



Koru: A study of Maori Jade and Bone Carving



Senior Project

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Maori Jade and Bone Carving



Introduction

I became really passionate about making jewelry six years ago when I attended my first metalsmithing class at Maine College of Art. I have always admired and been fascinated with the craftsmanship that produces a piece of jewelry or sculpture, and I wanted to further explore my fascination by engaging in the process. Maybe my love of adornment stems from the days when I made colored macaroni necklaces in preschool or from the way my mom used to wear twenty silver bracelets on one wrist. I loved the tinkling sound of all the bracelets shifting up and down her wrist with the slightest movement of her hand. My sister and I would go through my mom's jewelry box and relish in the thought of someday being old enough to wear one of her silver rings or bracelets.

I am not sure what prompted me to take up metalsmithing after high school never having worked with a piece of metal in my life; I was drawn to it. I had a small amount of fear that I wouldn't enjoy metalsmithing or that I would be horrible at it, but after the first class I was hooked. It didn't matter if I was awful at metalsmithing, which luckily I wasn't, because I found fulfillment and satisfaction from crafting out of metal.

Thus began my introduction to adornment. I spent two years at Maine College of Art improving my skills, being introduced to new ideas, and at times spending all night in the studio working on pieces. I think back on it now and wonder how I was able to function as a human being on such little sleep.

Through all my work and late nights I began to develop a connection to jewelry that I had never had before. Prior to attending Maine College of Art, all the jewelry that I



owned I had bought for myself at various stores. These pieces held no special meaning for me; they were just something beautiful to wear. The only value they possessed was aesthetic. In contrast, I found the pieces I was creating not only beautiful, but also full of meaning and symbolism. I received inspiration from natural elements, things like plants, leaves and spirals, but also from memories, thoughts, and parts of my existence. I was artistically placing parts of myself into my jewelry so that when I wore it, I was not wearing the jewelry to accent an outfit, but to express a part of my life or something I was passionate about.

My favorite piece that I created while at Maine College of Art is a silver locket. The front of it is pierced, a technique where pieces of metal are cut out to form a design in the remaining metal, to look like the spiral of a snail shell and leaves. On the inside I placed sea glass that I had collected when I was a child. The sea glass, in an array of different colors, could be seen from the outside of the locket through the piercing. The locket represents all the times in my childhood when my father would take my sister and me to the beach or around the islands in Casco Bay. On these trips I always combed the sand and rocks looking for sea glass, a habit I have to this day. The locket was not just a nice thing to look at, it told the story of a small part of my life that had made a lasting impression.

I was only a part-time student at Maine College of Art and in order to major in metalsmithing I would have had to become a full-time student. I couldn't see myself attending only art classes. I was just as interested in the environment that fueled my inspirations as I was in art and wanted to learn more about the ecology and natural history of plants and animals. I made a decision to leave Maine College of Art, but continue



studying metalsmithing on my own. I took a year and a half off, in that time traveling cross-country, living in Vermont, and making jewelry when I could.

I came to College of the Atlantic in the fall of 2004. In my first term I did an independent study entitled *Native Tribal Jewelry*. The intent of the study was to assess if jewelry held a deeper importance to other cultures than my own rather than the creation of objects that were merely aesthetically pleasing. I specifically sought to examine tribal cultures to observe if and how they used jewelry in a spiritual sense, what shapes represented and why they were used. I decided to focus on the cultures of Native Americans, Asians, Africans, and Pacific Islanders.

I was concerned with the lack of spiritual connection that the American culture I grew up in had with adornment. In our culture jewelry is something pretty to wear, but often there is no spiritual connection or meaning behind the jewelry. In all the tribes I studied, I found deep spiritual connections and traditions surrounding the making and wearing of adornment. Often, if not always, jewelry in native tribes was made with natural objects. I was particularly struck by the Maori culture of New Zealand and their use of jade and bone. I enjoyed the beauty of Maori designs, but I also understood that for the Maori jewelry held much spiritual meaning.

My independent study is what inspired me to go to New Zealand. The trip started out as an idea that popped into my head one day. I had wanted to go to New Zealand for years, and studying Maori jade and bone carving was a worthwhile reason to do so. With the help of a couple wonderful COA faculty and an amazing alumna, I was able to make my senior project happen. I went to New Zealand for three months, traveling to both the north and south islands. My original plan was to apprentice under one jeweler, but that



did not work out. I think it was for the best, though, because I was able to travel and meet many different jewelers who all had different stories to tell.

Most of my trip was spent studying Maori traditions, symbols, mythologies, and materials used to make jewelry. The only piece of jewelry I made while I was in New

Zealand was a jade *koru*. I had never carved stone or bone before, so the experience was completely new and challenging. In Hokitika, the jade capital of New Zealand, I worked with Steve who owned a studio called "Stones and Bones". He taught me



the entire process of jade carving and was extremely curious about COA letting me come to New Zealand to study Maori jade and bone carving for my senior project. I worked for nine hours to produce one two-inch jade pendent with the help of modern machinery such as rock saws, sanders, and diamond tipped grinders.

Traditionally only obsidian and sandstone were used to carve jade and the



carvings took months. Although using machinery is a lot faster than traditional methods, I think there is some intimacy that a jeweler shares with their piece that is lost. After spending months working on a pendent or tool, the artist develops a deep connection with the piece and puts a part of

themselves, their life, into that piece. I used a Dremel tool to make all the jewelry for my senior project. I would have liked to use traditional methods, but unfortunately I only had a month to make ten pieces of jewelry.



I made all the bone pendants for this project in my parent's basement after returning

home from New Zealand. I was inspired by traditional Maori design, but also the beauty of New Zealand and the sights I saw there.

