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NATIONAL PARKS IN NEW ZEALAND, CONSERVATION OR PRESERVATION?

Presented in partial fulfilment of the requirements for the Degree of Master of Science (Resource Management), in the University of Canterbury.

by

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ABSTRACT.

Natural protected areas are a resource for, and in which, a wide range of values is identified; market value, non-market value, and intrinsic value. National park history, philosophy and legislation is interpreted to suggest that preservation is, ideally, the primary land management goal for national parks, and that this goal reflects a subset of the values identified for protected areas as a whole. In actuality though, there are a number of non-preservationist influences which may increasingly prevent preservationist objectives from being met. These influences reflect a different subset of protected area values. In order for preservation to be achieved, stricter legislation will be necessary and in many cases it will not be applicable to existing national parks. It will be necessary to identify the areas where preservation is still achievable, and to protect those areas under the new legislation. The preservation of land will then require clear understanding of the values underlying preservation, and strong advocacy of those values in the face of pervasive human modifying influences.
CONTENTS.

ACKNOWLEDGEMENTS.

ABSTRACT.

1. INTRODUCTION.

2. VALUES ASSOCIATED WITH PROTECTED AREAS.
   2.1 Introduction.
   2.2 Market values in protected areas.
   2.3 Non-market values in protected areas.
   2.4 Intrinsic values in protected areas.

3. NEW ZEALAND NATIONAL PARKS; PRESERVATION.
   3.1 Introduction.
   3.2 Preservation as the primary management goal for New Zealand national parks.
   3.3 Protected area values compatible with New Zealand national parks.
   3.4 Conclusion.

4. NEW ZEALAND NATIONAL PARKS; CONSERVATION.
   4.1 Introduction.
   4.2 The influence of tourism.
   4.3 The influence of market forces.
   4.4 The influence of incremental change.
   4.5 Conclusion.

5. PROBLEM ANALYSIS, IMPLICATIONS AND POSSIBLE SOLUTIONS.
   5.1 Introduction.
   5.2 Implications.
   5.3 Addressing non-preservationist influences.
   5.4 Weaknesses in national park legislation.
   5.5 A realistic approach to the achievement of preservationist goals.

6. CONCLUSION.

REFERENCES.
CHAPTER 1. INTRODUCTION.

On looking at most landscapes of New Zealand, the impacts of human settlement are obvious, to varying degrees. These parts of the landscape have generally being modified, either for productive purposes or for human dwellings. However, some parts of the landscape remain similar in character to their pre-European and even pre-Polynesian state. Many of these essentially unmodified areas are becoming increasingly valuable as storehouses of genetic diversity, protectors of productive soils, generators of tourism revenue, and as retreats from life in the modified areas of New Zealand, especially the cities. To protect these values of unmodified environments, New Zealand has an extensive and well developed natural protected area system, including 12 'national parks'.

However there are a number of changes occurring to resource allocation philosophy and procedures in New Zealand which could affect national parks. In addition tourism, much of it oriented towards outdoor activities, is rapidly increasing in New Zealand. This also has possible implications for national parks. It also seems that, although national parks are all managed under the same legislation, and by the same department, there is a vast difference in the physical expression of peoples' influences in those parks. These concerns, the author's own observation of national parks in New Zealand, and the concerns evident in recent conservationist literature, have provided the impetus for conducting this investigation.

This project is concerned with whether or not national parks in New Zealand are being managed according to the goals expressed in their legislation, as derived in turn from their history and philosophy. It seeks to compare national parks ideally with national parks in actuality or expected actuality, and address the implications of any difference between ideal and actual outcomes. The central assumption of this project then, is that if land is designated with any status, the purpose of that designation, and its underlying values should be met.
Chapter Two identifies the range of values associated with protected areas as a whole. It investigates market, non-market and intrinsic values, drawing mainly on economic and philosophical literature.

The Third chapter proposes an ideal management goal for national parks in New Zealand, as an expression of park history, philosophy and legislation. In turn this goal will be matched to the range of values in Chapter Two.

Chapter Four examines any influences that currently are, or potentially may, prevent the achievement of the ideal management goal proposed in Chapter Three. It will determine what sort of management goal is actually being achieved, or is likely to be achieved and will again match that to the range of values from Chapter Two.

Chapter Five will assess the implications of any difference between the management goals, and underlying values, that Chapters Three and Four find existing in, or potentially existing in, national parks. It will also suggest possible solutions to any failure of the stewardship of New Zealand's national parks to meet its proposed, ideal goal.

It is not the purpose of this project to provide definitive answers to national park problems. Indeed the very existence of the problem studied could be disputed. Instead this project is intended to alert park managers and administrators to a possible, or potential problem in the achievement of their objectives as land managers. Accordingly, it outlines possible solutions which are intended to ensure the achievement of those goals. The success of this project is not contingent upon its acceptance by national park managers. It will be successful simply if it promotes careful discussion of national parks in terms of the management goals they are intended to reflect.
2.1. INTRODUCTION.

Upon investigating resource management issues it is found that the cause of any conflict that exists may be differences in peoples' values. Individuals and groups of individuals within society value nature and natural resources differently, and often prefer different courses of action with respect to those resources. For instance, some people and groups would prefer certain resource developments to occur while others would not. Indeed there is a wide range of values that may possibly exist in, or be held for, or granted to nature and natural resources. Resource managers must consider these in their decision-making, and resource management could be characterised as the resolution of value-based conflict among humans.

If values are important in resource management problems and conflicts, it seems reasonable to begin an assessment of such a problem with an assessment of values. National parks are a subset of protected areas, which are an example of a resource with which a broad range of values might be associated. "It is only when values are considered in relation to one another that their nature and shortcomings become known" (Brown 1984, 231). Similarly it is only when national parks are considered in relation to other protected areas that the values appropriate to national parks can be established.

Values associated with protected areas may be classified as market, non-market and intrinsic. They are examined in detail below:
2.2. MARKET VALUES IN PROTECTED AREAS.

A demand for a product exists because that product may provide utility or satisfaction, and is affordable relative to other products (Wonnacott and Wonnacott 1979, 395). A supply of a product exists because that supply is marketable, again relative to other products, and because it represents an income to a supplier. The existence of demand and supply leads to the interaction of willing producers and consumers. In a capitalist economy this interaction occurs within a market; the arena in which buyers and sellers interact and goods and services are traded for prices, or market values.

Value is seen in neoclassical economics as being preference related, and derived from individual human beings (Brown 1984, 231). Market values are derived from the collective interactions of individual producers and consumers in markets, and reflect the scarcity of resources of both producers and consumers, and the worth of goods relative to each other. Brown sees market value as either a unit or an aggregate concept (1984, 239). As a unit concept, market values are the prices that participants in markets pay and accept for products. Market price is delineated in units of money to allow efficient exchange to occur. As an aggregate concept, it is the sum of the surplus to consumers over and above the prices they pay and the surplus to producers over and above their supply costs. In this sense it is the utility gained by the participants in a market transaction, and more utility is gained by more transactions. While these two aspects of the market phenomenon are recognised, they are taken here as occurring simultaneously.

Market values are useful for public decision-makers because they exist for a large number of goods, and can indicate the relative importance of many things, to many people. They are easily observed, and as social phenomena they reflect the interaction of many individuals, not just a few. Boulding, who saw a clear measure of value as essential in order to establish whether today is better than yesterday (1977, 819), called money, "the only mechanism which offers a clear measure of value in our society" (1977, 819).

Market values also have "a kind of objective status" (Boulding 1977,
820), and both they, and the market mechanism have considerable "normative clout" (Boulding 1977, 820). For instance, the current government openly advocates a 'more market' approach to New Zealand's economic problems, and the fostering and encouraging of market activity is often seen as maximising individual freedom and opportunities, and collective wealth (see for example Friedman 1962; Treasury 1984). Indeed, dollar values are used to indicate national wealth, or 'standard of living', in the form of Gross Domestic Product (per capita).

The appropriateness of market values as an indicator of value depends upon the acceptance of the values and assumptions underlying market decisions, the notion of what constitutes social welfare, and how well the market mechanism contributes to that welfare. With respect to public resources, market values "are often inappropriate as the sole value measure" (Brown 1984, 231). Prices may not reflect all of the values placed on all parts of public resources, and therefore decisions based upon price alone may destroy some of those values.

One such example of a public resource is the protected area resource. While the minerals, some of the land, and some of the trees in protected areas have market values, "most members of the land community have no economic [market] value" (Leopold 1949, 225). Instead protected areas contain many other values and provide non-market benefits. Indeed, some protected areas may be an example of something which "we...have a feeling somehow...should be priceless" (Boulding 1977, 820-21).

Protected areas are not themselves marketed commodities, but the land, and flora and fauna they contain, may contribute to income and national wealth in two ways: Firstly, as protected areas they involve people in market transactions; people pay to get to protected areas, and for the food and equipment they use there. They may also consume services such as publications or guided activities. In this case protected areas provide income but are not greatly modified; the actual market values of some of the park's resources are not realised. Secondly, a protected area may have its status revoked and the marketable resources within it developed. The potential
market value of a protected area's resources then is an opportunity cost of having those resources protected.

