# Maori Associations with the Antarctic

- Tiro o te Moana ki te Tonga -

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## Introduction

"It may have been about our year 750 that the astonishing Hui-Te-Rangiora, in his canoe Te Iwi-o-Atea, sailed from Rarotonga on a voyage of wonders in that direction (South): he saw the bare white rocks that towered into the sky from out the monstrous seas, the long tresses of the woman that dwelt therefin, which waved about under the waters and on their surface, the frozen sea covered with pia or arrowroot, the deceitful animal that dived to great depths – 'a foggy, misty dark place not shone on by the sun'. Icebergs, the fifty foot long leaves of bull-kelp, the walrus or sea-elephant, the snowy ice fields of a clime very different from Hui-Te-Rangiora's own warm islands – all these he had seen".<sup>1</sup>

The Maori of Aotearoa - New Zealand have stories which talk about this land far to the south of their home. However, until the expeditions of the age of Antarctic discovery the land that is covered in ice was to a fairly great extent still shrouded in a sense of mystery that is of the unknown. Thus not until the documentation of the late 19th and early 20th century adventurers who landed on the continent came into publication was this mystery, or veil, lifted. The scientific age of exploration which to a certain extent has dissipated the mythology of the Antarctic is the product of interest in the continent that goes back for thousands of years. What it is about the Antarctic that has drawn such great interest for people, in early times on the literal, mythological and even cosmological level as well as the times during and after its physical and scientific exploration? And how is this historic relationship with the Antarctic realised in contemporary Maori society?

This report hopes to consolidate a reference of Maori associations with the Antarctic – building on the rich historical context and looking forward to where this relationship has positioned Maori today.

<sup>&</sup>lt;sup>1</sup> Beaglehole, 'The Discovery of New Zealand', p.3

## Historical accounts of Maori in the Antarctic

### Hui-Te-Rangiora

Antarctica existed in the imagination long before any human eye beheld it. Before the publishing and documentation from the reports of expeditions to the Antarctic dating from the end of the 18th to the beginning of the 20th century there was an aura of mythology which surrounded the continent. As a continent Antarctica had existed in people's minds through speculation and theory since at least as long as ancient Greece. The 6th century B.C.E. saw Pythagoras calculate that the world was round which would lead to Aristotle's theory of the 4th century B.C.E. suggesting that the "landmass of the northern hemisphere must be balanced by a large landmass in the south." Polynesian oral history relates that a great explorer, Hui-Te-Rangiora, sailing far south of New Zealand around 650 A.D., discovered a "white land." This voyage of Hui-Te-Rangiora is highlighted in the right of Figure 1 descending south from the Cook Islands.

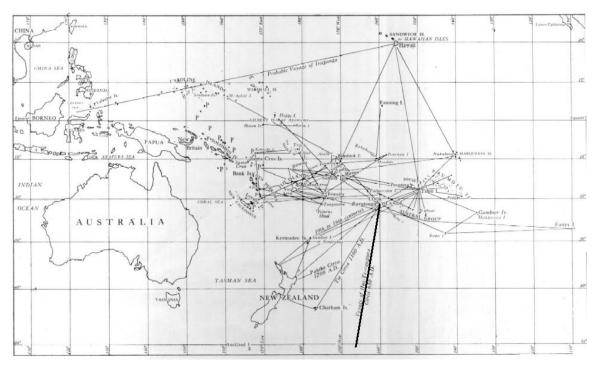


Figure 1: Map showing some recorded Polynesian voyages (Best, 1923).

According to traditional accounts the chief Hui-Te-Rangiora, was the first person to discover Antarctica. Leaving Rarotonga in the Cook Islands, he was given directions to reach Aotearoa – New Zealand but he and his crew missed it and carried on until they saw "a white land that was floating." These white lands are accredited to the great icebergs of Antarctica.

To this day Hui-Te-Rangiora is remembered as a man of great standing for a number of peoples within New Zealand. At Te Atiawa's Treaty of Waitangi hearing in Motueka, Ropata Taylor from the Ngati Rarua Atiawa lwi Trust spoke of Hui-Te-Rangiora, with great closeness:<sup>2</sup>

"Hui-Te-Rangiora is remembered on top of the Whare Tupuna called Turangapeke at Te Awhina (Marae) in Motueka. If you look closely, you can see that the carving at the top of the meeting house is a tekoteko of Hui-Te-Rangiora looking out – looking for the land. On top of other houses around the country are people like Kupe, Maui and other tupuna, but for us, in Motueka, there's that man, that explorer – Hui-Te-Rangiora."<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> This link to the people of Te Atiawa is of great personal importance to the author who acknowledges his whakapapa to Te Atiawa hapu in Motueka as well as Ngai Tahu ki Moeraki.

