

ANTARCTIC DRIVERS:

WHAT MOTIVATES NEW ZEALAND'S INVOLVEMENT IN THE ANTARCTIC?¹

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and Lesley Woudberg

Abstract

This report seeks to identify and assess the drivers motivating New Zealand's involvement in the Antarctic region. For the purpose of this report drivers are defined as 'underlying motivations or stimuli that instigate an action that is perceived to have positive outcomes for New Zealand'. Drivers instigating New Zealand's involvement in the Antarctic occur on two main levels: international and domestic. In order to analyse drivers occurring both at the international and at the domestic level, New Zealand's foreign policy development towards the Antarctic is related to the theories proffered by Maslow (cited in Smelser and Baltes, 2001: 5280) on the hierarchy of needs and by East (1978) on the foreign policy characteristics of small states (East, 1973, 1978; Henderson, 1980, 1991).

¹ Note that the term 'the Antarctic' refers to the area commonly recognised as the Antarctic region below the latitude of 60° South. Whereas 'Antarctica' refers only to the continent itself.

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SECTION ONE: INTRODUCTION

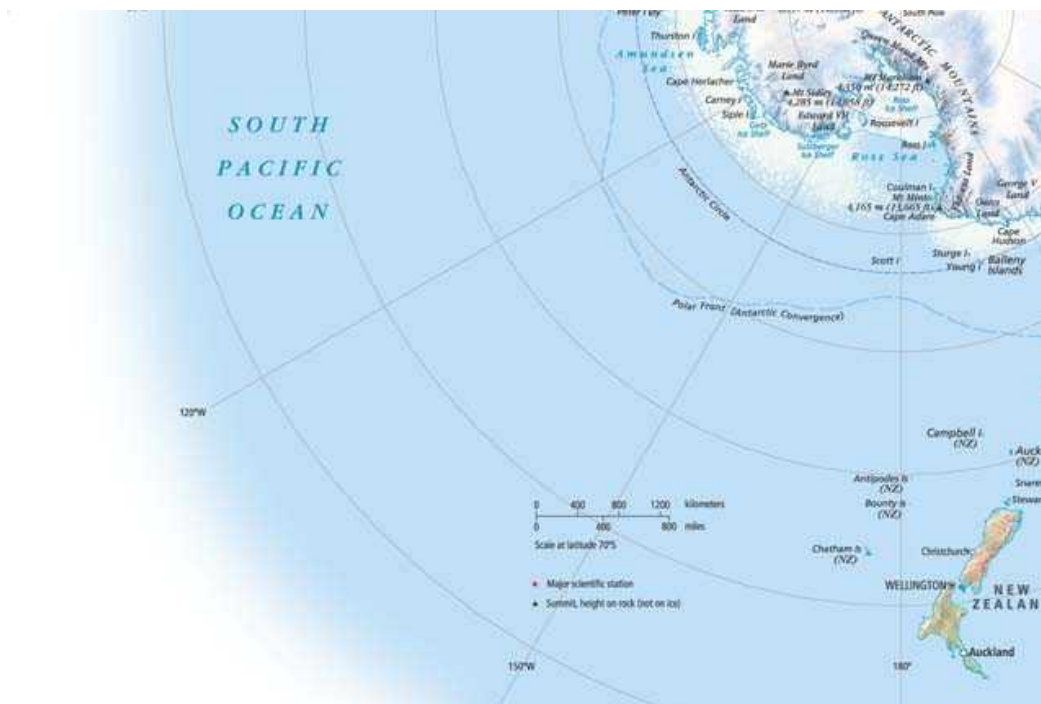
Antarctica and the Southern Ocean form one of the world's most precious wilderness areas. It is a vast natural reserve devoted to peace and science at New Zealand's back door – a place like no other and one whose protection is of utmost importance (Prime Minister Helen Clark, excerpt from foreword to New Zealand in Antarctica: New Zealand's Statement of Strategic Interest; November 2002).

1.1 INTRODUCTION

In 1923, the Government of the United Kingdom (UK) issued an Order in Council asserting that part of the territory in His Majesty's Dominions in the 'Antarctic Seas'² be named 'the Ross Dependency' and the Governor-General of New Zealand be appointed as its Governor. In essence, the UK granted New Zealand the responsibilities and sovereignty for the Ross Dependency, a 'slice' of the Antarctic 'pie'. This initial phase of New Zealand's formal Antarctic link was a reluctant one – bearing in mind that the acquisition and responsibility for the territory was by colonial command and the impetus of scientific exploration and modern logistics had not yet improved accessibility to continent. The International Geophysical Year in 1957/59 firmly recognised the value of Antarctica as a living laboratory and ushered in a new phase of New Zealand commitment to the continent and its untapped resources. New Zealand's involvement in the Antarctic was reaffirmed in the 1959 Antarctic Treaty³ when it became one of the first twelve states to sign.

New Zealand's involvement with the Antarctic does not come from this legal connection alone. New Zealand's geographical proximity to the Antarctic continent, has seen New Zealand act as both a gateway for the exploration of the South Polar region and as a launch-pad for exploitation e.g. whaling and sealing (see Figure 1: New Zealand's Proximity to the Ross Dependency) and for early scientific expeditions. The first phase of the strengthening New Zealand's Antarctic association was the participation of New Zealanders, such as Akaroa seaman Frank Worsley, in the 'heroic age' of Antarctic exploration. This tradition as a 'gateway' state continues with New Zealand's proximity providing access to and services for the region for modern-day research programmes. However, these associations that originated in the departure of Scott's Discovery Expedition in 1901 have strengthened over time. Logistic support has been provided to numerous international Antarctic programmes, such as those of the United Kingdom, United States, Italy and other interested nations. As a result, New Zealand has established itself as a logistics gateway for Antarctic travel and activities.

FIGURE 1: NEW ZEALAND'S PROXIMITY TO THE ROSS DEPENDENCY



New Zealand developed links with the Antarctic through the early expeditions but has since continued to maintain a high level of interest and involvement in the region. Per capita, New Zealand boasts one of

² This refers to 'Antarctic Seas' within the boundaries proposed in July 1922 ensuring that the area was to be a British settlement within the terms of the British Settlements Act 1887.

³ The Antarctic Treaty was signed on December 1, 1959, but did not come into force until June 23, 1961.

the highest numbers of 'Antarcticans'⁴ (Roberts, 2003) - a visible indication of a small nation's presence on the ice and, perhaps, a metaphor for New Zealand's continued level of involvement despite its size as a small state.

Each year the New Zealand Government invests approximately \$35NZD million in its Antarctic Programme (Petersen, 2003; Turvey, 2001: 60). This is not a big investment when compared to other Antarctic programmes the United States Antarctic Program (USAP) spends approximately \$234USD million per annum⁵; the Australian Antarctic Program spends approximately \$100AUD million per annum⁶ (2003); and the British Antarctic Survey (BAS) spends approximately £34UK million per annum and employs around 400 staff. New Zealand investment, however, is significant for a small country of approximately 4 million people and highlights the importance that the New Zealand Government places on its activities and presence in the Antarctic.

1.2 RATIONALE AND OBJECTIVES

Fundamental drivers are common to the human condition and underpin all behaviour, be it individual or collective. The New Zealand Government's approach to the Antarctic can be viewed as a grand expression of the fundamental drivers of individual human behaviour. This concept suggests that basic needs take precedence, such as the need to have air to breathe, water to drink, food to eat and security (Smelser and Baltes, 2001: 5280). With respect to the Antarctic, the New Zealand Government is motivated to consider its policies and actions in terms of these basic needs, of which security is the most obvious. Beyond the more basic needs, Maslow talks of higher needs, and of self-actualisation in particular (cited in Smelser and Baltes, 2001: 5280).

As a representative organisation, the New Zealand Government is interested in ensuring that the individuals in its purview continue to have these needs fulfilled. As the 'manager' of a developed country, the New Zealand Government is able to manage the process of national self-actualisation (acquiring knowledge, choosing between that which is more and that which is less worthwhile and using it creatively and inventively). Even helping others to find this level of fulfilment relates to satisfying New Zealand's more basic needs. New Zealand's assistance to Italy in the actualisation of its Antarctic programme and encouragement given to Malaysia to pursue its Antarctic interests benefits New Zealand's self-actualisation 'needs' to some degree.

Drivers are defined as underlying motivations or stimuli that instigate an action that is perceived to have positive outcomes for New Zealand. Drivers instigating New Zealand's involvement in the Antarctic occur on two main levels: international and domestic. Five drivers are identified here and each has both international and domestic facets. These drivers were identified after dissecting New Zealand's documents of strategic interest and making some observations regarding New Zealand's involvement in the Antarctic. The five drivers comprise:

- Historical & Social
- Political & Legal
- Science & Research
- Economic
- Environmental

As a small state, there are a number of fundamental questions New Zealand should be asking about its involvement in the Antarctic:

1. What **drives** New Zealand's involvement in the Antarctic?

⁴ Leslie Roberts (2003) estimates that there are upwards of 10,000 Antarcticans worldwide with a couple of thousand living in New Zealand. 'Antarcticans' are quite simply, those who have visited Antarctica or the Antarctic.

⁵ The USAP budget is \$234USD million for basic research but is also has an additional budget of \$240USD million for Project Icecube, of which \$30USD million is funding from the European Union (Brown, 2003)

⁶ It is interesting to note that the Australian programme is part of the Government Department of the Environment and Heritage (Turvey, 2001)

2. What does New Zealand **gain** from its involvement and relationship with the Antarctic region and its international regimes?
3. Is New Zealand investment in the Antarctic **worth it**?
4. Does New Zealand's profile as a **small state influence** its drivers?

This report seeks to examine and analyse the drivers motivating New Zealand's involvement in the Antarctic region, how they change over time and how they interact with one another. Some effort will be made to rank the drivers in order of importance.

It is also important to point out that this report assumes a basic level of knowledge with regard to the Antarctic Treaty system, though some details regarding New Zealand's links with the ATS are provided in the Appendices.

SECTION TWO: ANALYSIS OF FIVE KEY DRIVERS

Antarctica's insulation from external tensions enhances international stability in general and proves beneficial to all countries, especially those located in the southern hemisphere. Strategic interests derive less from a concern to use Antarctica for military or nuclear purposes but rather from a desire to deny an advantage to a rival. Zone of peace status transformed Antarctica into a kind of strategic non-fact even if there are controversies either over the role of the armed forces within Antarctic science or concerns over the militarisation or proximate places such as the Falklands...its strategic utility has been viewed increasingly in environmental terms (Beck and Dodds, 1998: 22)

2.1 INTRODUCTION: ANALYSING THE DRIVERS

To evaluate which drivers are most important to New Zealand's Antarctic policy, we will systematically examine each using the same policy benchmarks (where applicable):

- the New Zealand Government's strategic statements regarding each driver;
- how and whether the New Zealand Government's policies have altered or been shaped over time;

Statements of New Zealand's Strategic Interest, science and economic strategies represent the policies Government seeks to implement in the Antarctic. These documents are reviewed and have altered over time, several revised documents have been produced to date including:

- New Zealand Statement of Objectives for Antarctica (1995)
- December: Revised New Zealand Strategic Interests for Antarctica (2001)
- New Zealand Statement of Strategic Interest (Revised) (2002)

An overview of these three documents and analysis of the temporal changes can be viewed in Appendix II: Temporal Analysis of New Zealand's Statement of Strategic Interests in the Antarctic.

Some facets of the drivers are not subject to policy development and so are evaluated more subjectively, based on their perceived level of importance or connection to policy development. For example, the notion of New Zealand's identity with the Antarctic region is not necessarily government policy but many government policies refer to it. These implicit connections will also be considered as we evaluate what drives New Zealand's involvement in the Antarctic.

To clarify how and when international and domestic events have affected New Zealand's Antarctic policies, we present a chronology of major global events and their corresponding 'domestic' impact (see Appendix I: Chronology of New Zealand's Involvement and Policy Development with the Antarctic and Corresponding International Events, 1884-2003). Many of these events possess undeniable 'driver' characteristics – acting as stimuli prompting or promoting the development of New Zealand interests in the Antarctic (refer also to Table 3: Phases of New Zealand's Involvement and Commitment to the Antarctic). As a comparative timeline, the Chronology gives historical context to our analysis and highlights the dynamic and static nature of New Zealand's policy development in relation to significant events. Additionally, comparisons of New Zealand's drivers will be made against those of Australia, assessing New Zealand's small state capabilities where relevant.

The Importance of Size and Proximity to New Zealand's Antarctic Policy

In international politics, size and geo-strategic location matter. Therefore, it is essential to recognise New Zealand's status as a small state and its proximity to the Antarctic.

Being a relatively **small state** places obvious limitations on the New Zealand's ability to project its influence in the Ross Sea region. As a basic framework, New Zealand's foreign policy in the Antarctic will be examined against the framework of small state theory (East, 1978). New Zealand is commonly recognised as a small state, comprising several characteristics generally associated with small states: a small land mass; a small total population; a small gross national product (GNP) per capita; and a low level of military capability and projection. That is, New Zealand has: a territorial land mass of 268,676 square kilometres; a total population of approximately 4 million; a GNP ranked 20th by the Organisation of Economic Cooperation and Development [OECD] from a membership of 28⁷; and a military force

⁷ New Zealand has a human development index (HDI) of 20 – "The Human Development Report Office strives to include as many UN member countries as possible in the HDI. For a country to be included, data ideally should be available from the relevant international data agencies for all four components of the index (the primary sources of data are the United Nations Population Division for life expectancy at birth, the UNESCO Institute for Statistics for the adult literacy rate and combined primary, secondary and tertiary gross enrolment ratio and the World Bank for GDP per capita [PPP US\$])" (Human Development Report Office, 2004).

totalling approximately 13,400 personnel⁸ (Henderson, 1991: 4-6; New Zealand Defence Force, 2004; Statistics New Zealand, 2004).

It can be argued that in a different context, for example in a Pacific context compared with smaller Pacific island states, New Zealand is a large state. However, in an Antarctic context, sized-up against other Antarctic Treaty states, New Zealand is a small player. Despite its size, New Zealand has an extraordinary projection of influence.

Initially, the New Zealand government was less enthusiastic about its position in the 'exclusive club' of Western states that comprises the Antarctic Treaty system (ATS). The New Zealand Government proposed that the Antarctic be brought under the administration of the United Nations regime (Dodds, 1997: 157, 170; Alley, 1984: 914-915). Under this scenario New Zealand's projection of influence over the Antarctic would have decreased, as the roles of the ATS states as stewards over the Antarctic would then be shared by all UN member states (now numbering 191 states). One of the crucial advantages for New Zealand in the ATS is that the regime operates on a basis of consensual decision-making meaning that small states carry the same weight in the decision-making process as larger, more powerful states e.g. USA.

New Zealand's Antarctic policy constitutes one aspect of its overall foreign policy. Studies of comparative foreign policy generally recognise that size matters. Briefly, Maurice East (1978) developed a set of six characteristics identifying the international behaviour of small states:

- **Low levels of participation** in world affairs, as a result of limited material and human resources;
- A **narrow scope of foreign policy**, focusing on regional issues, and matters of direct concern to the small state;
- An **economic focus** in foreign policy execution, in order to gain maximum benefit from the limited resources;
- An **emphasis on internationalism**, involving participation in regional and international organisations as a means of compensating for the state's limited resources;
- A **moral emphasis**, and a high level of support for international legal norms;
- Hawks or doves? Opinions differ on the degree to which small states pursue an **assertive or compliant foreign policy**" (Henderson, 1991: 6).

In a number of ways, New Zealand's policy towards the Antarctic is uncharacteristic of a small state, that is, New Zealand 'punches well above its weight'. In order to determine to what extent New Zealand's Antarctic policies are characteristic of a 'small state', a loose comparison of the drivers of New Zealand and Australia (i.e. a medium power state possessing more resources, land mass, population and a larger GNP), is made throughout. By comparing their Antarctic policy, it will be possible to assess whether New Zealand does indeed act like a small state in terms of its Antarctic foreign policy.

The importance of proximity to New Zealand's connection and claims to the Antarctic territory of the Ross Dependency influences and strengthens a number of the drivers. The advantages of this geographic good fortune will be discussed in more detail throughout the driver analysis.

⁸ New Zealand's defence forces currently comprise: 9,000 regular force and 2,500 territorial force Service men and women and 1,900 civilian staff across the armed services of Navy, Army and Air Force, operating as Three Services – One Force (NZDF, 2004).

2.2 HISTORICAL AND SOCIAL DRIVERS

A New Zealand 'Antarctican' Identity, Maori, Education and Symbolism

Based on the pioneering exploits, and due to retaining the 'Ross Dependency', New Zealand has retained a strong national, Antarctic **identity** (Prior, 1997). Antarctica could almost be considered as an 'extension' of New Zealand. This is illustrated in the novel realisation that the telephone contact number for New Zealand's base, Scott Base, is listed in many of New Zealand's local telephone books.

Sir Edmund Hillary's exploits set a precedent for the New Zealand identity to be typified in the spirit of the 'adventurer'. For a relatively small population, an extraordinary number of New Zealand's population have been either directly or indirectly involved in Antarctica (Roberts, 2003).

The activities of New Zealand scientists are regularly reported, as are the exploits of New Zealand adventurers, the roles and views of New Zealand's Antarctic experts of various sorts, the visits by VIPs, journalists, artists and others, and the co-operation and activities of New Zealand with America and Italy in particular.

New Zealand has a substantial Antarctic literature, historical record and collection, including preservation work on monuments and artifacts on the continent by the Antarctic Heritage Trust (AHT). An example of the historical and cultural significance of the Antarctic to Christchurch for example is illustrated by the recent launching of *Frozen Histories: The Legacy of Scott and Shackleton* in Christchurch. This book is a photographic collection capturing the mystique of Shackleton's and Scott's huts⁹. In addition, Antarctica New Zealand runs an Artists and Writers programme with the objective of establishing a body of New Zealand art and literature, perhaps to strengthen New Zealand's cultural connection and in turn, its sovereignty claim.

In line with current acknowledgement of **Maori** aspirations, it is envisaged that Maori are going to be an increasingly important social driver that dictates New Zealand's involvement in Antarctica. As Dodd's (2003) states:

Thus far, Antarctica has often been seen as the preserve of the Pakeha community. This will change and Maori interest in fishing might be critical. Also do note place naming in the Ross Sea sector of Antarctica. You will find Maori inspired place names. What does that suggest? Where the Treaty of Waitangi goes, so New Zealand goes. So why not Antarctica?

Maori have a historical link, with claims that one of the earliest explorers to Antarctica was of Maori descent¹⁰. Also worthy of mention is the Maori commercial link with the fisheries operator, Sealord. Complications over Maori ownership to a New Zealand Antarctic territory could arise for the New Zealand Government in the future, in light of recent claims to the New Zealand foreshore. However, this is only really likely if New Zealand presses a claim to the Ross Sea region and to add to its exclusive economic zone by claiming its continental shelf.

Students in the University of Canterbury's Graduate Certificate in Antarctic Studies have also considered the existence of this Maori link. Abigail Haverkamp considered the connection Maori felt with the Antarctic in a collection of oral histories (K200: 2002/2003). Barrie Cook is currently examining the perceptions of Maori, and other ethnic groups of New Zealanders, to the Antarctic via a telephone survey (forthcoming K200: 2003/2004).