If the market mechanism is used in a society as the sole determinant for land and resource decision-making, then decisions will emphasise the land uses which are the most productive in terms of market value. Protected areas would then have to be shown to be the most productive use for the land they include. This seems difficult given that much of their value is not traded in markets, or present in conventional calculations of social wealth. It may also be inappropriate given that incorporating productive values into them may affect their other values, and these other values are considered important by some people.

Market value seems inappropriate as the sole measure of the value of protected areas. Firstly, it does not reflect all of the values present in, or held for protected areas. Secondly, strict adherence to market signals in protected areas might see them changed drastically in order to remain favoured over competing land uses, or might actually see their status revoked and their resources 'cashed in'. In order to appreciate the full value of protected areas, there is a need for the other values associated with protected areas to understood:

2.3. NON-MARKET VALUES IN PROTECTED AREAS.

There is little debate over whether or not we should have protected natural areas. Instead we consider how many, of what size and status, and in what areas (Loomis and Walsh 1986, 130; Peterson and Randall 1986). In such decision-making, information is needed on "the relative benefits of the choices available" (Everitt 1983, 176-77), because resources are scarce, and may be used in a variety of ways. While "the benefit of...market activities can be eloquently shown (Everitt 1983, 177), many of the benefits from protected areas are intangible. Being of a public good nature, these benefits are not expressed explicitly in markets, and may even conflict with desirable market outcomes.
Non-market valuation has arisen from within the discipline of economics, reflecting several concerns with existing decision criteria. On one hand there has been the concern that there is no such thing as the value of an object (Brown 1984, 244), and that the market value of some things was probably not the same as their true total value. On the other hand there is the concern that market and non-market values are incommensurable and "a set of social valuation coefficients [is needed] which can transform heterogeneous items into a common measure of value" (Boulding 1977, 811). This is coupled with concern that objectively derived values of extra-market benefits are needed so as not to "reflect the biases of the valuers" (Everitt 1983, 176).

While non-market values are not observed in markets, they are economic; "values are economic if some individuals (not necessarily all) feel better off (not necessarily materially) from receiving them" (Loomis and Walsh 1986, 126). While neither markets and prices, nor consumption or use need exist for economic value to exist (Edwards 1987, 79), non-market valuation is utilitarian (Peterson and Randall 1984, 4; Edwards 1987, 79). Its most basic assumption is that the "individual human being is...the originator of preference and, therefore of value" (Brown 1984, 231). Like conventional economic analysis it assumes that "the ultimate aim of economic activity is to satisfy the preference of consumers (Ulph and Reynolds 1981, 17).

Indeed, non-market valuation is usually done in hypothetical markets because;

"although there are no actual prices to reflect what people are willing to pay for non-marketed goods, there is no reason why we cannot ask then what they would be willing to pay under some hypothetical equivalent of market trading"
(Ulph and Reynolds 1981, 17, italics added).

Benefit-cost analysis seeks to simulate "complete and efficient" markets (Peterson and Randall 1984, 7), and is concerned with the "overall level of economic well-being" (Bishop and Heberlein 1979, 929), just as market analysis is. Indeed, the growth of the field of non-market valuation could actually be seen as part of the previously noted growth of market forces generally, because the latter is bringing increased pressure upon land
managers, and others, to justify their activities "in terms of economic benefits and costs" (Peterson and Randall 1984, 2).

The essential difference between market and non-market valuation then, is that the latter has a wider definition of value, including not just market value, but also recreation, scientific, educational, cultural, historic, aesthetic, option, existence and quasi-option values. Non-market valuation recognises that market value is not always equal to total value and sets about eliciting and measuring the difference.

The non-market valuation field has not been without its critics. Some people will not accept the normative basis of cost benefit analysis, and, or the empirical methods. They believe it has "a long way to go before it can claim accuracy comparable to analyses of market phenomena" (Bishop and Heberlein 1979, 929). Meanwhile, others, mainly ethicists and ecologists have criticised the "monetisation of environmental values...for being imperialistic, reductionistic, illogical, irrelevant and inappropriate" (Edwards 1987, 73). Some of the latter critics believe that there is also intrinsic value in nature which exists whether or not it gives people utility. These values cannot be accounted for by even non-market analysis because of its fundamental assumption that value can only inhere in humans. They are discussed below:

2.4. INTRINSIC VALUES IN PROTECTED AREAS.

Intrinsic value is the most problematic type of value associated with protected areas because it must exist independently of humans and their valuing consciousness. Its existence is therefore very difficult, if not impossible to prove or disprove. Callicott describes "the problem of constructing an adequate theory of intrinsic value for non-human natural entities and for nature as a whole" as "the central and most recalcitrant problem facing environmental ethics" (1985, 257).

Because readily quantified values are more easily understood and accepted than intangible ones, and because the two sorts of value are incommensurable, it is difficult, perhaps impossible to "judge the propriety of
appealing to...[intangible values] in the defence of social policy" (Hammond 1985, 168). Despite this difficulty though, Singer and others find that "ethics is inescapable,...it [is] impossible to prevent ourselves...classifying actions as right or wrong" (1981, ix). The objectivity of ethics though, must be questioned; "are moral laws somehow part of the nature of the universe, like the laws of physics?...or must ethics always be relative to the society in which we live, perhaps even to the personal attitudes of each of us" (ibid, ix).

Unlike our scientific enquiries into the nature of the physical universe, moral philosophy has revealed few generally accepted results about the fundamental nature of ethics, or the world. Adams (1972, 3) attributes this to the fact that the principle knowledge humans seek is "how can I impose my will upon the world and exploit it for my own purpose?". He believes that people will not accept any objective, normative aspects of nature because that belief will attenuate their power. However "heritage [and other intangible] values are as legitimate and important as any other values commonly appealed to in the justification of action and policy" (Hammond 1985, 168). For instance, the 1980 National Parks Act, unlike its 1952 predecessor, specifies the "intrinsic worth" (s.4) of parks as a reason for their "preservation", and not just "the benefit, use and enjoyment of the public" (National Parks Act 1980, s.4).

Many authors have tried to establish a credible basis for a theory of intrinsic value in nature. Progress has been made but intrinsic value theory is yet to be accepted axiomatically. It is not a cultural impossibility; spirit and independent qualities have been held to exist intrinsically in nature in many pre-industrial and pre-Christianic societies, including Maori society. The problem with getting acceptance for a theory of intrinsic value is one of overcoming the existing, entrenched cultural attitude that; "things which have been held to be intrinsically valuable, within our Western tradition of thought, have nearly always been taken to be states or conditions of persons" (Godfrey-Smith 1979, 309/10). "It follows from this that a very central assumption of Western moral thought is that value can be ascribed to the nonhuman world only insofar as it is good for the sake of the well-being of
human beings" (ibid, 310).

To 'qualify' as intrinsic, value must be self sufficient in the valuable object. Callicott suggests that something might be said to possess intrinsic value "if its value is objective and independent of all valuing consciousness" (Callicott 1980, 262). Because of the impossibility of proving the existence of such value he proposes another type of value which he calls inherent value. This equates to the assigned, and therefore possibly measurable part of intrinsic value.

"Let something be said, to possess inherent value if (while its value is not independent of all valuing consciousness) it is valued for itself and not only because it serves as a means to satisfy the desires, further the interests, or occasion the preferred experiences of the valuers" (ibid, 262).

Callicott's definitions are very clear and concise, showing precisely the character and make up of intrinsic value and demonstrating the possibility of such value existing with the full awareness and compliance of the valuers. Callicott shows that although intrinsic value itself must exist independently within the valuable object, that very existence might have some utilitarian value. However, the existence of this utilitarian aspect of intrinsic value is not equal to the intrinsic value itself, it is merely an assigned value; the value of the intrinsic value. Intrinsic value continues to exist when humans no longer value nature inherently because it exists in the valuable object.

While the exact basis for granting intrinsic value to non-human elements of the natural world differs from author to author, most attempts have one thing in common; they seek to explain the acceptance of intrinsic value in nature as an extension or expansion of the circle of beings and entities to which humans have moral obligations. For instance Leopold (1949, 217), wrote about a "process of ecological evolution" which he called the ethical sequence. He notes that throughout human history, "ethical criteria have been extended to many fields of conduct, with corresponding shrinkages in those judged by expediency alone" (ibid). Leopold sees the extension of ethical consideration to nature, as "an evolutionary possibility and an
ecological necessity" (ibid, 218).

The stances postulated by environmental ethicists might seem somewhat controversial. The "evolution of the capacity for empathy" while having many precedents, always involves the "acceptance, on the part of some individuals, of new obligations, rights, and values which, to a previous generation, would have been considered unthinkable" (Godfrey-Smith 1979, 318). However, despite the theoretical and cultural difficulties, the theory of intrinsic value in nature remains to be disproven, just as it remains to be proven. If Hammond (1985, 168) is right, and intangible value types are as legitimate as any other value types, then intrinsic value, by virtue of its possible existence and its acceptance by at least some people should be a consideration in resource decision-making.