<sup>&</sup>lt;sup>3</sup> http://tdc.govt.nz/index.php?Whatsinaname?HuiTeRangiora(OuterIsland)

#### Te Waka o Tamarereti

Maori oral traditional also tells of the Polynesian explorer Tamarereti who also ventured south to find a "white land". An article entitled "Voyage of Adventure, Ancient Maori Discovery of the South Pole", presents a detailed account by Hare Hongi of the voyage by 'Te Rua o Maahu' – the name of the canoe that was to under take the dangerous voyage to the deep south. <sup>4</sup> This voyage may be not mythological as much as it is historic. Although much is unknown regarding the nature of Tamarereti, what is known is that he was not considered of the order of gods, demi-gods, or volcanic deities as is common throughout Maori mythology. Rather he was a mortal being albeit the most intrepid of ancient mariners, but mortal nevertheless, suggesting a historical perspective more so than a mythological one.

The Maori had observed the Aurora of the far southern regions, when the whole sky seemed to be ablaze at regular intervals. It was thought that a god may have kept his temple there and that the "darting shafts of splendour were signals of his activities." Because this was a puzzle to the cosmological Maori sages (tohunga), Tamarereti (Reti) announced that he would voyage to the far south and discover the secret of the Aurora. It is universally accepted in the Maori world that upon return Reti's canoe Te Rua o Maahu brought back with it certain understanding of the physicality of the Antarctic region.

Te Rua o Maahu, a magnificent ocean going canoe was built of Totara and ornamented with plumes of feathers and paua shell. Seventy young Chiefs and two tohunga accompanied Reti along with food provisions and fire staffs which could be lit easily. The boat travelled through Te Aumiti now known as the French Pass in Marlborough, a treacherous suction current and headed south directly for Te Kahui Rua-Maahu, the point which the southern cross circles. Eventually after much time passing and anxious sentiment about the welfare of the expedition from the people home on land, the Waka was sited off shore.

<sup>&</sup>lt;sup>4</sup> Hare Hongi. Voyage of Adventure, Ancient Maori Discovery of the South Pole.

Unfortunately the boat was foundering as the crew were exhausted and eventually approaching a rocky shore stuck rock and was wrecked. It was affirmed as Reti's canoe. Reti was killed along with all but two of the survivors. One of the survivors was a tohunga and the other was a member of the crew. The two were nursed reverently back to health and lived long enough to tell the story. The story is brief but concise, the far south was reached as the tale consists of enormous ice cliffs with towering mountain ranges behind them. The ice cliffs were described as having no footing. The season was said to be suited to observation of the Aurora Australis which was a spectacular blaze of colour and eventually after shortening days the sun disappeared completely their guide the stars alone implying that they crossed the Antarctic Circle.

Tamarereti is variously remembered by Maori in the stars. For many the Milky Way traditionally represents the waka (canoe) of Tamarereti. The front and back of the waka are seen in the Scorpius and Orion constellations. The Maori name for Crux (the Southern Cross) is "Te Punga" – "the anchor". It is thought of as the anchor of Tamarereti's waka, where the Pointers are its rope.<sup>5</sup>



Figure 2: The Southern Cross (Te Punga) and Pointers (Groom, 2008).

<sup>&</sup>lt;sup>5</sup> Nga Korero Paki o Nga Whetu – The Stories of the Stars

http://www.carterobservatory.org/index.php?option=content&task=view&id=505&Itemid=103

## **Recent associations of Maori with Antarctica**

In 1840, New Zealander Te Atu (who later changed his name to John Sacs), whose father was Pakeha and mother Maori, travelled to Antarctica on the American ship the *Vincennes* (Norris, pers comm.). The *Vincennes* was one of six ships used in the first United States exploring expedition under the control of Lt. Charles Wilkes, who discovered the Shakleton Ice shelf and surveyed 1600 miles of coastline.

Sometime later Dr Louis Hauiti Potaka, a physician on Richard Byrd's BAE II expedition in 1935 would reach Antarctica (Norris, pers comm.). Dr Potaka travelled on the *Bear of Oakland* which was involved in the exploration on Marie Byrd Land and the first effective use of motor vehicles on the continent.

