


Fall 2011

Exploring Marine Conservation Efforts in Tasmania: An Internship With Ocean Planet

Lauren Markram

SIT Study Abroad, lmarkram@skidmore.edu

Follow this and additional works at: http://digitalcollections.sit.edu/isp_collection

 Part of the [Marine Biology Commons](#), and the [Natural Resources Management and Policy Commons](#)

Recommended Citation

Markram, Lauren, "Exploring Marine Conservation Efforts in Tasmania: An Internship With Ocean Planet" (2011). *Independent Study Project (ISP) Collection*. Paper 1127.

http://digitalcollections.sit.edu/isp_collection/1127

This Unpublished Paper is brought to you for free and open access by the SIT Study Abroad at SIT Digital Collections. It has been accepted for inclusion in Independent Study Project (ISP) Collection by an authorized administrator of SIT Digital Collections. For more information, please contact digitalcollections@sit.edu.

Exploring Marine Conservation Efforts in Tasmania: An Internship with Ocean Planet

Markram, Lauren
Academic Director: Brennan, Peter
Project Advisor: Mosley, Geoff
Skidmore College
Environmental Studies
Australia, Hobart

Submitted in partial fulfillment of the requirements for Australia:
Sustainability and Environmental Action, SIT Study Abroad, Fall 2011

Abstract

I chose to conduct a dual internship with Environment Tasmania and Ocean Planet. Although I was located in the ET office and conducted participant observation within that environment, I specifically worked on the Ocean Planet campaign to promote marine conservation efforts throughout Tasmania. I was drawn to this internship because the oceans are often disregarded within the environmental movement despite the fact that they are the key to life on earth and are in a degraded state. Further, Tasmania's marine environment is utterly unique, with ninety percent of its marine life found nowhere else on earth. Despite the magnificent biodiversity and endemism of Tasmanian marine life, only one percent of Tasmania's waters are protected by marine reserves. This is why Ocean Planet has dedicated itself to working on a local campaign in order to establish a network of marine reserves around Tasmania.

My goals during the internship were to gain independence and confidence, to improve my ability to communicate with the public about environmental issues, and to make an impact on the organization by being there to take on any excess work so that Rebecca Hubbard, the main driver of the organization, could have more time to focus on vital tasks.

During my time at Ocean Planet, I worked on numerous tasks such as advertising, report launches, organizing a discovery weekend, working stalls, conducting research on Macquarie Harbour, and writing letters to government officials. During this process, I collected data through participant observation to gain a deeper understanding of how non-profit organizations work and to comprehend what methods they use to approach their goals.

From these tasks, I learned vital life skills that will aid me in future professional endeavors. These consist of understanding the structure of a strategic organizational plan of action, gaining organizational abilities, being able to communicate with the public about environmental issues, and learning to negotiate and bargain. In the long term, I will be able to bring all of these skills back to the United States with me to aid my professional career. In the short term, I will use these skills to become more involved and improve the campaigns of the environmental group on the Skidmore College campus.

Table of Contents

Abstract.....	1
Table of Contents.....	2
Acknowledgements.....	3
1.0 Introduction.....	4
1.1 Importance of the Oceans.....	4
1.2 Current State of the Oceans.....	4
1.3 Tasmania’s Unique Marine Environment.....	5
1.4 Organizational Background and Partnerships.....	5
1.5 How Ocean Planet Advances Sustainability.....	7
1.6 Milestone Report Launch.....	8
1.7 Primary Goals.....	8
2.0 Methodology.....	9
2.1 Location, Rational, and Hours.....	9
2.2 Participant Observation.....	10
2.3 Limitations and Shortcomings of Data.....	10
3.0 Description of Activities.....	11
3.1 Public Engagement.....	11
3.1.1 Advertising.....	11
3.1.2 Media Launches.....	12
3.1.3 Maria Island Discovery Weekend.....	12
3.1.4 Festivals.....	13
3.2 Government Action.....	13
3.2.1 Macquarie Harbour Research.....	13
3.2.2 Letters to Government Officials.....	13
4.0 Discussion.....	14
4.1 Observation from Activities Conducted.....	14
4.1.1 Communication is Key.....	14
4.1.2 Financial Struggles.....	15
4.1.3 Importance of Media.....	15
4.2 Observations from Witnessing Conversations.....	16
4.2.1 The Sliding Baseline.....	16
4.2.2 The Importance of Networking.....	17
4.2.3 Frustrations with the Political System.....	18
5.0 Conclusion.....	19
5.1 Impressions of Ocean Planet and its Roles.....	19
5.2 What I learned and how to Apply that Knowledge in the US.....	20
5.2.1 The Importance of a Strategic Plan.....	20
5.2.2 Organizational Abilities.....	21
5.2.3 Communication with Public.....	21
5.2.4 How to Negotiate.....	21
6.0 References.....	23
7.0 Appendix: Sample of Work.....	25
7.1 Marine Pest Letter.....	25
7.2 Eco-Tourism Letter.....	27
7.3 Macquarie Harbour Research.....	29
7.4 Metro Sponsorship Form.....	32
7.5 Maria Island Discovery Weekend Information.....	35