Bone carving is a messy business. I had to have a vacuum and a fan running at all times



to get rid of all the bone dust. The smell of burning bone permeated the dust mask I wore at all times, which was fairly disgusting as burning bone smells like burning hair, only ten times worse. Nonetheless, I enjoyed every minute in the basement. There is an inherent need that I have to make adornment using nature as my guide.



Going to New Zealand was by far the best three-months of my life. I achieved all the goals I set for myself and infinitely more. This project is a reflection of what I learned about Maori jade and bone carving, New Zealand, and its people.



Materials



Pounamu

Pounamu is the Maori word for "green stone" or jade. The term pertains to all jade-like stones used by the Maori, including serpentine (*tangiwai*).

There are two types of jade found in the world: jadeite and nephrite jade. Nephrite jade is the only jade found in New Zealand and is located only in a small area of the upper west coast of the south island. Ancient *pounamu* artifacts can be found as far north as the northernmost tip of the north island, suggesting that the Maori people traveled and traded extensively.

Nephrite jade is made up of calcium magnesium silicate and various amounts of iron. Iron is what causes the many different shades of green in *pounamu*. One of the alluring aspects of *pounamu* is its translucence when held up to light. It is also one of the hardest stones. Maoris began using *pounamu* around the twelfth century and it was commonly used by the fourteenth. *Pounamu* was used for adzes, pendants, tools, and meres. Meres are Maori war clubs made entirely of jade. These are quite impressive and could deal a lethal blow.

In the past, huge jade boulders could be taken out of the rivers by anyone who found them, but recently the rights to the land and rivers where most of the jade is found have been given back to the Maori people. Now one needs special permission from the Maori people to remove any jade or to even go on the sacred land. Jade can be found on the beach in Hokitika, but it takes perseverance and time to do so.

Pounamu was and is a treasure to the Maori people. Pounamu holds vast spiritual and ethereal qualities and is considered a cherished possession by the Maori. They believe that pounamu represents mana, or spiritual power and rank. Mana can be



absorbed into a pendant much like oil on the skin. When a person wears a pendant, it absorbs their spirit, becoming a part of them. The person and the pendant become one. Traditionally, when a person died their pendants were passed on to another family member and usually named after the person who had passed. The pendants were placed in specially carved wooden boxes and considered *taonga*, or treasures. If the relative that the piece was being passed to was considered unworthy by the family, the piece could be buried with the owner or thrown into the sea.

A carver instilled his *mana* into his pieces through skill, courage, and endurance. Before the use of machinery and diamond-tipped blades, carvers would spend months, even years, carving one piece. Obsidian was used to drill holes and sandstone was used to grind the *pounamu* down and into shape.



Bone

Bone is nearly as significant to the Maori as pounamu. The bones of dogs, birds, whales, and humans were used to make pendants and other tools. In early carving, the leg bones of the extinct Moa were used. The Moa was a large flightless bird native to New Zealand at the time the Maoris arrived 700 years ago. The largest species of Moa grew to be 11.5 feet tall and weighed over 441 pounds. They were hunted for food, bone, and feathers and this, unfortunately, is what led to their extinction.

Whales are sacred to the Maori who believed that whales, like humans, possessed mana. By wearing a whalebone or tooth pendant, the wearer absorbed the mana of that creature. Whalebone or tooth pendants are uncommon because the Maori would only take bones and teeth from whales that had washed up on shore. They believed that the beached whales were a gift from Tangaroa, the God of the Sea. During the seventeen and eighteen hundreds New Zealand had a large whaling industry and whalebones were easily found at whaling stations. However, the Maoris would not touch these bones because they did not believe in whaling. The animals were slaughtered, therefore, the bones were not a gift from Tangaroa and contained no *mana*.

Many tribal wars have occurred throughout Maori history. Cannibalism was practiced at times because it was believed to be the greatest insult one could bestow upon their enemy. To eat a man was to destroy his *mana*. Making pendants out of the leg or arm bones of an enemy was also a great insult. It gave the warrior who wore the bones high prestige.

Today most, if not all, carvers use beef bone because it is easily accessible and inexpensive. Whalebone is used when it can be found and is still extremely sacred.



Symbols



Koru



A spiral that is representative of an unfurling fern frond. It symbolizes new growth and new life. It also signifies peace, tranquility, and the desire or need to be surrounded by tranquil elements.

Hei Matua



A fishhook. It symbolizes provision and prosperity. They are often worn on fishing trips for good luck.

Hei Tiki



A squatting figure with knees bent, feet together, hands on thighs, and an accentuated abdomen. The head is always cocked to one side. The eyes are large and fishlike and are sometimes inlayed with coral or paua shell. It is said the *Hei tiki* was the first Maori man who came from the stars. Traditionally only the chief of the *iwi* (tribe) wore *tiki*. They were given to people who were thought to be clear thinking, knowledgeable, loyal, and perceptive. They were almost always made out of *Pounamu*.



Te Manaia

A birdlike spiritual or mythical creature considered to be a tribal guardian. It was made to frighten away intruders. The figure is usually in profile and has three fingers and toes representing birth, life, and death.

Kaka Poria

These pendants were first used as leg rings to tether decoy parrots (kakas or keas) and eventually became used as adornment. Decoy parrots were tames birds used to lure wild parrots into traps or close to hunters. *Kaka Poria* could be made out of bone or jade.

Tools and Adzes



Carvers often wore their jade tools around their necks, these tools were later transformed into forms of adornment. This was also done with jade adzes; however, the adzes worn around the neck were small replicas of the adzes used to carve out canoes.



Traditions

There are many traditions surrounding the giving, receiving, and wearing of *pounamu* and bone pendants. They were strictly abided by in the past, but in contemporary culture, many people who buy jade or bone do not follow the traditions or even know they exist.