Te Tou also travelled to Antarctica, as the youngest member of the party who had travelled to Ross Island in the International Geophysical Year (IGY), raising the flag at the official opening of New Zealand's Scott Base in 1956 (Dodds & Yusoff, 2005; Norris, pers comm.)



Figure 3: Flag raising officially opens Scott Base, 1956 (Shanahan, 2008).

## **Contemporary challenges and opportunities**

In 1923, Britain claimed the Ross Dependency, and placed it into the care of New Zealand; however, despite this link to the continent, recent and contemporary Maori involvement in Antarctic related activities continues to be underrepresentative of New Zealand as a whole.

Initially the travellers to Antarctica with the New Zealand programme were mountaineers and climbers. Haverkamp (2003) identifies a number of cultural challenges faced by Maori who, despite having a close association with the outdoors, were not particularly experienced in this field. Reasons for this include a traditional lack of appropriate clothing and equipment to engage in such activities; however, this lack of experience was also due to traditional beliefs concerning mountains. Mountains inspired fear, awe and respect as the places of the atua (gods) or other spirits. Generally Maori would not climb to the summit of Tapu mountains (DOC, 2002). Since 1970, a change of the guard has been observed with predominantly scientists travelling to Antarctica. While scientific activities would appear to be amenable for Maori involvement Haverkamp (2003) further notes that in both cases, scientists and mountaineers travelling to Antarctica are still Pakeha.

The misrepresentation of Maori participation concerning New Zealand's activities in the Antarctic is acknowledged as inadequate by the national governing body – Antarctica New Zealand. Current Chief Executive for Antarctica New Zealand, Lou Sanson, has commented that people who travel to Antarctica through the New Zealand programme should be a true reflection of New Zealand's diverse ethnicity whereby Maori should make up at least ten percent of it (Haverkamp, 2003). Building on this realisation, Dodds & Yusoff (2005) have identified two evolving areas of Antarctic endeavour where Maori may well contribute further to New Zealand's evolving relationship with Antarctica and the Southern Ocean – place-naming in the Ross Dependency and resource management. These aspects as well as the potential contribution of arts and tourism will be discussed further.

#### Place-naming

Maori place-names already exist on Ross Island, where New Zealand's Scott Base is located. Currently, five New Zealand bird names have been assigned to Ross Island features, including: Kaka Nunatak, Kakapo Nunatak, Kea Nunatak, Ruru Crests, Takahe Nunatak.

Maori names for winds have also been assigned to the Ross Island features; Mumu Nunatak, Parawera Cone, Ponui Nunatak, and Tarakaka Peak. Pakaru Icefall is descriptively titled with the Maori name for 'broken'. Te Puna Roimata Peak is Maori for 'springs of tears' and commemorates the Air New Zealand crash at Mt Erebus which occurred near this point killing 257 passengers and crew in 1979. Waipuke Brach has been given the Maori word for 'flood' after periodic flooding of local penguin rookeries by meltwater from Cape Bird Ice Cap (Wood, 2002). Other mountains on Ross Island include, Mt Anakiwa, Mt Anare, Aorangi Peak and Mt Tuatara.

The use of Maori place-names in Antarctica is an important topic; however it is not the key focus of this report as it has been discussed by other authors (Haverkamp, 2003; Dodds & Yusoff, 2005). Although it is worth considering the argument made by that while the incorporation of Maori place-names into the Antarctic landscape initially appears like an inclusive cultural act, the prevailing creation of place through naming, can, as Berg and Kearns (1996) argued, nonetheless, reinforce Pakeha dominance, by defining meaning in nonindigenous terms. As New Zealand engages with a highly visible process of nation-building, which attempts to embrace indigenous and non-indigenous peoples, it is often easier to locate change within the formation of cultural symbols (such as place-naming and the adopting of indigenous practices like the haka) rather than to employ substantial changes in institutional practices (such as actively supporting Maori involvement in Antarctica and the Southern Ocean or examining the production and consumption of heritage industries).

#### Resource management

Maori have a strong history concerning resource management. Responses to biodiversity concerns traditionally included dietary changes, internal migration, territorial warfare, access restrictions based on whakapapa (genealogy) or mana (power, prestige) and conservation measures. These conservation measures varied from place to place and were driven by practical resource needs rather than the abstract principle of preserving biodiversity for its own sake (O'Regan, 1994).