Acknowledgments

I would like to thank Rebecca Hubbard for taking me in and fully integrating me into life in Tasmania as well as the Ocean Planet organization. Rebecca went beyond the call of duty and took it upon herself to ensure that I enjoyed my time at the organization as well as learned a great deal. My time in Tasmania would not have been the same without her energy, enthusiasm, and leadership. Thank you to the Environment Tasmania team, specifically Peter Skillern, Emma Anglesey, and Thomas Moore who accepted me as a full part of the team. Thanks to Richard Pullinger, an intern who kindly took me in and allowed me to stay in his house during my time at Ocean Planet. Thanks to Geoff Mosley who was always quick and extremely helpful in answering my numerous questions and sending me informative, interesting marine related articles. Thanks to Peter Brennan for giving support throughout the process and dedicating time and effort towards making my time Australia so amazing.

List of Abbreviations

ET- Environment Tasmania

WWF- World Wildlife Fund

DPIPWE- Department of Primary Industries, Parks, Water, and Environment

TCT- Tasmanian Conservation Trust

SCAT- Southern Coastcare Association of Tasmania

ISP Topic Codes

Fisheries and Aquaculture 606

Oceanography 619

Political Science 523

Keywords: Public engagement, marine conservation, government action, environmental campaign.

1. Introduction

1.1. Importance of the Oceans

The oceans are the essence of life on earth. They are fundamental to natural earthly systems as well as to humankind, as they produce over half of the oxygen in the atmosphere and provide the largest store of carbon in the world (Hubbard, 2008). According to Protect Planet Ocean, the oceans hold 97% of the planet's water and make up 70% of earth's surface. On average, humans take in 10% of their protein from seafood, and this percentage is greatly increased in poverty stricken coastal nations, where seafood is the foundation of nutritional intake. The oceans control temperature and climate systems, and our human vulnerability to natural disasters is therefore determined by the health of the marine world (Protect Planet Ocean, 2010).

In regard to industry, ocean-based businesses contribute over \$500 billion towards the worldwide economy (Holloway, 2009). In regard to science, they act as an undiscovered bounty of possible medical treatments. In regard to the environment, they are a hotbed for species diversity and the ultimate regulatory system. Essentially, the oceans are the key to life on earth. Life began in the oceans, and it will end with the oceans unless we change the way we treat and interact with the marine world.

1.2. Current State of the Oceans

Around the world, our oceans are in trouble. The worldwide fishing industry has grown to meet the needs of a burgeoning population, which is gripped with consumerism, excessive choice, and overconsumption. Due to this, unsustainable practices have emerged. According to the UN Food and Agriculture Organization, almost 80% of the world's fisheries are fully- to over- exploited (SOFIA, 2010). Numerous iconic species are being fished into extinction, and in the process of getting to these desired species, bottom trawlers and unsustainable nets are ravaging sensitive species and habitats.

According to J.R. Pegg, over half the world's coral reefs are on their way to extinction as warming waters combine with increasing acidification to cause coral bleaching. Coastal development is destroying fragile habitats and causing mass erosion. Plastic pollution contributes to the death of millions of marine creatures each year (such as birds and turtles). Polluted nutrient runoff into the oceans is instigating harmful algal blooms and contributing to eutrophication, causing massive marine dead zones. Oil spills

are destroying marine habitats and animals, and we are slowly waking up to the realization that not only are the oceans finite, but their resources are being destroyed and depleted at an alarming rate. (Pegg, 2003).

1.3. Tasmania's Unique Marine Environment

Tasmania's marine environment is utterly unique, with 90% of its echinoderm species, 85% of its fish species, and 95% of its mollusk species completely endemic to the Southern waters of Australia (Parsons, 2011, pp. 8). According to Rebecca Hubbard, the creation of this rare ecosystem is due to 65 million years of geologic isolation, long coastlines, sub-Antarctic cold waters, and the geographic barriers of the Bass Strait (Hubbard, 2009, pp.1). Furthermore, Tasmania's southerly location at the meeting point of three major oceanographic currents creates a high level of biodiversity, as warm subtropical waters mix with temperate and sub Antarctic waters. This results in a blend of warm nutrient poor waters with nutrient rich cold waters, creating a hotbed of species diversity.

The combination of all these factors has led to Tasmania's marine environment being utterly unique, teeming with life that is found nowhere else on earth. From giant Kelp Forests and thriving sea grass beds to critically endangered species and vitally important fish nurseries, Tasmania holds a special place in the world as a hotspot for marine biodiversity (Parsons, 2011, pp. 4).