New Zealand supports an impressive Antarctic **education** programme, which is a reflection of its social links to the Antarctic. This impressive programme attracts international research to New Zealand. Within New Zealand, each of its seven universities has some involvement in Antarctic research and several universities are world-renown for their Antarctic research and centres of research excellence (University of Canterbury; Victoria University at Wellington; Auckland University; Massey University; Lincoln University and University of Waikato). The national Gateway Antarctica programme is located in

⁹ Hoflehner, J. and K., Harrowfield, D. [text] (2003) *Frozen History: The Legacy of Scott and Shackleton*, Josef Hoflehner Publisher, Austria. Captioning for this book was provided by a Christchurch Antarctic veteran, David Harrowfield.

¹⁰ Baden Norris, Antarctic Curator of the Canterbury Museum tells of a Stewart Islander of Maori decent, John Sack, who appears to have been the first New Zealander to go to the Antarctic on the *Vincennes* (Norris, 2003).

the University of Canterbury, and scientists at the Victoria University, are at the forefront of international research into paleoclimatology and global warming. Antarctica New Zealand also funds education to some extent as this is part of its Government brief.

Visually, there are a multitude of **symbols**, both in New Zealand and in Antarctica that indicate New Zealand's social and historical links to Antarctica. In Christchurch, for example, a statue of Scott is situated in a prominent position and is a popular tourist attraction. A chalice of historical Antarctic importance is kept in the Chapel of the Snows (McMurdo Station) in summer and is held by Catholic brothers in Christchurch over the winter months. The vessel is 'escorted' to and fro by one of the Christchurch Catholic brothers who also serves at the Chapel over the summer period.

At Scott Base in December 2003, the presence of prominent New Zealand government personnel, such as the Governor General, Dame Silvia Cartwright, the Chief of the Army, Major-General Jerry Mateparae and Air Marshal Bruce Ferguson, CBE, AFC Chief of the NZ Defence, was an indication of the importance and strategic defence concerns of the Antarctic to New Zealand. The group of distinguished visitors visited Antarctica in what was dubbed a 'defence familiarisation trip'.

Additionally, Scott Base features signs promoting the sovereignty of New Zealand in the Ross Dependency. It has a flag pole prominently placed in front of the main buildings with several New Zealand Automobile Association signs that infer a 'physical connection': after all, the Ross Dependency is sign-posted *just* like any another destination or landmark within New Zealand. Another way to reinforce this physical connection is the issuing of postage stamps for the Ross Dependency. In part, this is a revenue earner for the Government but is also enhances New Zealand's connection to and sovereignty over the territory.

Formalising New Zealand's Involvement in Antarctica

The establishment of Scott Base in 1957 concreted New Zealand's involvement in, and more importantly its commitment to, the Antarctic. However, the significance of New Zealand's historical and social drivers in statement of strategic interest has not been consistent. The 1995 Statement of Objectives includes reference to:

The conservation of intrinsic value of Antarctica and the Southern Ocean for the benefit of the world community, and for present and future generations of New Zealanders

Whilst 'intrinsic value' could be linked to geographical, historical and social drivers, there is no explicit reference in the 1995 statement to historical and social drivers.

In contrast, the 2001 revised New Zealand Strategic Interests for Antarctica statement has it that New Zealand's interests in the Antarctic should ensure:

...that all activity is undertaken in a manner consistent with Antarctica's status as a natural reserve devoted to peace and science and within this context support Antarctic related activities that enhance the social, cultural and economic benefits to New Zealand and the wider global community

Inclusion indicates that the New Zealand Government recognised the domestic and international value of social and cultural factors in determining its strategic approach to the Antarctic. The 2002 Revised Statement of Strategic Interest removed this reference. The reasoning behind this is unclear, but the analysis of alternative drivers tends to indicate that economic and security motives have perhaps gained more strategic importance. It should also be noted that it is quite difficult to define 'social and cultural' benefits, whilst economic and security benefits are more tangible.

Conclusion

Although exploration and discovery of the heroic era presents New Zealand's first foray into the Antarctic, it appears that the influence of historical and social drivers in New Zealand's foreign policy is weak at best. The strength of this driver has been superseded over time and modern feats of exploration do not seem to capture the imagination or conjure same feelings of 'national achievement' or pride that they have in the past.

2.3 POLITICAL AND LEGAL DRIVERS

Geo-politics and the Development of New Zealand's Antarctic Policy

Since New Zealand's involvement in the Antarctic was assured after the 'gifting' of the Ross Dependency in 1923, New Zealand's ability to actively participate in the region has been tempered by its size and limited resources. New Zealand has expressed its influence and concerns in a number of ways: (1) utilising the Antarctic Treaty regime to raise and discuss issues important to New Zealand; (2) utilising other international fora to emphasise New Zealand's moral concerns, particularly over environmental issues.

This said, New Zealand's sovereignty claim to the Ross Dependency (now sometimes more broadly referred to as the Ross Sea Region) constitutes the foundation stone on which all other New Zealand activities in the Antarctic are based and justified. It is hard to imagine that New Zealand would have maintained such a strong and costly presence in a remote region or exercised such a degree of influence if other sovereignty and strategic motivations had not been present.

New Zealand's sovereignty in the region is the keystone to its involvement, but geo-strategic concerns have also played a role in consolidating New Zealand's commitment to the Ross Dependency. An illustration of New Zealand's concerns that the Antarctic may be despoiled by conflict was evident during the Cold War.

Proximity has, and continues to be, a major motivator in terms of national security and strategic perceptions by the Ministry of Foreign Affairs and Trade and by Antarctica New Zealand (Hughes, 2003; Murdoch, 2004).

Why is Antarctica important to New Zealand? Obviously a glance at the map reveals part of the answer to this question: proximity. Antarctica dominates our geographical setting and strongly influences our own environment...And of course, New Zealand is one of seven claimants to territory in Antarctica...(Murdoch, MFAT, 2004)

Whilst proximity is a security consideration, it also reinforces New Zealand's sovereignty claim, presence and status in the Antarctic. Proximity allows New Zealand to exercise, to some extent, a degree of control over access to the Dependency. There can be no question of the benefits that proximity has afforded New Zealand's international relations and as a 'gateway' state. New Zealand cooperates closely with the United States Antarctic Program in a mutually beneficial logistics arrangement e.g. supplying air transport, cargo handlers and support personnel.

The Antarctic Treaty system operates by consensus which means that, for NZ, it operates as a great leveller, equalising the inherent power disparity between powerful ATS states and weaker, smaller members of the ATS. Essentially, this allows NZ to 'pack a punch' greater than its weight. New Zealand has recently supported Malaysia's Antarctic aspirations. Motivations in this case though cannot be construed as purely diplomatic altruism. New Zealand's encouraging gestures to Malaysia come with some expectations. Malaysia has spoken out in the United Nations against the exclusivity of the ATS 'club'. It proposed that the Antarctic be governed through the United Nations system. Ironically, this was a stance New Zealand had taken earlier when reluctantly took control of the Ross Dependency (January, 1956).

New Zealand's also actively participates in and contributes to international Antarctic policy, namely the development, revision and enforcement of the Antarctic Treaty legal regime. This area of international relations highlights New Zealand's commitment as a small state to its moral emphasis on Antarctic foreign policy (East, 1978). In the process, it also serves to reinforce New Zealand's status as a claimant state and, therefore, its 'right' to legislate limitations for those states or actors wishing to access the continent (see Appendix III: New Zealand's Core Legal and Institutional Connections with the Antarctic).

The growing United States presence at McMurdo Sound cannot be overlooked when considering the New Zealand's geo-strategic priorities¹¹. The importance of sustaining New Zealand's sovereignty claim in the Ross Sea region is paramount in its Antarctic policy but it is not pursued at the cost of its cooperative relationship with the United States Antarctic Programme (USAP) or in contravention of the ATS protocols. The level of cooperation, indeed the level of dependence New Zealand has on the USAP, is indicative of its status as a small state. While New Zealand seeks to consolidate its presence in the region it has limited resources to do so effectively.

In this analysis, it is interesting to speculate on New Zealand's present stance regarding sea-bed claims. While Australia has been relatively quick to table its claim to the continental shelf around its Antarctic territory, New Zealand has held off laying claim to the sea-bed of the Ross Sea region (Hughes, 2004).

The Role of New Zealand's Military: Supporting Antarctic Activities

New Zealand's military involvement in the Antarctic is significant. Its involvement is in line with the three principles of the nation's defence policy:

- defend New Zealand against low level threats such as incursions into New Zealand Exclusive Economic Zone and terrorism,
- contribute to regional security including maintaining key defence relationships
- be a good international citizen by playing our part in global collective security efforts (Heyrick, 1998).

The most visible indication of the military's involvement is the provision of Defence Force Air Transport for New Zealand's Antarctic programme. The 2003 Antarctica New Zealand Annual Report stated that New Zealand contributed 15 RNZAF C130 Hercules flights providing 400,000lbs of air lift capability, and 226 helicopter hours.

New Zealand's Navy and Airforce also play key roles in the surveillance and policing of the Southern Ocean to protect marine resources (Hughes, 2003). The New Zealand Government intends to purchase a new class of medium range, patrol vessels, one of which will have a steel hull to enable utilisation in the Southern Ocean (Edgar, 2004). The investment in such a vessel is an indicator that New Zealand will maintain and build its presence in Antarctica in the future.

Military personnel are also employed at Scott Base and Christchurch International Airport (Antarctica New Zealand Annual Report, 2003). However, a comparison with the involvement of Australia's military in the Antarctic highlights a stark contrast: Australia does not provide any military logistic or personnel support to its programme. Both nations though carry out surveillance and patrol of the Southern Ocean, with Australia recently committing a vessel to carry out routine patrol of the Southern Ocean (Hemmings, 2003). Australia's strategic policy statement makes no implicit mention of the Antarctic being a place where peace and security must be ensured. It is, however, a signatory of the Antarctic Treaty and is therefore respectful of the region being used for the peaceful purposes of science and research. New Zealand, by comparison, places a greater emphasis on the maintenance of peace and security, making this policy a primary objective in its strategic policy statement.

Domestic Politics and Their Influence on New Zealand's Antarctic Policy

The effects of domestic politics on the formulation and implementation of foreign policy cannot be overlooked. There have been several instances in New Zealand's relationship with the Antarctic when domestic politics have had or could potentially have had a significant impact on New Zealand's ability to maintain an effective presence on the ice.

Firstly, domestic partisan politics can have an effect on New Zealand's commitment to maintaining an effective Antarctic programme. Budgets must be approved and a politician's degree of personal interest in Antarctica or Antarctic science can only bring favourable responses for the programme. Partisan politics in New Zealand, in comparison to that of Australia¹², is more markedly split over issues of national

¹¹ Note that, although the USA is an ATS member state, it does not recognise any territorial claims including New Zealand's territorial claim to the Ross Dependency and region.

¹² Australia's threat perceptions are far more immediate than New Zealand's. New Zealand has the advantage of geo-political isolation, Australia has the 'arc of instability' to its north, with its northern borders open to refugees and exposed to unstable states such as

security and strategic defence spending in New Zealand (Henderson, 2003). National Party has generally tended to err more heavily on the side of caution, considering broader, more traditional threat perceptions and funding accordingly. In January 1956, Leader of the Opposition and National Party (Walter Nash) proposed abandonment of national claims and United Nations control of Antarctica. This view was later moderated, offering a renunciation of New Zealand's claim only if all claims were dissolved and Antarctica came under the control of a truly international regime (Dodds, 1997: 157, 170). The National Party has tended to be more proactive in encouraging commerce and economic opportunities e.g. Antarctic Toothfish fisheries in 1996 (Johansen, 2004).

The Labour Party has generally recognised the limitations of New Zealand's defence resources and its indefensible landscape, changing tack from proactive 'defence' to preventive, regional actions¹³ (Henderson, 2003). In terms of partisan views affecting Antarctic policy, this can only be seen as significant during the ANZUS crisis when New Zealand's anti-nuclear stance had the potential to spill-over and affect New Zealand/US logistical cooperation in the Antarctic.

Secondly, the development of New Zealand's domestic legislation, such as the 1987 New Zealand Nuclear Free Zone, Disarmament and Arms Control Act and the Resource Management Act 1991, also have repercussions for New Zealand Antarctic policy development. Part in parcel with the creation of New Zealand domestic law that affects New Zealand policy on the ice, New Zealand also enacts laws that gives the Antarctic relevance in New Zealand's judicial system (see Appendix III: New Zealand's Core Legal and Institutional Connections with the Antarctic).

Thirdly, powerful lobby groups can also influence government policy. Growing commercial interests in the Antarctic fisheries and bioprospecting may see increased lobbying of government to get more support for increased access to Antarctic resources. Grassroots environmentalism can also have impact on government policy as is evident with the rise of 'green' politics and environment/resource management policy in New Zealand in the 1990's.

Conclusion

As a 'gateway' state, proximity affords New Zealand the advantages many other claimant and non-claimant states do not have a geographical location permitting relatively easy access to the remotest continent. The value of this geographical good luck in strengthening New Zealand's presence and claim to Antarctic territory cannot be underestimated – it is an intrinsic aspect of New Zealand's claim to sovereignty. Similarly, New Zealand's size affects its policy towards the Antarctic, and though proximity mitigates resource limitations to some degree (via easier access), it cannot compensate for such a small budget.

Some domestic political pressure can be exerted to force Antarctic policy changes but generally Antarctic policy is a product of international diplomacy, national strategic interests and geo-political circumstance.

Indonesia. With these sorts of 'threats' closer to its borders, parliamentary debate over Australia's defence budget is rare and defence spending is viewed as a necessity. For New Zealand, the question of defence spending is common in parliamentary debate, where different parties argue the pros and cons of defence spending.

¹³ For example, New Zealand has focused on more regional issues e.g. managing conflicts in Bougainville, East Timor and Solomon Islands.

2.4 SCIENCE AND RESEARCH DRIVERS

Having just considered the political and legal drivers in terms of geo-strategic importance and national interest, it now seems odd to recognise the science driver as equally fundamental to New Zealand's Antarctic policy. However, it must be noted that maintaining a legitimate scientific programme and a year-round base is one of the conditions required to retain one's status as a consultative member of the Antarctic Treaty system¹⁴. In this way, science is *essential* to the maintenance of and justification for New Zealand's Antarctic connection.

Antarctica is a continent devoted to peace and science and this is important both nationally and internationally. As a 'natural scientific laboratory' (Prior, 1997), Antarctica has provided New Zealand with a geographically advantageous setting for scientific endeavours. In 1958 the Ross Dependency Research Committee (RDRC) was established – announcing New Zealand's interest in Antarctic science. Since signing the 1959 Antarctic Treaty, New Zealand embarked upon a substantial and continuing programme of scientific research in the Ross Dependency (Prior, 1997). In 1966, Weber justified New Zealand's presence in Antarctica to study science 'peculiar to Antarctica' and to become a major part in the world-wide network of scientific stations established for that purpose. Part of this justification came with the 1956-1967 mapping of the 182,000 square miles of the Ross Dependency and a programme of geological reconnaissance (Weber, 1966).

Prior (1997), identifies New Zealand's fundamental rationale for scientific research in Antarctica as coming from recognition that events and processes there have a profound influence on the environment and evolution of the entire globe. The International Geophysical Year of 1957/58 provided the catalyst for Antarctic science, in particular linking Antarctic science to global processes and earth systems.

The 1995 New Zealand Strategic Objectives in Antarctica were to 'promote New Zealand's values and ideology by promoting Antarctica as a natural reserve devoted to peace and science'. Reviews of the 1970s and 1980s also stated the benefits to New Zealand of active and continuing scientific involvement in Antarctica. However, Turvey (2001) states that although Antarctica may be an important platform for, and focus of, science activity, it is not in itself a recognised domain of scientific endeavour- it is a 'theme' within those domains.

In 2002, New Zealand's Revised Statement of Strategic Interest acknowledged the role of science and in 2003 a second important document was released - the Antarctic and Southern Ocean Science Strategy. This document provides the basis for managing and enhancing New Zealand's science activities in the Ross Sea region over the next five years, namely from 2003-2008 (Sanson, 2003). It is centred on three research themes¹⁵:

- Antarctic Physical Environments Research
- Southern Ocean Research
- Antarctic Ecosystems Research

¹⁴ "Currently, forty-four nations have agreed to the Antarctic Treaty, but only twenty-seven control the decision making process. These twenty-seven are the "Consultative Parties" mentioned above, and they include the original twelve signatories. Only the Consultative Parties have votes at the Antarctic Treaty Consultative Meetings (ATCM), and every decision requires a consensus. However, nations who conduct scientific research on the continent can apply to become Consultative Parties. In 1998, the twenty-seven Consultative Parties are: Argentina, Australia, Belgium, Brazil, Bulgaria, Chile, China, Ecuador, Finland, France, Germany, India, Italy, Japan, the Republic of Korea, Netherlands, New Zealand, Norway, Peru, Poland, Russia, South Africa, Spain, Sweden, the United Kingdom, Uruguay, and the United States. The seventeen Non-consultative Parties are: Austria, Canada, Colombia, Cuba, the Czech Republic, Denmark, Greece, Guatemala, Hungary, the Democratic Republic of Korea, Papua New Guinea, Romania, the Slovak Republic, Switzerland, Turkey, Ukraine, and Venezuela" (<http://www.asoc.org/general/ats.htm>)

¹⁵ The original science strategy of 1998 had five research themes that have now been modified and integrated into three science themes: 1) The Antarctic and Southern Ocean Science Strategy outline four ways in which New Zealand benefits from its participation in Antarctic research; 2) Research conducted supports New Zealand's active participation in the Antarctic Treaty Consultative Meetings, the Committee on Environmental Protection (CEP) and the CCMLAR; 3) Research undertaken in Antarctica has a direct impact to understanding New Zealand's environment; 4) Outcomes from research to understand global scale problems are used to produce informed environmental policies on global impacts and; 5) The close relationship New Zealand has with the United States and Italy with logistics and scientific research benefits all three countries (Antarctic and Southern Ocean Science Strategy 2003).

The Science Strategy identifies a set of principles and priorities that are designed to direct the development of strategic science research. These are that science supported (by Antarctic New Zealand) will: 1) be of internationally reputable scientific merit; 2) require information best obtained from the Antarctic and Southern Ocean in order to be implemented; and, 3) significantly contribute to the world store of scientific knowledge and understanding. The Strategy also gives priority to research: 1) that contributes to the outcomes from the three science themes to provide new knowledge of broad scientific, environmental and economic benefit to New Zealand; 2) which supports New Zealand's international interests and obligations, especially those related to the Antarctic and Southern Ocean; and, 3) carried out in significant partnership with other nations, or which forms part of a formal international research programme(s).

International Scientific Collaboration and Cooperation

Christchurch provides the logistics support for such access to scientific activity in Antarctica. "The changing nature of Antarctic research and its increasing specialisation require concomitant provision of appropriate facilities" (RDRC, 1985). The reliability and frequency of the airborne link from Christchurch to Antarctica strengthens New Zealand's science by attracting international scientists of high calibre¹⁶.

