Domains Act 1953, according to McCaskill (1972), was a consequence of the newly passed National Parks Act 1952 which directed attention to the deficient Scenery Preservation Act 1903. The 1953 Act concentrated upon scenic reserve administration and maintenance, including policy for the preservation of the natural state allowing for the extermination of introduced flora and fauna.

The basis of the Reserves and Domains Act 1953, according to McCaskill (1972), was Section 167 of the Land Act 1948 which stated *the Minister may from time to time, set apart as a reserve any Crown land for any purpose which in his opinion is desirable in the public interest* (McCaskill, 1972, 8).

Administration of reserves was transferred to the jurisdiction of the National Parks Authority in the early 1960's. By the late 1960's integration of national parks and reserves administration within the Department of Lands and Survey was further encouraged with the establishment of two positions; the Assistant-Director of Administration (National Parks and Reserves), and the Director of National Parks and Reserves (McCaskill, 1972).

Reserves Rangers

The first reserves ranger was appointed in 1964, based at Peel Forest Scenic Reserve (Lucas, 1991). Rangers generally worked from an office base, inspecting reserves within their land district, under the jurisdiction of the Commissioner of Lands. Duties of reserves rangers were directed towards small, isolated areas of forest and bush, domain inspections, and the development of walkways. Cowie (1991), Reserves Ranger, Canterbury (1970-1988), recalled when he moved to Canterbury from the West Coast.

I found it quite hard to find these little itzy bitsy bits of bush left over from all the burning and farming. It took me some time to come to terms with these, you look up on the hill side and see the scrub up the slopes there and you think no it couldn't be that, but it was.

According to Ombler (1991), Reserves Ranger, Wanganui (1978-1983), a

reserves ranger predominantly dealt with the Reserves Act and dealt with lots and lots of little bits of land. Often lots of little forgotten pieces of land, not touristy spots, but areas there just for their own intrinsic worth. Reserves rangers tended to be far more ecological rangers.

As a result of the amalgamation of parks and reserves, and the training courses, the differences between reserves and national park rangers was reduced. There was greater understanding of the duties and responsibilities of each and movement between the two was included within a career structure.

Reserves Act 1977

The long title of the Reserves Act 1977 defined the Act as

relating to public reserves, to make further provision for their acquisition, control, management, maintenance, preservation (including the protection of the natural environment), development, and use.

Reserves under the jurisdiction of the Act included land administered under the Reserves and Domains Act 1953, and land previously administered under the Tourist and Health Resorts Control Act 1908 (Dingwall, 1981a). Reserves controlled by the Department of Lands and Survey under the 1977 Act were set apart under five categories (refer Figure 6.5).

Scenic reserves were historically managed in a caretaker style, active management of most reserves was not undertaken until the mid 1970's (Lucas, 1976). Dingwall (1981a, 7) stated that *day-to-day resource management and visitor supervision is in the hands of the department's national park and reserves ranger staff*. In 1975 reserve rangers duties and responsibilities increased as an outcome of the Walkways Act.

Reserve	Number	Hectares	Area ¹
Scenic Reserve	1219	354 439	1.32
Nature Reserve	50	185 577	0.69
Scientific Reserve	46	8 537	0.03
Government Purpose (Wildlife Management)	146	12 484	0.05
Marine Reserve	2	2687	0.01

¹ Percentage of New Zealand based upon total land area of 26,868,400 hectares.

Figure 6.5 Reserves (after Devlin *et al*, 1990).

Walkways

In 1975 the Walkways Act was passed. The Act provided for the

establishment of walking tracks over public and private land so the people of New Zealand shall have safe, unimpeded foot access to the countryside, for the benefit of physical recreation, as well as for the enjoyment of the outdoor environment, and the natural and pastoral beauty and historic and cultural qualities of the areas they pass through (Barr, 1989, 5).

The impetus for walkways came from the Federated Mountain Clubs in 1970 to develop a new system of public walking tracks covering the breadth of the country, North Cape to Bluff. Walkways were proposed in a style similar to the Pennine Way (England) and the Appalachian Trail (United States).

For designation, administration, management and control of walkways, a Walkways Commission was established numbering seven members. Members of the commission were representative of land administration departments, local authorities, and interested parties (New Zealand Walkways Commission, 1984). Reserve rangers were actively involved in the design, development and maintenance of walkways.

Development of walkways began in 1973 with the simultaneous opening of the Colonial Knob (Wellington), and Mt Auckland (Auckland). A number of other walkways were also opened prior to the passing of the Walkways Act 1975. Currently over 132 walkways throughout the country exist, totalling more than 1350km of track (Barr, 1989).

Chapter Summary

This chapter has reviewed the history of the Department of Lands and Survey as an agent of land administration and management in New Zealand, and the consequent evolution of the ranger. National parks, reserves and walkways have been one aspect of the department.

The main points are:

1. The first national park was established in the late nineteenth century, representing a trend to protect special areas. Scenic, ecological, environmental and cultural values were considered in the designation of national parks. By 1987 New Zealand boasted 12 national parks covering a range of landscapes.

2. Reserves provided protection to smaller land areas. Often reservation was for a specific feature, scenic quality, flora, and fauna.
3. Crown land rangers provided a necessary function in the control of the forest resource. During the 1880's the blatant destruction of the forest for settlement, and the control of settlement patterns provided adequate work for the crown land rangers. By the early 1920's the majority of land settlement had occurred, and most of the destruction of forests on Crown land was controlled. Crown land ranger's duties were redefined and reallocated to field inspectors.
4. National park administration and control was undertaken by national park boards. Boards appointed rangers to manage the parks in accordance with the various Acts. By the mid 1960's a national structure for national park administration and management was necessary. In 1969 as a result of major restructuring of national parks and reserves rangers became government employees, a career structure was created, and training programmes were initiated.
5. National park rangers became formally involved in visitor services through interpretive programmes promoted by the Department of Lands and Survey. Interpretation was recognised in the 1950's as a necessary part of national parks, however, this importance was not recognised formally until the establishment of the Assistant Supervisor (Interpretation) position in the early 1970's.
6. Reserves ranger's duties and responsibilities were founded upon crown land ranger's duties at the turn of the century. The protection and maintenance of reserves were the priorities for these rangers.
7. Training requirements for rangers progressed as the demands on the rangers increased. Initially in-house training was undertaken but by the mid 1970's formal training for both national park and reserves rangers had commenced at Lincoln College. Rangers needed to know more than track design and maintenance, management, science and landscape evaluation and design were also taught.

In documenting the evolution of crown land, national park and reserves rangers a number influences have affected the evolution of the role of the ranger as a protected natural resource manager. External and internal influences were distinguished. External influences included economic, social, political, and environmental factors. Internal influences included legislation, departmental policy, training, and individuals

within the department. As pressure from these factors increased, rangers' duties and responsibilities and roles changed.

The following chapter reviews the history and evolution of the wildlife rangers employed by the Wildlife Service, Department of Internal Affairs.



Miers with adult takahe, Takahe Expedition No. 4, Takahe Valley, Fiordland National Park 1948 (*Department of Conservation, photo H.J. Ollerenshaw*).

CHAPTER SEVEN

HISTORY OF THE WILDLIFE SERVICE

Ranger training expanded and the job now included a knowledge of accurate map reading, the study of law, excellent field glasses at wholesale rates, a silver badge depicting a swooping hawk and a car mileage allowance. The men bought black berets at their own expense. I wore my old khaki army beret and this became the insignia of the Chief Ranger (Francis, 1983, 21).

Introduction

This chapter reviews the history of the Wildlife Service, Department of Internal Affairs, and the wildlife rangers. The history is directed by the major events and legislation relating to wildlife in New Zealand. The relevant legislation can be seen in Figure 7.1.

Wildlife Service	
1870	Animals Protection Act 1873
1880	Animal Protection Act 1880
1890	Little Barrier Purchase Act 1894* Kapiti Island Public Reserve Act 1897*
1900	Animal Protection and Game Act 1907
1910	
1920	Animal Protection and Game Act 1922
1930	
1940	
1950	Wildlife Act 1953

* Legislation administered by the Department of Lands and Survey.

Figure 7.1 Principal legislation affecting the Wildlife Service, Department of Internal Affairs.

Specific legislation relating to animals and game can be traced back to the 1860's - Protection of Certain Animals Act 1861, Birds Protection Act 1862, Wild Birds

Protection Act 1864, Salmon and Trout Bill 1867 (Pears, 1982; Galbreath, 1989). Legislation prior to this dealt with domestic animals for settlement. The Animals Protection Act 1873 set out the original legislation relating to game animals. The Act distinguished between game animals as either 'game' or 'native game'. Protection of indigenous fauna, was presumed to include animals not listed as 'native game'. Explicit protection for indigenous species was provided later under the Animals Protection and Game Act 1921.

Prior to the establishment of the Wildlife Branch in 1945 (later renamed Wildlife Service), control of wild life had been vested in six government departments, acclimatisation societies, and within thirteen Acts.⁴³ The government departments were; Agriculture, State Forest Service, Public Works, Marine, Tourist and Health Resorts, and Internal Affairs.

Animal Acclimatisation

Animal acclimatisation in New Zealand was initiated in 1840 with the unsuccessful release of rabbits in Otago. Successful acclimatisation of rabbits in Southland in 1862 resulted in pressure from runholders for the introduction of a 'natural enemy' to *restore the balance of nature* (Hill & Hill, 1987, 91).

Government acclimatisation of mustelids (*Mustelidae*) - ferrets, stoats and weasels - began in 1882 in response to the pressure from runholders (Hill & Hill, 1987).

Opposition to the introduction of mustelids was expressed in England by Professor Newton of Cambridge University. Newton urged New Zealand scientists to use their influence to prevent the importations. The scientists included Sir Walter Buller,⁴⁴ Dr

⁴³ Forest Service Accession W 3129 42/0(1), c. 1945. Archey, G. *et al Proposals for Establishing a Wildlife Department for New Zealand*. The Acts in which wild life were incorporated were: Injurious Birds, 1908; Scenery Preservation, 1908; Tourists and Health Resorts Control, 1908; Forests, 1921-22; Animals Protection and Game, 1921-22; Land Act, 1924 (S. 129); Public Reserves, Domains and National Parks, 1928; Native Plant Protection, 1934; Introduction of Plants, 1927; Noxious Weeds, 1928; Rabbit Nuisance, 1928; Fisheries, 1908; Soil Conservation and Rivers Control, 1943.

⁴⁴ *Buller advocated the conservation of native birds and the establishment of sanctuaries on Little Barrier and Resolution islands; but he remained convinced that all native flora, fauna - and people - were constitutionally inferior and must inevitably be displaced by the European arrivals* (Galbreath, 1989, dustcover).

Hector⁴⁵ (Director of the Colonial Museum), and Captain Hutton F.R.S. (Curator of the Christchurch Museum) (Hill & Hill, 1987).

A core group became involved in conservation during the nineteenth century. As well as those mentioned above, Potts,⁴⁶ a far-sighted naturalist, and Thomson⁴⁷ advocated the establishment of a suitable refuge, an island sanctuary for native fauna.

Acclimatisation Societies

The first acclimatisation society was established in North Canterbury in 1863. By 1903 twenty one of the twenty three societies covering the breadth of the country had been established (Thomson, 1922).

From Auckland to Bluff the people founded acclimatisation societies for the purpose of introducing what seemed to them desirable animals, and they allowed their fancy free play.

I have been on the council of an acclimatisation society, and I know the enthusiasm, unalloyed by scientific considerations, which animates the members (Thomson, 1922, 22).

Under the Wildlife Act 1953 the functions of societies included the protection and preservation of protected wildlife; the breeding, propagation, liberation, and protection of game; administering wildlife and freshwater fisheries in their districts; educating members and the public in sportsmanship and conservation; and the prevention of unauthorised fauna releases (Hunn, 1968).

Hunn (1968, 26) outlined the principal responsibilities of acclimatisation societies as *local sports fisheries and game management as agents for Marine Department and*

⁴⁵ In 1861 James Hector and Julius Haast became New Zealand's first permanent professional scientists (Galbreath, 1989).

⁴⁶ Potts, T 1872 "Help us to save our Birds" in *Nature* May 2, p 6, stated: *Could we be persuaded to try and avert what will some day be a great reproach to this country, the destruction of so many species of our feathered tribe, D'Urville's Island might be found most useful. Wingless species, and birds of feeble powers of flight, might there find refuge for some of their representatives. Resolution Island might be placed under tapu from molestation by dog and gun.*

⁴⁷ George Malcolm Thomson. Science teacher at Otago Boys' High School, elected in 1909 as member of Parliament for Dunedin North, involved with the instigation of the Royal Commission on Forestry 1913, and author of *The Naturalisation of Animals and Plants in New Zealand*, 1922. Thomson was dedicated to New Zealand flora and fauna and an enthusiast for the protection of Resolution Island (Thomson, 1985; Galbreath, 1987; Hill & Hill, 1989; Roche, 1990).

Department of Internal Affairs. Societies employed rangers whose duties were predominantly concerned with the inspection of fishing and shooting licences and poaching.

Resolution Island

Resolution Island and a number of surrounding islands were gazetted in 1892 as permanently reserved for the protection of native flora and fauna on the recommendation of the Australasian Association for the Advancement of Science (AJHR, 1892; Onslow, 1892), and for recreation.⁴⁸ Henry⁴⁹ was appointed curator and caretaker of Resolution Island in 1894 and his duties were described as *the protection of the native fauna, on Resolution, Anchor, Petrel, Parrot, and the Pigeon Islands*.⁵⁰ Henry was appointed a crown lands ranger under the Land Act 1877, and a ranger under the Animals Protection Act 1880.

Resolution Island was somewhat of a legislative anomaly because in 1875 it was gazetted as a penal station under the Department of Justice, a notice never revoked. In 1904 the Tourist and Health Resorts section of Railways took control of the Island and Henry, leaving administrators in the Department of Lands and Survey disappointed. Henry remained on Resolution Island until 1908 when he transferred to Kapiti Island. In early 1905 western Southland, including Resolution Island was permanently reserved as a national park, but only formally constituted in 1952 - Fiordland National Park.

Although Henry has been hailed by many associated with national parks as the first ranger,⁵¹ presumably in Fiordland, this is neither accurate nor appropriate. Firstly, a

⁴⁸ LS-D4 238/671, 1894. Letter from Commissioner of Crown Lands to Surveyor General. Resolution Island was in the *Gazetteer* notice of 21st July 1892, as permanently reserved for recreation.

⁴⁹ Richard Henry appointed ranger for Resolution Island 1892-1908, and Kapiti Island 1908-1911. Henry undertook pioneering work in protected species management. Hill & Hill (1987, dustcover) wrote *His observations and descriptions of the natural history of the sound, his close relationship with its wildlife and his extraordinary efforts to save kakapos and kiwis from extinction, have been an invaluable contribution to wildlife conservation in New Zealand*.

⁵⁰ LS-D4 238/671, 1894. Letter from Commissioner of Crown Lands to Surveyor General. Proposing the appointment of Richard Henry as a ranger under the Animals Protection Act 1880.

⁵¹ *While the ranger service can be said to have begun with Richard Henry on Resolution Island in the 1890s, it was in the 1950s that it began to develop strength and expertise* (Thom, 1987b, 5). Thom was referring to national parks and reserves.

number of crown land rangers and forest rangers preceded Henry's appointment. In 1892 twenty two crown land rangers were employed by the Department of Lands and Survey (AJHR, 1892). Secondly, the work undertaken by Henry was the forerunner to the protected species management undertaken by the Wildlife Service, not the estate based national parks.

New Zealand's present success and international leadership in the management of threatened species might not have been achieved without Henry's foresight and commitment in conceiving and carrying out his innovatory work. It was a pioneering effort and established a solid foundation for what has later become a most successful means employed by the New Zealand Wildlife Service and others of rehabilitating critically endangered species (Hill & Hill, 1987, 318).