1.4. Organizational Background and Partnerships

As relayed by Rebecca Hubbard, Ocean Planet was formed in late 2007 upon Hubbard's arrival in Tasmania. After having spent a number of years working as a campaigner for Greenpeace and maintaining a strong passion for marine conservation, Hubbard arrived in Tasmania during a turbulent time for the Tasmanian marine world. This turbulence all related to the proposal to establish marine parks around Bruny Island, a hotspot of marine species diversity within Tasmanian waters. According to ABC News, there was much public resistance to the marine parks as fishermen rallied against the scheme and Primary Industries Minister, David Llewellyn refused to support any proposal that would put limits on the fishing industry (ABC News, 2008). Amidst all this governmental chaos of a misinformed public and resistant Minister, Rebecca Hubbard

and Christian Bell (CEO of the TCT and leader in Tasmanian marine conservation) teamed together to form a plan of action. Along with a handful of concerned members of the public, the group created strategies in an attempt to inform the public of the necessity and benefit that a network of marine parks would have on the area. Although the group was not successful in this cause, as the final result was a smaller system of marine parks than originally proposed in which people could still fish, the group of concerned individuals stayed together in order to battle future marine issues. They donned the name Ocean Planet, voting in Rebecca Hubbard as the coordinator of the group.

After being granted some seed money from a dedicated marine biologist and gaining funding from the government organization, Caring for Country, Ocean Planet had the means to function as a full-fledged organization by setting up a website and allowing the focus of full-time work from Rebecca Hubbard. However, Ocean Planet was now faced with the choice of either becoming an incorporated independent organization, or joining as part of a larger umbrella organization. It was at this time that Hubbard approached Environment Tasmania, as she felt that they maintained a similar mindset and system of values within the environmental movement (Hubbard, 2011).

Environment Tasmania was established in December 2006 due to the environmental movement's frustration with its current conservation council, the Tasmanian Conservation Trust. According to Rebecca Hubbard, The TCT was a conservative council that the government often relied on to represent the interests of the environmental movement in Tasmania. For a number of years, environmentalists around the state had become frustrated with the TCT and felt detached from the organization that was supposed to be representing them. These feelings of frustration came to a head in 2004, when the TCT made an agreement with government regarding forestry that favored the interests of Forestry Tasmania. This sparked action on the behalf of environmentalists across Tasmania, as concerned individuals came together to form a new conservation council that would be held accountable to the green agenda and truly represent environmental interests (Hubbard, 2011). ET operated as a volunteer organization during its first year of establishment in 2006. However, by late 2007, the group grew to be a staffed organization, serving as Australia's youngest conservation council (Environment

Tasmania, 2009). Environment Tasmania now serves as an umbrella organization to twenty-four environmental groups across Tasmania.

Ocean Planet partners with many other organizations within the field, such as the Tasmanian Conservation Trust, the Australian Marine Conservation Society, and the Wilderness Society to achieve larger scale impacts by utilizing shared resources (Ocean Planet, 2011). By fostering good relationships with these organizations, Ocean Planet has been able to increase the depth and length of its message, as a community of support is always better than isolated action. Because Environment Tasmania is such a strong driver of the ocean campaign, Ocean Planet often uses the ET logo attached to community events, as it is more widely recognized and therefore further legitimizes their claims with the public and government.

1.5. How Ocean Planet Advances Sustainability

The goal of Ocean Planet is to conserve marine ecosystems around Tasmania so that future generations may experience the same amazing wildlife and marine environments that we get to experience today. This idea of intergenerational equity is a cornerstone of sustainability, which promotes the idea that we must live within our means so that in the long term, people will be able to experience equal or improved environmental, social, and economic conditions (Thompson, 2003, pp. 3). Not only does Ocean Planet plan to create a system of marine reserves in order to instigate this protection and conservation, but it also works alongside fishermen and the government to have an open dialogue about sustainable fishing practices. It is for the benefit of fishermen as well as for marine life that protective measures are put in place, as current rates of overfishing mean that fish supplies will be plundered within just a few years if action is not taken. The marine reserves promoted by Ocean Planet will act as no-take zones for fishermen, which promotes growth of populations within these areas, resulting in a spillover of marine life into the fishing zones. This is a system that benefits all parties in the long run while still conserving marine ecosystems.

Further, Ocean Planet advances sustainability by openly opposing and working to end unsustainable marine practices. One such example is Ocean Planet's outright opposition to the proposal to expand aquaculture within Macquarie Harbour, a unique estuarine environment that is the second largest natural harbor in Australia and is a site

that holds great geological and environmental significance. A second example is the group's dedication to maintaining rock lobster populations in Tasmanian waters, as these creatures act as a keystone species that help to regulate kelp forests, which are a home to numerous marine species.

1.6. Milestone Report Launch

I was lucky enough to intern during a milestone event within Ocean Planet's campaign, as the scientific report commissioned by Rebecca Hubbard titled "Nowhere Else on Earth" was released. This was a one hundred page report written by Dr. Karen Parsons, a marine biologist and former Principal Scientist with Aquenal (Environment Tasmania, 2008). It was the first time that the science of Tasmania's marine life was collated on a statewide level and it found that Tasmania's marine life was even more globally significant than previously understood. Because the report gave scientific backing and evidence of the extraordinary natural values of Tasmania's marine life, Ocean Planet will be able to use the report to further persuade the public and government officials on the importance of conservation. Furthermore, Ocean Planet held two launches to give publicity to the report, holding one in Hobart and one in Launceston. These report launches were extremely successful as all three news channels in Hobart reported on the launch during the evening news, garnering a vast amount of public attention.