For the purposes of this project, intrinsic natural values are taken to be greatest in the least modified parts of New Zealand. As the level of human-induced modification increases, the intrinsic values of the affected ecosystems are lost, and replaced with the value of human activity, or with values giving utility to humans. The mere entry of humans to these areas will not be held to reduce intrinsic values, because humans are seen as being intrinsically part of those environments. Instead this reduction begins when the landscape no longer "appears to have been affected primarily by the forces of nature" (from Department of Lands and Survey and New Zealand Forest Service 1980). The impact of introduced biota is not ignored, instead intrinsic value is simply seen as residing in greatest quantity in the least modified areas.
CHAPTER 3. NEW ZEALAND NATIONAL PARKS; PRESERVATION.

3.1. INTRODUCTION.

National parks cannot be all things to all people (Green 1985, 3; Devlin 1980, 71). If so, what should they be, and to whom? Which of the values outlined above as being potentially held for, or existing in protected areas are appropriate to be protected and emphasised in national parks?

This chapter seeks to answer this question, and is in two parts. The first part evaluates the history, philosophy and legislation of national parks in New Zealand to determine whether they are intended to be a preservation, conservation or amenity concept, and to determine what is the intended primary management goal of those parks. The second part matches this goal to the range of values outlined in Chapter Two.

That no single park or single type of protected area can be all things to all people is critical. Where individuals or groups expect to pursue all of their recreational needs in one area, conflict can be expected. "Parks established under different legislation go part way towards avoiding this conflict" (Devlin 1980, 71). The philosophy and legislation of national parks provides a specific role for national parks in terms of the spectrum of values outlined in Chapter Two.

3.2. PRESERVATION AS THE PRIMARY MANAGEMENT GOAL FOR NEW ZEALAND NATIONAL PARKS.

National Park philosophy had its beginnings in Yellowstone, in the United States in 1872, with the realisation by a number of early explorers that some areas should remain in national ownership, and their natural state, for people's enjoyment. Many countries now have 'national parks' but there is great variety in the philosophy and management techniques applied to them.
Along with Canada and America, New Zealand;

"share[s]...perhaps the "purest" form of national park system, where the landforms and indigenous biota are protected from man-induced change and where any introduced biota is as far as possible removed-these areas are freely available for the enjoyment and education of all people".
(Rennison 1972, 8, italics added)

Herein lies the inherent conflict and contradiction of national parks; how can preservation and free access be reconciled? Some people see some levels of use as incompatible with the preservation goal, while others see preservation as a barrier to the use goal. Ideas as to which of these two goals should have priority, have changed in the one hundred years of our national park system's existence, and there has been no complete consensus over whether national parks should be primarily preservation areas, or use areas. Those who strongly favoured use had ascendancy in the era to approximately 1950, which Rennison (1972, 6) called the 'national playground' period. However, the modern perception of national parks in New Zealand is more of parks being a 'biota refuge' (ibid, 9) and, increasingly as a 'psychological refuge' (ibid, 10; also implied by Molloy and Wilson 1986).

Currently, some groups, such as concessionaires, tourist operators, and some politicians and user groups are trying to get parks 'opened up' for more use and development (Potton 1987, 22). On the other hand, conservationists and other user groups are advocating the continued preservation of those parks.

Booth (1986, 1987), notes that a random sample of the Christchurch public showed "overwhelming support towards national parks" (1986, 102) and that "the theme of preservation first and use second was apparent" (ibid, 106; 1987, 7). Against the perception of parks noted by Booth, must be put the observations of Jefferies (1986, 10). He notes that many visitors to Tongariro National Park arrive thinking "that the park environment has somehow been placed there solely for their individual enjoyment". Some visitors see the park "in the same way as Disneyland, or Kelly Tarlton's Underwater World or some similar sideshow" (ibid, 10).
The evolution of national park philosophy in New Zealand has been generally paralleled by the evolution of national park legislation. Initially when visitor numbers were very low, the administration of national parks showed "little or no coordination" (Lucas 1969, 4), and legislation was "untidy" (Thomson 1976, 4). By 1952 however, with the parks' growing importance, the need for a national system of park administration with clear goals became apparent. "The National Park Act 1952 laid the foundation for a truly "national" system of parks" (Lucas 1969, 4), and the "dual purpose of nature conservation and recreation was for the first time made explicit" (Thomson 1976, 4).

Between 1952 and 1964 five more parks were created. Rennison called the era to 1961 the era of "park ascendancy", and the period to 1972, when he was writing, a period of "testing" in which "nearly all parks [were] subject to sometimes irresistible pressures from alien interests, proving legislation incapable of protecting park features" (1972, 8).

The 1952 Act was replaced in 1980. The new Act involved little change in the purpose of national parks except that "intrinsic worth" (s.4 (1)) was added to "the benefit and enjoyment of the public" (National Parks Act 1952, s.3 (1)), as a reason for preserving areas as national parks. The "benefit and enjoyment of the public" also changed slightly, becoming "the benefit, use and enjoyment of the public" (National Parks Act 1980, s.4 (1), italics added). The 1980 Act also made some administrative changes to the local and national coordination of park policies by Quangos, and the preparation of, and public involvement in management planning. The 1980 Act also provided for the designation of areas within parks as "amenity areas" (s.15), in addition to the already existing "special protected areas" (s.12 1980; s.12 1952), and "wilderness areas" (s.14 1980; s.34 1952). "Each park has its own mix of such areas" (National Parks and Reserves Authority 1983, 6).

Like the 1952 Act, the 1980 Act enshrined the dual, use and preservation goals of national parks;

"clearly the intention of the legislation is that policies should be directed to ensuring an appropriate balance between the
preservation of areas that are integral to New Zealand's heritage, and provision for optimum public access to and enjoyment of areas that lend themselves to recreational use”
(National Parks and Reserves Authority 1983, 6)

However, the 1980 Act, like its 1952 predecessor, gives 'preservation' priority over use and access in one clause;

"subject to the...imposition of such conditions and restrictions as may be necessary for the preservation of the native plants and animals or for the welfare in general of the parks, the public shall have freedom of entry and access to the parks"
(National Parks Act 1980, s.4(2) (e)).

Despite this clause, the exact intent of the 1980 National Parks Act, that is, whether either use or preservation is to be the primary goal of national parks, cannot be ascertained. This is because the section of the Act from which the above clause comes, (s.4, "Principles to be Applied in National Parks") is open to legal interpretation.

Jefferies (1986, 11) interprets the Act to mean that preservation rather than public use and access is the primary goal of the National Parks Act; "the Act provides for the 'benefit, use and enjoyment' of park lands and acknowledges that the 'public shall have freedom of entry and access to the parks' but at all times the Act requires the use provisions to be subject to the overriding purpose of 'preserving in perpetuity' " (italics added). It is suggested here also that the preservation goal is actually strengthened in the current Act by the inclusion of the "intrinsic worth" clause in section four.

The potential ambiguity, and lack of legal definition of national park legislation in New Zealand is recognised. However, because it explicitly subjects the use of, and access to national parks, to the preservation of those parks, the legislation will be assumed in this project to reflect the preservation part of national park philosophy; the 'biota refuge' rather than the 'national playground' concept of parks. On a continuum from preservation through conservation to consumption then, national parks will be examined in this project as preservation areas, with preservation as the primary goal of their management. Which of the values outlined in Chapter Two can this be matched to?
3.3. PROTECTED AREA VALUES COMPATIBLE WITH NEW ZEALAND NATIONAL PARKS.

The difference between preservation and conservation is sometimes poorly understood. Preservation is a word that is used quite loosely and widely (Passmore 1974, 101), while "'conservation' is sometimes so used as to include every form of saving" (Passmore 1974, 73). Passmore makes a very clear distinction between the two; "to conserve is to save", but is "only the saving of natural resources for later consumption". Preservation is "maintain[ing] in their present condition such areas of the earth's surface as do not yet bear the obvious marks of man's(sic) handiwork" (ibid, 101). It should be noted against Passmore, that conservation is often seen as including, or at least not precluding, present use. The fundamental difference between preservation and conservation though, is well articulated by him and is of greater concern here; preservation is "primarily a saving from rather than a saving for, the saving of species and wilderness from damage or destruction" (ibid, 73).

The distinction that Passmore made led him to distinguish between conservationists and preservationists and their motives, and the resource values they appeal to. To him, conservationists are motivated by the future availability of resources, and appeal to instrumental values; whereas preservationists are motivated by keeping areas forever untouched by humans, and appeal to intrinsic value. Passmore "explicitly equates preservation with appeals to intrinsic value" (Norton 1986, 196). He "took it as axiomatic that true preservation must rest upon attributions of intrinsic value to non-humans" (ibid, 196).