Little Barrier Island became the second island preserve, and is now considered New Zealand's foremost wildlife sanctuary (Cometti, 1986). The Little Barrier Island Purchase Act 1894⁵² passed control to the Crown with responsibility and control given to the Auckland Institute.⁵³ In 1897 a caretaker was appointed who remained until 1909, in which time control of the Island had been transferred to the Tourist and Health Resorts section of Railways in 1904. The Department of Lands and Survey assumed control of the Island in 1951, however the management and welfare of the wildlife was the responsibility of Wildlife Branch.

Kapiti Island was incorporated into the expanding conservation reserve in 1897 when the Minister of Lands introduced the Kapiti Island Public Reserve Act that made the Island a preserve for New Zealand flora and fauna (Hill & Hill, 1987). It was several years before the appointment of a caretaker in 1906 who was resident until 1908 when Henry transferred from Resolution Island.

⁵² As early as 1886 the Auckland Institute advised the government to purchase Little Barrier Island (Onslow, 1892).

⁵³ The Auckland Institute was one of the societies that jointly constituted the New Zealand Institute. In *Nature* (1874, 135) the following described the New Zealand Institute. *The New Zealand Institute is composed of the following incorporated societies, each of which includes amongst its office-bearers and members one or more names eminent in science in the colony and well known in this country. The individual societies are, the Wellington Philosophical Society, Auckland Institute, Philosophical Institute of Canterbury, Otago Institute, and the Nelson Association for the Promotion of Science and Industry.* Members included Dr James Hector, Dr Julius Haast, Mr William Travers, and Mr Thomas Kirk. Honourary members included such names as Charles Darwin, Professor Huxley, Dr Hooker, Sir Charles Lyell, Professor Owen and Professor Flower.

Animals Protection and Game Act 1921

The Animals Protection and Game Act 1921 repealed the Animals Protection Act 1908 which Westerkov (1981) argued was the first effective protection for most native fauna as it consolidated previous piecemeal legislation. The long title of the 1921 Act stated it provided for the protection of animals, the regulation of game shooting seasons, and the constitution and powers of acclimatisation societies.

Animals afforded absolute protection were predominantly birds (indigenous and exotic), although also mentioned were indigenous mammals, a reptile, and amphibian.⁵⁴ Game were designated into two categories, imported and native. Game interests were provided by: allowing open seasons; outlawing trapping as a means of hunting; and licences for shooting.⁵⁵ Possums (*Trichosurus vulpecula*) were protected, the consequence of their acclimatisation - the spread of Tuberculosis (Tb) and the damage to indigenous vegetation - was yet unrecognised.

Acclimatisation societies were vested with the property of animals within their district. If districts were administered by the Tourist and Health Resorts section of Railways (the Rotorua and Southern Lakes Districts), possession was then vested in the Department of Internal Affairs (refer Figure 7.2).

The Animals Protection and Game Act 1921 allowed for the appointment of rangers, and expanded and made explicit their powers and duties not stated in the Animals Protection Act 1880. Powers and duties included: the seizure of all protected animals, imported or native game believed to be taken illegally; the seizure of all instruments and devices used contrary to the provisions of the Act; the stoppage of parcels, packages etc in transit believed to breach the Act; and the entrance on land or dwellings, under a Magistrates warrant, if a breach of the Act was suspected (S36 s1).

54

Animals Protection and Game Act 1921, First Schedule. Albatross, australian tree-swallow, avocet, bell-bird, bittern, canary, creeper, crow, cuckoo, dottrel, duck, fantail, fern-bird, gannet, grebe, gull, heron, huia, kaka, kakapo, kingfisher, kiwi, magpie, martin, owl, oyster-catcher, parrakeet, parson-bird (tui), penguin, petrel, pigeon, pipit, plover, pukeko, rail, rifleman, robin, saddleback, sandpiper, shearwater, snipe, southern merganser, starling, stilt-plover, stitch-bird, takahe, tern, thrush, tomtit, tropic bird, warbler, woodhen, wren. Also the native bats, frogs and tuatara.

55

Animals Protection and Game Act, 1921. Second Schedule, Imported Game. Black game (swan), chamois, deer, duck, goose, grouse, himalayan thar, moose, partridge, pheasant, quail, and wapiti.

Fish and Game Control

The Wildlife Branch controlled fish and game under the Animals Protection and Game Act 1921. Acclimatisation societies had long been established and districts of control designated throughout the country. In 1913 the Department of Internal Affairs was instructed to administer the Rotorua District incorporating the Lakes Rotorua and Taupo. The Rotorua District had previously been controlled by the Tourist and Health Resorts section of Railways. The Southern Lakes Acclimatisation District was designated and administered by the Department from 1945 (Department of Internal Affairs, 1963) (refer Figure 7.2).

During the year [1914] the Department of Internal Affairs assumed control of all fresh-water fisheries, and in conjunction with this took over the curing and the sale of trout at Rotorua and Taupo. The Conservator of Fish and Game was also transferred to the Department of Internal Affairs, and the control of the acclimatization matters was vested in the Tourist Agent (in McKinnon & Coughlan, 1960, 1:14).

During the mid-1930's rangers patrolling fish (trout) within the Central North Island, specifically during the spawning season, were considered inadequate in number to curtail poaching.⁵⁶ Those with a vested interest in the control of the fish, anglers and acclimatisation society members, suggested the appointment of six additional rangers, a suggestion not favourably received by the Secretary for Internal Affairs. Ultimately, no appointment was made.

Law enforcement was the primary concern of rangers engaged under the Animals Protection and Game Act 1921. Fish and game rangers were law enforcement officers, conserving and protecting the animals under the Act from poaching and exploitation.

I think the rangers have an opportunity of creating a good or a bad spirit amongst the sportsmen of New Zealand. A job is there to be done in two ways: It can be done in a way of a policeman carrying out his duties - hiding behind a bush, etc. -; or the duties can be carried out in a way of a sportsman who wishes to preserve and conserve the sport.⁵⁷

⁵⁶ IA 1 79/61, 1933. Memorandum from the Under-Secretary, Department of Internal Affairs to the Conservator of Fish and Game, Rotorua, 10 July, 1933 "Ranging". Memorandum from the Conservator of Fish and Game, Rotorua to the Under-Secretary, Department of Internal Affairs, 12 July, 1933 "Ranging". Memorandum from the Permanent Head, Department of Internal Affairs to the Secretary, Public Service Commissioner, 14 July 1933 "Taupo Fisheries - Ranging". *Tauarunui Press* 27 July, 1933 "Lake Taupo Fishing. Necessity for more Rangers".

⁵⁷ IA 1 79/61, 1938. Dickson, Head Ranger, Rotorua Acclimatisation District. Conference at Rotorua 8th June 1938. Conference title and topic unknown.

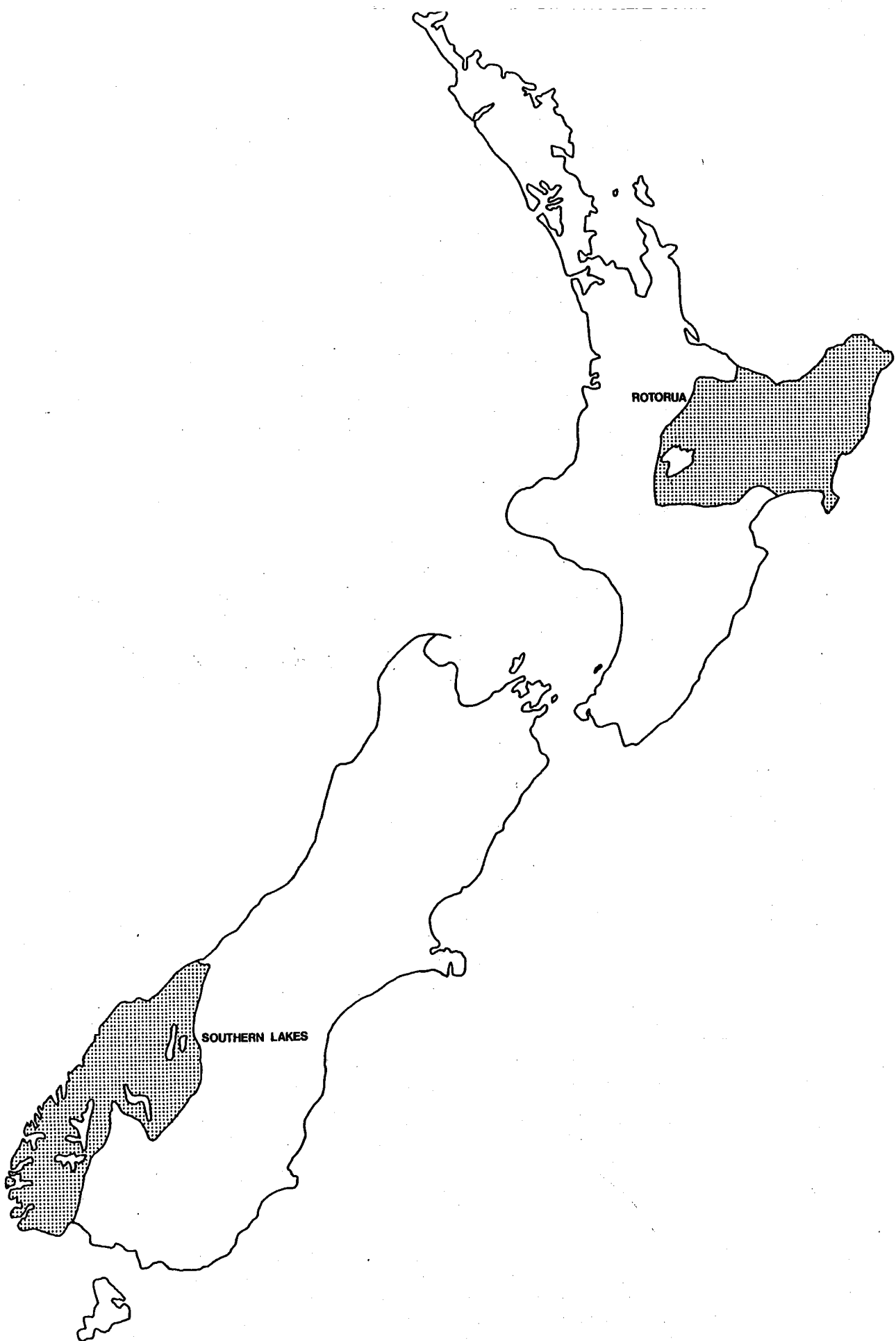


Figure 7.2 Location of Acclimatisation Districts under the control of the Wildlife Service, Department of Internal Affairs (after Pears, 1982).

The Deer Menace and Wildlife Branch Deer Cullers

Although deer were acclimatised into New Zealand from the 1860's it was not until the 1920's that there was any recognition of the problems associated with deer, and other introduced animals.⁵⁸

The 1930 annual report from the Nelson-Marlborough conservancy of the State Forest Service stated that adequate work was available for a wild life ranger. Proposed duties included the supervision of deer eradication parties, supervision and patrol of possum areas, the investigation of damage done by introduced animals, and the distribution of wild birds. The report suggested control be undertaken by the State Forest Service.⁵⁹

Public pressure⁶⁰ during the 1930's led to the appointment of Yerex⁶¹ by the Wildlife Branch to organise and manage deer hunters. Under the Animals Protection and Game Act 1921 the Department of Internal Affairs administered wild life matters, including the control and management of native and imported game.

Deer hunters were appointed upon a wage and bonus system. The work was characterised by long hours, six days per week, hard physical labour, and isolation. Duties consisted not only of shooting but also the packing of supplies, camp equipment and skins to the base camp.⁶² Rangers supervised operations while participating as a

⁵⁸ IA 3546 13/10/13, 1958. *Rangers Guide*. Wildlife Branch, Department of Internal Affairs, 1958 revised 1962.

⁵⁹ F1 10/1/8, 1930. Annual report 1930, Nelson-Marlborough conservancy, New Zealand Forest Service.

⁶⁰ Forest Service Accession W 3129 42/18, 1930. Letter from Moncrieff, P. to the Editor, *Evening Post* 12 February, 1930 "Wild Life Control. A Vital Problem. Can a Solution be Found?"; Letter from Tararua Trampler to the Editor, *Evening Post* 12 February, 1930 "Deer in the Tararuas"; Letter from Thornton, F.E. to the Editor, dated 29 January 1930 "The Deer Menace"; *Evening Post* 30 March, 1930 "Acclimatisation Wellington Society. The Year Reviewed"; Special report from Forbes, J., *The Guardian* April, 1930 "Deer Control in South Westland"; *The Press* 8 April, 1930 "Deer-Shooting. Overseas Sportsmen. Open Areas do not Interest Them."; Letter from Weka to the Editor, *The Dominion* 27 June, 1930 "Sport v. Native Birds"; *Otago Daily Times* 11 August, 1930 "Acclimatisation Societies. Value of their Work. Position Clearly Explained".

⁶¹ George Yerex was appointed the first stipendiary ranger for the Auckland Acclimatisation Society in 1926. Subsequently he was Conservator of Fish and Game in Rotorua, under the Department of Internal Affairs. In 1930 Yerex undertook the control and management of deer culling operations. Finally in 1945 Yerex was appointed the first Controller of the Wildlife Branch, Department of Internal Affairs (Newcombe, 1967).

⁶² IA 78/14, c.1945. Department of Internal Affairs Deer Control Section - Terms and Conditions of Employment.

full member of the group.

It is impossible to too highly eulogize the conduct and devotion to duty of all officers of the Department's field staff. These officers worked very long hours, endured great privations, and carried out most difficult exploratory duties under the most arduous conditions with a willingness that indicated that they were animated by a determination to achieve the maximum possible measure of success in spite of all obstacles and without consideration for themselves (in McKinnon & Coughlan, 1960, 3:33).

Deer culling continued through the war with many cullers too young for active overseas service. Culling operations were centred on such places as the Southern Alps in the Landsborough and Dart-Rees catchments, and in a number of the North Island ranges, Tararua, Ruahine, Kaimanawa and Kaweka.

Reasons for the initiation of noxious animal control operations have been attributed to the damage to the forests by deer, and the competition for domestic stock on farmland by goats and wallabies⁶³ (Corboy, 1991). The State Forest Service annual report in 1929 stated the Service's

fundamental concern is the control or extermination of certain pests which have been introduced either by way of acclimatization or by domestic species which have become feral. This is vital to the conservation and protection of the forests and their indigenous inhabitants (in McKinnon & Coughlan, 1960, 2:25).

Further in the report mention was made of the effects of these pests. These effects included over-grazing in the high country resulting in erosion of mountainsides, flooding as a consequence of the removal of forest vegetation, and an *unhealthy condition of the indigenous forest*.

Culling operations formed a core of field experience which remained until noxious animal control, hunters and rangers included, was transferred to the New Zealand Forest Service in 1956. The transfer resulted from further concern by the New Zealand Forest Service at the deteriorating state of the forest resource.

⁶³ "Snow" Corboy (1991), Forest Ranger, Environmental Forestry Division, NZFS, Nelson (1956-1987), *I think we took about 50,000 goats off the Clarence Reserve in about three years, the maximum number of sheep they run there is 10,000 so it certainly improved the farming capabilities.*

Wildlife Branch

The Wildlife Branch was established in 1945 to concentrate upon wildlife problems *in view of their increasing number and complexity* (Department of Internal Affairs, 1963, 3). Previously the section consisted of a Conservator of Fish and Game based in Rotorua who administered the Rotorua District fisheries, and a deer control section that administered culling operations. The Wildlife Branch was constituted into five sections; fauna conservation, freshwater fisheries, game management, information and education, and research.