1.7. My Primary Goals

Before arriving in Tasmania to begin my work with Ocean Planet, I set up a list of goals for myself. This was my first time working as an intern for a non-profit organization and I wanted to make sure that I got something out of the experience as well as made a positive impact on the organization itself. Personally my goals consisted of gaining confidence and independence simply by living on my own and being part of a working environment where I am held responsible for my tasks, to improve my knowledge and understanding of marine issues locally and worldwide, and to improve my ability to communicate with the public about environmental issues.

On an organizational level, my goals were to gain a deeper understanding of how non-profit organizations work, to comprehend what methods they use to approach their own goals, and to actually make an impact on the organization by being there to take on

any excess work so that Rebecca Hubbard, the main driver of the organization, could have more time to focus on vital tasks.

2. Methodology

2.1 Location, Rational, and Hours

I conducted a dual internship with Ocean Planet and Environment Tasmania. Although I worked directly on Ocean Planet's marine campaign, I was located in the Environment Tasmania office, in which I observed ET staff members and partook in their weekly and annual meeting. Therefore, all of my participant observation data relates to the Environment Tasmania umbrella group, while my actual activities and tasks were all conducted with Ocean Planet, a non-profit marine conservation organization located in Hobart, Tasmania.

I was drawn to Ocean Planet because its goal is to work locally in order to save the marine life around Tasmania. Initially, I looked towards internships with bigger groups such as the Australian Marine Conservation Society, a much larger nationwide group with multiple campaigns ongoing throughout Australia. Although the idea of working with such a strong widely known group was appealing, one of the main things that I learned during my time in Australia was the importance of local action. Further, I was intrigued by Tasmania's rich diversity of marine life. Many people think of the Great Barrier Reef in relation to marine life in Australia. However, Tasmania has a huge array of unique endemic species, from the iconic Spotted Handfish to the odd Weedy Seadragon. Despite the fact that on average, ninety percent of the marine life around Tasmania is found only in the Southern waters of Australia, only one percent is protected by Tasmanian marine reserves. This is a shocking statistic compared to the forty percent of protected land in Tasmania. Therefore, I was drawn to Ocean Planet due to the local focus of the campaign, the abundance of unique marine life in Tasmania, and the fact that there is currently so little protection for these endemic species.

My internship ran from the thirty-first of October to the 29th of November, and I worked a total of 181 hours at the organization. These hours included working four regular forty-hour weeks, as well as working weekend events such as the Sustainable Living Expo, and travelling to St. Mary's for a day of meetings and workshops. My time

in the office was spent focused on multiple tasks. Although other interns at the organization were given one big research project to focus on at a time, I was assigned multiple smaller jobs and research projects because I was only around for five weeks which did not give me enough time to dig into a larger project.

2.2 Participant Observation

The Environment Tasmania office I worked in was perfect for gathering participant observation data, as we all worked in the same room with no walls or cubicles dividing each other. Because there were no barriers separating me from the rest of the workers, I was able to witness all conversations and interactions between interns, the director, the member liaison, the coastal campaigner, and the marine coordinator. In order to gather as much data as possible, I became extremely involved in the organization, jumping on every opportunity to participate in activities or conversations. Further, the staff of Environment Tasmania were very inclusive and allowed me to take part in every aspect of the organization, from their weekly meetings in the office to their annual meeting up the coast of Tasmania.

During all of these opportunities I tried to act as a keen observer by paying attention to all that was going on around me and record any interesting conversations that I had with staff, or that I witnessed amongst others. I also recorded any observations that I made in regard to how the organization is run, how it was established and fits into the context of similar groups, what methods they use to achieve goals, and how certain aspects of the campaign could be improved. I recorded all of this information in my ISP journal along with the few informal interviews that occurred spontaneously when an interesting informative topic arose during conversations with staff members.

2.3 Limitations and Shortcomings of Data

The key to participant observation is to enter the world you are observing in order to understand the actions and beliefs of people in that community. Although this method is often an effective way of gathering social data, there exist some limitations to this method that are important to recognize. The first of these shortcomings is that people often monitor their behavior when they are aware of being observed. Because I informed Rebecca Hubbard and other staff members that I would be writing a paper based on my

experiences and observations during the internship, oftentimes staff members would ask me what I intend to write about in regard to an event that just happened because they didn't want to be perceived negatively. In order to minimize the effects of this, I tried to take notes in my journal only when in private to prevent attracting any attention from the participants of my observation. Because I only took notes when away from participants, I had to rely on my memory and interpretations of certain events and conversations. This is a limitation as my results depend on my ability to accurately recall information in an objective manner.

3. Description of Activities

Ocean Planet aims to reach three aspects of society within their campaign in order to achieve the goal of establishing a network of marine parks. These sects of society consist of the public, the government, and the fishing industry. During my internship I partook in numerous activities within the public and political spheres of the campaign.