The measures included the use of tikanga (ritualised methods) when harvesting important plants and animals, and the use of tapu (sacred prohibitions) and rahui (temporary prohibitions) to control the areas, seasons or species harvested. Because the measures were intended to maintain harvestable supplies of particular plants and animals, they focussed on species which had resource value or were spiritually safe. Lizards for example, were generally avoided because they were believed to have strong powers, while fish, food plants and edible invertebrates were readily eaten, with some being actively transferred from areas of plenty to areas of scarcity.

When discussing the relationship between Maori and the resources of the Southern Ocean it is imperitive to consider the ways and traditions of Ngai Tahu – the most numerous iwi of Te Wai Pounamu (South Island). For hundreds of years, Ngai Tahu fishermen have worked the sea around Te Wai Pounamu, bringing in abundant kai moana (seafood) to feed family. After colonisation, sea fishing remained an important part of the economy for many whanau (families), and even today Ngai Tahu has some of the best fishermen around, according to Ngai Tuahuriri runanga upoko Riakiihia (Rik) Tau, although numbers have dwindled shapely in recent years.

There are two currently outstanding Maori claims before the Waitangi Tribunal on the Sub Antarctic Auckland Islands (Dodds & Yusoff, 2005). Ngai Tahu is able to recount voyages to this region before European settlement and a party of Maori-Moriori from the Chatham Islands colonised Port Ross in the Auckland Islands in the mid-nineteenth century (King, 2004). A successful claim to the Auckland Islands would bring with it considerable exclusive rights to fishing in the Exclusive Economic Zone (EEZ) around the islands.

Ngai Tahu recognise and acknowledge that the management of Offshore Islands in many cases lies with many and in many ways varying management agencies, administering bodies, other agencies and/or groups, and support existing management regimes in so much as these regimes determine some form of protection and enhancement of Offshore Islands in their natural state.<sup>6</sup> Ngai Tahu have no desire to impose or dictate regulations or restrictions over those managing Offshore islands but instead wish to highlight issues that effect all Offshore Islands and promote general consensus among persons/bodies of the issues and need for protection or enhancement in some way.

Commercially speaking, Maori and especially Ngai Tahu have a profound interest in the Southern Ocean ecosystems, which extends from whale-watching ventures (associated with the Southern Ocean Whale Sanctuary 1994) to fisheries (which could include involvement in the Ross Sea fishery). Further involvement exists against a backdrop of growing resource activism within the Ross Dependency. Maori fishing rights are a significant source of economic and cultural anxiety that have yet to fully impact on New Zealand's Antarctic policy and the situation as it applies within the Antarctic context is worth exploring further.

<sup>&</sup>lt;sup>6</sup> Te Tangi a Tauira – The Cry of the People.

www.es.govt.nz/.../Draft%20Iwi%20Management%20Plan/Draft%20Iwi%20Management%20Plan%20Complete.pdf

#### Fisheries

Today marine fisheries still play an important part in the social, cultural, ecological and economic quality of life for many Maori and is recognised in the Treaty of Waitangi and supported through New Zealand common law and legislation. Customary fishing rights are provided for by Maori to recognise Maori harvesting needs (lwi needs).

The Ministry of Fisheries is a New Zealand government department responsible, through its Chief Executive, to the Minister of Fisheries. This agency is the main one responsible for managing New Zealand's fisheries. The Ministry of Fisheries' international fisheries objective is to "maximise the value to New Zealand from the sustainable utilisation of fisheries resources beyond the New Zealand EEZ". More specifically, seeking to ensure fisheries and the environmental impacts of fishing are managed sustainably beyond the New Zealand EEZ; and to maximise economic opportunities for New Zealand in respect of fisheries beyond the EEZ.<sup>7</sup>

#### International treaties

Fishing on the high seas is governed through international treaties agreed between States. New Zealand has signed up to many of these treaties, and as a result, has a range of international obligations that are incorporated into New Zealand law. The two main treaties are:

#### The United Nations Convention of the Law of the Sea (UNCLOS)

This is the primary international legal instrument governing high seas fishing (among other things). It sets out a framework of rights, obligations and duties with respect to high seas fishing – most importantly, the freedom to fish on the high seas, balanced with the responsibility for a State to control the activities of its nationals and vessels.