The Wildlife Branch had four primary functions: to promote the preservation of wildlife beneficial to humans; the utilisation of wildlife, mainly game, regarded as wildlife resource; the control or eradication of noxious forms of wildlife; and finally, the control of importation and liberations of wildlife.⁶⁴

According to McKinnon & Coughlan (1960, 3:45), the Department of Internal Affairs annual report 1946 stated the establishment of the Wildlife Branch allowed for more positive administration of Acts, and allowed for

preliminary measures [to be] taken for the investigation and remedial action where possible in connection with the problems vitally concerning the welfare of the flora and fauna of New Zealand:-

- (a) *The decrease in the native protected bird population and threatened extinction of some species:*
- (b) *The increase and possible menace of the opossum population:*
- (c) *The decrease of native and imported game-bird populations:*
- (d) *The relation between wild browsing animals and soil and river erosion in the back country:*
- (e) *The apparent deterioration of the Department's fresh-water fisheries (in common with all others in New Zealand).*

Wildlife Rangers

Wildlife rangers' duties and responsibilities were separated into two fields - fish and game, and protected species. Fish and game rangers were appointed in the mid 1930's to administer and patrol the Rotorua Acclimatisation District. Rangers were expected to

⁶⁴ IA 78/15, 1950. Yerex, G.F. "The Wildlife Branch" in *Wildlife Branch Bulletin. Field Staff Training Course 1950.*

*issue fishing, game and Taupo Harbour licenses,*⁶⁵ inspections of licenses and catches, and patrols for illegal poaching. The priority for rangers involved with fish and game was law enforcement.

This responsibility for law enforcement was a fundamental responsibility of the fish and game ranger which was retained until the disbandment of the Wildlife Service. Stack (1991), Wildlife Ranger (1961-1980), recalled how deer culling experiences were useful for ranging.

I guess the rangers in Internal Affairs days really did stem from that background from being deer hunters. Although they became less agile, they still had that cunning, that instinct of being able to track and to determine illegal activities. I guess that was the hunting instinct coming through.

Although rangers involved with protected species management had different duties and responsibilities, law enforcement was still important. Law enforcement was predominantly related to the illegal poaching of kereru (*Hemiphaga novae-zealandiae*). Because of the nature of protected species management, rangers could be located anywhere in New Zealand (including the off-shore islands).

According to Jones (1991), Senior Wildlife Officer, Hawkes Bay-East Coast (1977-1987), because the Wildlife Service was so small

there was no demarcation of work fields. All were expected to 'jump the fence' and assist in other fields as required. This often meant travelling all over the country to assist with various important projects such as survey, research, banding programmes, fauna searches, and to the more labour type jobs such as fencing, planting, and predator control.

Unlike fish and game ranging, protected species management was often undertaken in groups. As a result specialisation in duties and responsibilities, and species often occurred. One specialist duty was dog handling, a practice which has been used since 1980 in kakapo recovery with generally favourable results.

⁶⁵ IA 1 79/61, c.1936. Position of Ranger (Temporary), Department of Internal Affairs. Within this job description it stated *Applicants must have a good knowledge of the legislation governing fish and game, possess tact and be of good physique and address.*

Wildlife Act 1953

The Wildlife Act 1953 consolidated and amended laws relating to the protection and control of wild animals and birds, the regulation of game shooting seasons, and acclimatisation societies. Wildlife were clearly defined within the Act as all animals that live in a wild state, and also included animals bred in captivity. Westerkov (1957; 1981) concluded that wildlife as defined within the Act included birds (indigenous and introduced), some introduced mammals, amphibians, and reptiles, but not fish. Protection was redefined for number of animals, incorporating a new schedule of partially protected wildlife, for example the kea (*Nestor notabilis*).

Although statutory protection had been given to introduced animals, it was now predominantly afforded to indigenous fauna. The wildlife sanctuaries were redefined providing tighter legal protection. Law enforcement provisions were strengthened, provision for seizure extended, and protection to rangers broadened (Department of Internal Affairs, 1963).

Training

In-house training was undertaken by the Wildlife Branch from the early 1950's. Field based ranger training provided direct interaction with scientists, experienced wildlife rangers, and fauna management. Trainees provided a necessary supply of labour while experiencing deliberate management training opportunities. Up to three trainees were accepted each year for a four year traineeship. The criteria for trainees, according to Merton (1991), Fauna Conservation Officer (1957-1987), included *how much you could carry and for how long, it was very much field oriented.*

Training became more structured and organised as the requirements for wildlife rangers became more specialised. In the late 1970's the training scheme was adapted to ensure trainees were sufficiently skilled before they entered into field work. A nine month intensive basic training provided trainees with skills in bush, mountain and water safety; first aid; law enforcement, and wildlife and fisheries management (AJHR 1978; 1979).

A formal training programme was proposed during the mid 1980's at Lincoln College in conjunction with Department of Internal Affairs, and State Services Commission. The course was designed as in-service training for Wildlife Service staff following a similar

structure to the Department of Lands and Survey ranger block courses.⁶⁶

The establishment of the Department of Conservation in 1987 and the subsequent restructure *axed* (Caithness, 1991) the implementation of the course. Ultimately there was no formal training provided specifically for wildlife rangers.

Protected Species Management

Fauna conservation of rare and endangered species began in the early 1890's. It was not until the rediscovery of the takahe (*Notornis mantelli*) by Dr Orbell in 1948 that protected species became a priority of the wildlife mandate (validated in the Wildlife Act 1953).

Off-shore islands became the domain of the Wildlife Branch, as havens for protected species. These islands ranged from the sub-Antarctic Islands to the sub-tropical Kermadec Islands. Many islands within New Zealand territorial waters became island sanctuaries; for example Little Barrier and Kapiti Island (managed by Department of Lands and Survey), Stevens Island, Codfish Island and most recently Breaksea Island.

Islands became key habitats for the rarest species, particularly birds. Islands were 'easily' freed of predators and competitors - goats, sheep, rats, cats, pigs, rabbits, and possums. The development of the island philosophy for species protection and management began in the 1960's. Prior to this species management practices were conducted on the basis of northern hemisphere experiences - ecologically and environmentally distinct from New Zealand.

Rats were recognised as the key predator which led the Wildlife Branch to begin island transfers of rare and endangered fauna (Merton, 1991). Rescue was crucial in the case of the South Island saddleback (*Philesturnos carunculatus*), their final refuge on Big South Cape Island was invaded by rats in 1964. This rescue represented the acceleration of protected species research and management.

⁶⁶ The course proposed to provide a theoretical framework to build upon wildlife rangers' practical experiences. Course content included: biology and ecology of selected New Zealand animals; land and marine habitats and sensitivity to change and management; principles of natural resource economics; resource management, policy development and legislation; personal skills.

Protected species management maintained momentum with the discoveries of kokako (*Callaeas cinerea*) in such places as Whirinaki State Forest, kakapo (*Strigops habroptilus*) in Fiordland and Stewart Island, black stilt (*Himantopus novaezealandiae*) in the McKenzie basin, and the highly successful breeding of the Chatham Island black robin (*Petroica traversi*).⁶⁷

The success of these programmes symbolises the dedication and ingenuity of the Wildlife staff - rangers, scientists and administrators. Merton (1991) maintains *we were practically oriented [incorporating] a lot of Kiwi ingenuity*. Wildlife rangers specialising in protected species management were not bound by land district or acclimatisation district boundaries. They were a dedicated few who worked under harsh physical conditions with little recompense. Because of the variety of habitats and areas covered many officers simultaneously held ranger warrants from a number of departments.

Commission of Inquiry 1968

In 1968 a Commission of Inquiry on the *Organisation of Wildlife Management and Research in New Zealand* was established (Hunn, 1968). The Commission was to enquire into the most appropriate organisation which would ensure co-ordinated advice on wildlife policy, research, and management.

At least eight government departments, four advisory committees, eight collateral agencies, and acclimatisation societies had a legislative involvement in wildlife. The Commission's recommendations included the appointment of a Minister-in-Charge of Wildlife; the establishment of a National Wildlife Commission and a Wildlife Advisory Council; a national Wildlife Service be established as a functional division of an existing department - the Department of Lands and Survey; and New Zealand be divided into four wildlife conservancies - Auckland, Wellington, Canterbury, and Otago (Hunn, 1968).

⁶⁷ *In 1980 there were five individuals [Chatham Island black robins], one effective breeding pair. You couldn't get rarer than that. Extinction is the next step. By 1988 we should have over 60 individuals, and it'll probably be time to leave them to breed on their own.... But you know, I'm not too keen on being labelled the saviour of the species* (Merton in Peat, 1988, 21).

The structure of the new organisation would amalgamate the Wildlife Branch, Freshwater Fisheries Section of the Marine Department, Fauna Protection Reserves of the Department of Lands and Survey, and Animal Ecology Division of the Department of Scientific and Industrial Research (DSIR).

Within the new Service a ranger staff, based at district centres within conservancies, and resident rangers in some locations, would be instituted. The Commission recommended

a well-trained national corps of wildlife rangers should be established as the field officers of the National Wildlife Service. It would take over the rangers of the present Wildlife Branch (Hunn, 1968, 144).

One consequence of the Commission's recommendations was the renaming of the Wildlife Branch to the Wildlife Service. The Service, however, remained a division of the Department of Internal Affairs, an option preferred by the Commission if conditions for restructure were unfavourable. The other recommendations of the Commission were not implemented and it was not until the establishment of the Department of Conservation that all wildlife matters came under the jurisdiction of one legislated body.

Interest Groups

The main group involved in wildlife has been the Royal Forest and Bird Protection Society,⁶⁸ established in 1923 with the intention of advocating for the control of wildlife, and the preservation and protection of indigenous flora and fauna (Dalmer, 1983). The Society's policies included the elimination of all plant-eating animals in the forests (presumably only introduced animals); involving public interest in the conservation of native forests and wildlife; and the preservation of sanctuaries, scenic reserves and national parks (Dalmer, 1983).

⁶⁸

The Royal Forest and Bird Protection Society was founded in 1923, however, it has undergone a number of name changes. New Zealand Native Bird Protection Society 1923-1930. New Zealand Bird Protection Society 1931-1947. Forest and Bird Society 1948-1963. In 1963 the Royal prefix was added (Dalmer, 1983).

The influence of such groups was noticed by Merton (1991) who, during his career in the Wildlife Service, saw

a dramatic change in public awareness and attitudes to these things. People who felt strongly badgered the government. This was reflected in the strength of the Royal Forest and Bird Protection Society. They were one of the strongest advocates and kept us on the straight and narrow, just as they do today.

Other interest groups included the scientific societies - the Royal Society of New Zealand, the New Zealand Ecological Society and the Ornithological Society.

Conservation Advocacy

Conservation advocacy was undertaken by rangers. Advocacy included talks and film shows to schools and clubs, and environmental seminars.⁶⁹ In the Southern Lakes District Wildlife staff assisted in the summer holiday programmes for the Mt Aspiring National Park.⁷⁰

As well as talks and presentations, the Mt Bruce Native Bird Reserve (now Mt Bruce National Wildlife Centre) and Te Anau Wildlife Park, provided opportunities to experience indigenous fauna in captivity. The two centres were also active in highly successful captive breeding programmes for a number of species. Advocacy was also achieved through the involvement in national conservation campaigns. The 1980 annual report stated that

Wildlife officers continued their tradition of making a significant contribution to Conservation Week activities. District officers and field staff gave lectures totalling hundreds of hours to conservation groups and the general public (AJHR, 1980, G7, 40).

The Wildlife Service also actively assisted Radio New Zealand sound recordings of numerous indigenous bird species calls, and national and international television programmes and documentaries on New Zealand wildlife protection and management.

⁶⁹ IA 3546 3/4/3, 1972. Ranger report November 1972 from Wright, A. Field Officer Portobello.

⁷⁰ IA 3546 3/4/2/2, 1986. Monthly Report January 1986 by Hoetjes, R.J. Wildlife Officer (Fisheries) Queenstown.

International Secondment

The quality of the Wildlife Service was recognised world-wide. During the 1970's and 1980's a number of staff, including rangers, were seconded to various countries. These countries included Australia, Papua New Guinea and Mauritius (AJHR, 1978; 1984-85). Merton (in Peat, 1988, 24) recalled the status New Zealand had for protected and endangered species management.

A few years ago an American ornithologist wrote in a book that there were only two things capable of saving the very depleted wildlife of the Indian Ocean Island of Mauritius - a miracle and the New Zealand Wildlife Service. Mauritius got us.

What the Mauritius project showed was just how few people world-wide are specialising in the practical aspects of saving endangered species.

A New Conservation Department

In 1987 as a consequence of a number of years review the Department of Lands and Survey, the New Zealand Forest Service, and the Wildlife Service, Department of Internal Affairs were amalgamated into the one department - Department of Conservation.

The amalgamation created a department to administer national parks, forest parks, reserves and other Crown land as well as being responsible for the protection and management of wildlife - including marine mammals. Wildlife, although administered by the Department of Conservation, is still managed according to the Wildlife Act 1953.

Chapter Summary

The history of the Wildlife Service, Department of Internal Affairs and the rangers has been illustrated in this chapter. It is a history which has captured the imagination and dedication of a lot of different people at different times. This chapter represents, probably better than the others, the general change in attitude toward indigenous New Zealand conservation and preservation.

The main points are:

1. Active steps were taken toward the control and preservation of native fauna during the 1890's, for many such as the huia (*Heteralocha acutirostris*) it was too late. Resolution Island, Kapiti Island and Little Barrier Island became

wildlife sanctuaries, the start of a tradition which placed the Wildlife Service, Department of Internal Affairs on the 'cutting edge' world-wide of protected species management.

2. The effects of game acclimatisation have been recognised over the last century. By the 1930's the status of deer had been altered, from being protected to being a noxious animal, and government funded culling was initiated. In 1956 the administration and management (including the rangers) of deer culling was transferred to the New Zealand Forest Service.
3. Wildlife rangers were appointed during the 1930's to administer and patrol the Rotorua Acclimatisation District. The jurisdiction of wildlife rangers changed as the mandate of the Wildlife Service diversified and wildlife management became fragmented between fish and game, and protected species. Wildlife management developed from a beginning of imported game acclimatisation and control to a successful protected species management programme.
4. Control and monitoring of fish and game within the Rotorua and Southern Lakes acclimatisation districts which initiated the appointment of the first wildlife rangers continued until 1987. Fish and game are now administered by Fish and Game Councils around the country.
5. The predicament of rare and endangered species has become publicly recognised in the last two decades with the increasing voice of conservation lobbyists allied with the Wildlife Service.

Systematic analysis of the history of wildlife rangers and the Wildlife Service, Department of Internal Affairs has been undertaken. Throughout the history of wildlife management political, environmental, social and economic factors have been influential upon the directions which rangers have followed. Within the Wildlife Service other factors have also been important. These other influences are internal factors include legislation, departmental policies, and key individuals.

The identified external and internal influences have applied pressure on wildlife rangers' roles, changing the responsibilities and priorities over the last 100 years. These influences have illustrated how wildlife rangers have essentially experienced a 'full circle' in their role and responsibilities. To clarify, Henry in the 1890's was concerned for the kakapo and kiwi. Today these same species are a management priority.

The following chapter considers the influences on, and meaning of rangers. Information gleaned from the three histories is brought together to illustrate a number of common themes with regard to the ranger and protected natural resource management.

CHAPTER EIGHT

THE NEW ZEALAND RANGER

Introduction

This chapter is divided into two parts; influences on rangers, and the meaning of the New Zealand ranger. Part one analyses the influences upon ranger duties and responsibilities. Many different influences have affected rangers and resulted in changes in their duties and responsibilities. These influences include the physical environment, government policies, departmental directives, public pressure - especially interest groups, key individuals, and other rangers and institutions.

Part two describes and analyses the meaning of ranger. Meaning will be considered primarily in terms of duties and responsibilities undertaken. Three periods have been identified where rangers' duties and responsibilities were directed at the protection, control and management of protected natural resources.

This chapter extrapolates the information presented in the previous three chapters, uniting the influences across the three departments. In order to present an analysis of the influences and meanings a summary of the previous three chapters, the histories of the three departments and their ranger corps, is first presented.

Departmental Overview

The previous three chapters have reviewed the history of the Department of Lands and Survey, the New Zealand Forest Service, and the Wildlife Service. These chapters, although independent, provide an overview of ranger involvement in protected natural resource management. The chronicle of these departments has been anchored on the relevant legislation and important events over the last 113 years. Rangers' duties and responsibilities, departmental mandates, and various demands and pressures placed upon the departments have also been reviewed.

A number of common themes are evident in the history of protected natural resource management. Many of these are known, many are not. Well documented are the histories of the New Zealand Forest Service and Department of Lands and Survey, illustrating the relative importance of the mandates of these two departments. The

Wildlife Service, to date, has no concise written history.