3.1 Public Engagement

3.1.1 Advertising

I was put in charge of organizing multiple forms of advertising in order to increase the salience of marine issues with the public. Because the public has the power to vote in politicians, who then make decisions on whether to establish marine parks or set laws regulating human influence over the oceans, it is of vital importance that the community at large express concerns regarding the state of the marine environment. However, the process of getting society to care about environmental issues is extremely difficult, as many people simply don't care, or have preconceived notions that cause them to resist societal change. Because the public is accustomed to experiencing the world through advertising, it is through these means that Ocean Planet chose to promote the message that Tasmania's marine environment must be protected. Therefore, I partook in ongoing negotiations with the State Cinema in Northern Hobart in order to get a 30-second clip played during Coast Care week. These negotiations consisted of having to format the video clip according to the cinema's standards, discussing a discounted price for the advert as Ocean Planet is a non-profit group with a small budget, and finding a good week to advertise that would have the largest impact on the community. The clip

displayed was designed to educate the public of the fact that although ninety percent of its marine life is found nowhere else in the world, marine parks protect only one percent of Tasmania's marine environment.

A second form of advertising that I began organizing was a full advert that could be placed on the back of the Metro buses that run around Hobart. This task proved to be quite difficult, as the bus ads were extremely expensive and we were working on a tight budget. In an attempt to get a reduced rate, I went to the Metro offices to tell them about our cause and the importance of publicity in the campaign. In response I was given a long sponsorship form that took me an entire day to fill out, and we are currently still waiting to hear back from Metro in regard to our sponsorship proposal (See Appendix pg. 32).

3.1.2 Media Launches

I was involved in the preparation of two media launches for the "Nowhere Else on Earth Report" which was covered by numerous news channels (Southern Cross, ABC News, 7:30) and newspapers such as The Advocate, The Mercury, and The Examiner. My duties for these events consisted of arranging media kits to be handed out to all members of attending media. These kits consisted of a copyright form, a media release, a media report, an eight-page booklet that summarized the report, an electronic copy of the report, and videos/photos of Tasmanian marine creatures that could be used in the news segments.

3.1.3 Maria Island Discovery Weekend

In order to get the public excited about Tasmania's marine environment and to raise awareness of the importance of marine parks, Ocean Planet organized a discovery cleanup weekend on Maria Island, as it maintains a significantly large population of key marine species and gained protection as a national park twenty years ago. My tasks were to participate in planning meetings in order to make decisions on the itinerary of activities, to design a poster to advertise the weekend venture, to write a proposal in order to get funding from SCAT for costs incurred, and to put together an information sheet detailing the prices, accommodation options, directions of how to get there, and a form to fill out for those participating in the weekend (See Appendix pg. 35).

3.1.4 Festivals

A key to public engagement is to become a familiar face within community events. Therefore, Ocean Planet held stalls at the Sustainable Living Expo on the 10th and 11th of November, which had 7,500 visitors during those two days. I worked full days at these stalls talking to the public about the importance of establishing a network of marine parks around Tasmania, encouraging people to sign up to the Ocean Planet e-bulletin, showing the 3-minute video clip about Tasmania's unique marine environment, and selling Ocean Planet t-shirts.

3.2 Government Action

3.2.1 Macquarie Harbour Research

Macquarie Harbour is a distinctive estuarine environment in Tasmania. At six times the size of the Sydney Harbour, it is recognized as the second largest natural harbor in Australia. This unique aquatic ecosystem acts as the doorstep to the World Heritage Area, which brings in over 100,000 visitors each year (Whitham, 2003). One of the ongoing research projects I was involved in during the internship was to put together a fact sheet on the natural values of Macquarie Harbour, as a proposal was established by three industry giants to double their aquaculture leases in the Harbour. This is the largest aquaculture expansion proposal Tasmania has even been faced with, and the fact that it seems to be on its way to approval is extremely worrying for the Ocean Planet team, as aquaculture is an environmentally damaging and unsustainable practice. My tasks in relation to this research were to find background information of other leases in the area, to write a fact sheet on the important natural values of the Harbour and the harmful environmental effects of aquaculture, attend meetings to put together a plan of action, and to find evidence of baseline scientific data about the Harbour so that we could argue that the economic benefit of the aquaculture does not outweigh the social and environmental values of the Harbour (See Appendix pg. 29).

3.2.2 Letters to Government Officials

I wrote two letters to relevant individuals in government in order to encourage them to take action on marine issues that were currently being neglected. The first of these letters focused on the issue of marine pests in Tasmania, and was addressed to

Robert Gott, the Director of Marine Affairs at DPIPWE. To write this letter, I did a vast amount of background research on the current system in place to tackle the issue. I then contacted relevant members of government to ask about their actions against marine pests in order to get backing for my previous research. Once I had enough information on the topic, I drafted a letter that detailed the problem at hand, why the current plan of action is inadequate, and what Mr. Gott could do in order to better combat the issue.