#### The 1995 United Nations Fish Stocks Agreement (UNFSA)

<sup>&</sup>lt;sup>7</sup> http://www.fish.govt.nz/en-nz/International/default.htm

This builds on UNCLOS provisions, and sets out the framework for cooperation with other countries to conserve and manage highly migratory fish stocks such as tuna and stocks that straddle both the high seas and a state's EEZ. New Zealand's obligations in respect of these instruments are set out in Part 6A of the Fisheries Act.

#### **Regional Fisheries Management Organisations**

Within the broad framework of UNCLOS and UNFSA, specific areas of ocean, or in some cases specific fisheries, are managed through regional fisheries management organisations (RFMOs) or agreements. New Zealand is a member of three RFMOs –

- Commission for the Conservation of Antarctic Marine Living Resources
- Commission for the Conservation of Southern Bluefin Tuna
- Western and Central Pacific Fisheries Commission.

Each RFMO is established through a legally binding Convention. New Zealand meets annually with other member States to negotiate access to fisheries for New Zealand vessels and agree specific measures to conserve and manage the fisheries and their associated ecosystems. These measures are then incorporated into New Zealand laws and become legally binding on New Zealand vessels, companies and nationals.

Fishing in areas managed under the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR) is managed according to a precautionary approach. CCAMLR aims to ensure that fisheries do not develop at a rate faster than data can be acquired to determine sustainable catch levels. Fishing in these areas is subject to the agreement of the CCAMLR Commission, and fishing by New Zealanders is authorised by the issue of permits under the Antarctic Marine Living Resources Act (AMLR Act).

Several fisheries exist in the CCAMLR area (Figure 4), with some located within Exclusive Economic Zones of Commission members. New Zealand has been involved in fishing for toothfish in the Ross Sea region (Sub-Areas 88.1 and 88.2) of the CCAMLR Area since 1996. Sub-Area 88.1 extends to the west of the Ross Dependency and includes waters off the Australian and French Antarctic Territories. Sub-Area 88.2 is an area which extends around two thirds of the distance to Chile.

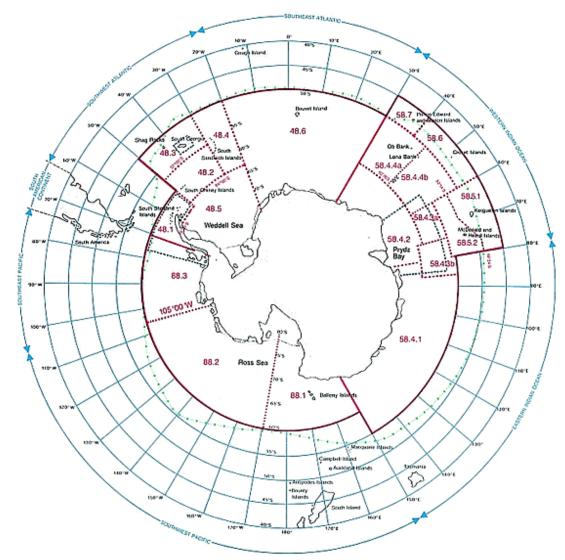


Figure 4: CCAMLR area (Baird, 2004).

#### Ross Sea Strategy

In 2005, the New Zealand government undertook a public consultation on a longterm framework for management of marine living resources and biodiversity of the Ross Sea. Views were sought on the future management of the Ross Sea including the establishment of Antarctic special protected areas (APSAs) and Antarctic specially managed areas (ASMAs), development of an assessed fishery under CCAMLR, additional elements of a management framework and research priorities.

Following the public consultation, in March 2006, the New Zealand Cabinet approved a strategy for the future management of the marine living resources and biodiversity of the Ross Sea. The strategy focuses on seeking a balance between well managed sustainable harvesting and marine protection that, in particular, safeguards the long-term ecological viability of marine systems, protects biodiversity, and protects areas potentially vulnerable to human impacts. Intermediate outcomes identified in the Strategy include the need to improve protection of the region's environment and achieve better fisheries management within CCAMLR including successfully address illegal, unregulated and unreported (IUU) fishing. Components to deliver these outcomes include increasing New Zealand's contribution to marine research and ecosystem monitoring in the Ross Sea, developing of a medium term management plan for the Ross Sea fishery, and promoting the establishment of marine protected areas on the high seas in the CCAMLR area.

An interesting point to note is the obvious disregard for Maori interests in this strategy. This is despite the Ministry of Fisheries openly proposing to expand fishing interests in the Ross Sea.