The first theme identified relates to change in rangers' duties and responsibilities. Briefly, as departmental mandates altered, so too did rangers' duties and responsibilities change. A second theme relates to how the requirements, experiences and qualifications required by rangers had evolved. Development of training for rangers occurred in all three departments to meet increasing demands on rangers.

A review of the discussions presented in the previous chapters illustrates the general changes in protected natural resource management.

1. Pressures from natural resource use were recognised by the early 1870's when the foundations of protected natural resource management were laid.
2. Parallel development in the three departments' responsibilities for protected natural resource management has occurred over the last 113 years. Management has become more specific as problems became more complex.
3. Departmental structures developed to accommodate the changing management of protected natural resources. Divisions were established to control specific areas of departmental mandates.
4. By the mid 1920's the majority of protected natural resources were gazetted, and hence protected under some form of legislation. Since then a hierarchy of protective status has evolved along with appropriate management techniques.
5. Public pressure has influenced a number of important decisions affecting protected natural resource management. The impact of some interest groups have played an important role in both protected natural areas and protected species, for example, the Federated Mountain Clubs and the Royal Forest and Bird Protection Society.
6. Recreation pressure on the protected natural resources has been a major influence on rangers' duties and responsibilities since the 1960's.

Tracing legislation and departmental developments, has allowed rangers to be viewed within a social, economic and political context. Descriptions of rangers' duties and responsibilities show the influence and impact of various events upon the ranger.

Part One: Influences on Rangers

Part one of this chapter deals with the influences which have affected rangers' duties and responsibilities. Historicist explanation has been used as a framework to allow the explanation of events and influences on rangers' duties and responsibilities. Historicist explanation, to recap, is based upon the following assumptions; the phenomenon is produced by a system of constant causes, and some social patterns cause their own reproduction.

The modified functional form of historicist explanation, was considered appropriate for explaining changes in rangers' duties and responsibilities (Figure 8.1). This modified form illustrates the point of interception of influences (tensions) is at the departmental structure (functional alternative).

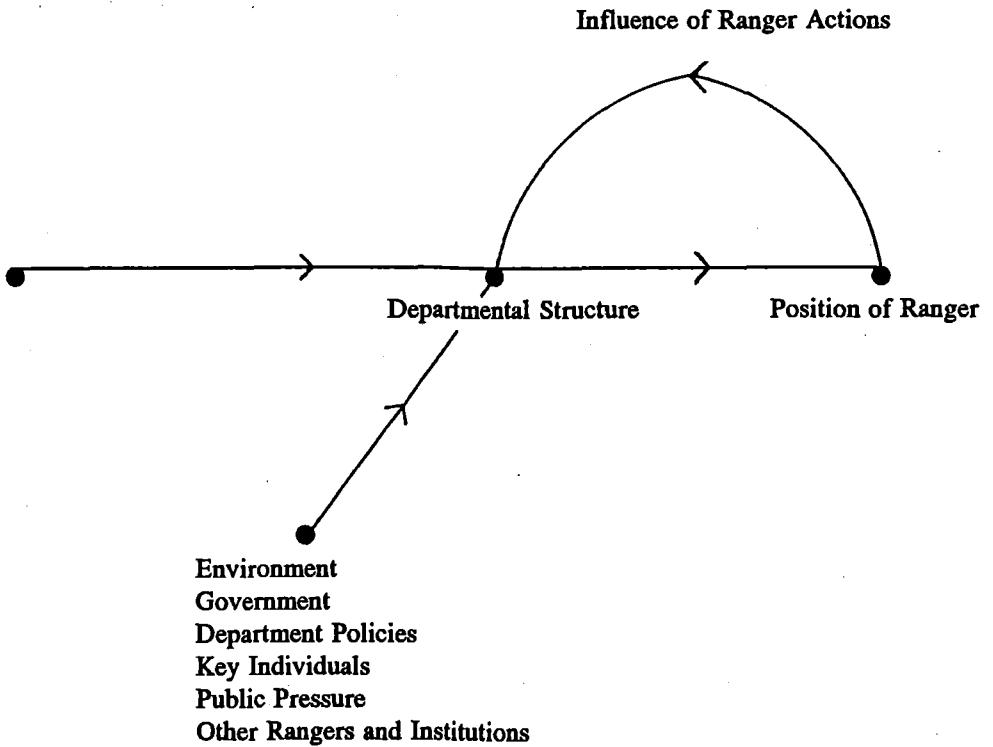


Figure 8.1 Modified Functional Form of Historicist Explanation (after Stinchcombe 1968).

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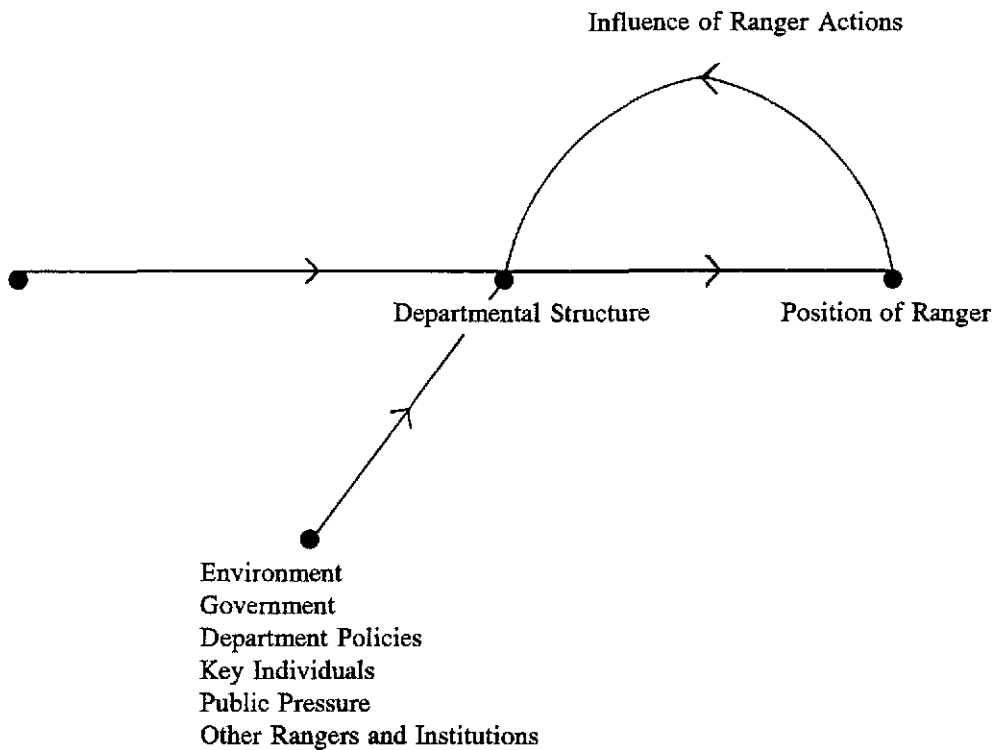


Figure 8.1 Modified Functional Form of Historicist Explanation (after Stinchcombe, 1968).

The use of historicist explanation assisted in the determination of six categories of influences which have been established from the discussion in the previous chapters. Six main areas have been highlighted - the environment, government, department policies, key individuals, public pressure, and other rangers and institutions. Each category will be considered separately.

Environment

When considering both rangers and protected natural resource management, an inherent consideration is the environment - the physical environment. The environment has been influential throughout the evolution of protected natural resource management. That is to say, the environment was one of the original causes resulting in the appointment of rangers, and has continually affected rangers' duties and responsibilities.

From the appointment of the first ranger, the environment has been central to their duties and responsibilities. Initially the state of the environment, the use and exploitation of the forests was significant, and dictated the protection of the environment. Subsequently, control and management of both the environment, and the use of the environment was undertaken by rangers.

Changing public perception of the environment especially between the 1870 and 1900 had a significant influence on the rangers' roles. Settlers attitude to the land and the environment was that it was something which had to be overcome. The environment was considered inhospitable and a 'flaw' which was systematically destroyed. By 1900 the land so despised had proved agriculturally and economically viable and was now perceived as providing the backbone of the nation.

The environment also dictated regional differences in rangers' duties and responsibilities. Because the New Zealand environment is differentiated by region and altitude, and problems and pressures are not consistent, the requirements for rangers were different. Croft (1991) recalled his experiences while Chief Ranger at Arthur's Pass National Park (1963-1977).

In the 1950's and 1960's in the Main Divide area we were going through a climatic spell of very heavy rainfall, torrential rainfall. It would rain for five or seven weeks at a time. Rivers would be in flood all the time and it was very difficult to get into the Park. As a working ranger you just had to abandon certain areas of the Park as you couldn't get to them because there were no bridges at the time, and you couldn't ford the rivers.

Not only did the environment dictate where and when rangers could undertake their duties, it was influential on the skills required by rangers. Jefferies (1991), Assistant Supervisor of National Parks (1974-1976), argued that there was *little point in having boating skills in Tongariro, but essential in Abel Tasman and if you couldn't ski in Tongariro or Mt Cook, then you weren't very effective.*

The physical environment had a direct effect on the ranger and protected natural resource management. Management priorities were dependent upon this factor which, in turn, influenced rangers' duties and responsibilities.

Government

Central government policies and legislation affected government departments which had both a direct and indirect influence on rangers' duties and responsibilities. Decisions on protected natural resource management affected the directions taken by the government departments and their respective ranger staff, such decisions include the amendment of legislation, or the development of further parks or reserves.

Protected natural resource management decisions were not the only policies which were influential on rangers' duties and responsibilities. Other policies, such as soldier resettlement, government housing development, hydro-electric power generation, and 'Think Big', all indirectly influenced protected natural resource management. The most influential central government policy was the development of Manapouri Power Station during the 1960's.

The Manapouri issue, according to Lucas (1991), Director of National Parks (1969-1975), *saw a part of the New Zealand heritage, which had largely been taken for granted as being impregnable, suddenly seen as being threatened.* Many of these policies, of which protected natural resource management was not central to the issue,

influenced the directions of departments and rangers. Lucas (1991) stated that the effect of the Manapouri issue on the ranger corp was that,

the rangers were not merely dealing with visitors, with hunters, and with tour operators. All of a sudden rangers were dealing with large scale development proposals, the impact of which were very significant. These all added to the need for people with a broader understanding of the issue, and greater ability to deal with them and plan for them.

Recently, the most significant central government policy was the implementation of 'Rogernomics' in 1984. Rogernomics was essentially economic policy which emphasised accountability, transparency and user pays. This policy ultimately resulted in the separation of government departments into commercial and non-commercial enterprises, and the restructure of protected natural resource management.

Legislation affected both the government departments and the rangers, having both a direct and indirect influence on rangers' duties and responsibilities. Major pieces of legislation have been identified as key events in the history of the ranger as a protected natural resource manager. Legislation established boundaries within which the government departments and the ranger corps were required to function.

Recent pieces of legislation - Forests Act 1949; National Parks Act 1952, 1980; Reserves Act 1977 - tend to be recognised as significant in the development of protected natural resource management. The older legislation, however, is also significant as it was in these early pieces of legislation that the foundation of rangers' duties and responsibilities were established.

Ultimately, central government was always responsible for protected natural resource management and rangers' duties and responsibilities. Poole (1991) maintained that the departments, as agents of government, were only fulfilling the directives from central government and administering their statutory mandates.

Department Policies

Departmental policies and directives have had a direct influence on rangers' duties and responsibilities. The departments were responsible for fulfilling the requirements set out in the various pieces of legislation. Therefore, as the legislated duties of the department were altered, so too were the ranger's duties and responsibilities. According to O'Reilly

(1991), Senior Ranger, Westland (1962-1987), *the major changes involved the wider scope of departmental activities and responsibilities.*

Although central government was ultimately responsible, the departments were influential on rangers' duties and responsibilities. Department policy and interpretation of both legislation and central government directives were important. An example of departmental influence was the multiple use concept introduced into the New Zealand Forest Service during the late 1960's. The level of implementation, and which multiplicity of uses would be incorporated in certain areas were decisions the New Zealand Forest Service had to make.

Departmental policies of other government departments often affected rangers' duties and responsibilities. For example the Department of Labour employment programmes were utilised by national parks to develop the track and walkway networks.

Public Pressure

Since the 1930's, public pressure, especially from interest groups, has resulted in a direct and indirect effect on rangers. Direct public pressure on rangers' duties and responsibilities occurred on the micro level, for example the provision of interpretation and education programmes. Indirect pressure occurred through pressure focused on the departments. Departmental responses to pressure included changing rangers' duties and responsibilities. Responses included national policies for the provision of, and the increased ranger involvement in recreation facilities.

The Federated Mountain Clubs and the Royal Forest and Bird Protection Society were two pressure groups which have been influential since the late 1920's. These two were supported by the general public and new organisations after the Manapouri issue. Interest groups were not only applying pressure on the departments, but often they were applying pressure on each other as there were conflicting goals, this was particularly true for wildlife management. Newcombe (1991), Director of Wildlife Branch (1961-1967), stated that

there was pressure from these organisations on the game bird side, the shooting side, the fishing side, on the acclimatisation societies side set against the pressure from the Royal Forest and Bird Protection Society and other conservation organisations.

Persistent public pressure was evident throughout the last seventy years, however, it was often directed at a single cause or issue. Therefore, the influence upon protected natural resource management and rangers' duties and responsibilities often appeared sporadic.

Key Individuals

Key individuals⁷¹ within and without the departments were very influential on the direction of policies undertaken. Within the departments there were not only those in positions of power, there were also those who had the dedication, and a vision that led to change. According to Stack (1991), Conservator of Wildlife, Rotorua (1981-1987), these key individuals were

the catalysts who drove the whole system. Everyone looked up to them as if they were god. These are the people who are our leaders, and they may not necessarily have been the Director, it might have been someone who was sitting back on the second or third tier. That was the person who was getting the results, the practical applicator who had this support right across the board.

Analysis of key individuals illustrates the influence people, not necessarily at the top of the administrative hierarchy, had on the direction of protected natural resource management. Often these key individuals progressed through the hierarchy to key positions as a consequence of their dedication, others remained as field operatives working in their areas of expertise.

The influence of key individuals started with the far-sighted conservation advocates of last century, and has continued. Key individuals outside of the departments were often involved in pressure groups, some were academics.

Other Rangers and Institutions

Training, and interdepartmental and international secondment contributed to the better understanding of the respective departments and the rangers. Training, both in-house and external, provided rangers with an opportunity to interact with other protected

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There are a number of key individuals who have been identified in each department, and within some pressure groups, and academic institutions. However, as this research did not intend to consider the influence of key individuals only some can be named and in fairness to those who may be left out, all will remain nameless. Suffice to say, there are many individuals who have left their mark on protected natural resource management in New Zealand.

natural resource managers, often with a different focus, and contact with others in the departmental hierarchy. Training also provided rangers with an opportunity to experience new ideas and to apply their practical knowledge to academic situations.

Interdepartmental secondment provided the opportunity to experience other methods of protected natural resource management and practice. This provided rangers with a better understanding and ability to deal with the problems they were experiencing in their field. International secondment provided new challenges for rangers and reinforced the knowledge that New Zealand protected natural resource management was second to none.

Periods of Influence

At various times during the last 113 years some of these six categories have been more influential than others in determining rangers' duties and responsibilities. In defining management prerogatives which influenced rangers' duties and responsibilities the influences upon rangers from internal and external factors often overlapped. There were few periods which were not influenced by at least two factors.

The most prominent influences identified were the environment, departmental policies and key individuals. These were most influential on rangers' duties and responsibilities during three periods; 1870-1880's, 1920's, and 1960-1980's. These three periods appear to represent three distinct periods in the evolution of the ranger as a protected natural resource manager.

Interim Summary

Part one of this chapter has described the six influences on rangers' duties and responsibilities which have been determined from the previous chapters. These six influences have been categorised as the environment, government, department policies, key individuals, public pressure, and other rangers and institutions.

These six influences have affected all of the ranger corps. Not all influences affected rangers continuously, often one influence would be more prominent than the others.

Part Two: Meaning of the New Zealand Ranger

This section of the chapter reviews and analyses the meaning of ranger. Meaning will be considered primarily in terms of duties and responsibilities undertaken. Differences and similarities between protected natural resource management and departments will be considered.