The second letter was addressed to Scott Bacon, the Minister of Tourism in Tasmania. The reason for this letter was that members of the Bruny Island community had expressed concerns in regard to the popular eco-tourism cruises around the Southeast of the Island. These concerns centered on the fact that the tours seem to be having a negative impact on the marine life in the area, and that they are not as environmentally friendly as they advertise themselves to be. After conducting a vast amount of research on the value of Bruny Island as a breeding hotspot for endangered fur seals, the migratory path for endangered whales, and familiarizing myself with how each of the tours promotes themselves, I got in contact with one of the concerned members of the public to hear her first hand experiences from witnessing these tours occur over the past twelve years. Once I had a basis of research and evidence, I wrote to Minister Bacon to encourage him to put pressure on these industries to alter numerous harmful practices as well as to fund research to scientifically determine what impact the tourism industry has truly had on the area (See Appendix pg. 25-28).

4. Discussion

4.1 Observations from Activities Conducted

4.1.1 Communication is Key

I was involved in weekly meetings with the staff of Environment Tasmania, the organizational meetings for the Maria Island discovery weekend, a plan of action meeting to face Macquarie Harbour aquaculture expansions, and I attended the annual ET member meeting up the northeast coast of Tasmania. Being able to witness each of these meetings was extremely beneficial as I was able to notice the strengths and weaknesses of communication that occurred, as well as the importance of communication in a functioning organization. It seemed that during small-scale meetings, such as the

Macquarie Harbour meeting between Jessica Feehley (an environmental lawyer) and Rebecca Hubbard, the communication was fluid and productive as they stated the problem, what needed to be done, and who should take on each task according to their personal strengths and weaknesses. However, the larger meetings that involved multiple groups with different agendas and ideas were extremely unproductive as people were unwilling to listen but were focused instead on promoting their own ideas. For example, during the annual ET member group meeting, we were going over the wording of the constitution for over four hours as each group had to edit the wording to better fit their organization. This became a long laborious unproductive process. Therefore, although it is important for all of these groups to get together to communicate and share ideas, it is important that each meeting have a specific agenda with a timeline that must be abided by, or else chaos will occur with each person trying to get their voice heard while no one is listening.

4.1.2 Financial Struggles

The most evident observation I made during my internship was how finance became a limiting factor to action. As a non-profit organization that relies on donations to function, Ocean Planet has a very small budget to work with. This is a problem that most social movements and non-profit groups are faced with, as every action undertaken has some form of cost involved. Even simple tasks such as sending letters to government become costly ventures when done on a large scale. Because money is so limited within Ocean Planet and most of it gets funneled into projects and advertising, there is little money left to be put towards the office in which the organization functions. I felt that this was one of the largest obstacles affecting my ability to work productively, as the computer I was working on did not have any Microsoft programs, and I therefore had to conduct all my work on Google Docs. This became an issue when the internet went down, or mostly when I was conducting research and could not open any files that were in a Microsoft format, whether that be excel, word, or even adobe. This put significant limits on my ability to conduct research. Further, many of the tasks I was assigned consisted of me having to do vast amounts of printing. This was an issue, as my computer could not print. Therefore, whenever I needed to print something I had to get another staff member in the office to do it for me, which became extremely frustrating because I

was constantly bothering the staff in order to get my work done. Although Ocean Planet is working on a tight budget and trying to put all of their money into the campaign, it is important that they ensure that their working environment is functioning effectively, as this could have significant impacts in the long run as much time is wasted on working with inadequate uncooperative technology.

4.1.3 Importance of Media

From working at the report launches, I was able to observe how the media can make or break a campaign. The media acts as the intermediary between organizations and the public. As such, they play a vital role in all campaigns as they reach the public sphere to act as free advertising that reaches all sects of society. The first report launch held in Hobart was extremely successful because Leon Compton, a famous radio presenter in Hobart, asked Rebecca Hubbard to come on his radio show that morning to discuss the report. Once that interview was broadcast to the Hobart community, all three news channels in Hobart were interested and attended the launch. The launch was featured on over three news channels that night. Therefore, on the night of the ninth of November, every news channel in Tasmania was promoting the “Nowhere Else on Earth” report. To add to that, The Mercury newspaper did a large double page spread on the report the next morning. The value of all of that publicity is immeasurable, as Ocean Planet would have never been able to pay for that amount of advertising.

4.2 Observations from Witnessing Conversations

4.2.1 The Sliding Baseline

A significant social dilemma that I became aware of through observations and conversations with those within the field of marine conservation was the idea of the sliding baseline. This is the idea that society’s expectation of what the environment should look like is dependent on their experiences within their lifetime. For example, about twenty years ago society actually woke up and realized the devastation human action has caused for fishing populations worldwide. Due to this epiphany, some governments began working to put moratoriums on certain fisheries or promoted more stringent fishing laws. Because of this, the fishing populations have slightly increased over the past twenty years. According to Michael Barron, many people would look at a graph of what the populations were in 1990 compared to how they are in 2011 and think

that the health of our marine environment is improving, and therefore there is nothing to worry about. But if you look on a greater timeline of fish populations over the past two hundred years, the sharp exponential decline that occurs between 1800 and 1990 is shocking (Barron, 2011). We might have made slight improvements in terms of our relationship with the marine world over the past few decades, but this does not make up for the centuries of extreme exploitation that changed the oceans from bountiful thriving ecosystems to barren marine dead zones.