These are some of the traditions:

- The first piece that a carver makes is always given away as a gift
- You don't buy yourself a jade or bone pendent; you have one given to you
- Someone other then yourself, preferably the giver, should place the pendant around your neck
- To make peace with the carver's mana that has been put into the piece, you hongi
 with it. Hongi is the Maori greeting where two people touch noses and foreheads
 and share a breath of life
- It is tapu, forbidden, to make an exact replica of another piece especially ancient pieces
- The piece is worn "Where your collar-bones meet in the front, above the chest
 and directly beneath your throat, [in this] little cavity. There it should sit because
 it is closest to you manawa (heart)." Kaumätua



Mythology



How Pounamu Came to Aotearoa

When the Maori world was created, *pounamu* took the form of a fish named Poutini. Poutini's enemy was Hin-tu-a-hoanga, the lady of the grindstone. She was the personified form of the sandstone used to shape and buff *pounamu*. She had a fish: Mata, who represented the obsidian used to drill holes in *pounamu*.

Ngahne, a friend of Kupe (the Maori ancestor who would later discover New Zealand), fled from the Maori homeland of Hawaiki with his fish Poutini to escape Hintu-a-hoanga. Poutini carried Ngahne on his back through the seas, but Hin-tu-a-hoanga learned of their escape and, with her fish Mata, set out to overtake them. She caught up with them on Mayor Island in the Bay of Plenty; Ngahne and Poutini were forced inland. They traveled south continuously for fear of being overtaken over by Hin-tu-a-hoanga and other personified stones. When they were exhausted and thought they could no longer fight off Hin-tu-a-hoanga and her fish, they reached the Arahura Valley on the west coast of the South Island. Poutini could go no further and Ngahne was able to lay him to rest peacefully. Ngahne took a piece of Poutini with him back to Hawaiki, and from this one piece of Poutini adzes were made which built the great canoes the Maori ancestors traveled to *Aotearoa* (New Zealand) in.



Te Ika a Maui

Maui was a Maori demigod who lived in the ancient homeland of Hawaiki. One day Maui set out fishing with his five brothers. When they had paddled their canoes far out to sea, Maui took out his magic fishhook made from the jawbone of his sorceress grandmother. He used blood from his nose as bait, tied a strong rope to the hook, and cast it out of the canoe and into the deep water. He soon felt an immense tug on the end of the line. He implored his brothers to help him haul in the great fish. They pulled with all their might, and when the fish surfaced it became the north island of New Zealand, called Te Ika a Maui, The Fish of Maui. Wellington Harbor is the fish's mouth, Lake Taupo its heart, Taranaki and the east coast are its two fins, and the Northland its tail. Mahia Peninsula in Hawkes Bay is called Te Matau a Maui, The Fishhook of Maui. The south island is known as Te Waka a Maui, The Canoe of Maui.

Even today, fishhook pendants are worn on fishing trips and in general and for good luck in particular.



The Beginning

The Maori world began with Ranginui, Sky Father and Papatuanuku, Earth Mother. Ranginui and Papatuanuku were united, so much in love that they clung to each other always. No light passed between them, leaving only darkness for many, many years. During this time they bore numerous children: Tawhiri-mahuta, the God of Winds and Storms; Haumia-tike-tike, the God of Wild Foods; Rongo-matane, the God of Peace and Cultivated Food; Tu-matauenga, the God of War and Humans; Tangaroa, the God of the Ocean; and Tane-mahuta, the God of the Forests.

After years of living in utter darkness the children of Ranginui and Papatuanuku became restless. They wanted light and life in their world, so they came to a decision that they would try to separate their parents. Each God tried but failed to part Ranginui and Papatuanuku. When the time came for Tane-mahuta to try, he planted his shoulders on the ground and his feet in the sky. With all his strength he was able to push his parents apart. Light entered the world and life was born.



Jewelry and Gallery Show



























Artist Statement

For the last six years I have been making jewelry; it is my passion. It is satisfying to create a wearable form of art that is not only beautiful, but that holds part of my life in it. I spend a great deal of time and energy on each piece and when I am finished I have often developed a deep and lasting connection with it. The pieces reflect part of my life, who I am, the memories that I cherish.

I went to New Zealand to study Maori jade and bone carving because I was interested in how another culture perceived adornment. By making my own jewelry I have come to value and appreciate the craftsmanship and soul that goes into hand crafted pieces. I felt there was a disconnect between spiritual and aesthetic aspects of adornment in what I had been taught, in the United States so I decided to go half way around the world to see if the Maori culture had retained that connection.

I found that the Maori culture is rich in spirituality and that much of this surrounds bone and jade carving in particular. The belief that a pendant can absorb one's *mana* or spirit amazed me. I was astounded to find that there are even rules on giving, receiving, and wearing pendants. The Maoris connection to adornment surpass life itself. When a person dies a piece their spirit is forever held in the pendant they wore in life.

I traveled around both the north and south islands of New Zealand for three months. I talked with as many jewelers as I could find and asked them to tell me their experiences, how they became jewelers, and what inspires them. Nature and the forms it can take inspires me. The natural beauty of New Zealand had me in awe the entire time I was in the country because there was always something exciting to see or learn. I was filled with so much exhilaration that I wanted to skip and dance everywhere I went.

This show is a materialization of the inspiration I received from the Maori people and the country of New Zealand. My jewelry, photographs, and writing are only a small reflection of what I witnessed in three months. New Zealand has filled me with enough inspiration to last a lifetime, maybe two.