Christchurch provides the International Antarctic Centre; an international airport; warehouse facilities; facilities for the New Zealand, American and Italian Antarctic Programmes and offices of the Antarctic Heritage Trust. As well as these facilities, Christchurch attracts many scientific support vessels to Lyttelton Harbour and Collaborative Antarctic statements have been signed between New Zealand and Chile, Switzerland and South Africa. (MFAT 1996) These statements are designed as the first step to assist scientists from these countries to establish contact and develop cooperative research programmes.

New Zealand can potentially be a leader in scientific research and participate in research projects it could not afford to conduct on its own. Indeed, 'Antarctica has long been synonymous with international cooperation' (New Zealand Science Strategy, 2003). Traditionally, New Zealand science consisted of small field parties of single disciplines working in the field. Nowadays, these teams are often multidisciplinary and international collaborations of scientists. The Science Strategy of 2003 gives great emphasis to international collaboration of research. The 1995 Statement of Strategic Objectives challenged Antarctica New Zealand to develop scientific activities of acknowledged excellence and world quality whether on Antarctica or in the Southern Ocean (Prior, 1997).

Key themes in the development of scientific policy have included:

- Giving a priority to international collaboration of scientific activity to counter the budget restraints of single national programmes.
- Increasing the level of understanding about marine ecosystems and biodiversity.
- Seeking new knowledge in different research areas to justify funding and New Zealand's presence in the Ross Dependency.
- Maintaining a multidisciplinary approach that focuses on analysing the global system.
- Strengthening the focus on management and conservation in the Antarctic.

The 1994 Strategic Review sought to justify New Zealand's presence in Antarctica, however a key question remains, "was science still the driver of the New Zealand national presence in Antarctica?" Essentially, "New Zealand needs to do top-notch science in Antarctic in order to retain its international credibility as an Antarctic player" (Prior, 1997). Before the 1994 review, there was evidence that New Zealand's Antarctic science faced 'danger of marginalisation in a new era of contestable funding' (Prior 1997). The question of, whether state subsidised science in Antarctica could be justified, was then asked.

The 2002 Review of New Zealand's Strategic Interests in Antarctica and the Southern Oceans reaffirmed the Government's commitment to support high-quality research in Antarctica and the Southern Ocean. The 2002 Revised Strategic Statement emphasises New Zealand's commitment to conserving the values of Antarctica and the Southern Oceans for the benefit of the world community and for present and future

¹⁶ "The immense size of Antarctica makes its comprehensive study beyond the resources and scope of a single nation and New Zealand and the United States, joined more recently by Italy, have pooled resources, knowledge and expertise to build a relationship unparalleled within the Antarctic Treaty system" (MFAT, 1996).

generations. This recognition of Antarctica's global importance is clear from the following rationales for scientific research in Antarctica:

Recognition that events and processes operating in and around Antarctica have, and have had, a profound influence on the environment and evolution of the entire globe;

The intrinsic values of the Antarctic atmosphere, biosphere and geosphere add to the fund of general knowledge of our planet and research between all these spheres are highly interrelated;

International recognition that science is both a primary and legitimate use of the continent in its own right and underpins management of that continent to avoid degradation of the environment and other values (MFAT, 2003).

New Zealand has taken up this offer and is seen as world leaders in science activity, especially in the field of global warming. Projects such as the Cape Roberts Project¹⁷ and ANDRILL are an example of a multinational event of which New Zealand leads. Both Cape Roberts Project and the ANDRILL drilling project involve issues of global scientific importance. Other significant international projects that New Zealand is involved in include the Network for Detection of Stratospheric Change (NDSC) and Global Atmospheric Watch (GAW).

The 2007-08 International Polar Year will provide New Zealand opportunity to highlight international collaborative research in Antarctica (Sansom, 2003). With increasing technology, Antarctic science and research has evolved into the phase of satellite technology, remote-sensing and unmanned equipment and real-time links to laboratories with the aid of the Internet. This change has opened up new ways of researching Antarctica and will contribute to New Zealand's research regarding issues of global significance.

Domestic Benefits of Science and Research

Antarctic science has direct relevance to New Zealand. This factor drives much of the scientific activity from New Zealand into Antarctica. Issues of global significance such as the break-up of the Antarctic ozone hole or up-welling of the ocean around Antarctica all have important repercussions for New Zealand, whether it be depleted ozone over New Zealand, influence over nutrient availability, biological productivity or impact on fisheries resources in New Zealand's 200-mile EEZ. New Zealand has engaged in research collaboration on issues of global scientific importance e.g. global warming.

The 1994 Review of New Zealand Strategic Objectives in Antarctica recognised major gaps in New Zealand's knowledge and understanding of intrinsic value, features and potential resources of the Ross Sea Region (Prior, 1997). Recognition of the rich diversity of the Southern Ocean as a profitable entity is becoming more apparent. Large-scale projects in the Ross Sea region such as BioRoss and the Latitudinal Gradient Project (LGP) have been designed to create a detailed inventory of the marine resources and ecosystem of the Ross Sea Region.

The 2002 Revised Strategic Statement introduces the concept of sustainable management and biosecurity. An emphasis on the marine living resources in the Southern Ocean suggests the growth of opportunities regarding fisheries, tourism, bioprospecting and resource exploitation. Research is increasingly centred on resources that could prove profitable e.g. BioRoss, fisheries.

New Zealand has a responsibility to maintain and enhance the quality of New Zealand Antarctic science (New Zealand Science Strategy, 2003). However, as identified by the RDRC in 1985, New Zealand national resources for supporting research projects in Antarctica were limited and the RDRC believed it necessary to convince the public that Antarctic research represented value for money. The 1995 Policy "challenged the New Zealand scientific community to articulate, define and carry out innovative strategy of excellent science in the Ross Sea region that is directed at meeting national scientific goals set up by the

¹⁷ Cape Roberts represents an "excellent example of the intent of the Antarctic Treaty with parties cooperating in a major logistical and scientific effort for the benefits of future generations" (MFAT, 1996). The Cape Roberts project is also an example of a project that could not have been completed by only one country, in particular New Zealand. The multinational programmes contribute to major research initiatives at a level that cannot be sustained within each country's national Antarctic research budget...collaboration in such programmes greatly enhances New Zealand's science profile and the best indication of international recognition of New Zealand's Antarctic and Southern Ocean science" (New Zealand Science Strategy, 2003). 'The relatively high cost of new Antarctic science, and the substantial operational and logistical support required, have militated increasingly in favour of international collaboration on the Continent' (Prior, 1997).

Government” (Prior, 1997). Projects such as BioRoss and the LGP will enable scientist to identify and record resources in the Ross Sea Region that will be of direct benefit to New Zealand.

Prior (1997) identifies regional concerns such as the issue of the ozone hole, fisheries resources and geological similarity between Antarctica and New Zealand that provides insight into potential mineral resources in New Zealand, as important motivators in New Zealand science in Antarctica. Knowledge of the influence of environmental factors on natural communities allows understanding of the process in New Zealand’s ecosystem (MFAT, 1996). Growing domestic concerns over the effects of global warming and increased ultra-violet radiation (which has been linked to a higher incidence of skin cancer) are also prime reasons for supporting New Zealand’s research in the Antarctic.

Conclusion

There has been a shift in the drivers of science over the last couple of decades. Since the signing of the Antarctic Treaty, science has undergone significant change due to technological advances and drive for knowledge. Science nowadays has to co-exist with a range of other factors in a way it did not have to in the 1950’s and 1960’s (Dodds, 2003). Subsequently, there is an increasing view that science is the ‘Trojan Horse’ masking sovereignty and economic ambitions.

New Zealand’s main motivation behind scientific activity in Antarctic is twofold. Firstly, science allows New Zealand to: ensure its ATS consultative party status; take a proactive approach as an Antarctic Treaty member and make its presence felt in the Antarctic. International collaboration of large scale projects as well as providing an important scientific gateway make New Zealand an important player in Antarctic science. Secondly, New Zealand is obligated to maintain Antarctic science of the highest quality, benefiting both New Zealand and the Antarctic. These obligations reflect domestic and international expectations of Antarctic science.

2.5 ECONOMIC DRIVERS

New Zealand has placed greater emphasis in recent years on the economic and commercial benefits that involvement with the Antarctic can provide. Actions that have reflected this are the granting of fishing licences for exploratory fishing in the Southern Ocean (Edgar, 2004) and the policing of southern fisheries by Royal New Zealand Navy [RNZ] vessels (Hughes, 2003). Bioprospecting in the Antarctic region and Southern Ocean (Munro, 2003) is another interest that reflects New Zealand's economic drive for involvement in Antarctica. However, these initiatives appear to be in contrast to the wording of the strategic policies (1995).

Economic Motivations for New Zealand's Antarctic Involvement

The 1995 Statement of Objectives for Antarctica explicitly promotes New Zealand's interest in the:

...economic well being ,through enhancing New Zealand's economic opportunities within the parameters of the ATS

Such direct references to economic opportunities are not made in subsequent statements. Maximising economic opportunities are inferred nonetheless with respect to 'resource' and 'sustainable management' from the 2001 Draft Strategic Statement and 2002 Strategic Statement. Economic interests have instead been referred to 'covertly' through other organisations and in other documents. For example, New Zealand has become a far more active participant in CCAMLR since the early 1990s. Additionally, it has developed a separate policy addressing issues relating to tourism in Antarctica (Media Statement, MFAT, 1995).

The exclusion of direct reference to economic opportunities indicates that the Government does not want its economic and commercial interests in the Antarctica to be perceived as a dominant driver. However, Dodds (2003), Wratt (2003) and Keating (2003) remain strong advocates that economic and commercial interests are of paramount importance to New Zealand, having a far higher priority than they have had previously. Dodds (2003) states that New Zealand is concerned with:

...obtaining value for money from science, exploiting opportunities in tourism including Christchurch as a gateway city, exploiting fisheries in the Ross Sea, exploring bio-prospecting possibilities and denying such opportunities to others (e.g. Non-New Zealanders in the Ross Sea Sector).

Stakeholders such as the Ministry for Fisheries have become increasingly active in matters relating to the Southern Ocean. Personnel from this Ministry outnumber other key stakeholders at forums where Antarctic matters are discussed (Wratt, 2003).

In contrast to New Zealand's covert acknowledgement of economic drivers (Marchant, 2004), Australia is overt about pursuing economic interests in Antarctica (see Appendix IV for a list of the purposes of the Australian Antarctic Programs i.e. the Fourth Goal). The increasing economic significance of Antarctica is also recognised by Antarctica New Zealand. Peterson (2003) agrees that more increasingly, policy and commerce is inter-linked with science and that government are pursuing an increase in the economic benefits resulting from Antarctic involvement.

The Benefits of Being a Gateway to the Antarctic: Boosting the Domestic Economy

'Gateway' connections have international significance and "twinning" comparisons are often made between Christchurch and other 'Gateway' cities: Punta Arenas, Chile; Cape Town, South Africa; Hobart, Australia; Ushuaia, Argentina and Stanley, Malvinas-Falklands (Prior, 1997). New Zealand has actively sought to maintain its position as one of five Southern Hemisphere Gateway countries to the Antarctic. The economic benefits for New Zealand of remaining an Antarctic Gateway are significant, providing substantial spin-offs for the domestic economy (Prior, 1997; Hall, 2000).

The spin-offs from Antarctic logistics support can be categorised according to direct and indirect effects on the economy (Hall, 2000). Direct spin-offs include: air transport and shipping; provisioning; fisheries

and workforce supply. Alone, specialised Antarctic fisheries reportedly raked in \$17NZD million in revenue in 2003 (Edgar, 2004). Indirect spin-offs include: the commercialisation of services and products (including accommodation, Antarctic equipment and communications); location of infrastructure; science centres and international committees; education and training; tourism; arts and culture; conservation and environmental management; and international information sharing.

It is estimated that these direct and indirect spin-offs resulting from Antarctic links contribute in excess of \$70NZD million to the New Zealand economy (Prior, 1997; Pickrell, 1998; Hall, 2000). The main economic and commercial stakeholders that have been formed as a result of the economic significance the Antarctic plays for New Zealand are identified below (refer Table 1: Stakeholders in New Zealand's Economic Gains As An Antarctic 'Gateway').

TABLE 1: STAKEHOLDERS IN NEW ZEALAND'S ECONOMIC GAINS AS AN ANTARCTIC 'GATEWAY'

ENTITY	CONTRIBUTION
Christchurch International Airport	Launching point for the New Zealand Air Force and USAP Air Links to Antarctica and specialist Antarctic souvenir shop
The Port of Lyttelton	Port of departure for non nuclear ships in the USAP
International Antarctic Centre (IAC)	Promotes the tourist and education appeal of the Antarctic and is a draw card for Christchurch
Kelly Tarlton's Antarctic Encounter and Underwater World	Promotes the tourist appeal of the Antarctic in Auckland
New Zealand-owned, or based, tourist companies	Leverage on tourists visiting New Zealand
Helicopters New Zealand	Contracted to provide helicopter support to New Zealand's Antarctic Programme
Telecom	Provide communications support to New Zealand's Antarctic Programme
New Zealand Antarctic Society	Provides a means of networking amongst the New Zealand Antarctic Community
Canterbury Antarctic link	Established to promote the economic benefits to the region from Antarctic activities, assisting commercial entities 'supplying' and servicing Antarctic, related activities eg. to communicate and network

There are obvious local benefits from this association, primarily involving the extensive logistics in 'getting to the ice'¹⁸. In 2003, 420 passengers and 172,000 pounds of air cargo were flown to Antarctica, and 252,000 pounds of cargo was shipped by sea in cooperation with the United States Antarctic Program [USAP] (Antarctica New Zealand Annual Report, 2003). Antarctica New Zealand's involvement in logistics support is explicitly stated in its brief: "we undertake and support scientific work of practical, economic and national significance". And supporting other ATS members is a large part of this. In addition to being in a relationship of close cooperation with the USAP¹⁹, New Zealand 'assists' with the Italian program and is also encouraging cooperative activities with Malaysia.

While the economic benefits of providing logistical support are generally localised, there are other forms of economic benefits that are and will be associated with New Zealand's involvement in the Antarctic, namely fishing and bioprospecting.

The Commercialisation of New Zealand's Antarctic Link: Fishing and Bioprospecting

Beyond the more obvious 'gateway' benefits, the well being of the domestic economy represents another area that is significant when considering the drivers motivating New Zealand's involvement in the Antarctic. New Zealand Government policy supports exploratory fishing in the Southern Ocean. This stance is in line with the CCAMLR policy outlined in Section 2.6. In the 2002/03 season, fishing activity

¹⁸ Christchurch and the surrounding Canterbury region, Dunedin and Invercargill are domestic regions where the economic gains of Antarctic involvement are most prominent as a result of the provision of logistic support. Christchurch claims to be New Zealand's 'Gateway to Antarctica', providing air transport infrastructure and port services through Lyttelton.

¹⁹ The New Zealand programme relies heavily on the US programme in particular, to transport passengers and air and sea cargo. For example, 252,000 pounds of cargo was shipped by in sea cooperation with the USAP (Antarctica New Zealand Annual Report, 2003).

occurred in nine CCAMLR areas, with New Zealand Fisheries occurring in Sections 88.1 and 88.2 of the Ross Sea (Edgar, 2004). An indication of the potential significance this economic resource has for New Zealand is reflected in the New Zealand Military's active involvement in patrolling the Southern Oceans, as described in Section 2.3. The military presence is attempting to police Illegal, Unregulated and Unreported (IUU) Fishing in the CCAMLR area.

Local fisheries, particularly in southern New Zealand have gained 'exploratory' licenses to fish in the Southern Ocean, with benefits to the local economies. Exploratory fishing provides for limited, licensed fishing in the Antarctic and is regulated and assessed by the CCAMLR regime. In an exploratory fisheries industry, monitoring and research is the key to sustainability and management of the marine resources. In conjunction with collecting a commercial catch, New Zealand vessels conduct a variety of research: toothfish and skate tagging; gonad, otolith and stomach sampling; sea bird mitigation; sub-species distribution; seabed mapping and depth distribution; pot fishing; temperature and light data; and sample collection. (Johansen, 2004)

Edgar (2004) states that New Zealand earned \$17NZD million from southern ocean fish in exports for the year 2002-2003. As a result of the granting of these exploratory fishing licenses, Patagonian Tooth Fish, and Antarctic Tooth Fish, are available at outlets throughout New Zealand.

New Zealand involvement cannot be seen necessarily detrimental to the environment. New Zealand fishing practices have established many of the benchmark standards regarding offal retention, management of loose bait, macerating other waste for discharging, hook-sink rate (10-20 billion hooks sunk and no bird deaths in Ross Sea), sea bird catch mitigation generally (assisting other countries to reduce their bird catch mortality levels), inspections and observers (only taking approved catch species) pre-sailing and post-trip inspections (Johansen, 2004). So, what are New Zealand's long-term fishing objectives? With the dictates of ice and the environment, it is unrealistic to foresee a more permanent fishing presence on Antarctica i.e. land-based activities such as processing factories and support services.

Bioprospecting is another area that contributes to New Zealand's economic motivation to be involved in Antarctica. Bioprospecting is the search for commercially viable biochemical and genetic sources in plants, animals and micro-organisms (Peterson, 2004). Resources identified may be used in food production, pest control, the development of new pharmaceuticals and other biotechnological applications

To date, New Zealand has not embarked on an aggressive bioprospecting campaign (Munro, 2003), as other nations such as Australia have (Marchant, 2004). Nonetheless, New Zealand scientists and companies are developing bioprospecting potentials. While the Government acknowledges the growing interest in 'bioactive' research, discussing bioactive research as a reality in terms of "bioactive discovery output" is not in alignment with current government policy (Hughes, 2004: 2).

Conclusion

New Zealand's Antarctic policy approach is now a balancing act between competing drivers. That is to say, government support for environmental management and protection on the one hand is juxtaposed by its efforts to balance national economic interests, namely, exploratory fishing, in the other.

However, there appears to be a hierarchy associated with government priorities and the Government's support for the fisheries is not made to the detriment of its standing in the ATS. Questionably, New Zealand's interests in overtly supporting its fishing industry²⁰ are not solely focused on its commercial value. It could be argued that while New Zealand seeks to reinforce its claim to the region, it is not simply about 'asserting' its sovereignty, it is more about controlling resources and managing them effectively.

²⁰ In 1996, government sources contacted Sanford Ltd. to advise them of the potential fishing opportunities in the Ross Sea Region and encouraged them to apply for CCAMLR licences (Johansen, 2004).

2.6 ENVIRONMENTAL DRIVERS

Promoting International Environmental Stewardship

Environmental drivers of Antarctic policy start to show themselves in the 1970. The Antarctic Treaty nations were prompted into action by what appeared to be the inevitable resumption of commercial sealing, fishing and the exploitation of mineral resources in the Antarctic. This resulted in the Convention for the Conservation of Antarctic Seals (CCAS) in 1978 and the Convention of Marine Living Resources (CCAMLR) in 1982. During these negotiations and in particular the negotiations for the Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA) New Zealand took a pragmatic approach. The official line was that it was inevitable that the resources would be exploited²¹ and the most important thing was to put in place some sort of regulatory system within the Antarctic Treaty system that would control access to the resource and safeguard the environment (Ministry of Foreign Affairs and Defense, 1977; Galvin, 1987).