It is useful to reiterate what the term ranger means in the overseas context. Generally speaking, the term ranger connotes knowledge, information, protection and a physical capability to undertake park duties, such as protection, enforcement and management. In New Zealand the ranger undertook a wide variety of duties and responsibilities as a consequence of being involved at the operational level of protected natural resource management. These duties and responsibilities are considered analogous to the meanings that have been ascribed to the ranger role over the last 113 years.

The evolution in the duties and responsibilities also represent a change in the wider issues of policy and department mandate and the influence of changing public tastes, preferences and pressures. The evolution of the departments has been reviewed in the previous chapters and provides a basis for the following discussion. Figure 8.2 illustrates a chronology of duties and responsibilities undertaken by rangers. Information compiled from archival data and interviews, gave an accurate practical representation of rangers' duties and responsibilities over the last 113 years.

Figure 8.2 provides a comparative base which represents, not only the differences, but also the similarities of the six ranger types. Three periods have been identified in the evolution of the ranger; protection, control, and management. These three represent a change in physical duties and management technique.

	Forest Rangers Environmental Forest Rangers	Crown Lands Rangers National Park Rangers Reserve Rangers	Wildlife Rangers
1880	Collection of timber licences Apprehension of unauthorised cutters or receivers of timber Seizure of illegally cut timber Prevention of damage to forests by fire Track cutting Determining forest boundaries Inspecting timber reserves and sawmills Valuation of forest resource Collecting seeds - miro, ironwood rata, kahikatea, kauri, totara Issuing licences for gum digging Protection	Animal protection (CL) Forest and saw mill inspections (CL) Inspection of deferred payment settlement (CL) Collection of cattle and timber licences (CL)	
1890		Curator and caretaker of Resolution, Kapiti and Little Barrier Islands (CL)	
1900	Stop the automatic burning of forests after logging Ensuring locomotives were spark proof	Applications for sections, leases, including land size, quality, valuation, and forest quality and type (CL)	
1910			
1920	Control of opossums Forest inspections Administrative responsibilities Resource managers	Inspection of reserves (CL) Inspections in connection to the settlement of discharged soldiers (CL) Control of the illegal taking of opossums (CL) Recording of native birds (CL)	
		Caretaker (NP)	
1930	Deal with unauthorised trespass and grazing of livestock Timber cruising Mill inspections		Supervision of deer eradication parties Law enforcement of Rotorua and Taupo fisheries Patrol of opossum areas
1940	Fire Control		Law enforcement - catching poachers Animal control activities
1950	Timber appraisal (PF) Noxious animal control - deer, chamois, goats (EF)		Deer culling Hands on person, with law enforcement being their primary focus Apprehension, prosecution
1960	Responsible for certain elements on the forest - tending, establishment, protection both fire and noxious animal (PF) Looked after the day-to-day operations (PF, EF) Watershed management (EF) Animal control (EF) Timber harvest Provision of amenity and recreation(EF)	Generalist (NP) Cleaning toilets (NP) Working in the field (NP) Patrol through the park (NP) Making and maintaining tracks (NP) Interpretation - lectures to groups and summer nature programmes (NP)	Conservation advocacy Fauna and flora, protected species management
1970	Involved in running a business (PF) Supervision of work gangs (PF, EF) Managing a total forest (PF) Responsible for huts and tracks (EF) Recreation Provision (EF)	Protection (NP) Public enjoyment (NP) Manager (NP) Administrator (NP) Track construction and maintenance (NP, R) Foreman of works (NP, R) Painting buildings (NP) Building toilets (NP, R) Building new huts (NP) Hut maintenance (NP) Working with scientists (NP) Search and rescue (NP) Interpretation (NP) Traffic control (NP) Ski patrol (NP)	Looking after the birds, fish, Creating habitats Researching animal behaviour Fencing, planting, predator control Fauna searches
1980	Environmental area was often area specific - specialist or generalist (EF) Interpretation and education activities (EF) Recreation development (EF)	Professional land managers (NP, R) Domains and reserves inspections (R) Environmental impact assessment work (R) Land use planning (R) Reserve maintenance (R) Interdepartmental work (NP)	Endangered species retrieval programmes Education and compliance Protection of the environment in a wider concept Planning submissions for effective habitat protection, maintaining data bases, collecting data, providing expert witness testimony

EF Environmental forest ranger
PF Production forest ranger
NP National park ranger
R Reserves ranger

Figure 8.2 Chronology of Rangers' Duties and Responsibilities.

The three periods identified - protection, control, and management - relate to general changes in legislation or departmental structure, for example the second period, control, starts with the redefinition of forest administration with the passing of the Forests Act 1921-22. The characteristics of each period represent different pressures and influences which affected rangers' actions, duties and responsibilities. The duties and responsibilities of these three periods will be considered separately.

Protection 1874-1920

This period covers the years around the turn of the century. It starts with the Forests Act 1874 and concludes with the refinement of land administration by the Department of Lands and Survey. In the 1880's, duties of the rangers were stated as *chiefly protective*.⁷² The major problem of this period was the exploitation of the forest resource as the settlement and development of New Zealand progressed.

Responsibilities and duties of these rangers set a precedent for subsequent rangers, laying a strong foundation of field work, patrol and protection.

There was little difference between the work undertaken by the forest rangers and that of the crown land rangers. Both types of rangers were concerned with the protection of the forests. Protection from blatant exploitation in the name of development, protection from unauthorised entrepreneurs, and protection from fire. Masters *et al* (1957, vii) stated *the bush was the enemy of the pioneer, and for every acre converted to useful timber, ten were sacrificed as a burnt offering*.

As expressed by Masters *et al* (1957), it was a period where the rate of exploitation of the forest was high. Many others have also iterated the view that settlers attitude towards the forest resource was rather unsophisticated. Thomson (1985, 188) stated that the

limited view of the role and importance of forests is telling evidence of the general opinion which had prevailed in New Zealand since it was first settled, ... forests were basically a hindrance to the development of New Zealand, and that unless they were on steep mountain country they should be removed entirely.

⁷²

LS 1 53/15, 1886. Letter from Kirk, Conservator of Forests, to Melhorne, forest ranger. LS 1 53/15, 1886. Letter from Kirk to von Porat, forest ranger. LS 1 53/14, 1887. Memorandum from Kirk to Campbell, forest ranger.

Kirkland (1991), Director-General of Forests (1981-1986), maintained that this attitude towards the forest meant the *work of the early rangers looking after the native forests, was to generally try and get people away from regarding native forests as something to be got out of the way*. Rangers' duties and responsibilities were directed by this pressure on the resource. Protection was the key to retaining the forests. Patrols were a major duty. Generally patrols included inspections of sawmills and timber operations, and boundary determinations.

Rangers were initially located in the northern kauri forests and Otago/Southland. Other areas ranged later included the West Coast, Canterbury, and the Manawatu/Wairarapa. These were areas of vast forest resources, and forest based industry. Geographically there was little difference in general duties between regions. General requirements, such as patrol, varied only in intensity and duration. Differences that did occur were often area specific, for example kauri distribution and the problems incurred from gum digging.

Towards the turn of the century two distinct differences between forest rangers and crown land rangers occurred. These were as a consequence of the expansion of crown land ranger's duties and responsibilities. The first distinction was the appointment of crown land rangers with a primary responsibility for native fauna. Although other crown land rangers had some responsibilities for fauna, their concern was protection of the forest flora rather than protection of the native fauna.

The second was the inclusion of the administration and inspection of reserves as part of the crown land ranger's duties and responsibilities. Crown land rangers were still involved in land inspections, specifically relating to deferred payment holdings, and the use of the forest resource.

The work of the [crown land] Rangers covers a wide field, calling not only for the possession of much special knowledge of agriculture and pastoral farming, land values, &c., but also for qualities of integrity and tact. Their advice is freely sought by settlers and others, and their reports often form the basis upon which the machinery of land administration in the various offices largely depends. It is therefore essential that they should be thoroughly competent men, and the Department is satisfied that this important branch of work is in capable hands (AJHR, 1921-22, C1, 5).

Rangers, throughout this period, concentrated initially upon the protection of the forest resource and settler development, and subsequently upon native fauna, and reserves. The culmination of the protection period arose out of the refinement of forest administration, and the Department of Lands and Survey, and the State Forest Service becoming separate entities.

Control 1921-1960

During the period 1921-1960 the ranger was a controller. This period starts with the redefinition of land administration and the establishment of the State Forest Service. The date 1960 does not relate to any specific legislation or structural change within any of the departments it was a time of general change. Change was occurring during this period - noxious animal control was transferred to the New Zealand Forest Service, national parks administration was underwent the first moves towards national integration, and protected species management become an important issue for Wildlife Branch.

Most duties and responsibilities undertaken by rangers in the previous period continued. Protection, which had been the priority during the earlier period, was replaced by a concentration upon control. New duties and responsibilities were a consequence of changing requirements of rangers as increased pressure was placed upon protected natural resource management. Control of use of the protected natural resources was inevitable as increasingly the demise of the resources was recognised.

Forest rangers maintained control of the forest resource through the issuing of licences. Licences were required for both the milling of timber and the collection of gum. Timber milling was controlled through the determination of timber quantities for milling, and the patrolling of saw mills. Timber cruising became an important part of the indigenous forest ranger's duties in such areas as the West Coast of the South Island.

Kirkland (1991), stated that the

Forest Service⁷³ started essentially as a controller of orderly rather than disorderly liquidation of native forests which were commonly burnt after logging. Also the Forest Service was the main agency to get the young plantations cranked up. A bit of the work of the early rangers, I think, was in the control area.

Control of noxious animals was required to protect the forest resource. Noxious animal control was under the control of the Department of Internal Affairs (later transferred to the New Zealand Forest Service). Thomson (1991), Director-General of Forests (1971-1976), noted that there was a *great deal of concern amongst rangers in the 1920's, 1930's and the 1940's about the damage the deer were doing to the forest.*

Those who were involved in animal control had to be a 'jack of all trades'. Corboy (1991), Senior Field Officer (1945-1956), recalled that *you had to shoe your own horses, do your own packing and cooking.* Although most of those involved directly in the animal control programmes were not rangers, supervision of the gangs was by rangers. Duties and responsibilities meant that rangers had to be *prepared to get their hands dirty, spend nights out on end in remote locations, doing the work which involved protecting the natural resource* (Stack, 1991).

The Wildlife Branch and wildlife rangers were also concerned with the control of fish and game, and some protected species. Control was provided through law enforcement. Newcombe (1991), Controller of Wildlife Branch (1961-1967), maintained that *straight out law enforcement was basically what the rangers were concerned with at the beginning.* There was no distinction between fish and game, and protected species with regard to law enforcement. Fish and game rangers were concerned with the control of trout, game, and deer, and according to Merton (1991), Fauna Conservation Officer (1959-1987),

law enforcement involving the protected species, was largely centred around the native pigeon, kereru.

⁷³

The establishment of the State Forest Service in 1921 as a separate entity from the Department of Lands and Survey is generally considered as the start of the Forest Service (Allsop, 1973).

Control of the public became increasingly important as use of many of the protected natural areas (be it State forest, provisional State forest park, national park or reserve) increased. Not only was control of illegal activities important, but control of legitimate activities required the involvement of rangers.

Recreation was increasing during this period. National parks were particularly vulnerable to the growth of visitors. One consequence of the rise in recreation was the redefinition of what was required of national park rangers. In high use areas, such as Tongariro National Park duties included law enforcement which, according to Mazey (1991), Chief Ranger at Tongariro National Park (1961-1975), *in some ways was far greater in the early days than it is today.*

In Westland National Park, Nicholls (1991), Chief Ranger (1963-1967), contested that *a ranger was a person employed by the park, a public relations joker. His job was to ensure that anybody who visited the park had a wonderful time.*

This period culminated with the consolidation of protected natural resources administration. A number of new Acts⁷⁴ came to fruition during this period helping to refine the duties and responsibilities of the rangers. Management techniques were becoming active and concern regarding the future of the resource were being voiced again in the public arena.

Management 1961-1987

Management, the last period identified, spans the last three decades up to the establishment of the Department of Conservation. This period was a time of tremendous change in protected natural resource management in New Zealand. Departmental structures were redefined, new divisions were established in response both to the pressures from the previous period and new pressures, and new issues were confronting protected natural resource managers.

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Forests Act 1921-22, Forests Act 1949, Noxious Animal Act 1956, Public Reserves, Domains and National Parks Act 1928, National Parks Act 1952, Reserves and Domains Act 1953, Animal Protection and Game Act 1922, and Wildlife Act 1953.

From the 1960's the duties and responsibilities of the ranger progressively moved towards management. This requirement for better management and administration brought many rangers out of the field and into the office. Lucas (1991), Director of National Parks (1969-1975), recognised the 1960's as a time when a whole stream of things led to a new approach and a new attitude.

It was not just because people sitting in an ivory tower were saying we need this, but because the reality was we did not have the answers with the existing system. We needed eyes, ears and brains out in the field better able to give advice on policy direction.

During this period, national park rangers and reserves rangers were united and a number of Head Office positions were established to allow for better administration of national parks and reserves. As Lucas (1991) saw it, the national park ranger had two images;

One a field manager, the person in the structure of protected area management who was the most visible on the ground.

The other, a resource manager taking advice from science and elsewhere and endeavouring to guide the policy makers in applying that information to achieve the goals laid out in the legislation.

Interpretation and education of the public became increasingly important for all rangers, but most notably for national park rangers, during this period. Rangers were seen by the public as representative of the park concept. Daniel (1991), Ranger on Kapiti Island (1976-1987), defined a ranger as *someone who had to be in touch with the environment and was able to get this message across to people, to interpret the environment, and to help protect the environment.*

As management and administration of the various departmental mandates increased, so too did the requirement for the rangers to become more familiar with various Acts. Reserves rangers, because of the variety of areas under their control, had a larger number of Acts to contend with. Ombler (1991), Reserves Ranger, Wanganui (1978-1983), recalled that as a

reserves ranger you got a far higher level of expertise in land or dealing with the intricacies of the Reserves and Other Lands Disposal Act, Maori Affairs Act, and the Local Government Act.

Wildlife Service was also expanding, especially in the research section which assisted in the management of wildlife. Management of wildlife had expanded rapidly with an

emphasis on protected species management, such as the relocation of wildlife to safe habitats. Merton (1991) recollected that in

the late 1950's early 1960's some people were working exclusively on game birds. In latter years, early 1980's, most would have been working on protected native birds, some even on frogs, bats and reptiles.

Wildlife rangers were not immune from public pressure. Effective management of wildlife could be obtained with public assistance through a ranger undertaking an advocacy role. According to Stack (1991), Conservator of Wildlife, Rotorua (1981-1987), a wildlife ranger had to be

a good communicator, a good educator, and understand a wide range of activities associated with flora and fauna. They were expected to answer communications and general enquiries from the public. The public looked to them as being the protectors of their heritage.

In forestry, changes were also occurring. Production rangers were actively managing the exotic forest resource as the second planting of exotics was initiated in the early 1960's. Recreation development progressed on all Crown lands. The gazettement of State forest parks, and the use of these areas for recreation provided new duties and responsibilities for environmental forest rangers. All rangers became increasingly involved, not only in the control of use, but also in the active planning and management for use of the areas. Thomson (1991), Director-General of Forests (1970-1976), stated that the emphasis of

forest rangers all through was on resource management. It was only since the mid 1950's or 1960's that their second role has come anywhere near as important, that of recreation development, in track maintenance, and the building of huts and visitor centres.

Protected natural resource management continued until the end of this period when the three departments were restructured. Rangers were still involved in a variety of duties and responsibilities that were shared between the field and the office. Active management of resources, such as planning for future use, had become far more important than the protection and control *per se*. Rangers were pro-active rather than reactive as they had been in the previous periods.

As the above discussion has illustrated, over the last 113 years one of these three images - protector, controller, and manager - has been more prevalent than the others. This is

in response to pressures upon protected natural resource management and the consequence has been the evolution of rangers' duties and responsibilities.