If this sliding baseline continues, the public will keep accepting the degrading state of the environment until we are left with a plundered earth. Therefore, it is essential that those within the environmental movement act to make visible to the public what our expectations for the natural world should be, based on what they were not five or ten years ago, but one hundred years ago.

4.2.2 Importance of Networking

During my first week at the internship, Rebecca Hubbard was working feverishly on a proposal to gain funding from a big name in the field of marine conservation. The whole reason this became possible was because she attended a function in Hobart a few days prior that was geared towards establishing a network of marine reserves around Antarctica. This event garnered a vast amount of attention from marine conservationists worldwide, as members of large-scale organizations were in attendance. During this function, Hubbard met a man leading the Oceans Five organization, and after telling him what Ocean Planet was working to establish in Tasmania, he agreed to come to our office and hear a longer proposal so that he could consider donating money to the organization. Although we did not end up getting any funding from him, he spent two hours in the office giving advice to Hubbard and helping with strategies. He is now a contact she can call on in the future, and as one with many large connections, this man could prove to be very helpful in Ocean Planet's future.

A second example of the importance of networking is that once the radio interview with Leon Compton was over on the day of the report launch, he expressed great interest in Ocean Planet. Rather than letting this great contact to the media world disintegrate, Rebecca Hubbard took advantage of it by inviting Compton to go diving in Southern Tasmania with Ocean Planet so that he can see and experience some of the

marine life that was discussed. By fostering this relationship with Leon Compton, Hubbard is ensuring that she will always have a source of media to turn to when Ocean Planet needs publicity.

4.2.3 Frustrations with the Political System

One of the main themes I observed throughout my internship was the frustration multiple environmental groups felt in regard to the political system. During the annual ET meeting in which a variety of member environmental groups spoke out on the obstacles they were facing, the government seemed to be at the forefront of all of them.

According to Rebecca Hubbard, although Tasmania has one of the highest percentages of Greens in government, the Green party is resistant to support many of the environmentalist causes because they are trying to prove to the rest of society that they are not radical “greenies” but rather a respectable solid party (Hubbard, 2011). Although it is understandable for the Green party to want to be seen in a respectable manner, there is no point in labeling themselves as “the Greens” when they do not support a green agenda. Therefore, the only way to push the environmental agenda is to foster public awareness and get the public to care. Once society at large is dedicated to an issue, then politicians will pay attention, as their seat in office is dependent on public votes. This, however, is a long and difficult process, and by the time we get society to care about environmental issues, it may already be too late.

A highlight within this dissatisfaction with government is that Minister of Primary Industries and Water, Bryan Green, has been acting out of line in order to support big business at the cost of the environment. According to Thomas Moore, Minister Green was approached during a coastal campaign in order to prevent development from taking place near a sensitive coastline. In response, he claimed he could not do anything because he did not have the power to stop the development (Moore, 2011). About a week later when the Macquarie Harbour aquaculture expansion plan was on the table, he put forth an amendment to the law so that the expert marine farm panel would no longer make the final decision whether to approve or disapprove of an expansion. Instead, they would make a recommendation to the Minister, and he would then have the final decision on whether to allow the expansion no matter what the marine panel recommend. He is blatantly pretending to not have power when he does, and then changing the law to suit

his agenda when he doesn't have the power. The reason he is so eager to be in control of aquaculture decisions is because earlier this year, the marine farming panel rejected an expansion in the D'Entrecasteaux Channel because they claimed the economic benefit of aquaculture did not outweigh the social and environmental values of the channel. In order to prevent this from happening in the future, Minister Green has simply taken the power away from the experts so that he can promote development no matter the cost to the environment.

Along these lines, Ocean Planet has difficulty in trying to prevent harmful development in Macquarie Harbour because the local population and council support the expansion. It is nearly impossible to get communities and politicians to see things in the long-term, as politicians only focus on what will get them a seat in the next election, while the public is concerned with where their next paycheck will come from. Therefore, any proposal that seems to promise money in the short term is popular. However, this is a harmful system as development of one industry may have negative impacts on a current less harmful industry in place. For example, aquaculture expansion in the Harbour could have negative impacts on the tourism industry in Strahan, which is the backbone to their local economy. However, people won't act against aquaculture because they assume any source of development will bring them wealth. It seems that this is an issue Tasmania has struggled with for decades, as they bring in harmful businesses such as hydropower, forestry, and aquaculture in order to increase the state's wealth, but end up destroying their amazing natural land and water in the process.