Journal Entries



Introduction

I went to New Zealand specifically to study Maori jade and bone carving, but I figured, since I was flying half way around the world, I should spend as much time there



and experience as much as I could. I particularly wanted to learn more about New Zealand's history and ecology while I was in the country. I left home not knowing a soul in New Zealand except one COA alumna who I had exchanged emails with for six months. Part of me felt great about this -- it was the first time in my life that I had gone somewhere on my own and did something

completely for myself. The other part of me was scared to death. I'd never really thought of myself as someone who was brave enough to leave everything and everyone I knew and go to a completely unfamiliar place. This trip made me realize how adaptable we human beings can be. When put in an uncomfortable position, I had to change my

habits in order to survive. For the first two weeks I was miserable, so homesick that I questioned whether I was completely crazy to even think I could spend three months alone in a foreign country. Three months began to seem like



an eternity, but then I realized that I had no one else to rely on but myself. I had to be strong and go after what I wanted. People were not going to seek me out; if I was going



to accomplish everything I had come to New Zealand to do I needed to get out, start talking to people, and stop wallowing in my own self-pity. I didn't have someone to hold my hand; instead I suddenly had a new life that was entirely unlike the one I had known at home.

I absorbed as much information about New Zealand as I could. While I was traveling, I would often mention, to my friends bits of knowledge I had picked up along the trip. My friends would ask, "How do you know all this stuff?" I would answer, "I pay attention."

I kept a journal and wrote in it religiously every day while on my trip. At home I am horrible about keeping a journal, usually going months between entries. Keeping a



journal everyday is completely out of character for me, but I am extremely glad that I did. I now look back at the entries and they bring back so many great memories, even of the days that I thought were boring at the time. This is a collection some of my

favorite and most eventful memories of my trip with information about New Zealand woven in-between.



Brave New World



I've lost a day and I don't know where to find it. I left on the 5^{th} and arrived on the 7^{th} . Where did the 6^{th} go? I guess I was nonexistent for one day!

These are the first sentences I wrote in my journal. Funny the things one thinks of when they are delirious with sickness and have been sleeping for practically sixteen hours straight. Time on a plane is strange, though. By crossing so many date lines an entire day was gone, but a day was gained on the return flight. I left Auckland at 8:40 p.m. on March 1st and landed in Boston at 9:00 p.m. on March 1st. Theoretically I was only flying for twenty minutes.

Well, I have finally made it to New Zealand!! The trip over here was a bit tedious, but I mostly slept on the twelve-hour flight and woke up feeling like I had been run over by a truck. The guy I sat next to on the plane was from Montreal and is also spending three months here. It was weird that he was the only person that I repeatedly saw at the LA airport, and I ended up sitting next to him. He was wearing big gold sunglasses and a trucker cap so that may have helped him stick out. He is staying in Dunedin with his parents and told me that if I needed a place to stay I was welcome there. I think I will take him up on the offer when I make my way south.

When I was going through customs at the airport, a security woman was walking around with a beagle. The beagle was sniffing out illegal things in people's bags. I was standing in line minding my own business when all of a sudden the dog jumped on me.

To make a long story short, I had forgotten to eat an apple and a bag of carrots that were



in my bag and the dog had sniffed them out. It was really embarrassing and I could feel my face turning bright red, which hasn't happened in a while. So because of that I had to go through biosecurity and have my bags searched and my boots washed off.

Biosecurity in New Zealand is tight. In the U.S. they search people in the airport for weapons of mass destruction, well maybe not mass destruction, but objects that could potentially cause bodily harm: things like knives, guns, and box cutters. In New Zealand they search people for food or critters that may or may not have been purposefully stowed in one's bag. I wonder how many unsuspecting tourists are embarrassed at the airport, like I was, when they forget to eat their carrots? It is understandable and a matter of common sense that New Zealand doesn't want introduced pests or diseases. They already have enough introduced species to deal with, and because New Zealand is relatively isolated geographically; any pest or disease introduced into the country is likely to have detrimental effects on the environment, economy, and industry.

However, not everyone has to go through biosecurity. I had to because of the carrot incident and because I was carrying camping equipment. The authorities want to make sure that foreign soil from boots or tent poles doesn't make it into the country. I didn't get reprimanded for forgetting about the apple and carrots or forgetting to wash my boots, but the embarrassment of it all was enough to ensure that I will never forget to be careful again.

After I made it through the airport I called Mum and Dad to tell them I had landed safely in New Zealand. Then I caught a bus from the airport into Auckland. I had



to hop on another bus to get to Parnell, a suburb of Auckland, where I was staying in a hostel. Finding the bus was easy, but I ended up losing my wallet either on the bus or



walking from the bus stop to the hostel. I had been at the hostel for about half an hour and was about to get out my wallet to pay when I realized it wasn't in my back pocket. I mentally freaked out, searched through all of my stuff five times, and concluded that it

was really missing. So I spent the day repeatedly calling the bus depot and going into town trying to track my wallet down, but with no luck. Tomorrow I am going to call the bus depot again and go to the police station down the street. If I don't find my wallet I will have to cancel my debit card. Why, oh why, did I have to lose my wallet? It sucks.

Losing my wallet was probably one of the more strenuous things that could have happened to me on my first day in a foreign country. What made me feel especially stupid was the fact that I had only been in the country for two hours! I was very glad that I hadn't put all my money on my debit card, instead opting to take traveler's checks. Still, it was quite a stressful day and an event that one who is jetlagged and sick especially doesn't want to deal with. Before this incident I had never lost my wallet. I was actually scared to call my parents and tell them. I thought they would be angry with me, seeing this incident as reason to believe that I was careless and unable to take care of myself. Of course this is not what they thought, or at least I don't think they did. They saw it for what it was -- a mistake that was not too detrimental. I lost some cash, but I



had traveler's checks; I lost my debit card, but that could be canceled and replaced; and I lost my license, but I had a passport. Worse things could have happened, but at the time I saw losing my wallet as a bad omen.