It seems ironic that before the creation of these Conventions there is little interest in environmental stewardship despite the fact that scientists were going to the ice to study the environment e.g. glaciers, climate change, geology and marine science. The emphasis of science before this time was on understanding the earth and its effects of humans on these interconnected systems.

New Zealand's position has changed little over the last 20 years when it comes to marine living resources. In the 1970's, however, the benefits to New Zealand were seen from a "gateway" perspective. The benefits to New Zealand would come from servicing foreign vessels and providing ancillary services to assist them. Today New Zealand sees its role more in managing access to the resource, setting the benchmark for the highest environmental standards, implementing CCAMLR provisions i.e. surveillance by New Zealand Air Force Orions, (as outlined in Section 2.3) as well as sustainably harvesting the resource. The official view is that New Zealand's marine activities are a branch of New Zealand's increasingly important environmental stewardship role of the Ross Sea Region (Hughes, 2003).

By the 1980's New Zealand played a significant role in promoting environmental stewardship within the international arena of the Antarctic Treaty system. Chris Beeby, Deputy Secretary of Ministry of Foreign Affairs, chaired the Antarctic minerals negotiations meetings (since they began in 1982), meetings that eventually led to the adoption of CRAMRA in 1988 (CRAMRA was never ratified). Despite the suspension of CRAMRA many of the measures i.e. environmental impact assessment, were transferred to the Protocol on Environmental Protection on the Antarctic Treaty (1991 Madrid Protocol) that came into force in 1998.

Environmentalism in New Zealand: Consequences in the Antarctic

It was during the CRAMRA negotiations, however, that the environmental lobby became more active both on the international scene. Greenpeace highlighted the environmental damage being caused by the construction of the French airfield at Dumont d'Urville, and within New Zealand (de Poorter, 2004). The environmental lobby put considerable pressure on the government to reject any proposals that allowed mining in the Antarctic (Galvin, 1987). This was also a time of major restructuring of environmental management in New Zealand that resulted in the Resource Management Act 1991. This was the beginning of an era in New Zealand history where it found itself at the forefront of world environmental management practices. It discovered the value of projecting internationally the "clean green" image and the expertise associated with maintaining a "clean green" environment.

Since the 1990s New Zealand has adopted a strong environmental stewardship role in the Antarctic as reflected in New Zealand's Statement of Strategic Interest 2002. This is most clearly demonstrated on land where New Zealand is active in cleaning up contaminated sites, disused stations e.g. Cape Hallet, and improving its waste management practices. Increasing tourism is also a concern and New Zealand

²¹ Initially, New Zealand sided with the US on the possibility of utilising Antarctic resources. The USA was particularly in favour of exploring the commercial potential of mining in the Antarctic.

upholds the principles of the 1991 Madrid Protocol in that tourist operators must provide environmental impact assessments and operations are closely monitored.

In addition, the Ross Sea Region State of the Environment Report 2001 was the first state of the environment report for a region of the Antarctic. This has been a catalyst for New Zealand and Australia to jointly lead a new initiative amongst the Treaty parties - the development of a state of the environment reporting system for the Antarctic.

Conclusion

Small states generally espouse moralistic foreign policy and willingly voice moral leadership in global affairs. This moral emphasis is more often a case of rhetoric rather than reality, for few small states possess the resources to enforce their stance in international politics. As a small state, New Zealand has “a strong tradition of supporting moral causes in the international community”(Henderson, 1991: 10-11). New Zealand likes to see itself as a good environmental steward, itself a moral stance. It has a strong track record in environmental stewardship and environmental issues enjoy a high profile in domestic politics (Dodds, 2003). The Ross Sea Region State of the Environment Report 2001 is an excellent example of New Zealand’s moral emphasis in promoting international environmental policy.

The situation, however, is less clear in the marine environment where New Zealand aspirations to sustainably harvest marine resources appear to some outsiders to create tensions between New Zealand’s environmental and economic aspirations for the Antarctic. The official line, however, is that the New Zealand’s economic activities in the Ross Sea Region are in line and are in fact contributing to New Zealand’s policy on environmental stewardship, developing effective regulations and promoting good management practices.

SECTION THREE: DISCUSSION, CONCLUSIONS & FUTURE DIRECTIONS

3.1 DISCUSSION: PHASES, SIZE AND INTERDEPENDENCE

The previous section analysed the five drivers using a combination of applied small state theory, policy analysis, chronological perspective and international comparison. This section will draw on the conclusions derived from each driver analysis and summarise the key issues: the driver phases and degrees of importance, the impact of New Zealand's small state size on its Antarctic policy and driver influence and interplay between the drivers (see Table 3: Summary of New Zealand's Antarctic Drivers).

Phases and Degrees of Importance

Drivers are a function of our relationship with other nations, our reaction to world events and a reflection of New Zealand's domestic scene. From this analysis it is evident that New Zealand's Antarctic policy development is a fluid process in which the primary drivers have waxed and waned, depending on the geopolitical context and domestic political circumstances. Four distinct periods in New Zealand's policy development are identified from 1922 to the present day. Over each period, the five drivers have tended to act in tandem with each other rather than as mutually exclusive motivations (refer Table 2: Phases of New Zealand's Involvement and Commitment to the Antarctic). The "real" drivers are often hard to detect as multiple agendas are being played out simultaneously.

TABLE 2: PHASES OF NEW ZEALAND'S INVOLVEMENT AND COMMITMENT TO THE ANTARCTIC

Chronological Period	Phases of New Zealand's Involvement and Commitment to the Antarctic
Pre-policy: up to 1922	New Zealand a colonial outpost of Great Britain Policy was the policy of Great Britain, not New Zealand's Driven by Great Britain's views on their strategic interests and their growing concerns with the Atlantic Antarctic - 'painting Antarctica pink'
Minimalist Approach: 1923-57	New Zealand administers the Ross Dependency on behalf of Great Britain. Acts as a dependent colony (as opposed to an independent state). Reluctant involvement. Preference for UN control and if this is the case New Zealand happy to relinquish sovereignty. Gateway to expeditions.
Realisation of the Value of 'Sovereignty' and Science: 1957-1995	International player in own right (IGY, TAE, own base, signatory to AT) Growing dependence on US for logistic support Support international ATS regime but strongly affirms New Zealand claim to Ross Dependency Establish own science programme Increase strength in environmental management role Support demilitarization and nuclear free Gateway recognition The New Zealand Antarctic Society was originally established to pressure government into taking more of an interest
Incongruous Environmental and Commercial Emphasis: 1995- Present	Reaffirm involvement and importance to New Zealand of the Antarctic Dependence on US for logistical support Safety and security Pursuing the economic potential of the southern ocean Science on a strategic basis (trend toward understanding big global processes and resources that could be exploited in the future) Asserting itself in the international forum through environmental stewardship and scientific credibility Growing importance of New Zealand's relationship/identity with Antarctic (historical, education/awareness, art and culture); ANZ's activities no longer just support science. Seeking to enhance international cooperation and understanding in the Antarctic.

TABLE 3: SUMMARY OF NEW ZEALAND'S ANTARCTIC DRIVERS

Drivers	International Aspect	Domestic Aspect
HISTORICAL & SOCIAL	<p>Proximity – our “backyard”</p> <p>New Zealand identity with the Antarctic</p> <p>New Zealand's image as an independent state enhances perceptions about its legitimacy in international actions, increases its international visibility and imbues a degree of national pride in New Zealand's outspoken involvement in the Antarctic</p> <p>Promotion of international education</p> <p>Maintenance and preservation of internationally significant heritage sites in New Zealand's Ross Dependency territory</p> <p>Connection to early exploration (e.g. Captain James Cook's voyages)</p> <p>Colonial involvement in the Antarctic</p> <p>Logistical springboard for international Antarctic expeditions (e.g. Byrd's expeditions and support for US activities)</p>	<p>Involvement in the heroic era of exploration e.g. Christchurch and Lyttelton were logistical springboards for early expeditions</p> <p>New Zealand's position as a 'gateway state'</p> <p>Personal connections with early explorers and the heroic era e.g. Frank Worsley</p> <p>Contemporary involvement e.g. Sir Edmund Hillary's involvement in the British Trans-Antarctic Expedition</p> <p>New Zealand has an internationally high per capita level of involvement in Antarctica than most other nations</p> <p>Promotion of national education</p> <p>Guardianship – being seen to be looking after our own backyard, our own part of the world and Maori concepts of guardianship and stewardship</p>
POLITICAL & LEGAL	<p>Initial New Zealand link with UK and the transfer of Ross Dependency in 1923</p> <p>Sovereignty (incl. potential claim of continental shelf in the Ross Sea Region) – one of the original 12 claimant states</p> <p>Geo-strategic interest</p> <p>National Security e.g. concerns during the Cold War</p> <p>Maintenance of important international 'friendships' e.g. New Zealand's close cooperation with the United States Antarctic Program</p> <p>The importance of maintaining Antarctica as a 'zone of peace'</p> <p>International treaties e.g. Antarctic Treaty 1961</p> <p>Development of international law e.g. sea bed and mining reinforces the perception of New Zealand as an international player</p>	<p>New Zealand domestic political leadership – partisan politics and the personal interest levels of leading policy-makers in the Antarctic</p> <p>New Zealand's Nuclear Free policy resulted in New Zealand exerting international pressure to halt the use of nuclear power in Antarctica</p> <p>Continued cooperation with the United States Antarctic Program may ensure close relations with the USA despite the ANZUS alliance being rendered inoperable (due to New Zealand's nuclear free policy) – domestic spin-offs from close US ties could impact domestically if a US free-trade agreement eventuates</p> <p>New Zealand seen as an active international collaboration reinforcing claimant status - providing assistance and 'access' to Malaysia; established links with the Italian program</p> <p>Several domestic laws reaffirm New Zealand's relationship with the Antarctic</p> <p>Development of New Zealand environmental law e.g. New Zealand State of the Environment Report and later the Ross Dependency State of the Environment Report</p>
ECONOMIC	<p>Fisheries: exploratory leading to commercial use</p> <p>Tourism e.g. Christchurch and Lyttelton are still logistical springboards for international Antarctic expeditions</p> <p>Bioprospecting</p>	<p>Fisheries and bioprospecting in the Antarctic region all hold potential for local market and industry expansion.</p> <p>Potential revenue earners e.g. fishing, issuing of fishing licenses, tourism</p> <p>Direct and indirect economic spin-offs from 'gateway' status</p>
SCIENCE & RESEARCH	<p>New Zealand can potentially be a leader in scientific research and participate in research projects it could not afford to conduct on its own</p> <p>Research collaboration on issues of global scientific importance e.g. global warming</p> <p>Access – New Zealand as a Gateway state e.g. Christchurch and Lyttelton are still logistical springboards for international Antarctic expeditions</p>	<p>Research collaboration on issues of global scientific importance e.g. global warming</p> <p>Research on resources that could prove profitable e.g. BioRoss and fisheries</p> <p>Domestic concerns over the effects of global warming and increased ultra-violet radiation (which has been linked to a higher incidence of skin cancer)</p>
ENVIRONMENT	<p>New Zealand's support for the 1991 Madrid Protocol enhances New Zealand's image as a 'leader' (with Australia) in environmental management</p> <p>Exerted international pressure to improve environmental practice in Antarctica: halt the use of nuclear power; seek more sustainable, energy efficient practices</p> <p>Protection of the international environment: concerns over global warming, pressure to halt international whaling</p> <p>Management of tourism</p>	<p>Increasing environmental lobby in New Zealand – more active NGOs in environmental lobby</p> <p>The passing of the Resource Management Act 1991</p> <p>Calls for stricter waste management plan after New Zealand's Resource Management Act 1991 had come into force</p> <p>New Zealand Government issues the Ross Dependency State of the Environment Report 2001</p> <p>New Zealand's fishing policy now at odds with its environmental policy</p>

Determining Importance: Differing Perspectives

Different stakeholders have different opinions about what the dominant drivers may be at any one time. As mentioned before, New Zealand drivers are multidimensional and complex. Ranking New Zealand's drivers can be rather subjective and problematic due to the complex nature of each driver and outside influences. Figure 2 (New Zealand's Antarctic Drivers and Their Perceived Importance) is a representation of what our group perceive to be the most important and influential drivers without taking any particular stakeholder view (page 32).

The Legacy of Size: A Small State Skating on 'Ice'

Being a small state, New Zealand's drivers are articulated differently from those of other nations, often limited by resources contributing to a high level of dependence on other Antarctic nations. Although New Zealand is extensively involved in the politics of the Antarctic, there is only a very small number of people working in the Antarctic Policy Division of the Ministry of Foreign Affairs and Trade. Like the 'Kiwi's' innovative use of modified Massey Ferguson tractors in the Commonwealth Trans-Antarctic Expedition, New Zealand continues to achieve a lot with very little. With a meagre staff of twenty-two, Antarctica New Zealand seeks to effectively administer all of New Zealand's activities and interests in the Antarctic – a task that is constantly expanding with every new commercial, educational and scientific development.

Compared to other countries, especially Australia, New Zealand's military play a large role in the Ross Sea Region. The New Zealand army provide logistical support and personnel for both New Zealand and US purposes (as mentioned in Section 2.2). The 2003/2004 Summer season in Antarctica saw two of the New Zealand's leading military personnel visit Scott Base. This perhaps signifies the importance of the New Zealand Government's security and strategic concerns in the Antarctic.

The distinction between Australia as a medium state and New Zealand as a small state is not an influencing factor with regards to the goals and objectives of the two programmes. This is illustrated in the similarities of the 2002 New Zealand Statement of Strategic Interest and Appendix IV, which lists the four goals of the Australian programme. New Zealand's small size is a decisive factor when considering Australia's comparative ability to effectively project its influence and protect 'its' marine resources in the Antarctic. Comparably, New Zealand's resources and independent logistical capabilities are very limited and consequently, are subject to a constant process of benefit rationalisation.

As a small state, the extent to which New Zealand can exert any logistical leverage is certainly limited. "Antarctica constitutes a national asset for a small country with limited sinew and leverage in the international world" (Prior, 1997). New Zealand's Antarctic programme operates through a joint logistics pool base at Christchurch International Airport (Antarctica New Zealand Annual Report, 2003). New Zealand C130 aeroplanes, an Italian icebreaker, the (*Polar Queen*) (ENEA, 2002) and US air and sea assets are shared to allow maximum utilisation of resources. The US Operation Deep Freeze has been based out of Christchurch, New Zealand, since 1955 (Phillips, 2001).

A distinction has also been made in relation to the relative 'aggressiveness' of the Australian programme. Due to better funding and greater size, the Australian programme is more overt about its economic motives in Antarctica, and has the ability to support its interests through fisheries patrols and pursuit of an Economic Exclusion Zone (EEZ) around its area of interest in Antarctica. Unlike Australia, New Zealand currently has no aspiration to claim the continental shelf which extends from the Ross Sea Region (Hughes, 2003). The reason behind this can be debated²² however one idea may be that New Zealand has not yet claimed the continental shelf around New Zealand (Hughes, 2003). This said, the Ross Sea Region State of the Environment Report itself is an expression of New Zealand claiming sovereignty of the area. To write this report, New Zealand must have first considered itself to have the 'right' to produce such a document due to the perceived 'guardian' status over the Ross Sea region.

New Zealand's proximity to Antarctica continues to be the main driver for involvement in the Antarctic and the basis of its territorial claim to the area known as the Ross Dependency. The perceived 'backyard'

²² The Ministry for the Environment is currently developing a national Oceans Policy, an important and wide-ranging issue. This will include a claim for the continental shelf around New Zealand. Once this is done, then New Zealand may make a claim for the Antarctic continental shelf around the Ross Sea Region.

and 'Gateway' concept of New Zealand to Antarctica has remained a firm motivation for the New Zealand Government to take an active position in maintaining Antarctica as a continent devoted to 'peace and science'.

The Antarctic Treaty System provides New Zealand with a stable forum for its involvement in the Antarctic. It provides both the framework and the influence for New Zealand to be an important internationally renowned decision-maker in matters relating to Antarctic policy and politics. Without the Antarctic Treaty, New Zealand's influence in the Antarctic would diminish considerably.

In summary, East's six small state characteristics are useful for analysing New Zealand's Antarctic policy but not all of the characteristics adequately describe New Zealand's small state involvement in the Antarctic. New Zealand's interaction in the Antarctic does not truly fit the 'compliant or assertive' roles but because New Zealand does not possess the resources needed to be self-sufficient in the Antarctic, it is more compliant than an independent party would be. The level of dependence on the United States for logistical support means that this relationship is one of compliance and cooperation. In terms of New Zealand's relationship within the ATS, New Zealand has not taken a compliant role (refer Table 4: New Zealand's Small State Characteristics and Antarctic Experience in Brief).

TABLE 4: NEW ZEALAND'S SMALL STATE CHARACTERISTICS AND ANTARCTIC EXPERIENCE IN BRIEF

Characteristic	New Zealand's Antarctic Experience in Brief
PARTICIPATION	While New Zealand's resources are comparatively limited, New Zealand's involvement in the Antarctic has continued at a relatively high level.
NARROW SCOPE	New Zealand's foreign policy has a strong regional focus (concentrating on the Pacific region) and the New Zealand government has made it clear that New Zealand's Antarctic territory, the Ross Dependency, constitutes one of its strongest regional responsibilities.
ECONOMIC FOCUS	New Zealand's small size hints at its limited economic resources and provides a good reason why it should seek to maximise its foreign policy decision making for economic benefits. New Zealand's recent support for regulated Antarctic fishing at the cost of criticism from the environmental lobby is evidence of this foreign policy priority.
INTERNATIONALISM	Support for the international Antarctic regime and its organisations provide New Zealand with an opportunity to voice an opinion on equal terms with larger, more powerful states. New Zealand supports the ATS, its legal and environmental regimes, the establishment of an ATS Secretariat and the enforcement of ATS regulations.
MORAL EMPHASIS	New Zealand has taken a strong stance on environmental issues e. g. whaling and the protection of marine resources in Antarctica in the past. More recently, New Zealand has come under criticism for deviating from its position as a bastion for the global environment. After producing a landmark State of the Environment for the Ross Sea Region, New Zealand has authorised government involvement in regulated fishing in the Ross Sea Region
ASSERTIVE OR COMPLIANT?	Initially, New Zealand's policy in the Antarctic was compliant. New Zealand was reluctant to assume control of its newly acquired dependency. This approach altered and has sought to consolidate its position in the Antarctic.

Interdependence and Interplay of Drivers

New Zealand's security in Antarctica is two-fold. Firstly, simple protection in the south and protection of New Zealand's 'backyard' helps promote peace in Antarctic and New Zealand's defence. Secondly, the security driver involves the protection of the resources in the Ross Sea Region and the Southern Ocean. This protection is in the form of a military presence, albeit informal²³, and regulation under the Antarctic Treaty System. New Zealand security in the Ross Sea Region helps to protect resources already identified and resources yet to be discovered or investigated. Sovereignty and proximity, identified as having paramount importance as a the political and legal driver, are interwoven so closely in policy motivations that is virtually one driver.