While fishing in Antarctic waters is supposedly regulated by the ecosystemfocussed (i.e. it is not supposed to be merely a Regional Fisheries Agreement) Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR) it is relevant to consider some of the short-comings descried by Hemmings (2004). These short-comings present opportunities for proactive involvement of Maori.

- It failed to prevent overfishing of Antarctic cod;
- The first generation krill fishery (peaking 528,201 tonnes 1981/2) collapsed with Soviet Union, so although regulating this fishery was a prime reason for CCAMLR, the jury is out on its performance. The second generation krill fishery has now taken off;
- There are well known problems with toothfish (Dissostichus) fisheries -
  - Increasing catches in authorised fishery
  - Initially at least, heavy massively destructive bycatch (seabirds, fish) in the authorised fishery
  - Massive problems with Illegal Unreported and Unregulated (IUU)
    fishery unsustainable catch of fish and massive seabird bycatch
  - o Breaches by CCAMLR members
  - Various half-hearted response measures
  - There is no FAO statistical area in Antarctica in which there is not now fishing, and fishing (in the Ross Sea) penetrates above 70 degrees south. We are now fishing in the most remote waters on our planet.
  - In the case of the Ross Sea Fishing started in 1996/07 and involved only 1 (NZ) vessel. For the 2003/04 season. CCAMLR authorised 25 vessels from 12 states to catch 3,760 tonnes of toothfish.

(Hemmings, 2004).

These issues present the need for a greater New Zealand presence addressing the real issues concerning resource management in the Southern Ocean. This provides opportunities for Maori to spearhead their already well versed sustainable resource management practices into areas such as in fisheries and conservation measures. Art is another significant aspect which should be considered when investigating relationships between Maori and the Antarctic. Maori have a unique, strong history in the arts and have much to contribute within this setting; however, despite this opportunity there are negligible Maori artists given the chance to experience Antarctica. In fact even the art displayed throughout New Zealand's Scott Base as well as other designs such as the unique Ross Dependency stamps are devoid of Maori 'flavour'.

Artists have travelled to Antarctica from the earliest explorations, with photographers Herbert Ponting and Frank Hurley perhaps the best known. New Zealand has supported artists in Antarctica since the beginnings of its involvement in 1956. In the early days of the New Zealand Antarctic programme most artists were either commissioned or NZ Defence Force artists.

In 1996 Antarctica New Zealand recognised that artists and writers could provide long-term benefits by raising public awareness of Antarctica to audiences which otherwise might not be reached. This brought forth The Artists to Antarctica Programme which was established in partnership with Creative New Zealand. Antarctica New Zealand provides, administrative and logistical support, and Creative New Zealand financial support. The programme encourages New Zealand artists in all disciplines to explore Antarctica through their work, thus increasing New Zealanders' understanding of Antarctica's value and global importance.

Antarctica New Zealand aims to cater, over time, for a wide variety of artistic styles and audiences, reflecting the diversity of Antarctica and New Zealand society. The artists are awarded the title of Antarctic Arts Fellows. Antarctica New Zealand occasionally invites artists and writers to travel to Antarctica for specific projects. The artists become honorary Antarctic Arts Fellows and travel to Antarctica under the Invitational Artists Programme.

#### Art

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Creative New Zealand is undertaking a review of all their Artist in Residence programmes during 2007. It is anticipated that this review will be completed in 2008. As a consequence of this review Antarctica New Zealand expects to be in a position to provide further information in anticipation of advertising the joint Creative New Zealand/Antarctica New Zealand Artists to Antarctica Programme sometime in 2008 for the 2009/10 Antarctic summer season.

These types of arts programmes provide ideal opportunities for aspiring Maori artists to become engaged and further promote aspect of Antarctica to a broader Maori audience.

#### Tourism

Tourism has been an increasingly big part of the Antarctic with tourists now arriving by sea and air; however, tourism and marketing of Antarctic related goods and services back in New Zealand is another important consideration which could perhaps also facilitate Maori involvement.

Significant opportunities to build on the somewhat little known, rich history that Maori share with the Antarctic present themselves. Existing establishments and events such as the Christchurch Antarctic Centre, marae hui, as well as museums present prime locations for such endeavours.

It is also relevant to consider the associations between sustainable resource management in the Southern Ocean and current Maori tourism ventures in New Zealand. Whale-watching is an example where particularly Ngai Tahu are already heavily involved. This industry is reliant on a Southern Ocean ecosystem which remains in a functional state.