The wallet fiasco jaded my initial perception of Auckland and that perception never got any better with time. I wasn't expecting to find such a large city in New Zealand, and as the first place I was thrust into, it was a bit overwhelming. I was expecting few people, lots of sheep, rolling hills, and maybe a hobbit or two. What I got was skyscrapers and bustling streets filled with so many people that I felt lost in a sea of business suits and high heels. I had been to New York City before leaving for New Zealand and it felt less crowded there than in Auckland. However, the rest of New Zealand was nothing like Auckland. The rest was as I had expected and much, much more. What really struck me, aside from the amazing natural beauty and diversity of landscapes, plants, and animals, was that I was treated with such kindness everywhere in New Zealand, something I haven't always experienced in the U.S.

In New Zealand sheep outnumber humans ten to one. New Zealand has a human population of 3.95 million and a sheep population of 39.2 million. I found the sheep to be a bit wary of humans, and as much as I tried I was only able to make one four-legged, wooly friend. However, the humans in New Zealand were overwhelmingly generous and kind, and I have felt more welcomed there then I ever have in another country.

I have to wonder how one country can have so many people who are so willing to go out of their way for perfect strangers and how an overwhelming majority of the population can be so nice. For example, I was staying with COA alumna Susi Newborn when I first arrived in New Zealand. She was having family over for Christmas and



would have no room for me in the house. I was planning on spending Christmas in a hostel, probably depressed and missing home terribly. One afternoon we went to Susi's friend's house to pick up Susi's children. While there I met a family from the Auckland area. They were full of questions: what was I doing in New Zealand, where was I spending Christmas? I told them that I had come to New Zealand to study Maori jade and bone carving, and since I didn't know anyone in New Zealand, I would be staying in a hostel for Christmas. After knowing me for five minutes they invited me to spend Christmas with them. I was stunned. I have never known strangers to be so warmly generous. They became my adopted family in New Zealand and I am still in contact with them.

I think that people in New Zealand are like this because the country is small. Both islands could be placed on top of the east coast of North America and not even stretch from Maine to South Carolina. New Zealand is also a very narrow country. The Southern Alps run along the middle of the south island and can be seen from both coasts. Not many people live in New Zealand. The population is, as I mentioned before, about 4 million, more than half of which live in Auckland and the surrounding suburbs. There are more people living in Auckland than on the entire south island. Due to these factors, New Zealand has a "hometown" kind of feel -- everyone watches out for each other and helps when they can.



Salvation and Sunburns



I am on Waiheke and HOLY SHIT!! it is gorgeous, nothing like Auckland. It is paradise. Susi picked me up at the ferry terminal. I have been imagining what she would



look like. In my mind, I saw her looking like Kerewin Holmes from The Bone People: in her forties with crazy, bushy, graying hair. I changed my mind on the way over to the island and thought she might be tall, thin, in shape. However, when

she found me it turned out that my first suspicion had been right. She looked exactly, and I mean exactly, like I first thought she would look. I am never right about these things.

She took me into town because she had a meeting and showed me where Paora's shop is. While she was at her meeting I went into his shop and introduced myself. I think once I said hello he knew who I was, probably because I was looking at him as if I knew him. We talked for a while, I asked him if I could come by and talk to him a bit more, and we scheduled an interview for Thursday morning. Susi had to go back to work, so we grabbed a bite to eat then she left me in town to hang out on the beach. I got sunburned and I wasn't even in the sun for very long.

When Susi picked me up we went to her house and I met her daughter, Nawwie, her son, Woody, and her husband, Luc. I also met her older daughter, Brenna, at the Marae where Susi works as a councilor. They are all very nice. Susi is a bit crazy, but I guess I expected that. I met their dog Luna as well. He looks like a very small wolf. He



was afraid of me at first, but by the end of the night he wouldn't stop licking me and biting my ankles. Apparently the ankle biting is a sign of dear affection.

I owe a lot of thanks to Susi Newborn. Because of her, I was able to go to New Zealand. She not only took me in for the first and last weeks of my trip, but she talked to local jewelers and introduced me to them, through email, before I even went there. I had already established communication with at least two jewelers before I went to Waiheke thanks to Susi. She is an amazing woman. She has led a life loaded full of adventure and craziness and is braver then I could ever hope to imagine. I couldn't envision living in three lifetimes what she has lived in one.

After dinner, Susi and I went to Palm Beach to get ice cream. The beach is split in two by an outcropping of rocks, so when you are on one side of the rocks you cannot

see the other part of the beach.

When looking at the water, the most beautiful part of the beach was to the left; it also happened to be a nude beach. There were many naked men playing Frisbee or frying their



scrotums in the sun. Thank God I was with Susi and I could look at her while I was walking. I don't know where to look when I am surrounded by publicly nude people -- I can't help catching normally concealed pieces of flesh out of the corner of my eye.



The sun in New Zealand is extremely strong. I knew this before I left Maine, but I don't think any amount of prior knowledge would have prepared me for how intense the UV rays really are. New Zealand basically has no ozone layer, almost all UV rays from the sun make it into the atmosphere. I came home the tannest I have ever been and I wore SPF 30 sun block the entire time I was there. If I wear this sun block in Maine, I barely get a tan. Skin cancer is prevalent throughout New Zealand. The mortality rate from skin cancer in New Zealand is one of the highest in the world with 250 deaths caused by melanoma each year.



Possums Attack

Possums Attack

I was staying in Marahau, located on the upper west coast of the south island, with two friends. After staying for a few days we decided to go camping with a couple of people we had met at a hostel. The campsite was a remote beach that could only be reached by crossing the flats at low tide or taking a strenuous inland track. We had to get to the beach before high tide at 6:00 p.m. to get across the easy way; however, my friends were not too bothered about getting to the beach before high tide and we ended up having to take the hard track to Taupo Point.