These issues appear to exist in a state of symbiosis, encompassed in the broad policy concept of 'national strategic interest'. For a diagrammatic explanation of these relationships refer to Figure 2: New Zealand's Antarctic Drivers and Their Perceived Importance. Driver interactions in this diagram require some interpretation. In Figure 2, the shading represent the importance of each driver, with the darkest being the most influential and important driver to New Zealand's involvement in Antarctica. Solid lines represent static drivers throughout time whereas the dashed lines represent dynamic and changing influence of drivers throughout time. Arrows indicate which of the main two drivers influence the other drivers the most.

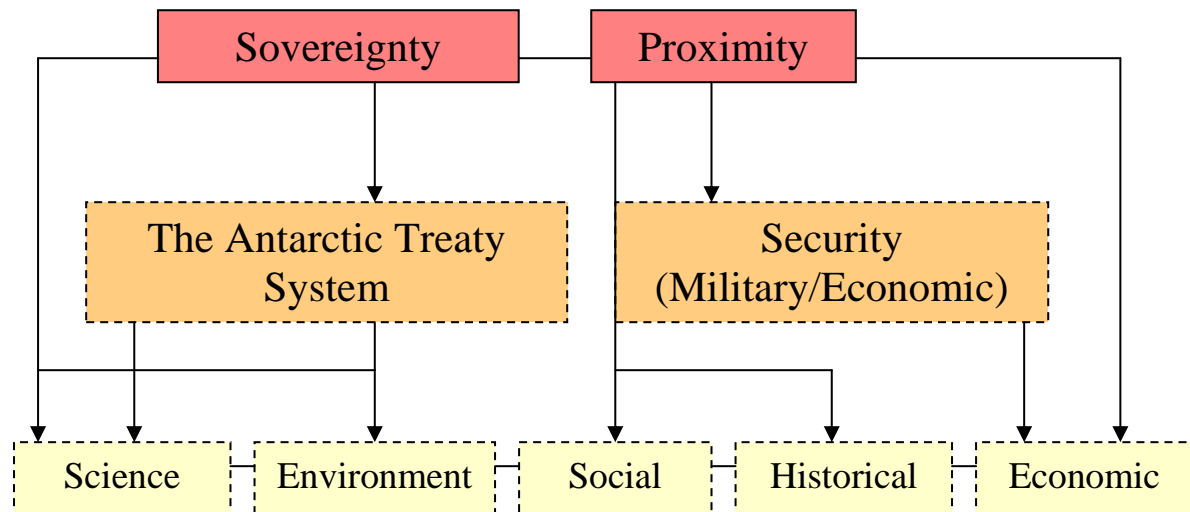
The potential economic benefits from the Ross Sea Region are also an important driver for New Zealand. However, New Zealand is careful not to push the economic factors to the extent it may jeopardise the Antarctic Treaty system. In this sense, New Zealand's 'small-state status' may inhibit some activities New Zealand may wish to pursue.

The science, environment and historical and social drivers are important to New Zealand however are all directly influenced by the proximity and sovereignty drivers. In each of these four drivers, New Zealand has a unique position and a rich history of involvement, whether it be through the Commonwealth Trans-Antarctic Expedition of 1957/58 or the 2001 Ross Sea Region State of the Environment Report. New Zealand has positioned itself successfully in the world forum of science and environmental management and the historical and social drivers relate well to the many relationships New Zealander's have with the Antarctica.

The Antarctic acts as a catalyst for international collaboration and integrated management in many respects. For example, international science projects such as ANDRILL and Cape Roberts or policy such as all conventions under the Antarctic Treaty System.

New Zealand uses its close relationship with the US to its own best advantage and, in part, this involves reaffirming New Zealand's presence and, therefore sovereignty, in the Ross Sea region. Indeed, not a great deal has changed in the NZ/US Antarctic relationship in 30 years. It is likely that the view held by Auburn in 1972 would still be valid today: "Should the US decide to close McMurdo, New Zealand would be practically incapable of operating Scott base" (Auburn, 1071: 60).

²³ New Zealand does not have the resources to assign a vessel to patrol the Ross Sea Region exclusively. Air Force Orions do maintain aerial surveillance and New Zealand's fishing vessels also maintain an unofficial eye over the waters of the Ross Sea.

FIGURE 2: NEW ZEALAND'S ANTARCTIC DRIVERS AND THEIR PERCEIVED IMPORTANCE

3.2 FINAL CONCLUSIONS

Antarctica plays a fundamental role in New Zealand just as New Zealand plays a fundamental role in the Antarctic. Both roles have undergone many changes since the signing of the Antarctic Treaty and these changes reflect ongoing developments in technology, politics, science, society, environmentalism and economic influences.

The New Zealand government has publicly stated its current policy toward the Antarctic in the New Zealand Statement of Strategic Interests 2002. The essential interests or underlying drivers as represented in this statement have all long histories that began when people first started venturing into the Southern Ocean and later Antarctica itself.

This report has described these drivers as:

- Historical and social drivers
- Political and legal drivers
- Scientific drivers
- Economic drivers
- Environmental drivers

The relative importance of each driver has waxed and waned over time as the Government has responded to international and national events, technological developments and changes in New Zealand's cultural and social fabric. What could be said to be the main drivers in New Zealand's involvement in the Antarctic in the 1950's is now different in a contemporary setting. However, some drivers have remained unchanged since 1923 when Britain handed over the responsibilities and sovereignty of the Ross Sea Region to New Zealand. These drivers include New Zealand's proximity to Antarctica and New Zealand's sovereign role over the Ross Sea Region.

Different stakeholders holding different values will often see the drivers differently and will have different views on what is the dominant driver at any particular time. Prior to the 1950's, however, it can be said that all drivers were relatively weak. New Zealand would have been happy to rid itself of all of its interests in the Antarctic.

The Government tries to balance what some may see as competing drivers in an effort to wring out of the Antarctic the maximum benefit for New Zealand and as a consequence of these actions the world. In this sense New Zealand is no different from individuals promoting their own interests to ensure their survival. And like individuals, the New Zealand Government will at times withhold its inner most motivations and agendas. Hence, the dominant drivers at a particular time are not necessarily those that are publicly articulated.

This report identified the fundamental driver of New Zealand's Antarctic policy as proximity to the Antarctic. Proximity led to New Zealand's claim to the Ross Dependency. The claim to the Ross Dependency has meant that New Zealand has a place in the Antarctic Treaty system, a science programme and an approach to the environment that encompasses notions of ownership as it plays guardian as well as responsible resource user.

New Zealand's claim to the Ross Dependency and its role in the Antarctic Treaty system also means that New Zealand has an international stage on which to play. The Antarctic Treaty system provides a forum for New Zealand to exert itself as an independent nation. The Antarctic Treaty system, its consensus style of decision making and limited membership is an essential mechanism through which New Zealand can exert an influence well above its size and economic/political power. New Zealand is sensitive to threats to the Antarctic Treaty system that may weaken its influence and seeks to support the system where it can.

This report found that New Zealand articulates its interests in similar terms as larger states such as Australia and the United States. Size and power, however, influence the way that each state implements their respective policies. Limited resources and capacity means that New Zealand is always looking for opportunities to work with other nations, particularly the United States. In essence, if New Zealand did not have United States logistical support it would be extremely difficult for New Zealand to have a presence on the ice. This close relationship has an influence on New Zealand's position on Antarctic matters.

In conclusion, it can be said that the fundamental drivers behind New Zealand's policy toward the Antarctic are the same as an individual seeking to maximize their prospects of survival while these are publicly articulated in similar ways as larger states. New Zealand's position as a small state, however, means that the way the policy is implemented is different from larger states. New Zealand is limited by its capacity, is influenced by its relationship with the United States and is reliant on the Antarctic Treaty system to have an international profile and an influence in international matters.

3.3 FUTURE CHALLENGES

New Zealand's size means it is constrained by:

- limited resources;
- its dependence on the United States for logistical support on the ice; and
- the methods it can afford to pursue its interests.

Despite these restrictions New Zealand is internationally renowned for "punching above its weight" for a "small state" on Antarctic matters. It has a reputation for squeezing as much as possible out of its \$32 million investment, be it scientific events on the ice, enforcement of CCAMLR provisions or influence in Antarctic Treaty forums.

But can New Zealand continue to afford to play a full role in Antarctic matters? As costs inevitably escalate and more is asked of Treaty parties will New Zealand continue to have an ability to play a full role in the future? Or on the other hand can New Zealand afford not to? At what stage could the Antarctic become too expensive for the perceived benefits?

This question would be particularly poignant if the United States downsized its Antarctic programme or decided to be less generous in sharing its logistical capability on the ice with New Zealand. Would New Zealand afford to go it alone? Could New Zealand continue to have a credible presence on the ice?

From the very beginning a driving force behind all countries interested in the Antarctic has been the potential of finding and exploiting its resources. Pressure for resource control and exploitation is expected to increase as technology makes the Antarctic more accessible. Today states like Australia are looking to the marine resources around Antarctica and laying the foundations to claim the continental shelf adjacent to its Antarctic claim. Will this inspire other nations to do the same? Will the resurgence of countries claiming bits of the Antarctic cause the disintegration of the Antarctic Treaty system and New Zealand's vehicle for exerting influence? Will full-scale conflict erupt between competing claimants? And will anyone lay a counter claim to the Ross Dependency? Some may argue that the United States has a stronger claim to the Ross Dependency than New Zealand because of its longer and more extensive presence in the region. Would the United States passively allow New Zealand to exert its claim for the Ross Dependency?

Establishing rules and regulations for resource use has always been a challenge for Antarctic Treaty nations as illustrated by CCAMLR's inability to stop illegal fishing in the Southern Ocean. Pressure is on to provide a better enforcement network. Australia has recently announced its intention to invest in an armed and specially strengthened vessel to patrol its exclusive economic zones in the Southern Ocean. New Zealand once sent a navy frigate to the Southern Ocean but essentially New Zealand's ability to patrol the Southern Ocean is limited to aircraft surveillance and its fishing fleet. Can New Zealand continue to play a full role in CCAMLR if its surveillance and enforcement capability is inadequate? Will illegal fishing reap the benefits and New Zealand miss out?

The potential conflict between New Zealand aspirations to exploit the resources of the southern ocean as well as promote good environmental practices and have a significant influence in the Antarctic Treaty system is a real one that the Government is presently trying to balance. Is an Antarctic fishing industry so valuable that New Zealand is prepared to forgo some influence in the Antarctic Treaty system?

If it becomes apparent that there are considerable benefits to be had in the Antarctic then it is likely that more countries will either seek to become members of the Antarctic Treaty or management of the Antarctic is transferred to the United Nations for the benefit of all. In either scenario New Zealand's status would be weakened as it became one of many contributing to decisions. If New Zealand's influence could be weakened does its current \$32 million annual investment in the Antarctic still make sense?

In the future, New Zealand faces many challenges as a small state grappling to maximise benefits from its Antarctic policy. Over the years New Zealand has moved from a position of indifference toward the Antarctic to a position where the Antarctic is increasingly becoming an integral part of the New Zealand ethos. The Antarctic is not only a place where New Zealand does some good science but it is also a vehicle through which New Zealand projects itself on the world stage. New Zealand is also increasingly seeing the economic benefit that it could accrue from the Antarctic.

The most immediate challenge will be to find a balance between what many people see as competing drivers within New Zealand's policy framework aspirations.

SECTION FOUR: APPENDICES

APPENDIX I: CHRONOLOGY OF NEW ZEALAND'S INVOLVEMENT AND POLICY DEVELOPMENT WITH THE ANTARCTIC AND CORRESPONDING INTERNATIONAL EVENTS, 1884-2003

Date	New Zealand Involvement	Date	Other Significant Events
		Jan 1884	Ross Ice shelf and Victoria Land claimed by Britain
		1895	Bull, Borchgrevink and Kristensen first landing on Antarctica, Cape Adare.
		1899	Borchgrevink's Southern Cross expedition first to winter over on the continent.
		1901	Scott's Discovery expedition departs from Lyttelton
		1905	International Geographical Congress make Antarctica the main target for future exploration.
		1907	Shackleton's Nimrod expedition
		1908	British claim Falkland Island Dependency – British Antarctic Territory.
		1911	Amundsen's reaches the South Pole.
		1912	Scott's party dies returning from the South Pole.
		1914	World War I breaks out.
		1915	Shackleton's Endurance expedition.
		1918	Peace declared World War I ends.
Feb 1920	UK Secretary of State for the Colonies proposes to New Zealand Government that it lays claim to Antarctic territory south of New Zealand.		
Mar 1921	British Government produces a memorandum on control of the Antarctic, proposing that New Zealand and Australia have separate areas of control, divided by meridian 160 degrees East.		
May 1923	New Zealand Cabinet approves proposal to make the "Ross Sea area" a dependency and vest control in the Governor General.		
July 1923	UK Government issues Order in council declaring "that part of His Majesty's Dominions in the "Antarctic Seas" within the boundaries proposed in July 1922 to be a British settlement within the terms of the British Settlements Act 1887, naming the territory "the Ross Dependency" and appointing the Governor-General of New Zealand as its Governor from the date of publication of the Order in Council in the New Zealand Government Gazette.		
Nov 1923	Governor-General issues regulations applying New Zealand law to the Dependency, and appoints Captain George Hooper with powers of a magistrate to enforce them.		
		1924	France claims Terre Adelie.
Nov 1926	Governor-General, as Governor of Dependency, issues Ross Dependency Whaling Regulations 1926.		

Date	New Zealand Involvement	Date	Other Significant Events
Nov 1929-31	New Zealand participates in Antarctic Expeditions (BANew ZealandARE) led by Douglas Mawson of Australia.	Nov 1929	US Admiral Byrd's first expedition, from "Little America" base in Ross Dependency, over-flies South Pole.
		Sept 1931	International Whaling Convention signed.
Dec 1933	New Zealand offers second Byrd expedition facilities both within New Zealand and in the Ross Dependency.	Feb 1933	Australian Antarctic Territory established by UK Order in Council (42% of Antarctic), followed by AAT Acceptance Act 1933 and Australian Order in Council in 1936 bringing UK Order into operation
Feb 1934	British Ambassador complains to State Department about infringement of New Zealand administrative rights and law by Byrd Expedition's action in establishing a US Post Office at Little America base in the Ross Dependency. Secretary of State rejects claim of sovereignty based on "mere discovery unaccompanied by occupancy and use"	Aug 1934	US authorises Lincoln Ellsworth to make claims to unexplored territory by drops from his aircraft, without implying advanced governmental knowledge or approval.
Aug 1938	Non-committal response from Savage doubts value of meteorological stations on Antarctic continent.		
1935	Whaling Industry Act 1935.		
		1939	Norway claimed Dronning Maud Land to counter German interest.
May 1939	New Zealand agrees to recognize Norwegian claim (Norway does not reciprocate in regard to Ross Dependency. US reserves its position on claims).	Sep 1939	Outbreak of World War II.
		Nov 1939	Roosevelt's instructions to Byrd envisage extensive exploration in several sectors, claimed and unclaimed, establishment of bases in UK sector and in Ross Dependency and assertion of claims through air drops or in cairns.
		1940	Chile counter claims British sector
		1943	Argentina counter claims British/Chilean sector.
		1945	Peace declared World War II ends.
Nov 1946	UK authorities urge New Zealand and Australia to take steps, including establishment of permanent bases, to strengthen their territorial claims.	1946-47	Byrd leads large-scale naval expedition to Antarctic ("Operation High Jump")
Dec 1946	New Zealand Cabinet sets up committee to make proposals for joint expedition with UK and Australia, but expresses preference for UN control of Antarctica to avoid disputes over sovereignty.		
			Confidential US policy paper maintains policy of non-recognition of other claims and reservation of US rights, but expresses preference for eventual settlement of territorial problems in Antarctica by international action and agreement.
May 1947	New Zealand committee recommends expedition and establishment of base (but Government takes no action).		
Mar 1948	New Zealand expresses (to UK and Australia and not US) its preferences for UN control of Antarctica – and settlement by International Court of disputed claims.	Jun 1948	State Department planners recommend support for international status for Antarctica in form of UN trusteeship administered by US and existing claimants and assertion of US claim to areas to which it has best rights through discovery and exploration.
		Oct 1948	Chile objects to US proposals. Affirms sovereignty over claimed territory and proposes alternative declaration of a five year standstill, providing that new bases

Date	New Zealand Involvement	Date	Other Significant Events
			should not prejudice existing claims.
Jan 1949	Fraser says publicly that New Zealand not averse to US proposals if others agree, and still hopes for internationalization.	Feb 1949	Australia rejects surrender of sovereignty involved in US proposals.
Oct 1949	New Zealand officials see advantage of Chilean proposals in maintaining status quo for the next few years.		
Jun 1950	Soviet Union tells US, New Zealand and other claimants that question of an Antarctic regime cannot be decided without its participation; asserts primacy of Bellingshausen's voyage in discovery of Antarctica; and seeks views on an international regime involving all interested states.		
Sept 1953	New Zealand Antarctica Society writes to PM advocating establishment of a permanent base in Ross Dependency and programme of scientific work under IGY in order to strengthen New Zealand's claim. PM favours putting "the whole thing into cold storage"		
		July 1954	US National Security Council decides US should reassert its rights in Antarctica and seek agreement among the "free world" claimants which will reserve their respective rights pending a solution to their claims, while permitting freedom of exploration and scientific investigation.
Apr 1955	Cabinet establishes Ross Sea Committee to organize New Zealand participation in Commonwealth Trans-Antarctic Expedition (TAE).		
Jan 1956	Leader of the Opposition (Walter Nash) proposes abandonment of national claims and UN control of Antarctica.		
Jan 1957	Permanent Base (Scott Base) established at Ross Island.	Jul 1957	IGY begins.
Jul 1957	US Secretary of State stresses to New Zealand Minister of External Affairs the need to "squeeze" the Russians out of the Antarctica.	Aug 1957	UK produces new proposal for internationalization of Antarctica, controlled by claimants and the US and USSR with minimal links to the UN.
Oct 1957	Hillary and New Zealand TAE Party leave Scott Base to establish depots for main party traversing the continent.	Nov 1957	Fuchs main TAE party leaves the Weddell Sea.
Jan 1958	New Zealand party reaches the South Pole.	Jan 1958	US advises intention to retain stations at McMurdo, Marie Byrd land and at the South Pole.
		Jan 1958	Fuchs TAE party reaches the South Pole.
Jan 1958	Nash publicly advocates international regime for Antarctica.	Jan 1958	US and UK put proposals for the internationalization of the Antarctic.
		Jan 1958	Australian Cabinet opposes internationalization.
Feb 1958	New Zealand Cabinet decides to keep the bases established in the Ross Dependency in connection with the IGY.	Mar 1958	TAE ends journey at Scott Base.
Mar 1958	New Zealand Cabinet establishes Ross Dependency Research Committee under Minister in charge of DSIR to coordinate activities in the Dependency. Minister of External Affairs retains responsibility for general policy.	Mar 1958	Australia now prepared to accept International agreement comprising demilitarization, freezing of claims, inclusion of Soviet Union, but maintaining right of exclusive exploitation.
		Mar 1958	US circulates to states participating in IGY proposal for Antarctic Treaty freezing legal status quo ensuring use for peaceful purposes only and freedom for scientific investigation.