From a Field Operative to Manager

The control and management periods (1920-1987), are both characterised by the movement of rangers from the field to the office. Administrative hierarchies were well established within the departmental structures. Although review and analysis of differences in duties and responsibilities through the ranger hierarchy have not been considered it is suffice to say, that progression through the hierarchy brought increased authority over a larger staff and a wider area. A greater proportion of time was spent on office and administrative work than field work. The ranger progressed from a pragmatic field operative to an office based manager.

Within the national park structure, many rangers were unenthusiastic about the idea of becoming office bound. Rennison (1991), Chief Ranger at Abel Tasman National Park (1974-1987), commented that

some of us thought it was a great idea and weren't forced. Some were pushed kicking and screaming into the office to become administrators, to become planners.

While Lyon (1991), Chief Ranger at Nelson Lakes National Park (1959-1980) recalled

when I first started I used to come to town once a month, by the time I finished it was sometimes two or three times a week ... I spent more time in the office helping our secretary answer correspondence, and doing management plans.

Generalist to Specialist

As a consequence of the evolution of rangers' duties and responsibilities, specialisation occurred in many areas. Specialisation can also be seen as a consequence of rangers moving from the field to the office. Rangers become polarised within their departments. This specialisation reinforced the different priorities expressed above.

Forest rangers became more specialised as the requirements of them increased. Rangers started to distinguish between themselves, this was especially true with the distinction of production and environmental forest rangers. Production forest rangers were responsible for forest management, through various field operations. Meanwhile,

environmental forest rangers became active in forest park and recreation management.

Throughout this century the forest ranger became a specialist of certain tasks and duties, but retained a generalist base which was an integral part of their training. The general nature of the training provided an introduction to, and experience of, a variety of duties and responsibilities.

National park rangers specialised in such areas as interpretation, ski patrol, search and rescue, and mountaineering. These specialised tasks were often additional to the general duties and responsibilities undertaken by rangers. As with the forest rangers, national park ranger training provided a general base of experience which supported the move towards such specialisation.

Wildlife rangers were specialised in the fields of fish and game, or protected species. Within each, occurred specialisation in duties and responsibilities. An example of this was the protected species personnel who could be moved around the country for specific assignments, such as the relocation of kakapo from Stewart Island to a safe habitat.

Ranger as a Conservationist

Conservation has been defined in many different ways. Definitions have ranged from the very simplistic - saving something for a future time and a future use - to including preservation and protection of natural and historic resources and maintaining their intrinsic worth for future generations (Conservation Act, 1987). The New Zealand Forest Service (1970, 5) defined conservation as

the management and husbandry of the forest for the specific objective or objectives to fulfil human needs. The objective may involve the management of the forest for water, timber, wildlife, forage, or recreation or a combination of these uses. It may include the maintenance of the forest in the wilderness state for spiritual enjoyment and primitive recreation.

The IUCN World Conservation Strategy provided a broader definition of conservation as

the management of the human use of the biosphere to yield the greatest sustainable benefits to present generations while maintaining the potential to meet the needs and aspirations of future generations (in O'Connor et al, 1990, 8).

There can be little dispute that the ranger was a conservationist. It has been aptly stated that *a ranger is the agent of conservation*.⁷⁵ Depending upon the period considered, whether protection, control or management, the definitions above allow for the definition of the ranger as a conservationist.

Throughout the last 113 years rangers have been actively conserving the protected natural resources. It was inevitable that field operatives involved in protected natural resource management would be categorised as such. Whether conservation is considered in the sense of collecting seeds for propagation, or interpretation and advocacy, the ranger was actively involved.

New Zealand Meanings Ascribed to Ranger

A ranger could have many connotations as far as job content and peoples perception of it (an ex-ranger, 1991).

By 1987, with the establishment of the Department of Conservation, a number of images of ranger had formed. These were based upon the accumulation of the array of duties and responsibilities undertaken over the past 113 years. As the above sections have illustrated, although there have been many differences between rangers' duties and responsibilities, there are many similarities.

Figure 8.3 represents an array of meanings ascribed to the term ranger by those involved in protected natural resource management. Many are adaptations on a theme, many are specific to the particular government department, generally, however common themes suggest a ranger is: a manager; an enforcer of legislation; the visible image of the institution; an information giver; a protector; a skilled person; and a field person.

⁷⁵

IA Accession 3546 13/10/31, 1958. *Rangers Guide*.

MANAGERS

- resource manager
- involved in the management field rather than as a workman
- managers at different levels of the park
- professional managers, land managers
- field manager, that is an all embracing term because they were:
 - technical people
 - professional people
 - interpreters
 - work staff
 - first aiders ...
- park manager, a park meaning in the widest sense
- involved in man management, people management
- manager of forests
- operations manager who looked after the day-to-day basis of the operations of the service
- supervisor of work gangs

CONTROLLERS

- controller of natural resources and natural resource use
- enforcer of legislation
- carried out functions laid down in legislation
- caretaker type person

PROTECTORS

- appointed to have authority over a prescribed territory or region
- person ranging over an area chasing poachers
- protector of the natural resource
- protector of the heritage

INFORMATION GIVERS

- responsible for providing information and guidance
- guider of policy by providing information to achieve goals laid out in legislation

THE VISIBLE INSTITUTION

- the person in the structure of protected area management who was the most visible to the public on the ground

SKILLED PERSONNEL

- a vocationally trained person who was expected to be competent in a wide range of practical skills
- a sub-professional person

FIELD PERSONNEL

- field man

RANGERS WERE NOT

- involved in political issues, long term planning, or technical decisions
- an academic

Figure 8.3 New Zealand Meanings Ascribed to Ranger

Chapter Summary

This chapter has united the themes presented in the histories of the three departments and has analysed the influences upon, and the meaning of ranger. Part one of this chapter reviewed the influences which have affected rangers' duties and responsibilities over the last 113 years. Part two reviewed the meaning of the New Zealand rangers.

From the analysis of the influences on rangers' duties and responsibilities six types of influences were determined. These included the physical environment, government policies, departmental policies, public pressure, key individuals, and other rangers and institutions. Throughout the last 113 years some of these influences have been more dominant in directing rangers' duties and responsibilities.

Meanings of the New Zealand rangers were analysed based upon the duties and responsibilities undertaken by rangers. Five main points were discussed:

1. Three periods of rangers' duties and responsibilities have been identified as protection (1870-1920), control (1921-1960) and management (1961-1987). These three periods were associated with changes in both internal and external factors. Internal factors included legislation, departmental policy, and key individuals, while external factors represented New Zealand's political, social and economic context.
2. The ranger has moved from being predominantly a field operative to including those office bound. This transition has occurred as a result of changing pressures and influences on protected natural resource management and rangers.
3. Meanings ascribed to rangers by those involved in protected natural resource management have illustrated the variety of meanings the term ranger invokes.
4. Rangers have increasingly progressed from generalists to specialists. As increasing pressures and demands were placed on protected natural resource management rangers' duties and responsibilities responded.
5. Rangers were agents of conservation. Throughout the last 113 years rangers have been involved in protected natural resource management as field operatives, teachers and managers.

CHAPTER NINE

CONCLUSION

This chapter provides a summary and conclusion to this thesis. The thesis has reviewed and analysed the evolution of the six types of New Zealand rangers over the last 113 years. Rangers have been described, their duties and responsibilities outlined, and their meanings analysed. Rangers were involved at the operational level of protected natural resource management for over a century. Changes in rangers' duties and responsibilities were seen as a consequence of internal and external factors. Internal factors included legislation, departmental policies, and key individuals, while external factors included environmental, social and political pressures.

The history of the term ranger was traced to the thirteenth century definition where a ranger was a keeper of the royal forests and hunting parks. The contemporary image of a ranger is, however, often based upon the publicly recognised United States national park ranger. Both proved inappropriate for describing and defining the New Zealand ranger. Definitions of ranger from Europe, Australia and the United States were reviewed. Generally, rangers were involved in resource management, interpretation and visitor services, and law enforcement. New Zealand's ranger corps developed and evolved within a different social, economic, political and public context but were also involved with resource management, interpretation and visitor centres, and law enforcement.

Six types of rangers in New Zealand were identified. These were the; crown land ranger, forest ranger, environmental forest ranger, national park ranger, reserves ranger, and wildlife ranger. Although employed by different government departments, rangers were actively involved in diverse aspects of protected natural resource management at the operational level.

Protected natural resource management was delineated. This concept was defined as encapsulating protected natural areas, forests, protected species, and fish and game animals. This incorporated the vast array of natural resources which have been the centre of the rangers' duties and responsibilities over the last 113 years. These natural

resources have subsequently been unified within the Department of Conservation mandate.

Analysis of the evolution of the role of the ranger began with the Forests Act (1874) and concluded with the Conservation Act (1987). In order to assist analysis, the histories of three departments were traced - the Department of Lands and Survey, the New Zealand Forest Service, and the Wildlife Service, Department of Internal Affairs. Legislation and important events were used as a method of tracing the development of the departments and the ranger corps. These histories were also considered within the context of New Zealand society, and the developing attitudes and perceptions of natural resources and the environment.

Historicist explanation, based upon two tenets, first that a phenomena is produced by a system of constant causes, and second that some social patterns cause their own reproduction, was used to guide the arrangement and organisation of this thesis. Historicist explanation was used as an abstract structure, or framework, which assisted in the coherent analysis of the influences affecting the evolution of the role of the ranger as a protected natural resource manager.

Historicist explanation was seen to adequately assist analysis through time, and at both a macro and micro level. Stinchcombe (1968) argued, that theory ought to assist in the creation of explanations. Historicist explanation assisted in the determination of a number of explanations for the evolution of the role of the ranger as a protected natural resource manager.

In analysing the histories of the three departments, a number of issues were seen to be instrumental in the development of protected natural resource management. The attitude of settlers towards land and the environment, the acclimatisation of flora and fauna, and the development of commercial forestry and pastoralism all contributed to the necessity for the protection of New Zealand's natural resources. The first ranger was appointed in 1874 to protect the forest resource from the blatant exploitation by settlers. By the turn of the century the attitude towards land had changed. Land, especially farm land, was considered the backbone of New Zealand providing a foundation for a growing economy. This attitude remains ingrained in modern New Zealand. The 1960's

illustrated yet another change in attitude towards land and the environment. The natural environment was now considered something to be preserved as it represented the heritage and essence of New Zealand.

Political, social, economic and industrial development of New Zealand necessitated an increase in ranger numbers. Rangers became an integral component in the protection, control and management of the natural resources. By the 1920's most of the protected natural resources, including fauna and flora, had been protected under legislation. National parks, State forests, provisional State forests, and reserves had been gazetted. Over the next seven decades the only alterations which were made related to the type of protection status given to these resources. For example many reserves formed the basis of national parks.

Over the last 113 years management of forests, protected natural areas, protected species, and fish and game was variable. Departmental reorganisations, individual Acts and an *ad hoc* uncoordinated national structure characterised protected natural resource management until the late 1940's. From the late 1940's a number of new Acts - Forests Act (1949), National Parks Act (1952; 1980), Wildlife Act (1953), and Reserves Act (1977); policy changes - multiple use of forests; and national structures were initiated for better protected natural resource management.

The 1960's was a period of significant change in protected natural resource management, and society in general. Backcountry recreation participation, and tourism grew as a result of increased mobility, increased disposable income, and better access to the backcountry. The development and gazetting of additional national parks, reserves, and State forest parks provided a new arena into which rangers moved. Recreational use of these areas was increasingly encouraged with the development of the new divisions, and interpretation and public awareness campaigns within which rangers focused on the (legitimate) use of the protected natural resources for recreation.

Parallel development of the Department of Lands and Survey, the New Zealand Forest Service, and the Wildlife Service, Department of Internal Affairs was inevitable as many external influences were directed at the environment, conservation and natural resource use. External influences which affected the departments were essentially economic,

social and political factors. In many instances, the development threads of these departments intertwined as issues and influences were multi-faceted.

Ranger training has provided a foundation of experiences which has been actively incorporated in protected natural resource management since the 1940's. As a result of in-house and professional training the rangers from the three departments have established national and international reputations for protected natural resource management. This reputation has been illustrated by the ranger corps who were given opportunities to train and work in Europe and other countries, such as Nepal, Mauritius and Western Samoa.

As well as the influences on the departments, there were a number of influences which were seen to affect rangers' duties and responsibilities. Six categories of influences were determined:

- i. **Environment.** The physical environment itself, the state of the environment, and the popular attitude towards land and the environment had a direct effect on rangers' duties and responsibilities.
- ii. **Government.** Government policies and legislation had a direct and indirect effect on the rangers. Some of the most influential government decisions affecting protected natural resource management and rangers did not have protected natural resource management as a central issue.
- iii. **Departmental Policies.** As the departments had the statutory responsibilities for protected natural resource management, departmental policies directly influenced rangers' duties and responsibilities.
- iv. **Public Pressure.** Continual public pressure since the 1930's provided direct and indirect pressure on rangers and the departments.
- v. **Key Individuals.** Key individuals within and without the departments were influential upon the direction of protected natural resource management policies.

- vi. **Other Rangers and Institutions.** Training, and interdepartmental and international secondment contributed to the development of the respective department's ranger corps.

Rangers' duties and responsibilities throughout the period evolved as demands and pressures increased. As a consequence of these, three distinct periods were identified - protection, control and management - which represent different management priorities.

1. **Protection 1874-1920.** Rangers' duties and responsibilities were primarily the protection of the resource. Patrols were the major duty incorporating inspections of sawmill and timber operations. Rangers, throughout this period, concentrated initially upon the protection of the forest resource and land settlement, and subsequently upon native fauna, and reserve designation.
2. **Control 1921-1960.** Control of use of the protected natural resources was inevitable as increasingly the demise of these resources was recognised. Rangers' duties and responsibilities included the control of legal and illegal activities. These duties consisted of the control of the forest resource, noxious animals, fish and game, and latterly public recreation.
3. **Management 1961-1987.** Rangers' duties and responsibilities progressively moved towards management. Rangers moved out of the field into the office, and became specialists in areas of protected natural resource management.

As increasing pressures and demands were placed on protected natural resource management rangers' duties and responsibilities responded. Rangers were initially field operatives concerned with the day-to-day protection, control and maintenance of their areas of jurisdiction. As the development of New Zealand occurred a transition of pressures from land development to land utilisation resulted in changed duties and responsibilities of rangers. Rangers were increasingly required to undertake administrative and management roles ultimately resulting in their transition from field to office.

Throughout the 113 years, however, rangers were agents of conservation involved in the management, teaching and practice of conservation. Many of the original duties undertaken by the rangers in the 1880's were still applicable in 1987 when the three departments were disbanded and rangers were renamed conservation officers.

Rangers have been the unsung heroes of New Zealand's protected natural resource management. One of the aims of this thesis was to illustrate, not only the integral part rangers' played in protected natural resource management, but also the diversity and similarity between rangers from the three departments.

To reiterate what one ex-ranger (1991) said.

Ranger is an all embracing term because they were technical people, they were professional people, they were interpreters, they were work staff, they were first aiders, they were individuals with a really broad base of experiences.

Further Research

This thesis has only considered the evolution of protected natural resource management up until 1987. Since this date a new department, the Department of Conservation, has been established with new protected natural resource managers - conservation officers.

A number of questions which require answers include: Are conservation officers rangers? What are the similarities and differences between the duties and responsibilities of rangers and conservation officers? Perhaps most importantly, how do the public perceive protected natural resource management and the new 'rangers', and can the uniformed staff based on the conservation estate - national parks, forest parks and conservation parks - who deal with the public daily still be called rangers?