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We got to the beach that we needed to cross at 6:00. It was the worst possible time to cross because the tide was completely up and we had to edge our way along the rocks to get to an inland track. Darryn had borrowed my big pack and he and Kate were carrying considerable loads. I had my small pack with necessary clothes, sleeping bag, and toiletries. I was also carrying two tents and a giant sleeping pad. Going along the

rocks was hard work and I don't know how Kate and Darryn managed. At one point, needing to use my hands to climb down a ledge, I tossed the tent and the sleeping pad onto the rocks in front of me.

The tent landed firmly, but the sleeping



pad bounced, landing right in the water. I shouted a few choice words like, "Shit, fuck, damn it," because not only was the sleeping pad in the water, but it was also starting to float out to sea. Luckily I had my bathing suit on, so I took off my clothes and jumped in



after it. I was later told that back on the rocks, the others were wondering why I had chosen this moment to go for a swim. After jumping into the water, I managed to swim into some rocks and cut my hand on the mussels that had decided to make the rocks their home. When I got into deeper water I kept thinking that I was going to be eaten by a shark! By the time I caught up with the sleeping pad, it had already floated out about thirty feet. I grabbed it and managed to haul it back to the rock ledge. Climbing onto the barnacle- covered rocks, I realized that my brand new sunglasses had gotten scratched. This made me even more pissed off.

Then I was informed that we had passed the inland track and had to go back



along the ledge to find it. At this point I was ready to give up on this camping trip. I was trudging along, regretting that I had come camping, when we finally made it to the beach.

It was well worth all the trouble to get there. It

was the most beautiful beach paradise that I have ever seen. It even had the added bonus of a colony of shags and oystercatchers occupying a small stretch of sand.

Taupo Point was amazing, almost perfect aside from the horrible hike and the fact that the place was infested with Australian bush-tailed possums. The Australian bush-tailed possum is the most loathed pest in New Zealand. Introduced in 1837 for their fur, the possum has become so adapted to New Zealand that 70 million of these creatures now live there. They strip native trees of their new vegetation and eat the eggs and young flightless birds. New Zealanders hate the possum. Given the opportunity to kill them,



any New Zealander will happily oblige. I was told a story about a man from New Zealand who went to visit some friends in Australia where possums are endangered and protected. The man was sitting next to a campfire with his mates and out of the bush came a curious possum. In a fit of blind rage and hatred the man picked up a large stick and proceeded to beat the unsuspecting possum to death. When he was satisfied that it was not going to get up and scurry off, he turned around to see that his mates had looks of horror on their faces, jolting him back to the reality that he was not in New Zealand.

The only mammals native to New Zealand are two species of bats. However, with the arrival of humans came the arrival of a plethora of mammalian pests. Whether introduced intentionally or accidentally, New Zealand is now home to stoats, ferrets, rats and possums, all of which love to feed on ground-dwelling birds and their eggs, in addition to native vegetation. New Zealand has an amazing array of native birds. Some of these birds have evolved to be flightless due to the historical absence of mammals on the islands. Now, with the introduction of mammalian pests, New Zealand's native bird populations are in trouble, and massive efforts are underway to try and rid the country of unwanted creatures.

I had my own encounter with the cheeky bush-tailed possum while camping at Taupo Point in upper Abel Tasman National Park. We set up camp, then started a fire. We were sitting around chatting when we heard a rustling in the bushes behind us. I broke-out my flashlight, shined it into the bush, and there, sitting on a driftwood log was a possum. Now, I have lived in New England all my life and the word possum conjures the image of a large gray, rat-like creature that I have never actually seen in the wild. The Australian bush-tailed possums are nothing like the possums I imagine. They have



soft fur, big ears, pink noses, and are actually cute. They are also not afraid of humans, at least these possums weren't. We threw sticks at them and chased them, but they always

crept back out of the bush to investigate what we were doing. In retrospect, maybe this was a distraction technique so that the other possums could fulfill their mission: eating as much of our food as they could get their paws on. I was the first to go to bed and as I was walking back to the path from the beach, my flashlight caught a possum sitting in the middle of the trail, happily munching on what looked like a large wad of bread. I then



remembered that we had hung the food in the trees, thinking of protecting it from bears rather then small furry animals who live in trees. I rushed back to the campsite to find possums hanging upside down eating everything. I yelled, I got close to them, I even poked one with my flashlight, but they were unaffected by my presence. I had to literally shake the trees to get them away from the food. Eventually we ended up sleeping with the food in our tents because the possums were even coming under the rain flies to get at it. I didn't get much sleep that night.

In addition to possums, Taupo Point is full of Maori History and European history. Taupo Point actually changed the course of history for the whole country of New Zealand. In 1642, Dutch explorer Abel Tasman was the first European to discover New Zealand. As I have been told, his ship anchored at Taupo Point so that some men could go ashore and collect water. There was a Maori *Pa*, or fortress, next to the beach and



upon seeing the Dutch ship the Maori warriors blew horns challenging the Dutch to battle. Not knowing anything of Maori customs, the Dutch blew horns back thinking it was a sign of friendship. However, the Maoris took this to be a sign that the Dutch accepted their challenge. The Maori warriors got into a *waka*, or canoe, and paddled out to meet, in battle, a boat that was sent ashore by the Dutch. The Maori waka rammed the Dutch boat, killing three men. Tasman was so shaken up by the incident that he turned his boat around and never came back to New Zealand. Taupo Point was known as Murderer's Bay for quite some time. Since Tasman didn't claim New Zealand for the Dutch, it came under British rule when Captain James Cook sailed there in 1769.