Few other authors have addressed the conservation, preservation distinction, "perhaps because they accept Passmore's reduction" (ibid, 196). Certainly Passmore's work is highly regarded and seldom criticised (ibid, 196). If Passmore was right, and preservation has to be based only on the intrinsic values of essentially unmodified landscapes, New Zealand national parks, as preservation areas could preserve only intrinsic values. The
rationale for national parks would be completely non-anthropocentric. However, the effect of Passmore's reduction has been to "choke...off discussion of the diverse motives supporting preservationist policies" (ibid, 208). Earlier preservationists such as Muir and Leopold "never limited [their] advocacy of wilderness preservation to motives derived from non-human sources of value" (ibid, 210). While conservationist motives "can be characterised fairly straightforwardly as utilitarian" (ibid, 210), preservationist motives are not simply non-utilitarian. Non-utilitarianism is sufficient to support preservation, but a variety of human-centred motives may also exist for preservation.

For instance, Molloy and Wilson (1986) note a wide variety of individual and community benefits (and costs) of wilderness preservation. Leopold, apart from doubting whether non-anthropocentrism would carry any weight in policy-making (1979, 140), "believed that concern for human interests, if broad enough and farsighted enough, is sufficient to support an adequate environmental policy" (in Norton 1986, 207). "The central concern of both Darling [1969] and Leopold was not the line between human and non-human interests, but the line between "short-term economic" and "non-economic" bases for decision-making" (Norton 1986, 207). Leopold equated 'economic bases' with profit bases, or what would now be termed commercial bases; whereas the modern definition of economic may include many non-market, but still utilitarian values, that may be used to justify preservation.

Leopold's concern with commercial criteria was "that the contribution of species without direct commercial uses will be ignored" (Norton 1986, 208). If this is so, and New Zealand national parks are primarily preservation areas as proposed here, the market values outlined in Chapter Two, if used to maximise resource returns are not compatible with those parks, because those values are not able to promote preservation.

However, not all utilitarian values are incompatible with preservation, because, as noted, there are many, widely recognised, utilitarian justifications for preservation. Utilitarian values are compatible with New Zealand national parks if they are capable of fostering preservation; these are human,
non-consumptive values such as aesthetic, scientific, educational, recreational, existence and option values. They are the non-market values outlined in Chapter Two. Their applicability is subject to a concern that they may be integrated into an analysis based upon the same criteria as purely market analysis. In this case, they would no longer be appropriate in preservationist national parks, because they would exist in a framework which promotes the efficient use of resources, which has already been shown to be incompatible with such parks.

So, some utilitarian values are potentially sufficient to justify preservationist national parks such as New Zealand's are assumed to be here. Molloy and Wilson express caution though; "arguments...based on self interest, or on bargaining between interests are always vulnerable to developments which change the perceived balance of benefits and costs (1986, 18-19). When human interests are the major consideration in decision-making, only "derivative", or "tenuous" value will be assigned to the non-human environment (ibid, 20 and 21.). Both they and Norton question the adequacy of utilitarian values alone for promoting wilderness preservation, especially in the distant future, because those values "do not...accord with our deepest feelings about wilderness" (ibid, 20). If utilitarian arguments for preservation are inadequate then preservation "may...require policies that are not in the long term interests of the human species" (Norton 1986, 214). In such policies it is the intrinsic value of non-human environments which is the only possible justification for preservation.

3.4. CONCLUSION.

The values compatible with preservation, the assumed primary management goal for New Zealand national parks, are intrinsic values, and those non-market values which are dependent upon the maintenance of the parks' natural states. Market values, while not usually compatible with preservation, may provide some economic justification for preservationist national parks,
but only where they are attached to things necessary to enjoy the park, such as equipment, rather than to the resources of the park itself. This 'condition' also applies to non-market values, which lose their ability to promote preservation if placed in a market-like, income-maximising context.

No particular value is necessary to justify preservation, except when all utilitarian reasons for preservation have disappeared. In this case, intrinsic value, which exists whether or not it is appealed to, remains as the only possible justification for preservation.
4.1. INTRODUCTION.

Chapter Three examined the uncertain legislation and philosophy of national parks, and proposed preservation as the primary, or ideal role of national parks in New Zealand. It also matched this role to the range of values outlined in Chapter Two. Chapter Four examines the actual, or potential outcomes; that is, what role parks are actually playing and what values are actually being preserved or emphasised. Whereas Chapter Three proposed what should happen in parks, Chapter Four examines what actually does happen or may be expected to happen in the near future. On the assumption that national parks are primarily preservation areas, Chapter Four assesses whether the values that national parks preserve in reality are those which they should preserve ideally.

There are various non-preservationist influences which may act upon national parks that have been noted by both New Zealand and overseas authors. These influences could become significant in New Zealand. Even in this national park centennial year, when the quality of our park system has been widely acknowledged and celebrated (see for instance Thom 1987), some people are expressing concern. For instance there is concern over the rapid growth of tourism in New Zealand, (see for instance Jefferies 1986; Potton 1986) and the growing influence of market philosophy (see for instance Jefferies 1986; Mark 1987).

These non-preservationist influences are the subject of this Chapter. Although they are assessed individually, the links between each factor are made explicit and should not be ignored. The first part of the Chapter examines the influences of tourism as an industry. The second part examines the influences of market and economic forces, while the third investigates the influence of incremental changes in parks, and of park managers themselves.
This Chapter is a review of literature rather than a review of actual examples of non-preservationist influences in New Zealand national parks. It is intended to alert park managers to possible management, philosophical and financial problems during a period of significant change in resource management and allocation practices, and significant growth in national park usage.

The concluding part of the chapter is similar to that in Chapter Three. It matches the actual and potential situation in national parks to the preservation-consumption continuum and, in turn, to the range of values identified in Chapter Two. This allows the implications of any difference between the ideal and actual state of our national parks to be examined in the final Chapter, and possible solutions to be suggested.

4.2. THE INFLUENCE OF TOURISM.

The post-1945 change from tourism as a luxury, to tourism as a mass-consumption good, has increased the scale of tourism worldwide, and led to increased concern about the detrimental environmental and social effects of tourism, despite its economic importance. Indeed tourism has often been studied in terms of its environmental, social and economic impacts (see for instance Matheson and Wall 1982), and a considerable literature has developed that examines tourism's impacts on the environment.

The negative environmental impacts of tourism could be split into two types; the actual physical impacts such as trampling, erosion, various forms of pollution, and overloading of social infrastructure like roads and sewerage systems; and longer term deterioration from cumulative impact. The major concern here however is with the cumulative impacts. Little work has been done on these impacts, but three critical concepts have arisen, and this assessment of the impacts of tourism on national parks will draw largely on those concepts;

Firstly, Budowski (1976) postulated three possible states for the relationship between tourism interests and conservation advocates. The first
is a state of co-existence where neither is very highly developed or impinges upon the other. This is essentially an ephemeral relationship; with time and the further development of tourism and, or environmental concern, this co-existence will change to either symbiosis-where tourism and the environment benefit mutually, or conflict-where advocates of the two clash.

Vukonic and Pirjevic (1980) saw the growth of tourism as being limited by one or more of the "factors", such as attractions, accommodation and transport, mixed into the product being offered. They said that natural resources would often be the limiting factor, and a tourism product would only be "harmoniously composed" if it did not exceed the capacity of those resources.

Finally, several authors, such as Butler (1980), Cohen (1973), Price (1981) and Plog (1973) have looked at tourism in terms of evolutionary cycles from small beginnings to mass tourism. They have examined changes that occurred in impact parameters over the duration of these cycles, and changes in the characteristics of tourists, their hosts, and the facilities they use. These studies have provided a useful insight into tourist area evolution. While they have tended to be applied to social parameters they might also be applied to the study of environmental impacts.

The New Zealand Tourist Council's definition of a domestic tourist is merely someone staying for at least one night, somewhere other than their usual residential area, while an international tourist is someone spending at least 24 hours in New Zealand for pleasure or business (New Zealand Tourist Council 1984, 4). Tourists need not take part in any commercial tourist activities or products. In that case the environmental impacts of tourists on national parks may be limited to erosion and trampling, and are likely to be compatible with national parks, and with the values that may foster preservation. The recreational impacts will also be few, because these tourists are likely to be "explorers" or "drifters" (Cohen 1973,169) or "discoverers" (Plog 1973, in Wall 1982, 189), that is, visitors characteristic of recently discovered, or as yet undeveloped destinations. They will probably share similar aspirations, and be few in number. The concern here is instead
with the impacts caused when destinations are well known, and characterised by many built facilities, and when "institutionalised...tourism" brings "organised", and "individual masses" (Cohen 1973, 167-169) to those destinations.