Date	New Zealand Involvement	Date	Other Significant Events
		Jul 1958	US produces draft Treaty article which would freeze status quo.
		Dec 1958	IGY ends.
May 1958	Nash makes public statement in favour of international regime, free access for scientific and economic purposes, conformity with the UN principles, non-militarisation, claims to be put aside.		
Oct 1958	At Antarctic conference, New Zealand opening statement affirms soundness of New Zealand claim to Ross Dependency, while indicating readiness to consider relinquishment of national rights if others will agree as a step towards an international regime but in absence of such agreement accepts freezing of legal status quo; supports demilitarization, prohibition of nuclear testing, freedom of access, and association with the UN.		
Dec 1959	New Zealand one of 12 nations that signs the Antarctic Treaty.		
Oct 1960	Antarctic Act 1960 asserts New Zealand jurisdiction to deal inter alia with crimes committed in the Ross Dependency.		
Nov 1960	New Zealand ratifies the Antarctic Treaty.		
		Jun 1961	Antarctic Treaty comes into force.
		1962	US install a nuclear power plant at their McMurdo base. The plant was decommissioned in 1972.
		Oct 1962	Cuban missile crisis.
		Jun 1964	Adopt measures for the Conservation of Fauna and Flora
1970	Antarctic Division of DSIR was moved to Christchurch.		
		Dec 1972	Adopt Convention for the Conservation of Antarctic Seals comes into force March 1978.
		1973	First world oil shock. US Glomar Challenger drilling programme indicates regions adjacent to the Ross Ice Shelf and Filchner-Ronne Ice Shelf may have oil reserves in the order of 45 billion barrels which is reported in the Wall Street Journal (1982 British sector of North Sea oil reserve was estimated at 40 billion barrels).
1975	8 th ATCM New Zealand tentatively suggests if agreement can be reached to ban mining and instead make the Antarctic a World Park then New Zealand would relinquish its claim to the Ross Dependency.		
		1977	Antarctic Southern Ocean Coalition (ASOC) formed. Second world oil shock. New Zealand enacts the Territorial Sea and Exclusive Economic Zone Act 1977.
1979	Air New Zealand DC10 carrying 257 passengers crashes into Mt Erebus.	1979	Greenpeace embarks "Antarctic World Park" campaign.
		May 1980	Adopt the Convention of Antarctic Marine Living Resources (CCAMLR) comes into force April 1982.
1981	New Zealand implements CCAMLR by the Antarctic Marine		

Date	New Zealand Involvement	Date	Other Significant Events
	Living Resources Act 1981. Under the Act it is prohibited to take any marine organisms (excluding mammals) without a permit from the Minister of Fisheries.		
		1982	United Nations Convention on the Law of the Sea comes into force 1994. Falklands War.
		1987	Greenpeace protests about the French hard rock airfield at Dumont d'Urville. The Bruntland Report is published.
		Jun 1988	Adopt Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA) suspended.
		Jan 1989	Argentine supply vessel Bahia Paraiso runs into Full Astern Reef on the Antarctic peninsula spilling 600,000 litres of oil into Arthur Harbour.
		1989	Fall of the Berlin Wall. Exxon Valdez oil spill, Alaska.
		Oct 1991	Protocol on Environmental Protection on the Antarctic Treaty (the Protocol) comes into force Jan 1998.
1992	Responsibility for the New Zealand Antarctic Programme transferred to Ministry of Foreign Affairs.	1992	The United Nations Conference on the Environment and Development (Rio) is held. One of the outcomes of the conference is the Convention on Biodiversity.
1994	Review of New Zealand strategic objectives in Antarctica.		
1994	New Zealand implements the Protocol by The Antarctic (Environmental Protection) Act 1994. The Act provides a permitting system for all activities in the Antarctica and provides for penalties for offences including imprisonment and fines up to \$100,000.	1994	ATCM establishes guidelines for tourism and non-government activities, including for visitors, organizers and conductors of expeditions.
1994	Review of New Zealand involvement in the Antarctic concluded that nothing should prejudice New Zealand claim to sovereignty. First government statement of strategic.	1995	ATCM agrees on standardized checklist for Antarctic Treaty Inspections.
Jul 1996	Antarctic New Zealand comes into being by means of the New Zealand Antarctic Institute Act.		
1996	New Zealand allows exploratory fishing in the Ross Sea Region i.e. commercial fishing in the Southern Ocean commences.		
		1998	ATCM urges parties to implement the existing guidelines for emergency response. ATCM encourages parties to ratify Annex V (Protected Areas) and sets out responsibility for revising protected area management plans.
		1999	ATCM establishes guidelines for the preparation of EIA's in Antarctica. ATCM establishes guidelines for Antarctic shipping and related activities.
		2000	ATCM establishes guidelines for assessing defining and proposing new protected areas.
2001	Antarctic New Zealand releases Ross Sea Region: A State of the Environment Report for the Ross Sea Region of Antarctica.	2001	24 th ATCM in St Petersburg agree to establish the Secretariat in Buenos Aires Argentina. ATCM establishes guidelines for the handling of pre-1958 historic remains whose

Date	New Zealand Involvement	Date	Other Significant Events
			existence or present location is not known. ATCM agree to review the current list of designated historic sites and monuments.
		Sept 2001	Terrorist attack on the world Trade Centre.
Nov 2002	New Zealand Statement of Strategic Interest.		
2003	New Zealand releases policy statement on tourism and other non-governmental activities in the Antarctic		
	ATCM agree to Australia and New Zealand leading the development of a state of the environment reporting system for the Antarctic.		

APPENDIX II: TEMPORAL ANALYSIS OF NEW ZEALAND'S STATEMENT OF STRATEGIC INTERESTS IN THE ANTARCTIC

1995 - New Zealand Statement of Objectives for Antarctica

The first note pertains to use of the word 'objective' in the statement title. It is used here instead of 'interest', which occurs in subsequent statements of strategic interest. This word gives connotations of intent, purpose, aim, idea or goal, whereas 'interest' gives connotations of concentration, attention, concern, importance, significance and awareness.

"The conservation of intrinsic value of Antarctica and the Southern Ocean for the benefit of the world community, and for present and future generations of New Zealanders, reflected in active and responsible stewardship that promotes New Zealand's interest in..."

It is interesting to ask how 'intrinsic value' is defined. Various references in this statement mimic those made in the Resource Management Act 1991. For instance, intrinsic values are defined in terms of:

'Benefits of world community' which implies an international focus as well as a national and regional focus;
 'Present and future generations' presenting an intergenerational and intragenerational approach; and
 'Active and responsible stewardship' presenting New Zealand as a caretaker or guardian of the Antarctic environment and its resources.

This statement details New Zealand's moral emphasis on stewardship though it does not seek to define what exactly stewardship entails. Does this 'concept' also enshrine the notion of territorial claim and sovereignty?

"Maintaining its long-term interest in and commitment to the Ross Dependency."

The unspecific nature of this 'interest' means that it could apply to several different interests, the most likely interests being economic, political and scientific. It also expresses the long-term nature of New Zealand's commitment to the Antarctic. These interests can also be interpreted as drivers in New Zealand's policy development.

"National security, through keeping Antarctica as a neutral and non-aligned neighbour."

This statement succinctly sets out one of the central political drivers of New Zealand involvement in the Antarctic. Again the definition of key terms, i.e. non-aligned neighbour, is loose and open to a broad or narrow interpretation. How realistic is the expectation that the Antarctic can be kept neutral if all of the major countries are involved in the Antarctic Treaty system?

"Economic well being, through enhancing New Zealand's economic opportunities within the parameters of the Antarctic Treaty System."

One can easily question how these economic opportunities are to be enhanced? Is having a presence in Antarctica enough? And to what level must you maintain visible presence? This may partially explain New Zealand's willingness to be involved in large-scale science projects on the ice, though this collaborative involvement is also a financial necessity for most New Zealand science projects and scientists.

This does not mention New Zealand's specific relationship to CCMALR or CRAMRA and the implications for environmental protection, conservation or preservation contained in each.

"International stability, by enhancing New Zealand's leadership in the governance of Antarctica."

In terms of New Zealand's political stance, environmentalism and internationalism, this phrase has strong connotations e.g. enhancing leadership and governance. One can question whether we consider this to refer

to leadership in science or environmentalism. This rhetoric is really seeks to enhance New Zealand's small state status on an international stage.

Use of 'international stability'- focus on internationalism, moral high ground. Peace keeping, neutralism.

Promoting New Zealand's values and ideology by promoting Antarctica as a natural reserve devoted to peace and science.

From this statement's political and moral stance, it is interesting to ask what New Zealand's values and ideologies are in Antarctica. How have New Zealand's values and ideologies (e.g. the Treaty of Waitangi in particular) impacted on Antarctica and Antarctic policy?

Conclusion

A very internationally focus document with interesting spatial and temporal components e.g. intragenerational/intergenerational and international/national.

The stewardship mentality shows through which may be influenced by New Zealand's 'moral nature' or by legislation such as the RMA 1991.

The entire document has a political and economic emphasis backed up with science. Although some emphasis has been placed on national security, it is not the priority as seen at this time.

Main themes- New Zealand having a presence, maintaining and enhancing presence and influence internationally, promoting wellbeing of New Zealand, working within ATS.

Draft: Dec 2001 Revised New Zealand Strategic Interests for Antarctica

A dramatic change in title of document states a new focus for New Zealand's involvement in the Antarctic. Now use the word 'interest' in place of 'objectives'. This word brings with it connotations of concentration, attention, concern, importance, significance, awareness and motives.

The maintenance of the intrinsic values of Antarctica and the Southern Ocean, for the benefit of the world community and for present and future generations of New Zealanders, reflected in active and responsible stewardship, under the ATS, that promotes New Zealand's interests in:

Changing the word from 'conservation' to 'maintenance' of intrinsic values implies preservation as opposed to conservation.

National and international peace and security through a commitment to keeping Antarctica peaceful, nuclear free, and its environment protected.

Interestingly, New Zealand's national security has now become a main priority. Issues of security, environment and a focus on internationalism emerge as a consequence of the Sept. 11 terrorist attacks on the World Trade Center in New York and the Pentagon Washington, USA in 2001.

More emphasis has been placed on environmental protection, and may be a reaction to the potential threat of bio-terrorism. On the other hand, it could be a response to the release of the Ross Sea Region State of the Environment Report.

Continued influence in Antarctic governance through maintaining an effective role in the ATS and credible presence in the Ross Dependency.

Another political and legal policy reference but this time the word 'continued' infers that New Zealand has already had a prolonged influence e.g. environmental monitoring. This reinforces a New Zealand perception of international influence.

'Effective role'- how is 'effective' defined as in what are or sphere of influence e.g. ATCM/ ATS?

'Credible presence'- how is this defined? Credible to who? Credible to New Zealand Govt, New Zealand public, treaty members?

This section emphasises continual presence that is active, effective and influential. There is no direct mention of science here.

Conserving, protection and understanding the biodiversity of Antarctica and the Southern Ocean, in particular the biodiversity of the Ross Sea Region, including protection and management of special areas.

This is the first strategic mention of protection and management of protected areas and biodiversity of Ross Sea Region.

Direct result of RSR- SOE Report recommendations and observations. ATCM also released guidelines for pre-1958 historic remains and list of designated historic monuments.

A statement of international and regional environmentalism.

Conservation, including sustainable use () or marine living resources of the Southern Ocean, and in particular the Ross Sea, in accordance with CCAMLR.*

In a statement of environmental, economic and political direction, of particular note is the first use of term 'sustainable' although it is not extended to either sustainable development or sustainable management. 'Sustainable use' is defined however with a similar definition of the Convention of Biological Diversity.

Interestingly the statement makes includes 'sustainability' as a practice of 'conservation'. Are these terms considered the same or do they represent conflicting approaches?

Strong support for CCAMLR is shown here.

() sustainable use: means the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations. (Convention on Biological Diversity).*

Supporting and where appropriate leading, high quality Antarctica and Southern Ocean science that benefit from the unique research opportunities provided by Antarctica.

In terms of science in Antarctica, New Zealand provides a strong 'supporting' role in terms of e.g. gateway state proximity, logistics, international collaboration, scientists, and funding.

This statement is suitably ambiguous when it comes to providing guidelines of 'appropriateness'. Is the statement, 'where appropriate' really referring to anything that will be of benefit to New Zealand?

For New Zealand to lead in Antarctic science it needs to support and collaborate with 'leading, high quality' international research. Such are the limitation to New Zealand funding and logistics as a small-state.

Demonstrating and advocating for best practice in environmental stewardship and all other activities throughout Antarctica and in particular the Ross Sea Region.

New Zealand's ability in 'demonstrating and advocating' Antarctic environmentalism depends on who and how will this be done. New Zealand has produced the Ross Sea Region State of the Environment Report and ushered in a new level of 'best practice' and 'stewardship standards'.

To some degree the stewardship mentality carries with it an element of moral emphasis for New Zealand in an international arena.

Logistically, New Zealand's aims to provide environmental stewardship is only possible in Ross Sea Region but actions in this limited area have wider implications for the rest of Antarctica and Treaty states.

Ensuring that all activity is undertaken in a manner consistent with Antarctica's status as a natural reserve devoted to peace and science and within this context support Antarctic related activities that enhance the social, cultural and economic benefits to New Zealand and the wider global community.

The broadness of combining social, cultural, scientific and economic activities into one context are problematic. New Zealand, and other Treaty states, face the same problem when trying to 'ensure all activities' are undertaken in accordance with the Antarctic legal regime - the Treaty system suffers from an inherent lack of enforcement capability.

This is the first mention of social, cultural and economic benefits, however none of these terms are adequately defined e.g. what kind of Antarctic activities support the cultural benefits of New Zealand and the wider global community?

Conclusion

This strategy is longer and much more descriptive than the 1995 strategy. This strategy is heavily affected and derived from international events such as Sept 11th and threats of bioterrorism.

It has more of an environmental and conservation focus especially with the mention of protected areas and marine resources.

The inclusion of cultural and social benefits is an interesting addition from the 1995 strategy however these concepts are ambiguous in the context of the rest of the strategy.

2002 New Zealand Statement of Strategic Interest (Revised)

In 'Forward'- Helen Clark states that "(the statement) reflects our enduring interests but it also focuses on the emerging priorities, in the marine, biodiversity and biosecurity areas."

New Zealand is committed to the conservation of the intrinsic and wilderness values of Antarctica and the Southern Ocean, for the benefit of the world community and for present and future generations of New Zealanders. This will be reflected in active and responsible stewardship, under the Antarctic Treaty System, that promotes New Zealand's interest in:

The use of word 'commitment' shows New Zealand dedication and obligations to Antarctica.

The word 'conservation' has again replaced 'maintaining', which was used in the 2001 strategy.

The addition of the word 'wilderness' suggests a differentiation between 'intrinsic' and 'wilderness' values that was not identified in previous strategies.

National and international peace and security through a commitment to keeping Antarctica peaceful, nuclear free, and its environment protected.

Security and environmental concerns have not changed since 2001. New Zealand still places an emphasis on national security and environmental protection.

Continued influence in Antarctic governance through maintaining an effective role in the Antarctic Treaty System, and maintaining its long-term interest, commitment to and credible presence in the Ross Dependency.

This statement denotes the legal and political relationship between New Zealand, the Antarctic Treaty System and Antarctica. Interestingly, New Zealand's interest now involves 'maintaining long-term interest' – what does this mean? It is important to question whether this statement refers to: presence, sovereignty, economic interests, scientific interests or relates to resource exploitation.

Use of word 'Ross Dependency' instead of the Ross Sea Region gives connotations of affirming 'sovereignty' of area. This is backed up by the addition of 'maintaining long-term interest'.

Conserving, protection and understanding the biodiversity of Antarctica and the Southern Ocean, in particular the biodiversity of the Ross Sea Region, including promotion, protection and management of representative special areas, and enhancing biosecurity.

This statement addresses one of New Zealand's main concerns over the continent, development of an environmental approach that maintains some ambiguity regarding economic considerations but considers security as a concern.

The addition of 'promoting' special areas is particularly interesting and, if broadly construed, could be considered as a reference to encouraging regulated tourism or bioprospecting in marine areas.

'Representative' special areas suggest strategy is looking toward developing marine reserves/protected areas or EEZ.

Addition of biosecurity is an important development in contemporary Antarctica relating to activities such as claiming New Zealand's EEZ and continental shelf. Justification for navy and other fisheries to monitor fisheries in RSR and in extended EEZ.

Conserving and sustainable management of the marine living resource of the Southern Ocean, and in particular the Ross Sea, in accordance with the Convention of the Conservation of Antarctic Marine Living Resource (CCAMLR) and the Antarctica Environmental Protocol, and within the context supporting strong environmental standards and sustainable economic benefits.

The implications of this statement are both environmental and economic. The addition of 'sustainable management' is a very important factor here as it extends beyond the 2001 strategy and introduces similar

concepts implemented in the RMA 1991. There is one inherent problem in using this terminology in that it is not defined in terms of an Antarctic context.

Additional of reference is made to the Environmental Protocol, environmental standards and sustainable economic benefits.

Another, more significant problem is that the notion of 'sustainability' can be used by fisheries advocates as a justification for exploratory fishing. Advocates for developing bioprospecting or potential fisheries as an economic interest can utilise the ambiguity associated with the term 'sustainability' so long as they can argue they are conducting business in a sustainable manner.

Supporting and where appropriate leading, high quality Antarctica and Southern Ocean science that benefit from the unique research opportunities provided by Antarctica.

Essentially, New Zealand's policy towards science has not changed from the 2001 strategy.

Demonstrating and advocating for best practice in environmental stewardship and all other activities throughout Antarctica and in particular the Ross Sea Region.

The notion of environmental stewardship has not changed from the 2001 strategy.

Ensuring that all activity is undertaken in a manner consistent with Antarctica's status as a natural reserve devoted to peace and science.

An important feature of this statement is the absence of 'activities that enhance social, cultural and economic benefits of New Zealand and the wider global community'. Were social and cultural benefits hard to define? Have economic benefits been given more weight and priority as can be construed by their addition to other statements in the strategy?

Conclusion

This latest statement mirrors contemporary issues and activities that have arisen in Antarctica e.g. bioprospecting, biosecurity, fisheries, resource exploitation and claiming of the EEZ.

Although there is a strong economic and environmental focus, there is a strong underlying factor especially seen in statement two. Here the word's 'Ross Dependency' (as opposed to RSR) is used within the same sentence as 'continual influence in Antarctic governance', 'effective role in ATS', 'long-term interest', 'and credible presence'. All of these statements suggest New Zealand's desire to affirm its presence in Antarctica and sovereignty of the RSR.