I also saw my first New Zealand fur seal at Taupo Point. One of my friends had gotten mad at the rest of us and had gone for a long walk without telling anyone. Hours



later, when she finally returned, she reported that there were seals hanging out on the rocks about a _ of a mile down the beach. I made the mistake, in my excitement, of not bringing along shoes. The entire _ mile of rocks was covered in tiny barnacles and my poor feet where screaming by the time we reached the seals. One large male New Zealand fur seal was sitting on a rock by the edge of the water, scratching

himself. He was beautiful and unaffected by our presence. He just went on scratching as I slowly inched closer to him, getting about five feet away. He looked like a bear with flippers.





The male seals that I encountered were not aggressive, but they can be when females are in the area. All the seals that I saw at Taupo Point were male, which leads me to believe it was either past the breeding season or the seals I saw were

juvenile. Male New Zealand fur seals can grow to be 5.2 feet in length and weigh 355 pounds, while female New Zealand fur seals are a considerably smaller, growing to 4 feet in length and weighing 88 pounds. The seals are common in the waters off the coasts of New Zealand and southern Australia. New Zealand fur seals feed at night and are known to dive deeper and longer periods of time than any other species of fur seal. Seals have been recorded off the Otago Peninsula, diving to depths of 238 meters, or 781 feet, for 11 minutes, but usually they only dive for 1-2 minutes.



In Awe of Franz Josef





The glacier was absolutely amazing. I felt like skipping and dancing, but people probably would have thought I was crazy or something. I am in awe of the spirituality of this place. I have yet to lose my feeling of complete insignificance in this country. It is astonishing to have nature fill me with so much joy and wonder.

Franz Josef Glacier was a magnificent sight. I had never seen a glacier before so I was tremendously excited when I first

caught a glimpse of it. I think my eyes were about to bulge out of my head and I had a sappy grin plastered on my face, I couldn't stop smiling. The craziest and most unexpected thing about the glacier is that it descends into a rainforest. One would think that if a glacier descended into a rainforest, it would be constantly retreating. However, Franz Josef Glacier is one of the only glaciers in the world that still flows nearly to sea level. At the glacier's terminal face, one can see a large river gushing from the mass of ice.





Franz Josef is located on the middle west coast of the south island where a band of wind called the 'roaring forties' crosses from the Indian Ocean. Thirty meters of snow falls annually onto the glacier because weather coming from the west is forced over the Southern Alps causing it to cool and lose its moisture in the form of rain and snow. The weight of the snowfall pushes the glacier

down the valley at a rate ten times faster then most glaciers. Franz Josef Glacier is 7,000 years old. The first European discovery of it was in 1863 by Julius von Haast. He named it after the Emperor of the Austro-Hungarian Empire.



Cheeky Keas



Milford Sound was one of the places in New Zealand that I desperately wanted to see. I was traveling on a bus system, and to go to Milford Sound for a day would have cost me NZ 164 dollars. I was on a tight budget and couldn't afford, nor did I want to spend, 164 dollars for a five hour bus ride, a two hour ride around the sound, then another five hour bus ride back to Queenstown.

Luckily while I was in Queenstown I randomly met up with two friends that I had hiked with in Franz Josef, Steve and Kevin. Steve had a car so the three of us did a lot of

hiking around the Queenstown area. After a couple of days they mentioned that Milford Sound was the next stop on their trip. I sheepishly asked if there was room in the car for a small person such as myself, which of course I



knew there was since I had been occupying the back seat for three days. I was so excited and I must have thanked the two of them about thirty times for allowing me to come along. I actually never got back on the bus, instead traveling with Steve and Kevin for the rest of the trip.

I was over-excited even before we got to the sound. The drive through Fiordland National Park was breathtaking, the road cutting through massive mountains thick with green vegetation. At one point we stopped the car to get out, stretch our legs, and take pictures. I couldn't help but do a little happy dance; I didn't care what the guys thought. Later in the trip, Steve teased me saying, "You know, Kevin and I seriously thought about leaving you behind after that."



We visited Milford Sound on a rare day – it was sunny. Normally Milford Sound is one of the wettest places on earth, annually receiving 8 meters, or 23 feet, of rain! As we cruised through the sound, the captain mentioned over the intercom that there was a drought because it hadn't rained in 92 hours!

All the rain creates a layer of fresh water on top of the salt water in the sound.

Tannins from the vegetation living on the cliffs and shores reduce the amount of light that



penetrates the water, restricting most marine life to a depth of 40 meters, or 131 feet. Because less light filters through the water, species that would normally be living much deeper in the sound, such as black coral, are found closer to the surface. Milford Sound, which is actually a fiord, is 1,000 feet deep and the cliffs rise 3,000 feet straight out of the water. There is no gradual incline from sea level to mountains; the

mountains simply climb out of the sea.

Another amazing aspect of Milford Sound was the keas. The kea (*Nestor notabilis*) is an alpine parrot endemic to the south island of New Zealand. Wild populations are believed to be somewhere between 1,000 and 5,000 birds. Keas are about 50 centimeters long and rely mostly on vegetation for food, but will also eat grubs, insects, and have been known to attack sheep. Judy Diamond and Alan B. Bond state in their book, Kea Bird of Paradox:



Keas frequented the high-country sheep runs; they seemed to live almost exclusively on carrion. A contemporary witness described keas feeding on sheep's head, or other offal, the bird proceeds to tear off the skin and flesh, devouring it piecemeal, after the manner of a Hawk, or at other times holding the object down with one foot, and with the other grasping the portion it was eating, after the fashion of Parrots.

By 1867 sheep in the high country runs seemed to be afflicted by a new disease, manifested by the sudden appearance of a patch of raw flesh, about the size of a mans hand, on the loin area. Soon, however, an observant shepherd noticed a kea clinging to the back of a sheep and pecking at one of these sores. Witnesses subsequently reported seeing keas loitering around sheep that were bleeding from fresh wounds. Some sheep did not have wounds but simply bare patches where tufts of wool had been picked out. The stomachs of keas shot on these sheep runs were often filled with wool and raw mutton.