A distinction is made here between tourists and 'free and independent' type travellers because the two are so different, and because there is nothing inherent in tourism, as defined above by the New Zealand Tourist Council, that is incompatible with preservationist national parks. Instead, the incompatibility of tourism and such national parks stems from the nature of institutionalised, commercial tourism. Therefore, tourism may herein be interpreted as meaning commercial tourism, rather than the mere phenomenon of 'being away from home'. The latter will be referred to as 'free and independent travel', and will not be considered as a non-preservationist influence. However, free and independent travel may be a forerunner to degrees of tourism which are non-preservationist, and this possibility is examined in section 4.4.

To understand why tourism is likely to cumulatively impact the national parks it operates in, it is necessary to realise the inevitability of tourist operators wishing to provide facilities to augment the attractiveness of those parks and the profitability of tourist services. National parks are often tourist attractions. Although they are attractive in their natural state, they are usually augmented by accommodation and transport facilities such as roads and hotels in the creation of a tourist product. This desire to provide tourist facilities is noted by several authors (see for instance Butler 1980, 7; Cheng 1980, 73; Cohen 1973, 170), and is "particularly difficult to curtail" if market forces or government policies favour business expansion (Cheng 1980, 73).

Indeed, "the development of tourist infrastructures has been left largely to the interplay of market forces" (Matheson and Wall 1982, 127). These forces make the development of destinations appear "immediately favourable" (Budowski, 1976, 28), but "have failed to ensure that adequate attention has been given to environmental and social concerns" (Matheson and Wall 1982, 127). Tourism development has tended to be "pulled along"
(Vukonic and Pirjevic 1980, 16) by the economic benefits foreseen, whereas the socio-environmental costs are somewhat harder to measure, and are not borne by the developer.

Tourism decisions made purely on economic grounds are likely to lead to significant and detrimental social and environmental impacts in national parks, especially if those parks are intended to be preservation areas. While the augmentation of national parks with facilities may improve their attractiveness to tourists, and their revenue-generating potential, those facilities, the activities they allow tourists to take part in, and the number of tourists that they can accommodate, may not be compatible with preservation as a land management goal, or with other recreational uses which are compatible with that goal. This is because the natural features of a tourism product often "represent its irreplaceable components and...by their quantitative dimensions...determine and limit growth" (Vukonic and Pirjevic 1980, 14), particularly if those features have preservation as their primary management goal.

In terms of Budowski's work it seems that New Zealand national parks are currently in a co-existence state with tourism, with tourism not very highly developed in parks. To some degree though, the relationship could actually be called symbiotic, with conservationists using tourism's economic benefits as an argument for conservation (see for instance Smith 1987, 9; Hager 1985, 7-8), and tourism advocates and others extolling the virtues of tourism as a conservative force (see for instance Moore, 1986; Lucas 1985). However some caution is also being expressed about the potential impact of tourism on national parks (see for instance Jefferies 1986; Potton 1986; Lucas 1985).

Whatever the relationship between tourism and national parks, tourism in New Zealand is certainly increasing rapidly. International visitor arrivals grew by 15.2 percent to 596,995 in the year to 31 March 1985 (Department of Statistics 1986, 319), and receipts of overseas currency from tourism more than doubled between 1981 and 1985 (ibid, 320). This trend is expected to continue, with one million overseas visitors per annum expected by 1990.
Booth (1986, 5) notes that nearly three million people visited New Zealand's national parks in 1985, and that this is increasing by approximately ten percent per annum. The exact importance of national parks to tourism income and employment, and in attracting visitors is not known, although 70 percent of both domestic and international tourists intend visiting a park on their "next holiday" (Henshall 1982, 51).

In terms of the work of Vukonic and Pirjevic, tourist operators are just beginning to seek to 'mix' accommodation and transport facilities with the natural attractions of our parks. While free and independent travellers have been visiting national parks since their inception, commercial tourism in New Zealand national parks is at an early stage of its development. The work of Butler (1980) and others, suggests that tourism may be expected to increase rapidly in the near future bringing larger numbers of increasingly facility dependent visitors.

If this assessment of the potential cumulative impact of tourism on national parks is correct, the implications for those parks and many of the current free and independent park users will be very serious. The preservation status of national parks proposed here suggests that tourism developments that dramatically increase visitor numbers, and create significant new facilities in parks, will be incompatible with those parks and the opportunities currently available there. The persistent argument that tourism is a strong force for conservation does not seem to apply to preservation, or the recreational opportunities that accompany the preservation status.

4.3. THE INFLUENCE OF MARKET FORCES.

As noted in Chapter Two, the philosophy behind market values, and some applications of non-market valuation, is not compatible with preservation as a land management goal, as proposed here for New Zealand national parks. Therefore, it would seem that if market forces and market-oriented approaches to resource allocation are present in, or may become present in
our parks, those parks will change from the preservation state to another state that is not compatible with their assumed principal goal, or with the needs and wishes of those who use national parks in their natural state.

The period since the election of July 1984, has seen radical changes in New Zealand's economy and the economic policies of government. The emphasis of these policies has clearly changed to make the economy, and the sectors, firms and individuals within it, more responsive to international and internal market signals. Treasury has strongly promoted these policies out of concern that "the New Zealand economy continues to display one of the most lacklustre performances...in the developed world" (The Treasury 1984, 103), due to long-run structural problems such as inappropriate government interventions, and resistance to adjustment to changes in international markets (ibid, 104-107). The Treasury sees a more responsive, 'market economy' as the "only way to ensure that the country's resources are continually being allocated so as to achieve the highest national income available" (ibid, 107-8). Treasury is advocating such an economy because "most policies are...judged in terms of how well they succeed in...achieve[ing] greater welfare" (ibid, 111), and generally, greater welfare is more likely to be achieved by "harnessing and supplementing markets...than supressing them" (ibid, 111). Despite advocating market oriented policies strongly, The Treasury does recognise that there will be occasions when interventions will be necessary to improve market outcomes, and even when a reduction in general efficiency will be justified in order to achieve a more equitable outcome (ibid, 112).

The impetus of The Treasury's advocacy has extended to land use policy (see The Treasury 1984a), with a need seen for, the "relative profitability" of activities to dictate which should be undertaken (ibid, 12), and for subsidies to be removed so that people in businesses may "receive the correct price signals as to what was happening in international markets" (ibid, 77). Finally, a more market market approach has been applied to government expenditure and government activities. Douglas (1986, 11) suggests that "government trading activities can, and because of their size
and importance must, be made to perform better". A major way in which "improved public sector performance" has been sought has been to "distinguish between the "market" activities of the government and "non-market activities" " (The Treasury 1984, 120).

Conservationists themselves have welcomed some of the economic reforms instituted by the government since 1984. In 1985 for instance, they noted that "the alliance in favour of reform [of the Forest Service] consist[ed] of the Treasury Ministers and the conservationists" (Joint Campaign on Native Forest 1985, 5), and conservationists have long advocated the same splitting of commercial and non-commercial functions that Treasury has advocated.

It is suggested here though, that while conservation and market forces may be allies—at least some of the time, preservation may not be as compatible with market-oriented thinking. National parks have not been exempted from the impetus to manage natural and social resources according to market forces simply because they are now administered by a department that has no commercial functions. Instead the Department of Conservation, which administers national parks, is now subject to a requirement to recover some of its costs by charging users for its services, where those users can be readily identified and shown to benefit (Douglas 1986, 15-16). The grounds for these new policies are that they increase "efficiency and equity" (ibid, 16). That is, cost recovery, including user pays, "discourages waste", because the market price of government services will force people to assess their real need for those services (ibid, 17). Secondly, it "raises revenue" and replaces the need for extra taxation, which may reduce efficiency (ibid, 18). The implementation of user pays and cost recovery is apparently to be carried out "wherever possible" (Jefferies 1986, 11) except perhaps where "not consistent with...social goals" (Douglas 1986, 17; also noted by The Treasury 1984, 112).

"The user pays approach...may be appropriate up to a point" (Mark 1987, 1). "It seems reasonable that the user should pay a greater proportion of the cost [of national park services] than the non user (Jefferies 1986,11). If the requirement for cost recovery is low, it might be met simply by charging for
huts, parking, publications and interpretation, and have no impact on the goal of preservation, if that is indeed the primary goal of national parks. However, both Mark (1987), and Jefferies (1986) raise philosophical doubts about the applicability of 'market forces' to national parks. If the requirement for cost recovery is very high it may have to be met in such a way that the preservation goal is being undermined, such as by 'opening national parks up' for concessionaires to provide touristic services. For instance the income provided to the West Coast region by visitors to Westland National Park in 1980, was estimated at $4.2 million (Pearce 1982), but that could have been higher if more concessionaires were allowed to operate in the park.

As the income returned from national parks increases though, so might facilities and visitor numbers. By contrast, the amount of unaltered environment would decrease, as would the availability of recreational opportunities associated with that environment. A rate of cost recovery that was too high to be achieved without environmental modification could lead to preservation as 'a goal of national parks being traded off for gains in economic efficiency. However, it should be noted that park managers may actually choose not to meet cost recovery requirements, and accept reduced budgets. This may actually support preservation by preventing facilities or publicity being provided.