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- Wynn, G. 1977 "Conservation and Society in Late Nineteenth-Century New Zealand" in *New Zealand Journal of History* vol 11(2) pp 125-136.
- 1979 "Pioneers, politicians and the conservation of forests in early New Zealand" in *Journal of Historical Geography* vol 5(2) pp 171-188
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Legislation

Animals Protection Act 1880

Animals Protection and Game Acts 1907, 1922

Conservation Act 1987

Egmont National Park Act 1900

Forests Act 1874, 1921-22, 1949

Kapiti Island Public Reserve Act 1897

Land Acts 1877, 1892, 1948

Little Barrier Purchase Act 1894

National Parks Act 1952, 1980

New Zealand State Forest Act 1885

Noxious Animals Act 1956

Public Reserves, Domains and National Parks Act 1928

Tongariro National Park Act 1894

Reserves Act 1977

Reserves and Domains Act 1953

Scenery Preservation Act 1903

Tourist and Health Resorts Control Act 1908

Wildlife Act 1953

Unpublished Archives Files

National Archives Holdings

New Zealand Forest Service Files

Accession	Series	Title
F1	1/1	Acts and Amendments 1918-1958
	1/1/6	Animal Protection and Game Act 1921, 1929-1938
	1/1/36/1	Animal Protection and Game Act 1936-1953
	1/5	Forest Legislation - General 1921-1945, 1949-1971
	1/7	Forest Policy - Conservation 1952-1975
	1/7/5	Proposed Amalgamation with Lands 1931-1932
	2/4/1	Appointment of Forest Rangers under Wildlife Act 1953-1958
	2/4/3	Honorary Forest Rangers 1948-1957
	2/4/8	Warrant of Appointment of Forest Officer 1953-1957
	3/0	Employment of Labour 1930-1947
	7/8/25	Staff Training 1962-1964
	10/1	Correspondence re Reports 1921-1941
	10/1/8 A	Annual Reports - Forest Policy 1952-1959
	10/1/8/2	Newspaper Clippings 1944-1946
	42/14	Work in Connection with Internal Affairs Wildlife 1928-1930
	42/18	Wildlife Control Newspaper Clippings 1930-1946
	de 0.05	Reports & Correspondence from Canterbury School of Forestry 1926-1931
	IA 17/3	Deer Destruction Department Parties 1932-1934
	IA 46/45	Wildlife Reports by G.F. Yerex 1930
W 3129	7/8/25	Staff Training 1962-1964
	7/13	Forest Training Centre 1962-1964
	7/14	Professional Officers 1962-1970
	10/1/1	District Ranger - Auckland 1956-1958
	10/1/2	District Ranger - Rotorua 1953-1960
	10/1/3	District Ranger - Wellington 1958
	10/1/8/13	Annual Report FRI & FTC 1958-1960
	10/1/11	Staff Activities
	10/2	Instructions to Field Staff re Duties 1940-1964
	10/2/0	Diary General Notes 1950-1965
	10/2/84	Diary Notes - Protection Personnel 1956-1962
	10/2/86	Diary Notes - Protection 1956-1962
	13/11/2/3	Ranger Training Scheme 1964-1967
	13/11/9/1	Forest Parks 1963-1973
	13/11/12	Forest Employment 1962-1972
	41/25/2/1	Wildlife Commission of Enquiry on Administration 1968-1978
	42/0	Wildlife Control 1928-1955
	103/12/8/6	Manpower Working Party 1969
	103/12/8/7	Education, Training and Research Working Party 1969-1970

Lands and Survey Files

LS 1	53/1-10	Registered Files 1885-1889
	53/14	Outward Memo Book (Forests) 1876-1877, 1885-1889
	53/15-17	Outward Letterbooks (Forests) 1885-1889
	53/18	Reference Book 1876-1877, 1885-1887
	53/19	Account Book of Forestry Offices 1886-1889
	56/2	Regulations for New Zealand Forestry 1903 (NZSF Act 1885)
	56/3	Regulations for New Zealand Forestry 1909
LS-D	4	Resolution Island Rangers Report
LS-HK	1	Letterbooks Crown Lands Rangers 1905-1923
	1/149	Crown Rangers Reports
	1/173	Forest Department
	1/210	Crown Land Rangers

Wildlife Service, Department of Internal Affairs Files

IA	1 79/61	Fisheries - Trout rangers - appointment of
	78/14	Misc papers - games, protection, control
	78/15	Wildlife Branch Bulletins: Field Staff Training Courses
	78/16	Copies of Wildlife Publications
3546	3/4/1-15	Monthly Reports and Activities Reports
	3/7/1	Branch Circulars 1969-1986
	11/12/2	Game Management Policy 1978-1986
	13/10/13	Publications - Rangers Guide 1963-1985
	13/10/14	Publications - The Wildlife Service 1964-1982
	13/10/15	Publications - Field Officers Handbook 1966-1984
	13/7/1-1/2	Notices - Design and Insignia 1982-1987
	13/16/4	Information Section - Staff Training 1975-1986
	23/1/1	Ranging Powers of Wildlife Officers 1970-1986
	23/1/2	S.S.C. Wildlife Warrants for Staff Only 1977-1986
	23/1/3	Ranging Assistance from Acclimatisation Societies 1970-1986
	23/4/1	Rangers Policy re Appointment of Stipendiary Officers of Acclimatisation Societies 1971-1987
	23/4/3	Rangers Powers and Functions 1985-1987
	23/4/4	Joint Ranger Agreements Dept/West Coast and Westland Acclimatisation Society 1969-1981
	23/5/1	Appointment of Wildlife Officers as Rangers under Forests Act & Reserves and Domains Act 1977-1985
	PTG WIL 0	General 1975-1983
	PTG WIL 1	Rangers Warrant 1968-1986
	PTG WIL 2	Rangers Report 1969-1986
	PTG WIL 23	Ranger Appointment Card 1970-1974
	PTG WIL 42	Wildlife Ranger ID Armband 1975-1978
	PTG WIL 45	Policy Manual 1975-1981

Department of Conservation Holdings

Lands and Survey Files

PKS	1/1/1	NZ Park Service General
	1/1/4	Ranger's Warrants
	1/2/1	SR & ASR Reports
	1/2/1/1-13	Permanent Rangers
	1/2/3	Appointment of Rangers under Other Acts
	1/3/1	Ranger Training General
	1/3/2	Ranger Training Turangi Training Centre
	1/3/3	Lincoln College Block Courses - General
	1/3/3/1-3	Lincoln College Block Courses
	1/4/1	Ranger Exchange System General
	1/4/1/1-2	Ranger Exchange System NSW & Tasmania
	1/4/2	Ranger's Reports on Visits Overseas
	1/5/1-6	Uniforms

Photographic Collections

The New Zealand Forest Service Photographic Collection is held at National Archives.

The Department of Lands and Survey and the Wildlife Service, Department of Internal Affairs Photographic Collections are held at the Department of Conservation Head Office, Wellington.

PERSONAL COMMUNICATION

Dave BAMFORD 1991 interview. Currently a Partner in Tourism Resource Consultants, Wellington. Ranger Franz Josef, Westland National Park (1976-1979). Ranger, Tongariro National Park (1979-1981). Awarded Winston Churchill Scholarship to the United States. Assistant Supervising Ranger, Dept L&S HO (1981-1986). Acting Supervising Ranger, Dept L&S HO (1986).

Bill CASH 1991 correspondence. Currently Conservation Officer, DOC Picton. Wildlife Officer (Protected Species) Wildlife Service, Department of Internal Affairs (1978-1987).

Tommy CAITHNESS 1991 interview. Science technician, Research Section Wildlife Branch, Department of Internal Affairs (1955-1965). Scientist, Wildlife Service, Department of Internal Affairs (1965-1987). Senior Conservation Officer, DOC HO (1987-1989).

Ray CLELAND 1991 correspondence. Ranger for the New Zealand Forest Service (1947-1948). Employed for one year by the Swedish Forest Service (1948-1949). Deer culler (1949-1950). Temporary ranger (3 months) for the Department of Internal Affairs (1950). Ranger-in-Charge, Arthur's Pass National Park (1950-1958). First Supervisor of National Parks, Dept L&S HO (1959-1965). Chief Ranger, Mt Aspiring National Park (1966-1979). Honorary Forest Ranger and Honorary Wildlife Ranger.

"Snow" CORBOY 1991 interview. Deer culler, Wildlife Branch, Department of Internal Affairs (1942-1945). Senior Field Officer, Stewart Island, Canterbury-Westland (1945-1956). Transferred to NZFS (1956). Forest Ranger, Environmental Forestry Division NZFS, Nelson (1956-1987).

Don COWIE 1991 interview. Ranger Fox Glacier, Westland National Park (1965-1970). Reserves Ranger, Canterbury (1970-1988).

Peter CROFT 1991 interview. Voluntary worker, Tongariro National Park (1952-1953). Casual worker, Fiordland National Park and Arthur's Pass National Park (1956-1957). Assistant Ranger, Arthur's Pass National Park (1957-1959). Senior Ranger, Arthur's Pass National Park (1959-1963). Chief Ranger, Arthur's Pass National Park (1963-1977). Assistant Supervisor of National Parks and Reserves, Dept L&S HO (1977-1978). Co.Warden, Sagarmatha National Park, Nepal (1979-1980). Chief Ranger, Nelson Lakes National Park (1980-1987).

Peter DANIEL 1991 interview. Currently Field Manager, Kapiti Island Nature Reserve. Ranger, Kapiti Island (1976-1987). Lighthouse keeper, Puysegur Point (1970-1976). Held ranger warrants for New Zealand Forest Service, Wildlife Service, Department of Internal Affairs, Marine Department, and Wellington Acclimatisation Society.

John DAWE 1991 interview. Currently Training Officer, Forestry Training Centre Whakarewarewa. Trained Woodsman, and Forest Officer. Training Officer, NZFS HO (1972-1980).

Bill DROWER 1991 interview. Progressed from wage worker to Leading Hand, Forest Foreman, and Ranger NZFS. Officer-in-Charge, Woodhill Forest North Auckland. Officer-in-Charge (Principal Ranger) Kaingaroa Forest. Honorary Park Ranger, Tongariro National Park. Honorary Fisheries Ranger, Woodhill Forest.

Paul GREEN 1991 interview. Currently Regional Conservator, Tongariro-Turangi Conservancy, Turangi. Ranger, Ohakune, Tongariro National Park (1974-1977). Senior Ranger, Whakapapa, Tongariro National Park (1977-1979). Acting Chief Ranger, Tongariro National Park (1979). Chief Ranger, Hauraki Gulf Maritime Park (1980-1982). Chief Ranger, Fiordland National Park (1982-1986). Chief Ranger, Tongariro National Park (1986-1987). District Conservator, Tongariro (1987-1989).

- John HOLLOWAY 1991 interview. Currently DOC HO. Professional trainee NZFS (1963-1967).
- David HOSKYN 1991 correspondence. Reserves Ranger, Peel Forest Park (1966-1970). Senior Ranger - Reserves, Nelson Land District (1970- 1986).
- Bruce JEFFERIES 1991 interview. Currently UNDP team member in Papua New Guinea. Ranger, Tongariro National Park (1966-1974). Assistant Supervisor of National Parks Dept L&S HO (1974-1976). Chief Warden, Sagarmatha National Park Nepal (1976-1979). Chief Ranger, Tongariro National Park (1979-1986). FAO (UN) Project Manager for National Park and Wildlife Conservation Officer, Nepal (1986-1988). Regional Manager, DOC Gisborne (1988-1991).
- Ted JONES 1991 correspondence. Currently Field Centre Manager, Bay of Islands Maritime and Historic Park. Wildlife Ranger, Wildlife Service, Department of Internal Affairs, Rotorua, Mangakino, Raetihi (1973-1977). Senior Wildlife Officer, northern Hawkes Bay-East Coast (1977-1987).
- Andy KIRKLAND 1991 interview. Currently Chief Executive, Department of Social Welfare. Junior labourer, NZFS Gwavas Forest (1951). Forester trainee. Deputy Director General of Forests (1978-1983). Director General of Forests (1983-1986).
- Bob LAWN 1991 interview. Junior labourer through to chainman (1939-1942). Forest Foreman (1945). Forest Ranger, NZFS (1946). Engaged in national forest survey (1945-1949). Senior Ranger, (1947-1952). District Ranger, Hokitika (1952-1957). District Ranger, NZFS, Kaikohe (1957-1973). Principal Ranger, Hokitika (1973-1979). Assistant Conservator of Forests, Hokitika (1980-1981).
- Peter C LOGAN 1991 correspondence. Deer culler, Wildlife Branch, Department of Internal Affairs (1946-1949). Wildlife Ranger, Wildlife Branch (1949-1955). Forest Ranger, NZFS (1955-1964). Field Inspector, NZFS (1964-1971). Principal Environmental Forest Ranger (1971-1986). Acting Director Environmental Forestry Division, NZFS (1986-1987).

PHC "Bing" LUCAS 1991 interview. Started work Department of Lands and Survey in 1942 systematically progressing up the administrative hierarchy. Administrative Assistant (1965-1969). Awarded Winston Churchill Scholarship to North America (1969). First Director of National Parks (1969-1975). Deputy Director-General of Lands (1975-1981). Director-General of Lands (1981-1986).

George LYON 1991 interview. Board member, Nelson Lakes National Park Board (1956-1959). Chief Ranger, Nelson Lakes National Park (1959-1980). Honorary ranger, Wildlife Service, Department of Internal Affairs. Honorary ranger, Nelson Acclimatisation Society. Honorary Fire Officer, Lake Rotoiti. Member of FMC Executive (1979-1980).

Jack McCONCHIE 1991 correspondence. Currently lecturer in Physical Geography Victoria University of Wellington (1988-). Member of the Kaimanawa State Forest Park Advisory Committee (1978-1980). Member of FMC Executive (1981-1983), North Island vice President (1983-1985). Honorary Ranger, NZFS for Tararua, Rimutaka, Haurangi (1976-), extended to Kaimanawa (1979).

John MALCOLM 1991 interview. Currently Director of NZ Forest Managers, Turangi. Ranger trainee, NZFS (1954-1958).

John MAZEY 1991 interview. Chief Ranger Tongariro National Park (1961-1975). Awarded Winston Churchill Scholarship to the United States (1969). Supervisor of National Parks, Dept L&S HO (1975-1986).

Don MERTON 1991 interview. Currently Senior Conservation Officer, Directorate of Protected Ecosystems and Species, DOC HO. Fauna Conservation Officer, Wildlife Service, Department of Internal Affairs (1957-1987).

Ken MIERS 1991 interview. Deer culler, Wildlife Branch, Department of Internal Affairs (1944-1949). Deputy Director of Wildlife (1963-1966). Supervisor of National Parks, Dept L&S HO (1966). Director of Environmental Forestry Division, NZFS HO (1966-1985).

Frank NEWCOMBE 1991 interview. Clerical cadet Department of Internal Affairs (1927). Foundation member of Wildlife Branch, Department of Internal Affairs (1945). Controller of Wildlife Branch (1961-1967).

Gordon NICHOLLS 1991 interview. Chief Ranger Franz Josef, Westland National Park (1963-1967). Awarded Winston Churchill Scholarship to the United States (1968). Supervisor of National Parks, Dept L&S HO (1969-1975). Warden, Sagarmatha National Park, Nepal (1976-1979).

John OMBLER 1991 interview. Currently Regional Conservator, DOC, Napier. Wage worker, Mt Aspiring National Park (1975-1976). Relieving Ranger, Dept L&S (various locations) (1976-1978). Reserves Ranger, Wanganui (1978-1983). Ranger, Fiordland National Park (1983-1986). Assistant Supervising Ranger, Dept L&S HO (1986-1987). Chief Ranger, Whanganui National Park (1987). District Conservator, DOC, Wanganui (1987).

Kevin "Foxy" O'CONNOR 1991 interview. Currently Operations Manager, DOC, Nelson. Ranger trainee, NZFS (1972-1975). Assistant Ranger, NZFS Stewart Island (1975). Environmental Forest Ranger, Westland (1976). Diploma in Parks and Recreation - Ranger Option, Lincoln College (1978-1980). Recreation Ranger, Catlins State Forest Park (1980-1981). Officer-in-Charge, Craigieburn State Forest Park (1981-1984). Recreation Forest Officer, NZFS HO (1984-1986). Seconded to Dept L&S HO as Acting Assistant Supervising Ranger, Dept L&S HO (1986-1987). District Conservator, DOC, Taupo (1987-1990).

Merv O'REILLY 1991 correspondence. Labourer NZFS (1951). Technical (ranger) trainee (1952). Appointed ranger (various stations) (1957-1962). Senior Ranger Environmental Forestry, Westland (1962-1987).