Keas are opportunistic feeders
and are extremely well adapted to
finding and utilizing food sources. I
don't mean to give the kea a bad
reputation by using the sheep as an
example; I just find it fascinating that a
bird living for thousands of years mostly





on vegetation would, when given the opportunity, just as happily feed on meat.

I don't believe that keas killing sheep is a huge problem in New Zealand these days, but keas eating refuse left in parks and in garbage dumps is. Keas are highly intelligent, social birds and can be extremely inquisitive, especially when it comes to shiny objects. Recently more and more people have been visiting kea habitat, which gives



the keas more available food sources, i.e. trash. The less time keas spend looking for food, the more time they have to be curious and cause mischief.

This is what leads them to cause damage in parking lots by tearing anything rubber off

the cars. In order to combat the keas' natural mischievous behavior, the Department of Conservation has set up a program to educated people about kea behavior and to not feed keas.

The keas I met were in a gravel lot right before a tunnel approaching Milford Sound. They were very accustomed to humans and one came right up to me, no doubt curious about my shiny new silver camera.



Dolphin Swim



I woke up almost every hour last night, scared that we would miss the alarm or that it wouldn't go off and we wouldn't make the swim. The last time I woke up was at 4:15 A.M., thinking "I only have fifteen minutes to sleep?" 4:30 A.M. comes quickly when you haven't gotten much sleep. We dragged ourselves out of bed and went downstairs to have a meager breakfast of toast and tea. There was only one other person up in the hostel, and surprise, surprise: he was also going on the dolphin swim...

After getting on wet suits, we took a short bus ride and then all piled into a small boat. At this point the sun was just coming up over the horizon. We were all freezing in our little wet suits, dreading going over the huge swells that were lurching out on the ocean. Steve looked a bit nervous about the swells. He gets seasick, but he made sure to take two sickness tablets before we left the hostel. We got out into the open water and the swells were not as bad as they looked.

The first yellow light of day was illuminating the clouds and I could see dolphins jumping far off in the distance. Then our captain and skipper spotted the dolphins, which prompted them to tell us to get on our masks and snorkels then move to the back of the boat. I was sitting on the back platform with my legs dangling in the water, watching dolphins surface all around me and fighting back a desperate urge to fling myself off the moving vessel to be in the water with them. When the boat stoppe, a horn sounded, notifying us that it was okay to jump in. I slid off the platform. After the bubbles cleared, I saw that I was surrounded by a huge pod of dusky dolphins. They were swimming under me, next to me, all around me! Swimming with the dolphins has to be the singular most amazing experience of my life. To be up close to these awesome creatures and for



them to swim past as if I was just another member of the pod was magical, brilliant even! I was so overwhelmed with happiness that the only words I could manage were "Wow" and "Oh my God." It seemed as if the dolphins were all gone in a very short time. The boat horn blew, calling us back, and I was thinking, "That's it?" However, we were informed that we would be getting back in the water shortly. The second time in the water was even better then the first. I was swimming along with the pod, diving with them, when one of the dolphins took an interest in me. It was swimming circles around me for about two minutes! The dolphin and I were constantly making eye contact while diving. When it swam away, I went to the surface to get my bearings, then realized that the boat and the other swimmers were some distance away. Sneaky dolphin; luring me away from the boat.

Before we had started our adventure, Steve expressed to me that he was scared of going in the water because he wasn't a good swimmer. I told him not to worry; I would save him if he were drowning. But then I thought about it and told him that I would probably completely forget about him once I was in the water. I was right, too, I didn't see him the entire time and the only people I even noticed were the ones that I accidentally swam into.

The waters off the coast of Kaikoura are deep and cold, making them an ideal habitat for creatures such as krill. The krill are what attracts so many dolphins and whales to the area. In the summer months, between October and April, the dusky dolphin (*Lagenorhynchus obscurus*) numbers off the southern side of the Kaikoura Peninsula reach 100 to 800 in each pod, or social group. The pod that I swam with consisted of well



over 200 individual dolphins. Dusky dolphins are rather small for cetaceans, reaching 165-195 centimeters in length and weighing between 60-90 kilograms. They can live to be 20-25 years old. Dusky dolphins are one of the most acrobatic dolphin species, often repeating jumps over and over. I witnessed many back flips when I watched them after the swim.

It was a little daunting to be in the water with them at first. They are such strong animals and powerful swimmers. For the first time in my life I felt extremely close to another species, almost like I was of that species. In that environment the dolphins were superior to me, and I don't think it is often that we humans feel that way in the presence of animals.



Farm Stay

Farm Stay

Kizz and Tom are the Maori couple who run the bone-carving workshop at the farm. I talked to Kizz for a couple of hours about how she was introduced to bone carving, about her family, the area, my trip. She learned bone carving at a polytechnic institute in a one-year course that also explored contemporary Maori painting. She and Tom have just taken up the business at the farm. They bought it five months ago from two Maori men who apparently learned bone carving in prison! Kizz had to teach herself how to use the Dremel tools because, until they bought the business, she had done all her carving with saws and files. She said it would take about four days to produce a piece with the files, whereas it only took a couple of hours with the Dremel. She told me that generations of her family have lived in the area and that after storms they always go beachcombing for driftwood. When they find a large piece that is suitable for carving, they carve their initials into the wood to claim it. They then go back home to get equipment to move the logs off the beach. She told me how to prepare bone for carving, by boiling it and leaving it in a bleach solution, and how to get it white by leaving it in the sun, and I watched her carve for a while. She gave me a couple of Paua shells to take home with me. I thanked her over and over again; I don't think she even realized how much that small, kind gesture meant to me.



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