Another, potentially non-preservationist influence of market forces, is that the user pays philosophy may become the 'user says' philosophy (Mark 1987, 1). User says may well be dominated by concessionaires and their customers rather than preservation advocates such as park managers and free and independent wilderness users. As noted in the previous section though, the desires of tourism advocates may not be consistent with the preservation objective.

Despite the concerns expressed here about the implications of cost recovery through user pays, a greater threat to preservation will come if the goal of economic efficiency is applied strictly to national parks. As noted above, The Treasury cites the need to be adaptive to changing market signals by allowing resources to flow to where they can be used most efficiently and
to where returns are relatively high (1984a, 12). In Treasury's words "ignoring such changes in profitability can only lead to an economic loss to the nation" (ibid, 11). If this philosophy is applied to the extreme, especially if there is no consideration of non-market and intrinsic values, it follows that the best, or most 'economically efficient' land use will be adopted in all areas. National parks are, for most areas, just one of several land use options. Other, productive options might include agriculture, mining, forestry or, particularly, varying levels of commercial tourism. As defenders of areas with which market values are proposed to be incompatible, national park advocates would stand little chance of proving a park to be the most economically efficient use for the land in that park. The existence of a national park then, is quite likely to be, in Treasury's words, one of the causes of "economic loss to the nation" (ibid, 11).

One way of alleviating this situation wherein national parks are an economic burden, is to allow more tourism products to be operated in those parks. However, as noted in the previous section, tourism, and particularly the facility-intensive kind of tourism that could justify national parks in terms of economic efficiency, is unlikely to be compatible with preservation objectives.

In summary, there are a number of ways in which market forces are becoming more influential in New Zealand national parks. However these forces and their underlying income-maximisation philosophy, seem to be incapable of allowing the achievement of preservation as a primary objective for those parks. If preservation is accepted as the primary objective of national parks, and if 'market forces' are not excluded from those parks, the parks are likely to fail to meet their primary objective.

4.4. THE INFLUENCE OF INCREMENTAL CHANGE.

The increase in visitor numbers and tourism developments in national parks is intensifying pressure on those parks. This pressure, in turn seems likely to "exacerbate physical degradation of the resource base...and lead to a decrease...in the quality of [some] peoples' recreational experiences"
(Ditwiler 1979, 439). National parks, if they are preservation areas, should ideally remain in an unaltered state. However, as popular destination areas and ideal areas for tourism developments, they are vulnerable to the influence of incrementalism which may slowly undermine the preservation goal and reduce the availability of some recreational pursuits.

The kinds of changes introduced to national parks by growing visitor numbers and, or increases in tourist facilities are likely to be incremental, cumulative and difficult to pinpoint (Cheng 1980, 73). Cheng notes that "gradual expansion in the number of tourist services and facilities...has the potential to alter subtly the social environment" (ibid), and to change "community values and objectives" (ibid). While Cheng is talking principally of social impacts on communities, she also refers to physical impacts, and the impacts on national parks may be very similar. In national parks, incremental change may lead to a change in the values preserved in national parks, and in the objectives achieved in those parks.

The most important feature of incremental change though, is not the difficulty of observing it or planning for it, but its apparent acceptance by people, and its perpetuation. Incremental change is accepted, or at least rarely questioned, because individuals and society "are highly adaptable to a changing environment provided that the change is slow and...steady" (Barkham 1973, 219). Dustin and McAvoy (1982, 49) also note this "human adaptability which enables people to adjust to a progressively lower quality of recreation opportunities without loss of satisfaction".

Nielsen et al (1977) called this phenomenon of the acceptance of incremental change the "last settler syndrome". They suggest that first time visitors to an area accept the level of development and crowding they experience in a recreation setting but may drive out repeat visitors who go elsewhere causing the same displacement. These waves of "invasion and succession" (Dustin and McAvoy 1982, 52) are difficult to detect, and "regardless of the types of recreational opportunities provided the majority of recreationalists will be satisfied" (ibid).

The fact that visitors remain happy might suggest that the last settler
syndrome and incremental change would not be a problem. Indeed Wall notes that a tourist attraction "can have many capacities", and because "most studies of visitor satisfactions indicate that visitors have a good time..., the capacity is not exceeded" (1982, 191). It might also be argued that people do not miss what they never knew or that there are plenty of undeveloped areas remaining for wilderness experiences (after Dustin and McAvoy 1982, 53). However, it is argued here that incrementalism is a very great problem in national parks, if those parks are primarily preservation areas, because the logical conclusion of an inevitable process of invasion and succession of new, and more numerous visitors, is the complete replacement of the original attraction with something very highly augmented by facilities. So while incrementalism might not exceed some of the several possible capacities for national park sites, it seems likely to exceed the capacity that is compatible with the achievement of the preservation goal.

In addition, the argument that people will not miss what they do not know about takes no account of future recreationists, or of the intrinsic values within national parks, both of which are important parts of the preservation goal. Finally, scarcity and irreversibility mean that those who demand the low-development type recreation opportunities which are compatible with preservation, have increasingly few places to have a satisfactory recreational experience. A situation may develop where the "last settler" really is the last settler; there is nowhere else for that person to go, where their long term satisfaction is guaranteed, without the need to change their perception of what constitutes a quality experience.

Although the principle aim of national park managers in New Zealand is assumed here to be the preservation of park environments, they are also concerned with providing quality recreational experiences. The problem of incremental change in national parks is likely to be compounded by those managers because, like park visitors, they fail to perceive, or to realise the implications of, incremental changes.

National park managers, in seeking to cater for visitors, gauge their success in providing good recreational opportunities largely by assessing
"what a majority of people have been satisfied with in the past" (Dustin and McAvoy 1982, 52). However, dissatisfied users tend not to be included in surveys because they now accept an increased number of visitors in the old setting or have left, possibly impacting other visitors in another setting. In addition, Neilson et al note that managers, if they seek to maximise total user satisfaction rather than average user satisfaction may promote a level of use that is not compatible with some users (1977, 57) and, or with the preservation goal. So, if national park managers do not receive any signals that the increased development of facilities is not in keeping with national park goals, they will "precipitate a further decline in the quality of recreation opportunities and environments" by "inadvertently support[ing] the adaptive process" (Dustin and McAvoy 1982, 52) of incremental change.

Like commercial tourist managers, national park managers augment attractions with facilities because the provision of more facilities seems to be the right decision. Just as it was shown above that tourism is a resource development rather than a force for preservation in national parks, so might recreation be. This is because of an apparent inability of park managers, to recognise and plan for incremental changes, and an "increasing number of visitors whose satisfaction is not affected by a progressively lower quality of recreational opportunities" (ibid, 54)

4.5. CONCLUSION.

This assessment of potentially non-preservationist influences in New Zealand national parks is not definitive. There may be other influences which have not been investigated, and there are also preservationist influences in parks such as the strong New Zealand conservation lobby, a possible "bias towards nature" among park managers (Ditwiler 1979, 439), and, as proposed in Chapter Three, park legislation itself. A lot of the research material used here was from outside of New Zealand and was theoretical in nature. There is a need for research into New Zealand examples to be done.

Notwithstanding this, it is clear that there are a number of influences
which have the potential to undermine, or are already undermining, preservation as a possible management goal for New Zealand national parks. This undermining may also cause the loss of the recreational opportunities compatible with that goal. These influences are closely related to each other, especially the impetus to incremental change that tourism is giving, and the impetus to tourism that market forces are giving. They are strong forces, and in the case of tourism and market forces they have highly tangible benefits. By contrast preservation is a weak force with little tangible benefit to humans, and sometimes even significant disbenefit.

The non-preservationist influences acting upon, or with the potential to act upon our national parks, are incompatible with the parks' preservation, which is proposed in the previous Chapter as the primary goal of national park management. They are strongly utilitarian influences which might encourage market valuation of national park resources and, or the provision of a level of facilities for visitors and tourists that was not compatible with the parks' preservation. These utilitarian influences are expressions of underlying values which are not dependent upon parks remaining in their natural state. By contrast, it has been proposed that those utilitarian values which are embodied in, and compatible with New Zealand national parks, are values held for an essentially unmodified environment. In addition, the preservation status embodies some values that are non-utilitarian, and which could not be represented if the influences examined here, became dominant in national parks.

The non-preservationist influences outlined here would, if allowed to dominate, lead to those parks becoming conservation areas rather than preservation areas. In the words of Passmore, parks would be saved for human use rather than from human modification.
CHAPTER 5. PROBLEM ANALYSIS, IMPLICATIONS AND POSSIBLE SOLUTIONS.

5.1. INTRODUCTION.

New Zealand national parks are increasingly subject to a number of conservationist influences. Their popularity and attractiveness for tourism developments is increasing, and justification for preservation as a land management goal is becoming more difficult in the face of new, more market-oriented resource allocation procedures. Another, less obvious influence is at work, as both park managers and visitors perpetuate a cycle of incremental, apparently justifiable changes to national parks, which constantly increase the impact of humans in those parks.