#### The future of Maori involvement in Antarctica

Currently the state of Maori participation and involvement in Antarctic related activities is minimal. Haverkamp (2003) suggests that while ~500 people travel to the Antarctica with the New Zealand Antarctic programme, it is estimated that from this number as little as 10 would be Maori. In addition Maori who travel to Antarctica are likely to do so through the Royal New Zealand Air Force (RNZAF) who logistically support Antarctica New Zealand's Research programme.

Antarctica New Zealand has identified the need to facilitate and encourage Maori participation and despite the current low participation by Maori in New Zealand's Antarctic activities, there has been encouraging steps made in recent times. The Ngai Tahu Environmental Sciences Award – in conjunction with Te Tapuae o Rehua and Gateway Antarctica (Canterbury University) is a positive step towards facilitating and promoting Maori involvement in Antarctic pursuits. The award has been promoted as a means to support and build the capability (skills and experience) of Ngai Tahu members who are working and/or studying in the environmental science field and has successfully merged Maori interests and the reality which is Antarctica.

This particular scholarship focuses on Environmental Science as a pre-requisite for eligibility which relates directly to some of the resource management activities discussed earlier; however, other real opportunities exist to encourage and facilitate the incorporation of Maori into other Antarctic related activities (e.g. arts and tourism). Real avenues for Maori participation exist, particularly within the context of Antarctica art which is already promoted as part of New Zealand's Antarctic policy. Antarctica New Zealand openly states its aims to cater, over time, for a wide variety of artistic styles and audiences, reflecting the diversity of Antarctica and New Zealand society. This type of objective must include Maori participation and involvement.

## References

Baird, R. (2004). Coastal state fisheries management: A review of Australian enforcement action in the Heard and McDonald Islands Australian fishing zone. *Deakin Law Review* 9 (1).

Beaglehole, '*The Discovery of New Zealand*'. Dept of Internal Affairs, Wellington. p.3.

Berg, L.D., Kearns. R.A. (1996). Constructing cultural geographies of Aotearoa. *New Zealand Geographer* 53 (2) 1-2.

Best, E. (1923). *Polynesian Voyages: The Maori as a Deep-sea Naviator, Explorer, and Colonizer*. Wellington, New Zealand: Dominion Museum.

Department of Conservation. (2002). *Aoraki/Mt Cook – the ancestor of Ngai Tahu*. Accessed: 5/2/2008 http://www.doc.govt.nz/Community/005~Conservation-and-Maori/Topuni/050~Aoraki-Mt-Cook.asp

Dodds, K., Yusoff, K. (2005). Settlement and Unsettlement in Aotearoa/New Zealand and Antarctica. *Polar Record* 41: 141-155.

Groom, Roger. Accessed: 9/2/2008 http://www.astrophotography.com.au/galleryimages/182Apr2004F24\_ SCandP.jpg

Haverkamp, A. (2003). Maori and Antarctica. GCAS Major Report.

Hemmings. A. (2004). Commersial Penetration of Antarctica. *ECOlink* (October) p.6-8.

Hongi, H. (1925). *Voyage of Adventure, Ancient Maori Discovery of the South Pole*. The Weekly Press Christchurch NZ. Thursday June 18, 1925 (Front Page).

King, M. (2004). The Penguin History of New Zealand. Auckland: Penguin.

Ministry of Fisheries. Accessed: 4/2/2008 http://www.fish.govt.nz/en-nz/International/default.htm

Nga Korero Paki o Nga Whetu – The Stories of the Stars. Accessed: 3/2/2008 http://www.carterobservatory.org/index.php?option=content&task=view&id=505&I temid=103

O'Regan, T. (1994). The Māori view of sustainable land management. In: *Proceedings of the 1994 New Zealand Conference on Sustainable Land Management 1214 April 1994,* edited by Ralston, M. Lincoln University: Lincoln, Canterbury: 63-66.

Shanahan, Eunice. Accessed: 9/2/2008 http://www.earsathome.com/rosdep.html

Tasman District Council Website. Accessed: 3/2/2008 http://tdc.govt.nz/index.php?Whatsinaname?HuiTeRangiora(OuterIsland)

Te Tangi a Tauira – The Cry of the People. Accessed: 3/2/2008 www.es.govt.nz/.../Draft%20Iwi%20Management%20Plan/Draft%20Iwi%20Mana gement%20Plan%20Complete.pdf

Wood, A. (2002). Toponyms of Ross Island. University