APPENDIX III: NEW ZEALAND'S CORE LEGAL AND INSTITUTIONAL CONNECTIONS WITH THE ANTARCTIC

1) Transfer of Authority over the Ross Dependency 1923

2) Statements of Strategic Interest

- (see Appendix II: Temporal Analysis of New Zealand's Statement of Strategic Interests in the Antarctic)

3) Signatory to International Legal Regimes

- Antarctic Treaty, Dec 1, 1959 & Jun 23, 1961
- The Agreed Measures for the Conservation of Antarctic Fauna and Flora, 1964
- Conservation for the Conservation of the Antarctic Seals (CCAS), 1972
- Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR), 1982
- Convention on the Regulation of Antarctic Mineral Resource Activity (CRAMRA), 1988 – This piece of legislation was not entered into force but its concerns were more substantially addressed by the later 1991 Madrid Protocol.
- The Environmental Protocol to the Antarctic Treaty (The Madrid Protocol), 1991

4) Incorporation of International Legal Regimes into New Zealand Law

- Antarctic Act 1960 asserts New Zealand jurisdiction to deal *inter alia* with crimes committed in the Ross Dependency.
- Antarctic (Environmental Protection) Act 1994
- Customs Import and Export Prohibition Order on Toothfish, 2000

5) Creation of New Zealand Antarctic Institutions

- The Antarctic Heritage Trust (AHT), April 1987
- International Centre for Antarctic Information and Research (ICAIR), 1991
- The New Zealand Antarctic Institute (NZAI), 1996 (otherwise known as Antarctica New Zealand)

APPENDIX IV: AUSTRALIA'S ANTARCTIC POLICY

Australia's Antarctic Policy, Australian Antarctic Division (AAD)

Antarctica valued, protected and understood

Charter

To advance Australia's Antarctic interests.

Responsibilities

We are responsible to the people and Parliament of Australia for-

- ◆ leading Australia's Antarctic Program.
- ◆ managing Australian National Antarctic Research Expeditions.
- ◆ conducting Antarctic and sub-Antarctic research activities.
- ◆ protecting the Antarctic environment.
- ◆ administering the Australian Antarctic Territory and the Territory of Heard and McDonald Islands.
- ◆ being the primary Australian source of Antarctic information.
- ◆ providing objective, accurate and high-quality advice to our Minister.
- ◆ implementing the decisions of government promptly and conscientiously.

Purpose

Goal 1 - We maintain the Antarctic Treaty System and enhance Australia's influence in it by-

- ◆ maintaining a strong presence at ATS meetings, taking the lead on issues and developing initiatives for international consideration.
- ◆ complying with the requirements of the ATS.
- ◆ cooperating with our Antarctic Treaty partners.

Goal 2- We protect the Antarctic environment by-

- ◆ developing ways to minimise our impact.
- ◆ remediating past work sites.
- ◆ undertaking research to ensure that environmental and fisheries management is based on sound scientific principles.

Goal 3 - We seek a better understanding of the role of Antarctica in the global climate systems by-

- ◆ contributing to knowledge of global climate systems through the study of ice, water and atmosphere.
- ◆ contributing data to the world's climate research and meteorological communities.

Goal 4 - We undertake and support scientific work of practical, economic and national significance by-

- ◆ supporting Antarctic research.

- ◆ providing data and support for national and international clients.
- ◆ conducting research in physical, biological and human science.

Shared Values

In doing their job and making decisions, employees of the Australian Antarctic Division will-

- ◆ uphold the laws of Australia and the ethical values of the Australian Public Service.
- ◆ accept professional responsibility for their part in pursuing AAD corporate goals and be personally accountable for their actions.
- ◆ be positive in responding to the needs of the Minister, staff and clients, and be honest, frank and forthright with advice.
- ◆ be innovative, receptive to new ideas and responsive to new circumstances.
- ◆ strive to improve their skills and knowledge and give of their best to every task.
- ◆ be fair, considerate and cooperative in their dealings with others,
- ◆ sharing knowledge and skills,
- ◆ avoiding preferential treatment,
- ◆ respecting others' confidence,
- ◆ supporting others' aspirations,
- ◆ and being alert to others' well-being and safety.
- ◆ always consider the impacts of their actions and decisions on the environment and seek the course which causes the least environmental harm.

In performing its functions and making decisions, the organisation will-

- ◆ strive for the highest corporate standards in ethics, probity and accountability.
- ◆ protect the rights of its employees.
- ◆ value and acknowledge its employees' contributions.
- ◆ be flexible and receptive to innovation.
- ◆ actively foster a culture of high quality work and continuous improvement.
- ◆ provide employees with training and development opportunities.
- ◆ provide a cooperative, supportive, non-discriminatory and openly consultative working environment.
- ◆ take all reasonable measures to ensure that its employees are safe when at work.

APPENDIX V: PERSONAL PERSPECTIVES – WRITTEN RESPONSES TO SYNDICATE EMAIL REQUEST

Various Antarctic Stakeholders and Advisers to be Sent the Email Request for Information

The following letter was emailed to various 'stakeholders' and advisers interested in Antarctic issues, namely:

- **Klaus Dodds:** Specialist in the Geo-politics of Antarctica, Dean of the Graduate School, Senior Lecturer in Geography at Royal Holloway, University of London.
- **Colin Keating:** formerly NZ's Permanent Representative to the United Nations, now a Partner in Chen and Palmer Associates
- **Greenpeace:** Greenpeace organisation Australia Pacific branch
- **Hon. Phil Goff:** Minister of Foreign Affairs and Trade, Minister of Justice, Minister of Pacific Island Affairs
- **Hon. Chris Carter:** Minister of Conservation, Local Government and Ethnic Affairs
- **Hon. Pete Hodgson:** Minister of Energy, Fisheries, Forestry, Research Science and Technology, and Minister for Crown Research Institutes; Associate Minister of Economic, Industry and Regional Development, and Associate Minister of Foreign Affairs and Trade)
- **Cath Wallace:** Lecturer at Victoria University, Wellington and Director, ECO
- **Gillian Wratt:** former Head of Antarctica New Zealand, Senior Operator in Sustainable Development Group, Ministry of the Environment
- **Lou Sanson:** Chief Executive Officer, Antarctica New Zealand
- **Forest and Bird New Zealand:** President/General Director of the National Office
- **Trevor Hughes:** Ministry of Foreign Affairs and Trade
- **Hon. Simon Upton:** Former Minister for the Environment, Email sent to his website
- **Geoffrey Palmer:** former Prime Minister, Chen & Palmer Associates
- **Kim Hill:** Radio Broadcaster, Radio New Zealand

Responses were received from:

- **Klaus Dodds**
- **Colin Keating**
- **Greenpeace**
- **Hon. Phil Goff**
- **Simon Murdoch on Behalf of Hon. Phil Goff, Hon. Pete Hodgson and Hon. Chris Carter**
- **Cath Wallace**
- **Gillian Wratt**
- **Lou Sanson** (written and verbal in a lecture he gave to the Graduate Certificate Course)
- **Trevor Hughes** (verbally in a lecture he gave to the Graduate Certificate Course)

Email Request for Information

From: Barrie F Cook [mailto:bfc19@student.canterbury.ac.nz]

Sent: Friday, 5 December 2003 6:09 p.m.

To: _____

Subject: Antarctic

Dear _____

We are 5 students doing the Graduate Certificate in Antarctic Studies at Canterbury University. Our syndicate is focusing on the topic of what drives the New Zealand Government's approach to Antarctica (and the Southern Ocean).

We have sourced considerable material on the subject however we are hoping that you may be prepared to provide a more personal interpretation for the purposes of our assignment.

Asking you right on Xmas is a terrible thing to do however just a paragraph or two in response would suffice.

The types of questions we are trying to answer are:

- What is the main Govt driver today?
- How have the drivers changed over time?
- Are some drivers more visible than other and if so why?
- Are New Zealand drivers the same as other countries and if not how are they different?

If you were able to respond and to do so by 5 January we would be doubly grateful. Just a paragraph or two!

Yours sincerely

Waverley Parsons (Masters of Environmental Studies Victoria University), Shona Muir (Logistics Officer, Australian Navy), Jud Fretter (Political Science Dept, Canterbury University), Lesley Woudberg (senior advisor, Ministry for the Environment), & Barrie Cook (consultant, Niu Pacific Ltd)

Response: Klaus Dodds

Specialist in the Geo-politics of Antarctica, Dean of the Graduate School, Senior Lecturer in Geography at Royal Holloway, University of London.

Subject: RE: Antarctic

Date: Fri, 05 Dec 2003 12:56:42 +0000

From: Dodds K <K.Dodds@rhul.ac.uk>

To: "'bfc19@student.canterbury.ac.nz'" <bfc19@student.canterbury.ac.nz>

Dear Barrie and team,

I will answer it now otherwise I will forget! No problem about timing.

Methodologically, drivers may be difficult to identify in terms of what is available in the public domain and depending on who you talk to emphases will no doubt alter. My sense is that commercial factors are far more important than they were e.g. obtaining value for money from science, exploiting opportunities in tourism including Christchurch as a gateway city, exploiting fisheries in the Ross Sea, exploring bio-prospecting possibilities and denying such opportunities to others (e.g. Non-New Zealanders in the Ross Sea Sector). Not in any violent way but simply by not being passive (e.g. why did New Zealand send the naval ship Te Kaha down to the southern ocean in 2002?). Moreover, environmental politics and management enjoys a high profile and is arguably a more significant factor compared to claimant states such as Argentina and Chile. The notion of being a good 'environmental steward' clearly matters to New Zealand governments.

I think one huge change has been that science/scientific activity has to co-exist with a range of other factors in a way it did not have to do so in the 1950s and 1960s.

Visibility is hard to answer it depends a great deal on audiences and networking. One way to think about this is to consider different constituencies e.g. academic, NGO, media, political, military, scientific and the general public. Some overlap of course. The answer to that question will lie in the sources and methods adopted.

New Zealand is not so different to other claimant states. It wants to protect Geographical proximity also matters in terms of presenting opportunities as does the presence of a large non-claimant state on the ice and in Christchurch. i.e. the USA.

For the future, I think Maori are going to be increasingly important drivers. Thus far Antarctica has often been seen as the preserve of the Pakeha community. This will change and Maori interest in fishing might be critical. Also do note place naming in the Ross Sea sector of Antarctica. You will find Maori inspired place names. What does that suggest? Where the Treaty of Waitangi goes so New Zealand goes. So why not Antarctica?!!

Good luck and best wishes,
Klaus

Dr Klaus Dodds
Dean of the Graduate School
Senior Lecturer in Geography

Department of Geography
Royal Holloway, University of London
Egham Surrey
TW20 0EX
Tel: 01784 443580
Fax: 01784 472836
Email: k.dodds@rhul.ac.uk

Response: Colin Keating

NZ's Former Permanent Representative to the United Nations, Partner in Chen and Palmer

Subject: RE: Antarctic

Date: Mon, 08 Dec 2003 09:48:07 +1300

From: Colin Keating <Colin.Keating@chenpalm.co.nz>

To: bfc19@student.canterbury.ac.nz

Hello,

Sorry, I can only fit in a brief comment.

I think it would be naïve to think of a single driver. There are many

- history (including the sovereignty issue)
- security
- environmental policy
- economic
- scientific

Another key factor, which is less visible, and not often mentioned is location. If New Zealand was located at different latitudes then inevitably its interest would be much less acute.

Over time (i.e. the last 20 years) the environmental and economic factors have emerged. They were less relevant in the prior 50 years.

Basically the drivers are commonly held with others but there are obvious differences in interested the major powers fit Antarctica into their global framework. Chile and Argentina have a stronger emphasis on sovereignty. Some are slightly more driven by resources egg the distant water fishing countries. Mostly, however the drivers are very similar. What is interesting and may be worth studying is that some countries, like Canada, joined but found they really couldn't sustain the interest. Why?

Hope this helps,
Colin Keating

Response: Greenpeace Australia Pacific

Subject: Antarctic/ New Zealand Gov Q's
Date: Tue, 09 Dec 2003 17:12:17 +1100
From: Isobel Lindley <Isobel.Lindley@au.greenpeace.org>
Organization: Greenpeace Australia Pacific
To: bfc19@student.canterbury.ac.nz
CC: jessa Latona <Jessa.Latona@au.greenpeace.org>

Hi,
Thank you for your email.??

We contacted the Greenpeace New Zealand office, but unfortunately they are unable to help out with your query.? We don't have anyone in our Australia or Suva office with the expertise to help you either.? I'm sorry!

There are a few links listed on our website at:
<http://www.greenpeace.org.au/oceans/index.html>
Not sure if they would be of any use?
The only other thing I can think of is that you try talking directly with the New Zealand government.? If you would like to find out more about Greenpeace, visit our website at:
<http://www.greenpeace.org.au/>
For information on our work world wide, visit the Greenpeace International website:?
<http://www.greenpeace.org>

Alternatively, you can email me your postal address and I will happily send you some information.?? ?????
We would like to invite you to become a member of Greenpeace's cyberactivist network.? Being a cyberactivist allows you to keep a finger on the pulse of environmental activism.? You will receive our monthly Activist News with plenty of ways to support Greenpeace campaigns. We'll also send you the occasional emergency campaign alert and you will have the option to join the Greenpeace Cyberactivist Community, allowing you to participate in on-line discussions, and even launch your own virtual ship as part of the Greenpeace virtual flotilla membership directory.

Just go to: <http://act.greenpeace.org/register>
to become an online environmental activist.????
We look forward to hearing from you soon.? We can't do it without you, but together we can make a difference.? Regards,????

Isobel Lindley
Public Information
Greenpeace

Subject: Re: Antarctic/ New Zealand Gov Q's
Date: Wed, 10 Dec 2003 10:55:19 +1100
From: Isobel Lindley <Isobel.Lindley@au.greenpeace.org>
Organization: Greenpeace Australia Pacific
To: bfc19@student.canterbury.ac.nz

Hiya,

Yeah we worked with the Antarctic and Southern Ocean Coalition (ASOC) to campaign against the signing of the Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA) until the signing of the Protocol on Environmental Protection to the Antarctic Treaty in 1991.

Since

then we have encouraged Antarctic Treaty nations to ratify the Protocol and to implement its provisions.

We are working now primarily on threats to

the

marine ecosystem in Antarctica and the Southern Ocean such as whaling

and illegal, unreported and unregulated fishing. We would like to see

more

Marine Protected Areas (MPAs) set up such as the one recently declared at Heard Island.

We are still members of ASOC. I wonder if someone at ASOC can give you a hand? Their website:

<http://www.asoc.org/>

Sorry. Breaks my heart when we can't help out. Just under-resourced and busy so sometimes very difficult. Good luck with your work.

Best wishes,

Isobel

Response: Hon. Pete Hodgson

(Minister of Minister of Energy, Fisheries, Forestry, Research Science and Technology, and Minister for Crown Research Institutes; Associate Minister of Economic, Industry and Regional Development, and Associate Minister of Foreign Affairs and Trade)

Subject: Re: Antarctic

Date: Wed, 10 Dec 2003 10:37:11 +1300

From: Ministerial Office of Hon Pete Hodgson

<Ministerial.Office.of.Hon.Pete.Hodgson@ministers.govt.nz>

To: bfc19@student.canterbury.ac.nz

Dear Barrie Cook

On behalf of the Hon Pete Hodgson, I acknowledge your email of 5 December 2003, attached, regarding Antarctic and Southern Oceans policy.

These are matters appropriately dealt with by the Minister of Foreign Affairs and Trade, Hon Phil Goff. I have taken the liberty of forwarded your email on to Mr Goff's office for consideration.

Yours sincerely

KEITH MASON

Senior Private Secretary – Hon Pete Hodgson

Response: Cath Wallace

Lecturer at Victoria University, Wellington and Director, ECO

Subject: RE: Antarctic

Date: Wed, 14 Jan 2004 18:35:36 +1300

From: Cath Wallace <Cath.Wallace@vuw.ac.nz>

To: bfc19@student.canterbury.ac.nz

Dear Barrie, Waverley, Shona, Jud and Lesley,

Sorry I let this slip – and am late with my response.

Barrie has said that

"The types of questions [you] are trying to answer are:

- >> > – What is the main Govt driver today?
- >> > – How have the drivers changed over time?
- >> > – Are some drivers more visible than other and if so why?
- >> > – Are New Zealand drivers the same as other countries and if not how are they different?

– What is the main Govt driver today?

Officially the main drivers are as in the statement of New Zealand's Strategic interests in the Ross Sea area which I presume you have seen. If not, let me know.

It became clear during the process of ECO, ASOC and Forest and Bird contesting the very strongly economic benefit focus of the 1995 statement that the present government wanted to move away from that formulation to something that put less emphasis on Antarctica and New Zealand's activities there as an engine of regional (Canterbury) economic growth and more emphasis on conservation. However the government still is clearly intent on allowing New Zealand fishing companies to get economic benefits in Antarctica and so is resisting pressure to agree to a moratorium on fishing in the Ross Sea (and more widely in the Southern Ocean). The government also resisted a formulation of the New Zealand position that used language directly taken from the AT and the Environmental Protocol. Thus conservation is a goal but is apparently not to be pursued at the expense of benefits to fishing companies. However fishing companies are to observe high standards of operation.

There is always a strong element in New Zealand policy of retaining our territorial claims and of working within and supporting the Antarctic Treaty System primarily for reasons of security.

It is also clear that the ham-fisted attempts to create a marine reserve around the Balleny Islands was frowned on because it annoyed other ATCPs by seeming to be motivated by claimant interests rather than

conservation concerns.

- How have the drivers changed over time?

Security, claims and science (partly for the purposes of claims) have always been important drivers of New Zealand policy. During the time of the Antarctic Minerals Convention negotiations (1982–1988 and then the ratification period (1988–90) the official reason for wanting the minerals regime was the inevitability of minerals activity and the need therefore for rules to control mining in order to secure the place from conflict and to protect the environment.

In fact the New Zealand interest certainly included a commitment to security and a vision that the minerals regime would avoid conflict, but the claimant interest was strong and so was the vision that New Zealand might get some spin off benefits from having mining in Antarctica.

From the ENGO point of view, we (ECO and ASOC New Zealand) contested this vigorously and pointed out that the minerals regime was not an instrument (as claimed by governments) for the avoidance of inevitable mining and environmental damage, but rather for the securing of the legal and property rights framework for mining with environmental stuff just window dressing (a view that became ever more convincing as the details of their negotiated agreement emerged).

Thus New Zealand had a strong commitment to the minerals regime and its paving the way for exploitation.

Public pressure shifted governmental positions gradually and it was really only late 1989–90 The Labour government resisted pressure to move away from the minerals convention and to adopt a ban on minerals economic activity until shortly before Geoffrey Palmer was toppled from office in late 1990. The position in New Zealand started to shift in 1989 and even then it took some months to shift fully with Foreign Affairs strenuously resisting and reinterpreting the shifts that the politicians (particularly Phillip Woollaston and others) were making. Throughout his time in office, David Lange supported Chris Beeby, the New Zealand chief negotiator and chair of the negotiations. As one official observed to me, "Lange likes his lawyers".

Though the National Party Parliamentary leader, Jim Bolger, took the position of supporting a World Park in Antarctica before Labour did, and that helped to lever Labour out of its support for the minerals regime, a few years after National took power in the 1990s, the position began to change. It was in 1995 that without consultation with the public National adopted a much more "economic growth" and "regional development" position, with appointments and actions that stressed the potential for Canterbury economic interests with respect to Antarctica.