However, it must be noted that this is more pronounced in some parks than in others, and in some parts of parks than in other parts. Similarly, large areas of some of our parks still retain their natural character and are still able to foster preservation goals. Indeed, it might actually be argued, against the findings of this project, that national parks in New Zealand are fulfilling preservation goals because they still appear to be largely natural areas. Depending upon the definition of preservation an observer uses, this may be so, but comparison of areas such as the skifields of Tongariro, the beaches of Abel Tasman, the Mount Cook village area, and the Milford Track and Sound area, with the more remote areas of Urewera, Aspiring, Arthur’s Pass and Fiordland National Parks, suggests that there is a vast difference in the outcomes being achieved. Even if a broad definition of preservation is accepted, the former areas still seem to be conservationist areas where preservation, as a land use goal has not been achieved.

The concern of this project is that in time, even the areas that still have preservation potential, will become conservation areas. Preservation seems to be a very difficult land management goal to maintain or justify. If the assessment of national parks that is presented in the previous Chapter is
correct, and non-preservationist influences are becoming significant in national parks, those parks will be increasingly unable to meet preservation objectives. If these objectives are the primary objectives of national parks, as proposed in Chapter Three, the stewardship of New Zealand's national parks will be erring on the side of conservation.

5.2. IMPLICATIONS.

The growth of non-preservationist influences in New Zealand national parks will lead to the steady loss of land for preservation. Accompanying this will be the loss of some of the intrinsic values existing in national parks, and of any utilitarian values that are compatible with the preservation status, such as the value of the mere existence of the parks in a natural state, and the value of maintaining the options associated with that state. Finally, the resource-based, non facility-demanding recreational opportunities that can only be pursued in a wilderness setting will also be lost. It may be argued that the outcome achieved will have other, possibly greater benefits. This is true, but this outcome will not be compatible with the preservation status, and may well be achievable elsewhere.

The policy implications of this failure to achieve preservation objectives could be addressed in several ways. Firstly, the problem might be attributed to the ideal state of national parks that is proposed above as the primary intention of park legislation; it could be that this goal is the wrong one for the land in question. Secondly, if preservation is accepted as the primary goal of the National Parks Act, as in this project, the problem to be addressed will be attributed to some part of the process whereby national parks are actually administered and managed, and the preservation goal pursued. Thirdly, the legislation may be blamed for the difference between ideal and actual outcomes, because the confusion of its dual objectives allows no ideal state for parks to be discerned. This in turn makes it difficult to judge the rightness and wrongness of influences acting upon national parks.

The view taken here, in keeping with the assumed, ideally
preservationist state of national parks, is that preservation, and the intrinsic and utilitarian values associated with it, is legitimate as a land management goal. The rest of the current Chapter then, will address the impact of non-preservationist influences, and the problem of managing national parks to achieve preservationist objectives. However, fulfillment of preservationist objectives may not be appropriate or possible in the current number or area of national parks. So, while the preservation goal is accepted, the possibility and appropriateness of its application will be questioned for some areas, as will the efficacy of some of its clauses.

It is important that the failure of national parks to achieve the preservation goal be addressed urgently for two reasons. Firstly, the amount of land able to be managed for preservation can only decrease while non-preservationist influences are not addressed. Secondly, changes to the preservation state of natural environment are irreversible; "unlike most other cultural resources of our society-playing fields, theatre, symphony orchestras, ballet companies-wilderness cannot be produced" (Wilson and Molloy 1986, 17). Preservation is the only land use option which leaves the preservation option open (Molloy 1981, 8; Molloy and Wilson 1986, 16), and because of this, irreversibility must be a major consideration in addressing possible changes to environments that are currently compatible with preservation.

5.3. ADDRESSING NON-PRESERVATIONIST INFLUENCES.

Norton notes that, the distinction between the motives of conservationists and preservationists might "reflect a difference in theory of value (1986, 198). If our national parks are preservation areas as proposed, but our stewardship of them is erring on the side of conservation, "New Zealand [may be] lack[ing] a clear philosophy of values for its national park management" (Potton 1986, 25). New Zealanders as a whole need to establish exactly what it is that they have national parks for, that is, what management goals and underlying values should national park management reflect. If some degree of preservation is identified as the intended primary goal of national parks in
New Zealand, the compatibility of market forces, recreation, tourism with the level of preservation envisaged will need to be established. Park management will then need to control human impacts in national parks so that the desired level of preservation is obtained.

To ensure the achievement of preservation goals "park administrators will need to develop a philosophy that recognises the full range of human and other values which they are protecting in national parks" (ibid 25), because "wilderness protection, [or indeed, the achievement of any other land management goal] ultimately rests upon the implementation of a management programme that ensures that those values which designation originally sought to protect are, in fact, protected" (Stankey 1981, 77). "A clearer understanding of the basis of these values can give added support and resolve to efforts aimed at preserving" (Hammond, 1985, 196).

One difficulty that preservationists will need to overcome, is that preservation, unlike conservation, might not "easily be incorporated within the traditional Graeco-Christian [and anthropocentric] view of the world" (Passmore 1974, 101, in Norton 1986, 197), because it may be based upon non-antropocentric justifications, and, or actually be of disbenefit to people. Leopold, writing in the 1920s, also noted the difficulty of giving weight to non-antropocentrism in policy making. In addition, preservation and the underlying concepts such as intrinsic value are imprecise (Norton 1986, 218).

However, the modern conservation movement has brought vastly increased support to the concept of intrinsic value, and making decisions on utilitarian, anthropocentric grounds alone, may not do justice to our intuitions (Godfrey-Smith 1979, 319). In addition, although intrinsic value can still not be defined or proven, its existence is asserted-allbeit implicit or intuitively-by many authors (e.g. Potton 1986, 25; Godfrey-Smith 1979, 319; Molloy and Wilson 1986, 21; Norton, 1986, 214; Rolston 1985, 38; Calicott 1985). Appeals to intrinsic value and non-antropocentrism are as legitimate and important as appeals to any other value (Hammond 1985, 168). "We are no longer bound to arguing always and only on the basis of human benefit..., on which basis the value of the non-human environment will always be
derivative and tenuous (Molloy and Wilson 1986, 21)

The public 'support' for national parks in New Zealand that was observed by Booth (1966) has been noted. However, that support is for parks as they are, which, it is asserted here, is different to their ideal, preservation state. Would there be so much support for such a large preservation estate? "Can we articulate the satisfactions and benefits of wilderness clearly enough to convince people who have not experienced it to support its preservation despite any costs involved?" (Molloy and Wilson 1986, 11). One criticism that has been made of wilderness and preservation policies, is the elitism they engender because of the difficulty of access to wilderness areas. To gain acceptance of wilderness as legitimate and worthwhile, managers must demonstrate that this criticism "shows very little understanding of the wilderness concept" (ibid, 14) and that with easy access wilderness would no longer actually be wilderness.

Stankey called wilderness preservation an activity "counter to the predominantly utilitarian values that dominate the world today" (1981, 74). National park administrators need to "dispel the...concern that wilderness values are somehow incompatible with civilisation" (Passmore 1974, in Hammond, 1985, 169) and to overcome the deeply rooted, human-centred tendency which sees converted nature as "something...more agreeable and more intelligible than wilderness" (Passmore 1974, in Hammond 1985, 169, also noted by Gunn 1980, 26, and Molloy and Wilson 1986, 20).

A clear understanding of the values that national parks are intended to protect, will also be necessary to overcome the increasing influence of market forces. As noted in Chapter Four, The Treasury does envisage occasions when a "reduction in general efficiency" will be appropriate or necessary (The Treasury 1984, 112; also Douglas 1986, 17). National park administrators and advocates must accept that preservation involves "consciously foregoing an opportunity for economic growth" (Molloy 1981, 8). As preservation advocates they will have to convince The Treasury, and resource policy makers generally, that national parks are a worthy exception to the general need to promote greater income by efficient resource use.
It will be a "substantial job of education" to convince advocates of adherence to market forces that "wilderness areas...are not a deep laid plot to lock up land,...but a desirable mechanism for management" (Lucas 1981, 48). Preservationists will also need to seek the exemption of national parks from cost benefit analyses because, "there is a richer [or wider] value spectrum [in national parks] than we(sic) have reason to believe can be caught by economic valuation" (Rolston 1985, 38). Indeed, part of the justification for preservation is non-anthropocentric, whereas cost-benefit analysis reflects "the anthropocentric view that all value ultimately resides in human interests and concerns" (Godfrey-Smith 1979, 312; Brown 1984, 231 provides an example of this human-centred tendency of economics).

A clear understanding of the goals of national parks and their underlying values, will assist park managers in recognising and dealing with incremental change by making its impact on the achievement of preservation more readily discernible. National park managers need to fit the demands on them as recreation planners, to their role of providing stewardship for preservation areas. They "must abandon their reactive habits and replace user satisfaction as the[ir] ultimate goal" (Dustin and McAvoy 1982, 54) with a commitment to fostering recreational opportunities which "protect the integrity and stability of the environment in which those opportunities exist" (ibid, 54). Only if the recreational opportunities which are compatible with preservation are actively managed for, and other activities and commercial tourism excluded, can the preservation goal be met.