Lindsay POOLE 1991 interview. Graduated B.For.Sc, professional forester, Forestry School, Auckland University College (1931). Joined DSIR Botany Division (1936). DSIR scientific liaison officer in London (1939-45). British Military Government, Germany, Forestry and Timber Control (1945). Assistant Director of the Botany Division, DSIR (1946-1948). Director of Botany Division, DSIR

(1949-1950). Assistant Director of Forestry, NZFS (1950-1960). Director-General of Forestry, NZFS (1961-1971). Chairman of the Soil Conservation and Rivers Control Council (1971-1975).

Les PRACY 1991 interview. Deer culler Wildlife Branch, Department of Internal Affairs (1946-1949). National survey of possums (1949-1952). Transferred to NZFS (1956). Forest Ranger Environmental Forestry Division, NZFS (1956-1987).

Geoff RENNISON 1991 interview. Currently Field Centre Manager, DOC, Takaka. Senior Ranger Fox Glacier, Westland National Park (1968-1974). Chief Ranger, Abel Tasman National Park (1974-1987). District Conservator, DOC, Takaka (1987-1990).

Lew SKUDDER 1991 interview. Technical trainee, NZFS (1945-1950). Forest Ranger, NZFS (1950-1973). Assistant Conservator of Forests, Rotorua (1976-1983). Deputy Conservator of Forests, Rotorua (1983-1987).

Dave STACK 1991 interview. Currently Chief Executive Officer, Eastern Region Fish and Game Council, Rotorua. Deer culler, Wildlife Branch, Department of Internal Affairs (1951-1956). NZFS, Environmental Management (1956-1961). Wildlife Ranger, NZ Wildlife Service (1961-1980). Conservator of Wildlife, Rotorua (1981-1987). Deputy Regional Manager (Conservation Management), DOC (1987-1990).

Priestley THOMSON 1991 interview. Graduated from the Canterbury School of Forestry 1934. Directed the national forest survey (1945-1955). Director of Research, Forest Research Institute (1946-1948). Conservator of Forests, Rotorua (1959-1961). Assistant Director-General of Forests (1961-1968). Deputy Director-General of Forests (1968-1970). Director-General of Forests (1970-1976). Member of FMC Executive (1953-1954, 1961). Vice-President FMC (1955-1957, 1960). President FMC (1958-1959).

CHRONOLOGY

- 840 Treaty of Waitangi
Organised European settlement of New Zealand commenced
Unsuccessful attempt to acclimatise rabbits in Otago
- 855 750,000 sheep in New Zealand
- 861 Protection of Certain Animals Act
- 862 Birds Protection Act
Rabbits successfully acclimatised in Southland
- 863 First acclimatisation society established in North Canterbury
- 864 Wild Birds Protection Act
- 867 Salmon and Trout Bill
- 870 10 million sheep and 500,000 cattle farmed in New Zealand
- 873 Animals Protection Act
- 874 Forests Act
Dr Hector estimated 3.3 million hectares of forest destroyed between 1830 and 1873
- 875 Campbell appointed as ranger by Southland Waste Lands Board (first documented appointment of a ranger)
- 876 Provincial Governments abolished
- 877 Land Act
Campbell Walker appointed First Conservator of State Forests
- 880 Animals Protection Act
- 882 Government mustelid importations began in response to the rabbit invasion
- 884 Campbell appointed crown lands ranger to deal with deferred payment settlement
- 885 Evidence of Forestry School in the Lyndhurst District
New Zealand State Forests Act
McIlhone appointed as forest ranger in Puhī Puhī Forest Reserve
Campbell appointed forest ranger for Southland District
- 387 Te Heuheu IV Tukino gifted the peaks surrounding Tongariro, Ngauruhoe, and Ruapehu for the purpose of a national park
Forest and Agriculture Branch, Crown Lands Department transferred to Forests and Agriculture Branch, Department of Lands and Survey
School of Forestry, Pomology and Agriculture established at Whangarei
- 392 Department of Lands and Survey established, an alliance of the Crown Lands Office and the Survey Department
Land Act
Resolution Island permanently reserved for the protection of native flora and fauna and recreation
22 crown land rangers in New Zealand
- 394 Tongariro National Park Act - New Zealand's first national park
Little Barrier Island Purchase Act - responsibility and control by the Auckland Institute
Henry appointed caretaker and curator of Resolution Island
- 396 State Forest Branch, Lands Department established
- 397 Kapiti Island Public Reserve Act
- 400 Egmont National Park Act - provided for the appointment of national park rangers
- 401 Tourist and Health Resorts section of Railways established to administer major natural attractions and promote the tourist industry

- 1903 Scenery Preservation Act - provided for the creation of a Royal Commission on scenery preservation
21 out of the 23 acclimatisation societies had been established by this date
- 1904 Tourist and Health Resorts take control of Resolution Island and Little Barrier Island
- 1906 Scenery Preservation Amendment Act - allowed for the appointment of a Scenery Preservation Board
- 1908 Animals Protection Act
- 1909 29 rangers in Dominion
Control of scenic reserves returned to Department of Lands and Survey from the Department of Tourist and Health Resorts
- 1913 Department of Internal Affairs instructed to administer Taupo and Rotorua fisheries
Royal Commission on Forestry
- 1915 Forestry Branch of Lands and Survey established
- 1918 Forestry Department established from Forestry Branch
- 1921 Animals Protection and Game Act
- 1921-22 Forests Act
Forestry Department renamed State Forest Service
- 1923 Royal Forest and Bird Protection Society established (original name New Zealand Native Bird Protection Society)
- 1924 Exotic afforestation of Kaingaroa commenced
- 1925, 26 Schools of Forestry including forest ranger training courses initiated at Auckland and Canterbury Universities
- 1928 Public Reserves, Domains and National Parks Act
- 1929 Arthur's Pass National Park established
Ranger Uren appointed Wild Life Officer in Wellington
- 1930 Protection status of deer relinquished
Captain Yerex employed by Department of Internal Affairs to coordinate deer culling operations
Auckland School of Forestry closed
- 1931 Federated Mountain Clubs established
- 1934 Canterbury School of Forestry closed
- 1941 Soil Conservation and Rivers Control Act
- 1942 Abel Tasman National Park established
- 1945 Wildlife Branch, Department of Internal Affairs established
Southern Lakes District established and jurisdiction vested in Wildlife Branch
Forest Training Centre established at Whakarewarewa, Rotorua
- 1948 Land Act
Takahe rediscovered by Orbell - protected species became a priority for Wildlife Branch
- 1949 Forests Act
State Forest Service renamed New Zealand Forest Service
- 1950 In-house training for wildlife rangers commenced
- 1951 Department of Lands and Survey assumed control of Little Barrier Island from New Zealand Tourist and Publicity Department
- 1952 National Parks Act
National Parks Authority and Boards established
- 1953 Wildlife Act
Reserves and Domains Act
Mt Cook National Park established

- 1954 Tararua State Forest Park established as first State forest park
Te Urewera National Park established
- 1955 New Zealand National Forest Survey completed
- 1956 Noxious Animal Act
Control of culling operations of deer, opossums and other noxious animals transferred from Wildlife Branch, Department of Internal Affairs to the New Zealand Forest Service
Nelson Lakes National Park established
Protection Forestry Division established - later renamed Environmental Forestry Division
- 1959 Department of Lands and Survey Head Office established Supervisor of National Parks position
- 1960 Westland National Park established
- 1964 Mt Aspiring National Park established
First reserves ranger appointed and based at Peel Forest Scenic Reserve
South Island saddleback rescued from Big South Cape Island - protected species research and management accelerated
- 1966 Working Party on National Park Administration
- 1967 New Zealand State Forest Reefton ranger school closed
Craigieburn State Forest Park established
Hauraki Gulf Maritime Park established
- 1968 Commission of Inquiry on the Organisation of Wildlife Management and Research in New Zealand
Wildlife Branch renamed Wildlife Service
- 1969 National park and reserves rangers became public servants
National Parks Division, Department of Lands and Survey established
Kaimanawa State Forest Park established
- 1970 North-west Nelson State Forest Park established
In-house ranger training established for national park and reserves rangers
Save Manapouri Campaign initiated by Royal Forest and Bird Protection Society
- 1971 Coromandel and Pirongia State Forest Parks established
- 1972 Rimutaka State Forest Park established
Protests against French atmospheric nuclear tests at Muroroa Atoll began
- 1973 Marlborough Sounds Maritime Park established
- 1974 Wilcox report "Training for Park Management" prepared for National Parks Authority
Kaweka, Lake Sumner, Haurangi and Catlins State Forest Parks established
- 1975 Walkways Act
Kaimai-Mamaku and Whakarewarewa State Forest Parks established
Diploma in Parks and Recreation Administration and Ranger block courses commence at Lincoln College
- 1976 Forests Amendment Act - allowed for the establishment of forest parks and recreation areas under a multiple use mandate
Ruahine State Forest Park established
- 1977 Reserves Act
Mount Richmond State Forest Park established
- 1978 Hanmer and Pureora State Forest Parks established
Bay of Islands Maritime & Historic Park established
- 1979 Raukumara State Forest Park established
Government Caucus Committee established to review the administrative structure of national parks and reserves

- 1980 National Parks Act
National Parks Authority renamed National Parks and Reserves Authority
International Ranger Training Centre established at Turangi by the National Parks and Reserves Authority
Species management commenced on the remaining 5 Chatham Island Black Robins - by 1988 over 60 individuals existed
- 1981 OECD reviewed New Zealand's environmental administration and policy
Nature Conservation Council recommended administrative reorganisation of environmental agencies
- 1983 Victoria State Forest Park established
- 1984 Whirinaki and Northland State Forest Parks established
Ranger block courses at Lincoln College concluded
Investigations began for formal training of wildlife rangers at Lincoln College - training never initiated
- 1985 Environmental Forum agreed that a new environmental department should be established to promote conservation and protection of the natural and historic heritage
New Zealand became nuclear free
- 1986 Whanganui National Park established
- 1987 Paparoa National Park established
New Zealand Forest Service, Department of Lands and Survey and Wildlife Service
Department of Internal Affairs disbanded
Conservation Act
Department of Conservation established

RANGER NUMBERS 1911-1986

	Crown Land	Forest ¹	Wildlife	Reserves	National Park
1911	8				
1912	8				
1913	28				
1914	29				
1915	32				
1916	31				
1917	31				
1918	32				
1919	31				
1920	32				
1921	36				
1922	36	35			
1923	32	41			
1924	33	41			
1925		40			
1926		36			
1927		39			
1928		40			
1929		40			
1930		38			
1931		42			
1932		41			
1933		35			
1934		33			
1935		32			
1936		43			
1937		43			
1938		47			
1939		50			
1940		62			
1941		63	2		
1942		66	2		
1943		68	2		
1944		68	2		
1945		64	2		
1946		63	2		
1947		66	2		
1948		62	2		
1949		140	4		
1950		160	30		

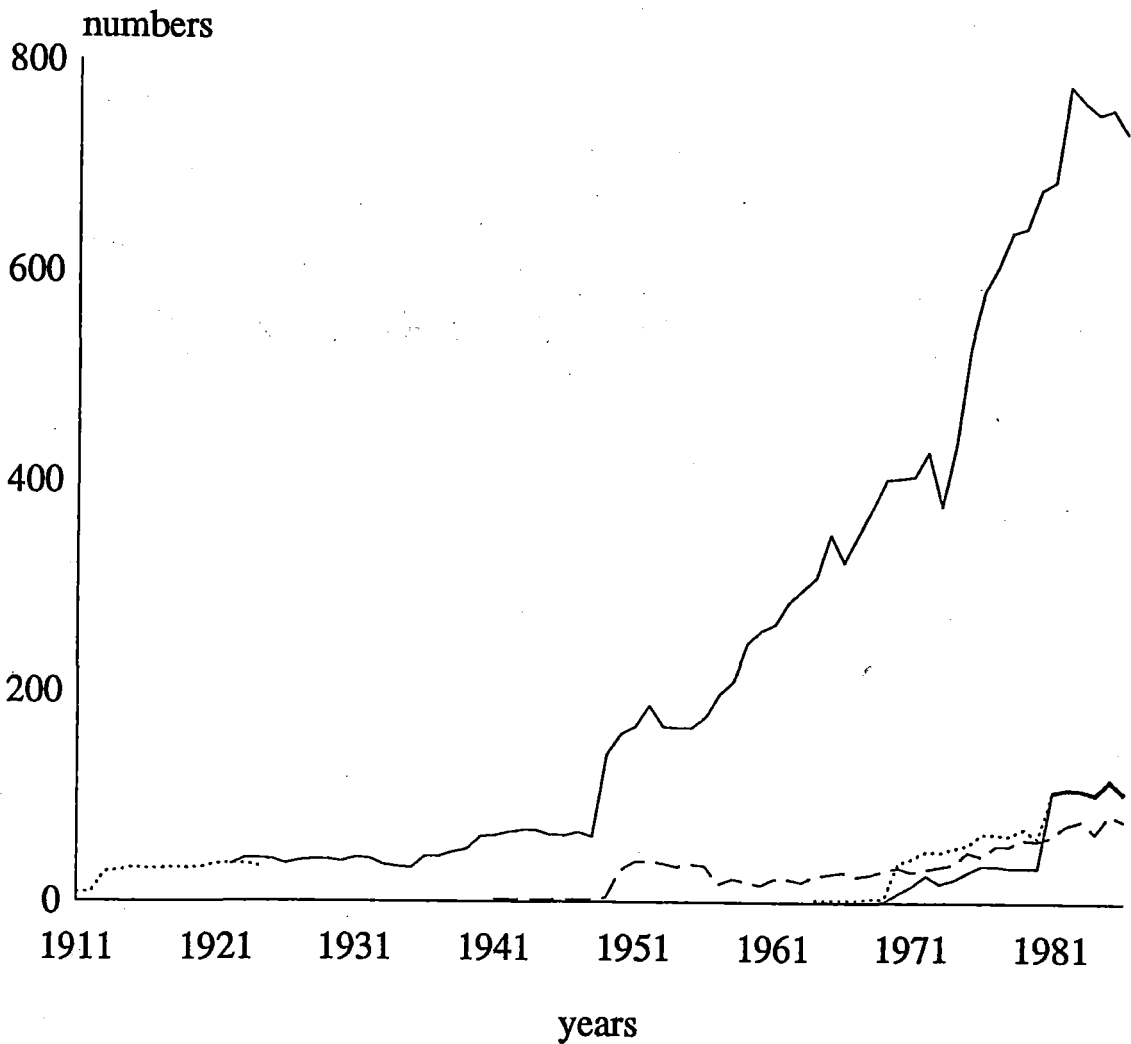
1951		167	38		
1952		187	38		
1953		167	37		
1954		166	33		
1955		166	36		
1956		176	34		
1957		198	17		
1958		210	22		
1959		246	19		
1960		258	16		
1961		264	22		
1962		285	22		
1963		297	19		
1964		309	25	1	3
1965		350	27	1	3
1966		324	29	1	3
1967		350	25	1	3
1968		375	27	1	4
1969		402	31	1	4
1970		403	33	9	38
1971		405	29	16	42
1972		428	32	26	49
1973		377	34	18	48
1974		436	37	22	52
1975		528	48	29	55
1976		581	44	35	65
1977		605	54	35	65
1978		637	54	33	64
1979		641	60	33	70
1980		678	59	33	61
1981		686	63	105 ²	
1982		776	74	108	
1983		761	78	107	
1984		750	66	103	
1985		754	84	116	
1986		732	78	104	

¹ This total includes both environmental and production forest rangers. The number of environmental forest rangers was approximately 128 by 1986 (O'Connor, 1991).

² Under the National Parks Act 1980 the distinction between national park and reserves rangers was removed. They became known only as rangers.

(after State Services Commission 1911-1987 *List of Persons Employed on the Permanent Staff of the Public Service*, (colloquially known as the 'Stud Book'))

Ranger Numbers 1911-1986



.....	Crown Land	—	Forest	- - -	Wildlife
—	National Park	Reserves	—	Parks & Reserves