Claimant interests drive much of New Zealand's position, but New Zealand does not show this publicly. New Zealand however is much less strident on its claims than Chile or Argentina or most other claimant states. Why? I suspect it has something to do with the New Zealand public attitude to nationalism. I think we really know it is all a bit of a conceit for New Zealand to claim Antarctica and that our nationalism does not really rally to the case particularly. In contrast, it used to be (and may still be) illegal to publish a map of Argentina without the Antarctic claim part of the map.

Economic interests are also strong in New Zealand but these are contested by the New Zealand Environmental NGOs and some in the science and conservation community, so as a driver these interests are usually muted to some extent.

As with all our foreign policy, New Zealand likes to engage via the rules and likes to see the collectives that incorporate the ATS operating. This is part of the need for small countries to have order and partly the strong concern about security.

Over the last decade-plus, New Zealand's position has shifted noticeably from one of strong conservation (1991) to one of economic interest (mid 1990s) and to a muted economic interest focussed particularly on fishing, muted by both security, order and conservation concerns.

I hope these observations help.

Regards,
Cath

Response: Gillian Wratt

Senior Operator in Sustainable Development Group, Ministry of the Environment

Subject: Re: Govt drivers

Date: Tue, 16 Dec 2003 23:12:37 +1300

From: Gill Wratt <gill.wratt@xtra.co.nz>

Reply-To: Gill Wratt <gill.wratt@xtra.co.nz>

To: bfc19@student.canterbury.ac.nz

References: <03Dec16.180211nzdt.328327@frank.mfe.govt.nz>

Hi Barrie, Waverley, Shona, Jud, and Lesley

Sorry for the delay in getting back to you – life's been busy since I was in Christchurch, and I'm off to the Peninsula on Thursday, so its now or never for a reply. These are very much my personal views

What is the main Govt driver today?

That Antarctica is strategically important to NZ because of its geographic position. It is very much in NZs interests for Antarctica to be an area of peace and science. Supporting this is – NZs desire to be seen as an environmentally responsible country, and to be part of the international science programmes that happen in NZ, our historical connections with Antarctic exploration, and our connections with the adventure ethic associated with Antarctica

How have the drivers changed over time?

I think the fundamental driver remains much the same. The emphasis given to environmental stewardship has strengthened a lot in the past 10–15 years. The science focus has also changed with much more emphasis on research associated with understanding of global ecosystems and processes.

Are NZ drivers the same as other countries and if not how are they different? There are differences in emphases, but all countries involved in Antarctica are basically driven by strategic interests. Overlaying this are the scientific opportunities, and environmental commitment.

Hope this helps

Regards

Gill

Response: Simon Murdoch



5 January 2004

APU/ADM/5/1

Waverley Parsons and colleagues
Graduate Certificate in Antarctic Studies
University of Canterbury
Private Bag 4800
CHRISTCHURCH

Dear Waverley and colleagues

Mr Goff has asked me to reply on his behalf to your email of 5 December about the drivers of Government policy towards Antarctica. I am also replying on behalf of Mr Hodgson and Mr Carter whom I understand you have also approached.

I have been told that since you sent your email, Trevor Hughes, the Head of the Ministry's Antarctic Policy Unit, came and spoke to your course at Canterbury University on these and other current Antarctic issues. I believe you have also had the opportunity to study during your course so far the Government's "Statement of Strategic Interest" from May 2002.

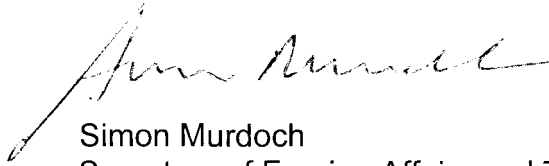
I will therefore confine my remarks to the bold outline of our policy rather than getting into detail. New Zealand's principal concerns are to protect the Antarctic environment and to ensure the continent remains free from international discord. We consider the Antarctic Treaty System, which has designated Antarctica "a natural reserve, devoted to peace and science", and of which we are a founding member, serves these interests very well. Strengthening the Treaty System is accordingly an important objective for New Zealand.

Why is Antarctica important to New Zealand? Obviously a glance at the map reveals part of the answer to this question: proximity. Antarctica dominates our geographical setting and strongly influences our own environment. The ozone hole which forms over Antarctica each year is not just an academic issue for New Zealanders. And of course New Zealand is one of the seven claimants to territory in Antarctica, in our case in respect of the Ross Dependency.

The Treaty System is being challenged on a number of fronts as Antarctica's resources take on greater economic value. Illegal fishing in Antarctic waters is of serious concern to New Zealand. We contribute to upholding the Convention on the Conservation of Antarctic Marine Living Resources by carrying out surveillance in the Ross Sea and by actively participating in the work of the Commission. We also believe that tourism in Antarctica, which has greatly expanded and diversified in recent years, needs to be more effectively managed within the Treaty System in order to preserve Antarctica's pristine environment and role as a natural laboratory for science.

In terms of the visibility of the drivers for New Zealand, you can always expect therefore to see New Zealand delegates taking a strong line on environmental protection, and supporting practical efforts to promote international cooperation. In this regard I believe our motivations are widely shared by most other Treaty Parties.

Yours sincerely

A handwritten signature in black ink, appearing to read "Simon Murdoch". The signature is written in a cursive style with a long, sweeping underline that extends to the left.

Simon Murdoch
Secretary of Foreign Affairs and Trade

Response: Hon. Chris Carter



Office of Hon Chris Carter
MP for Te Atatu
Minister of Conservation
Minister of Local Government
Minister for Ethnic Affairs

19 December 2003

Waverly Parsons and Barrie Cook
CI- Professor Bryan Storey
Gateway Antarctica
Canterbury University
CHRISTCHURCH

Dear Waverley Parsons and Barrie Cook

The Hon Chris Carter, Minister of Conservation, has asked me to acknowledge receipt of your recent letter concerning the Government's approach to Antarctica.

This issue falls within the portfolio of Hon Phil Goff, Minister of Foreign Affairs and Trade. Your letter has therefore been referred to his office.

Thank you for taking the time to write.

Yours sincerely

Daniel King Private Secretary — Conservation

Cc Private Secretary to Minister of Foreign Affairs and Trade.
Referred for your attention

Electorate Office: 300 Great North Road, Henderson, Waitakere City, New Zealand.

Telephone: 64 9 835 0915, Facsimile: 64 9 835 0945

Ministerial Office: Parliament Buildings, Wellington, New Zealand.

Telephone: 64 4 470 6568, Facsimile: 64 4 472 8034

Email: ccarter@ministers.govt.nz, Website: www.beehive.govt.nz

Response: Lou Sanson's – Out of Office reply

Subject: Re: Your email to Lou Sanson

Date: Tue, 23 Dec 2003 11:04:44 +1300

From: Alison Whitaker <A.Whitaker@antarcticanz.govt.nz>

To: bfc19@student.canterbury.ac.nz

Hi Barry

Sorry for the delay

Lou has just advised me that he is unable to respond to this email for you in the time given. He has been very busy with VIP groups on the ice and has just returned to NZ to attend Govt meetings in Wellington before taking a well earned break. He is away again as we speak, not to return until tomorrow.

Our apologies that you did not receive this response sooner. I would suggest that you could contact MFAT in Wellington, the Antarctic Division, perhaps Eva Murray on eva.murray@mfat.govt.nz <<mailto:eva.murray@mfat.govt.nz>> who would be able to answer your questions.

Best of luck and kindest regards

Alison

Alison Whitaker
Antarctica New Zealand
Private Bag 4745
Christchurch
Phone: 64 (03)358 0200
Fax: 64 (03) 358 0211
Email: a.whitaker@antarcticanz.govt.nz

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www.antarcticanz.govt.nz

REFERENCES

- Alley, R. (1984) "New Zealand and Antarctica", *International Journal*, Vol. 34: 911–931.
- Antarctica New Zealand, (2003) *Antarctica New Zealand Annual Report – December 2003*, Antarctica New Zealand, Christchurch, New Zealand.
- Auburn, F. (1972) *The Ross Dependency*, Martin Nijhoff, The Hague, The Netherlands.
- Australian Antarctic Division [AAD] (2003) *Australia's Antarctic Policy*, www.aad.gov.au
- Beck, P. (1986) *International Politics of Antarctica* Croom Helm, London, United Kingdom.
- Beck, P. and Dodds, K. (1998) *Why Study Antarctica?*, Potter, R. (ed.) CEDAR Research Papers, No. 26, Centre for Developing Areas Research, Department of Geography, Royal Holloway, University of London, Egham, Surrey, Essex, United Kingdom, July 1998.
- Beeby, C. (1972) *The Antarctic Treaty*, Wellington, New Zealand Institute of International Affairs [includes the *Antarctic Treaty* Text of the 1959 Antarctic Treaty [ratified in 1961]
- Berkman, P. A. (2002) *Science into Policy: Global Lessons from Antarctica*, Academic Press, San Diego, California, USA.
- Brown, A. (2003) *Project Icecube*, Lecture to The Canterbury Antarctic Society, University of Canterbury, Christchurch, New Zealand: 25 November, 2003.
- Brown, A. (2003) *US Antarctic Programs and Raytheon*, Lecture to Graduate Certificate in Antarctic Studies course, University of Canterbury, Christchurch, New Zealand: 26 November, 2003.
- Clark, M. (1988) 'Cooperation on Ice: the potential of collaboration' in P. Kelly and J. Childs eds. *Geopolitics of the Southern Cone and Antarctica* Boulder, Lynne Rienner: 203–213
- Cook, B. (2003/03) *New Zealander's Perceptions of Antarctica: Ethnic Comparisons*, forthcoming Individual Project presented for the Graduate Certificate in Antarctic Studies course, University of Canterbury, Christchurch, New Zealand.
- de Poorter, M. (2004) *Antarctica Environmental Issues*, Lecture to Graduate Certificate in Antarctic Studies course, University of Canterbury, Christchurch, New Zealand: 13 January, 2004.
- Dodds K. (2003) Personal communication, 6 December 2003.
- East, M. (1973) "Size and Foreign Policy: A Test of Two Models", *World Politics*, Vol. 25, No. 4: 557.
- East, M. (1978) 'National Attributes and Foreign Policy' in M East, S. A. Salmore and C. F. Hermann (eds.) *Why Nations Act – Theoretical Perspectives for Comparative Foreign Policy Studies* Sage Publications, Beverly Hills, California, USA: 123–142.
- Edgar, A. (2004) *Ministry of Fisheries*, Personal Communications, 08 January 2004

ENEA (2002) *Italy in Antarctica*

Galvin, N. (1987) *Policy on Ice: New Zealand's Antarctic Policy Choices*, National Conference Organised by the Environmental Council and Institute of Policy Studies, Victoria University, Wellington.

Gilbert, N. (2003) *Managing Human Impacts in Antarctica*, Lecture to Graduate Certificate in Antarctic Studies course, University of Canterbury, Christchurch, New Zealand: 20 November, 2003.

Hall, C. M. (2000) "The Tourist and Economic Significance of Antarctic Travel in Australian and New Zealand Antarctic Gateway Cities", *Tourism and Hospitality Research*, Vol. 2, No. 2: 157-169.

Hoflehner, J. and K., Harrowfield, D. [text] (2003) *Frozen History: The Legacy of Scott and Shackleton*, Josef Hoflehner Publisher, Austria.

Haverkamp, A. (2002/03) *Maori and Antarctica*, Individual Project presented for the Graduate Certificate in Antarctic Studies course, University of Canterbury, Christchurch, New Zealand.

Hemmings, A. (2003) *The Role of Non-State Actors in the Antarctic Treaty System*, 20 November, 2003; *Sovereignty in 21st Century Antarctica*, 24 November 2003; *Environmental Issues*, 5 December 2003. Lectures to Graduate Certificate in Antarctic Studies course, University of Canterbury, Christchurch, New Zealand.

Henderson, J. (1980) 'The Foreign Policy of a Small State' in J Henderson, K Jackson and R Kennaway eds *Beyond New Zealand: The Foreign Policy of a Small State* Methuen Publications (New Zealand) Ltd., Auckland, New Zealand: 2-8.

Henderson, J. (1991) "New Zealand and the Foreign Policy of Small States", Chapter 1, Kennaway, R. and Henderson, J. (eds.), *Beyond New Zealand II - Foreign Policy into the 1990's*, Longman Paul Limited, Auckland, New Zealand: 3-13.

Henderson, J. (2003) "New Zealand's Foreign Policy" Lectures to POLS404/DIPL407 New Zealand Foreign Policy course, Department of Political Science, University of Canterbury, Christchurch, New Zealand.

Hughes, T. (2002), Personal Communication to Bryan Storey Regarding Gateway Antarctica's Proposal to establish a Centre of Research Excellence, Ministry for Foreign Affairs, APU/SCI/2, APU/CV/AT/1, 16 October 2002.

Hughes, T. (2003), Ministry for Foreign Affairs, Personal Communications, 8 December 2003

Hughes, T. (2003) *New Zealand Government Policy toward the Antarctic*, Lecture to Graduate Certificate in Antarctic Studies course, University of Canterbury, Christchurch, New Zealand: 8 December 2003.

Human Development Report Office (2004) <http://www.undp.org/hdr2003/faq.html#12>

- Investment New Zealand, (2004), *50 Things You Should Know About Investment Ready New Zealand*, <http://www.investnewzealand.govt.nz/common/files/50%20Things.pdf>
- Johansen, G. (2004) *Overview of Sanford Ltd.'s Operation*, Lecture to Graduate Certificate in Antarctic Studies course, University of Canterbury, Christchurch, New Zealand: 15 January, 2004.
- Keating, C. (2003) Personal communication – email, 8 December 2003.
- King, D. (2003) Personal Communication – letter, Private Secretary for the Minister of Conservation, 19 December 2003.
- Levine, S. and Harris, P. [eds.] (1999) *The New Zealand Politics Source Book*, Third Edition, Dunmore Press Ltd., Palmerston North, New Zealand.
- Marchant, H. (2004) *Australian Antarctic Division*, Personal Communications, 12 January, 2004
- Martin, D. (2003) Conservation with Syndicate Group, 3 December 2003.
- Ministries of Foreign Affairs and Defence (1977) *Strategic and Economic Significance of Antarctica*, Wellington.
- Ministry of Foreign Affairs and Trade [MFAT] (1996) *New Zealand and Antarctica Information Bulletin 59* Wellington, New Zealand.
- Ministry of Foreign Affairs and Trade [MFAT] (2003) “NZ Backs Stronger Management of Antarctic Tourism” *Media Statement*, Wellington, New Zealand: 22 May 2003.
- Ministry of Foreign Affairs and Trade [MFAT] (2003) “NZ Policy Statement on Tourism and other Non-Governmental Activities in Antarctica” *Media Statement*, Wellington, New Zealand: 22 May 2003.
- Munro, M. (2003) *Bioprospecting and Bioactives*, Lecture to Graduate Certificate in Antarctic Studies course, University of Canterbury, Christchurch, New Zealand: 9 December 2004.
- Munro, M. (2003) University of Canterbury Chemistry Department, Personal Communications, 9 December 2003.
- Murdoch, S. (2004) Personal communication – letter, Ministry of Foreign Affairs and Trade, 5 January 2004.
- New Zealand Government (2003) *New Zealand Science in Antarctica and the Southern Ocean Strategy 2003*, <http://www.antarcticanz.govt.nz/Pages/Science/Strategy.msa>, Accessed 09 January 2004.
- New Zealand Defence Force (2004) <http://www.nzdf.mil.nz/>
- Norris, B. (2003) *New Zealand's Historical Antarctic Connections*, Lecture to Graduate Certificate in Antarctic Studies course, Canterbury Museum, Christchurch, New Zealand: 13 November 2003.

- Petersen, D. (2003) *Antarctica New Zealand – Science Strategy*, Lecture to Graduate Certificate in Antarctic Studies course, University of Canterbury, Christchurch, New Zealand: 13 November 2003.
- Petersen, D. (2004) *Exploiting Antarctica*, Lecture to Graduate Certificate in Antarctic Studies course, University of Canterbury, Christchurch, New Zealand: 13 January 2004.
- Phillips, T. (2001) *Gateway to the Ice: Christchurch's International Airport*, Antarctic Air Links from 1955, Christchurch's International Airport, Christchurch
- Pickrill, C. (1998) "New Zealand Defence Force and the Antarctic", *Antarctica 2010, Proceedings of the Antarctic Futures Workshop 28 – 30 April 1998*, Tetley, G. (ed.)
- Pickrill, C. (1998) "Christchurch – A Gateway City", *Antarctica 2010, Proceedings of the Antarctic Futures Workshop 28 – 30 April 1998*, Tetley, G. (ed.)
- Prior, S. (1997) *Antarctica: View for a Gateway* Working Paper 5/97 Centre for Strategic Studies, Victoria University of Wellington.
- Roberts, L. (2003) "Author arrives to research 'Ice Breed'", *Newswire*, Communications and Development, University of Canterbury, Christchurch, New Zealand, <http://www.newsroom.canterbury.ac.nz/stories/03091701.htm>, 17 September 2003.
- Ross Dependency Research Committee [RDRC] (1985) *Future Directions in New Zealand Antarctic Research* Department of Scientific and Industrial Research, New Zealand.
- Royal New Zealand Airforce (2004), <http://www.airforce.mil.nz/faqs/faqsus.htm#faq2>
- Sanson, L. (2003) *Antarctica New Zealand supporting quality science*. Publication <http://www.niwa.co.nz/pubs/wa/11-3/quality>; Retrieved online– 1/12/03.
- Simpson, A. (1991) 'New Zealand and the Antarctic' in R. Kennaway and J. Henderson eds. *Beyond New Zealand II: Foreign Policy into the 1990's* Auckland, Longman Paul Limited: 178–186.
- Smelser, N. J. and Baltes, P. B. [eds.] (2001) *International Encyclopedia of the Social and Behavioural Sciences*, Vol. 8, Elsevier Science Ltd., Oxford: 5280.
- Templeton, M. (2000) *A Wise Adventure – New Zealand and Antarctica 1920–1960*, Wellington, Victoria University Press.
- Templeton, M. (2002) *Protecting Antarctica – The Development of the Treaty System*, Wellington, New Zealand Institute of International Affairs.
- Thakur, R. (1991) "The Elusive Essence of Size: Australia, New Zealand, and Small States in International Relations", Chapter 10, Higgott, R. and Richardson, J. L. (eds.), *International Relations: Global and Australian Perspectives on an Evolving Discipline*, Australian National University, Canberra: 241–287.
- Turvey, R. D. (2001/2) *Policy into Science – Business Lessons for Antarctica*, Graduate Certificate in Antarctic Studies Individual Project, Gateway Antarctica, Christchurch, New Zealand, University of Canterbury.

Human Development Report Office, (2004) <http://www.undp.org/hdr2003/faq.html#12>

Wallace, C. (2004) Personal communication 14 January 2004.

Waterhouse, E. J. (ed.) (2001) *Ross Sea Region: A State of the Environment Report for the Ross Sea Region of Antarctica*, New Zealand Antarctic Institute, Christchurch.

Weber, D. (1966) *The New Zealand Decade in Antarctica* Antarctic Division, Information Officer, Scott Base, Summer 1966–67.

Wong, F. (2002) *Challenges to the Antarctic Treaty System*, Speech given at the annual Antarctic Conference.

Wratt, G. (2003) Personal communication, 3 December 2003.