This could also satisfy wilderness-type recreationists who lose recreation opportunities as preservation areas diminish. Non-preservationist influences such as the last settler syndrome and incremental change tend to homogenise both environments and the available recreation opportunities, but given the diversity of recreation aspirations, "it follows that recreational quality is best achieved by maintaining as diverse a system of environmental settings as possible (ibid). If recreation is managed in this way the quality of that recreation may be judged by "the degree of fit between [the]...attributes [of a recreation setting]...and the preferences of recreationalists experiencing
them" (ibid), rather than simply by the happiness of a majority of current park users. Accepting that no recreation environment will be pleasing to all recreationalists will allow "the broadest segment of the public, to find satisfying recreational opportunities" (ibid), while still maintaining the environments with which those opportunities are compatible.

5.4. **WEAKNESSES IN NATIONAL PARK LEGISLATION.**

As well as a lack of clarity of the values appropriate to the preservation of national parks, there are a number of features of national park legislation itself which have compounded the difficulty of achieving preservation objectives. Both Rennison (1972) and Booth (1986) note that our national park system "is unable to defend itself by falling back on the law" (Rennison 1972, 8). The major problem of existing park legislation is its incorporation of dual goals as the "principles to be applied in national parks" (s.4). As noted above, neither the preservation, nor the use objective can readily be discerned as being the intended primary objective. If preservation is to be the primary objective of national park management, this will need to be more explicitly stated in the opening section of the Act. For instance, there is currently no definition for "preservation" in the National Parks Act, whereas the 1987 Conservation Act defines preservation as, "the maintenance, so far as is practicable, of...[a resource's] intrinsic values" (s.2); and section 4(2) (a) of the Act states that parks "shall be preserved as far as possible in their natural state" (italics added). Preservation as a land management goal would be better served if the "as far as possible" clause was removed.

However, even if the opening section of the National Parks Act was amended, and made more explicitly preservationist, there are still a number of ways in which non-preservationist influences could be legitimised through the Act. The fact that park management plans are under continuous review (s. 46(1)), makes the tenability of policies throughout the ten year life of a plan vulnerable to incremental decision-making. This is compounded by the powers of the Minister of Conservation to permit a wide range of activities in
national parks, such as farming and grazing (s.51), roading (s.55), the construction and operation of accommodation facilities (s.50), and the erection of facilities for electronic communication (s.49 (b)). Section 49(a) allows the Minister in "accordance with the management plan" to "permit the use of any part of the park for any specified purpose of public recreation". While the National Parks Act may be interpreted as giving strong protection to the land it applies to, it may also legitimise the very influences that lead to parks being unable to achieve the preservation goal.

There is one section of the Act which offers stronger protection of the land it encompasses than the Act does generally. This is section 14, which deals with wilderness areas. It specifies that wilderness areas "shall be kept and maintained in a state of nature" s.14(2) (a), and it is clearly intended to foster more wilderness-like areas and experiences than the Act as a whole. However, as part of a national park, a wilderness area remains subject to the above loopholes in the Act generally, that is, Ministerial discretion and the uncertainty of management plan policies. More importantly though, the wilderness area designation itself is subject to the Minister's discretion, on the recommendation of the National Parks Authority, (s.14(1)). The provisions of this section may be stronger, but they only apply "while any area is set apart as a wilderness area" (s.14(2), italics added). The rest of the Act might be more open to non-preservationist influences, but at least the status itself cannot be revoked, "except by Act of Parliament" (s.11(1)).

Although wilderness areas, with some amendment to grant greater protection, could offer a better means of achieving preservation goals than the National Parks Act generally, Thom (1981, 61) notes that "wilderness...is neither a predominant nor mandatory zoning in national parks". In addition, because of the non-preservationist forces outlined above, and the irreversibility of their impact, "as time goes on [there are] increasing difficulties in zoning wilderness within an established park" (ibid, 60). If wilderness designation was used more often as a management device in national parks, and the loopholes that permit conservationist activities to overcome preservationist goals were closed, national park legislation would be able to
fulfill those goals.

However many parts of existing national parks may no longer have the potential to fulfill the preservation objective because of changes that have already occurred within their boundaries. Apart from the irreversibility of changes made to those areas, a major reason for this inability to fulfill preservation goals seems to be that these areas are too accessible, and popular to remain in their natural state, and to foster recreational opportunities compatible with that state. This can again be attributed to a failure of the 1980 National Parks Act. It specifies that parks shall be "areas of New Zealand that contain scenery, or natural features so beautiful, unique or scientifically important that their preservation is in the national interest" (s.4(1)). This clause in the legislation, plus the reknown of the national park status (noted for instance by Hager 1985, 7), and the publicity given to national parks, has attracted more non-preservationist influences, that is more visitors, and tourist operators, than can ideally be accommodated within areas that are intended to be preserved in their natural state. Many of the areas which have been given national park status then, are perhaps, too special, accessible or popular for the assumed, preservationist ideals of that status to be maintained. It is notable for instance, that the parks which are more ordinary or remote, or not already opened up to large-scale visitation; such as Urewera, Arthur's Pass and much of Aspiring and Fiordland National Parks, are more wilderness-like in character than the parks which are centred on such popular, accessible features as Mount Cook, the Ruapehu skifields, the Southern fiords, or the Golden Bay beaches. The evident and potential failure to meet preservationist objectives in national park legislation suggests not that the objectives of that legislation are inappropriate, but that its application has been overambitious and unrealistic, and that the main body of the legislation is incompatible with its assumed primary goal.
5.5. A REALISTIC APPROACH TO THE ACHIEVEMENT OF PRESERVATIONIST GOALS.

What preservation advocates need to do then, in order to facilitate the achievement of preservation goals, is promote a piece of legislation which is capable of giving greater legal protection to preservation areas. It will then be necessary to identify areas which are still suitable for preservation management to be applied, and to effect the designation of some of those areas under that legislation. If this can be done, it may be possible to achieve preservation objectives. However, it may be necessary to redefine existing national park boundaries, because of the apparent unsuitability of some existing parks for preservation status. In addition, because of the freedom of access associated with the national park status, preservation objectives might be more achievable if these new areas are called something other than national parks, such as preservation areas or wildernesses.

Those areas of the existing national parks which could not sustain preservation as their primary objective, could remain 'national parks' under their existing legislation, although the use goal might be given greater emphasis in that legislation. Although these areas would be conservation rather than preservation areas, the National Parks Act would still require them to be, "as far as possible", natural areas.

Both the 'new' national parks, and the proposed 'wildernesses' would require management systems that could promote the goals intended by their designation. Caution would need to be exercised so that "the [wilderness] zoning [did not] attract [incompatible] use[s] while conveying the assumption that...[the national parks]...will accept development" (Thom 1981, 60). Strict legislation which explicitly embodied the management goals necessary to achieve the objectives of designation, and clear advocacy of the values appropriate to each type of area would help to achieve this.

The new system envisaged here would actually involve little change to existing national park legislation, or, in some areas, to national park management. Instead, it implies changes to the existing boundaries of
existing preservation areas, and the explicit separation of preservation and use as management priorities in legislation. It accepts the reality of pressures on currently existing national parks, and of the failure to achieve preservation objectives in those parks. In the face of that reality, it recognises the need to pursue preservation goals actively, with appropriate legislation, only in areas where the natural character of New Zealand, as expressed by essentially non-human forces, is still apparent. It is a realistic approach to the achievement of land use goals, accepting that "if it is possible to maintain areas in a pristine state in the face of population and economic growth, it will be necessary to manage other areas for sustained, steady and intense use" (Norton 1986, 219).
CHAPTER 6. CONCLUSION.

National parks are intended to protect certain values. In New Zealand parks, it is proposed that these values are the intrinsic values within those parks, and the utilitarian values attached to those parks in their natural state. To protect these values, preservation is proposed as the ideal, primary management goal. However, a number of non-preservationist influences are growing in most national parks in New Zealand, and it seems that if national parks are to be accepted as the means of achieving preservation land management goals, those goals will, increasingly, not be met.

The assessment of national parks undertaken in this project, suggests that radical, rather than minor changes may be necessary, to ensure that somewhere, preservation can be sustained. Preservation advocates should understand more fully, the values they seek to protect, and accept the existence and validity of other land management goals, and the need to ensure their achievement too. Preservation legislation, to truly protect preservation-oriented land values, will need to be stronger than it currently is, and rigidly applied. However, where irreversibility is present, and more use-oriented values are already dominant, preservation land values are not realistic. In these cases conservation may be a more realistic management goal.

The need to enact change, not necessarily that change suggested here is urgent. National parks, while still largely natural areas, are increasingly unlikely to fulfill preservationists' expectations. By the strictest criteria of what constitutes preservation, there are few sites left where preservation objectives might still be met.
REFERENCES.