5. Conclusions

5.1 Impressions of Ocean Planet and its Roles

Ocean Planet is a small, dedicated organization that started from a group of concerned individuals. It has managed to stand the test of time to continuously fight for a network of marine reserves in an attempt to conserve Tasmania's unique marine wildlife for generations to come. Although it is faced with a difficult political battle ahead, Rebecca Hubbard is devoted to the cause, claiming its one of those campaigns that will keep her up past midnight working to improve. Due to the strong determination of Hubbard and other members of the Ocean Planet team, combined with the strong support

of Environment Tasmania, I foresee success in the future as the progress this organization has made during the past four years has set it on the path to achieving a network of marine reserves.

I was lucky enough to intern during a milestone in the marine conservation campaign, as the launch of the “Nowhere Else on Earth” report not only put Ocean Planet in the media sphere garnering public attention, but it will also now act as evidence for politicians to realize why Tasmanian waters must be protected. Moving forward, Ocean Planet plans to fund more similar reports to outline the socio-economic benefits of marine reserves, and to detail the current health of Tasmanian waters statewide. Once people are aware of how much the marine world has degraded, how unique and worthy of protection that marine environment is, and how marine reserves would actually benefit society in the long run, then it will be extremely difficult for politicians and the public to ignore the Ocean Planet call for a network of marine reserves.

Ocean Planet fulfills the role of a grassroots local marine conservation group geared specifically to saving Tasmanian waters. There exist no other organizations that pursue this same cause, and there are no other full-time marine campaigners in Tasmania other than Rebecca Hubbard. Therefore, this organization fills the marine niche that was previously gaping open before the establishment of Ocean Planet. Because forestry, mining, and dams have been at the forefront of the Tasmanian environmental movement’s concern for so many years, other important aspects of the natural world seem to have been pushed to the wayside. Further, because people could see the immediate destruction of deforestation and hydropower, whilst the damage to the oceans is invisible above the surface, much of the public and politicians find the more evident problems to be the more important ones. Ocean Planet, and specifically the “Nowhere Else on Earth” report has made the oceans accessible to the public so that they may be able to connect with the Kelp Forests and Spotted Handfish in the same way that people have grown to care for the Tarkine or a Wedge-Tailed Eagle.

5.2 What I Learned During the Internship and how to Apply Knowledge in US

5.2.1 The Importance of a Strategic Plan

From interning with Ocean Planet, I learned about the importance of having goals, a timeline, and a strong strategic plan of how to achieve those goals within an

organization. For example, Ocean Planet's goal is to establish a network of marine reserves around Tasmania. Currently, only one percent of Tasmanian waters are protected, and their goal is to have ten percent protection in marine parks by 2012. In order to accomplish this goal, they devised a strategic plan to go through government by bringing together support from the public, the fishing industry, and government officials. Getting to experience this format for how to run an organization and achieve goals is extremely beneficial to my future, as it gives me a solid framework to pursue goals in the future by first setting out a plan of action. Further, this gave me an idea of how organizations are formed, how they run, and how they begin to tackle large-scale goals.

5.2.2 Organizational Abilities

I learned multiple valuable organizational skills from partaking in the planning stages of the Maria Island discovery weekend as well as the report launches. I was often given a vast quantity of tasks that I had to prioritize and accomplish according to their timeline and importance. I also learned how to time manage, how to contact people in order to get everyone to follow through with their assigned tasks, and to bring together important information in a cohesive format. These skills may help me in the future, as they will allow me to take on organizational roles in jobs or community groups.

5.2.3 Communication with Public

From working at the Sustainable Living Expo, I gained a greater ability to talk to members of the public and convey the importance of environmental issues. In the past, I often found it difficult to talk to people about environmental concerns as I would give-in whenever I met resistance and would fumble my opinion even if I knew I had solid facts to support my argument. However, after doing vast amounts of research and becoming extremely familiar not only with marine issues, but specifically with Tasmania's unique marine environment, I found it easy to talk to members of the public and form solid arguments when met with resistance. This is an extremely valuable tool, as it is essential that I learn to argue and support my opinions with facts in order to sway public opinions in favor of environmental protection.

5.2.4 How to Negotiate

Bargaining is a life skill that I never practice or wanted to practice until this internship. However, by working with a small non-profit organization with a tight budget,

I felt it necessary to bargain and negotiate in order to get the best deal for the organization, as every dollar counts towards the cause. Therefore, I negotiated on numerous occasions with the State Cinema, the Metro Bus Company, and costume designers in order to get the best deal possible by pleading the case that we are a great non-profit group with a positive cause to improve the local environment. This skill is essential to my future both personally and professionally, as life is all about negotiations and trying to get the best business deal possible.

6. References

Protect Planet Ocean 2010, International Union for Conservation of Nature, Geneva Switzerland. Available:

<<http://www.protectplanetocean.org/introduction/introbox/oceans/introduction-item.html>> (2nd November 2011).

Hubbard, R. 2008, *Challenges and Solutions*, Ocean Planet (online), Available: <<http://oceanplanet.org.au/challenges-solutions/>> (2nd November 2011).

Holloway, C 2009, *Oceans: Threat and Management*, World Wildlife Fund, Topic for Discussion (Online), Available: <http://wwf.panda.org/about_our_earth/teacher_resources/webfieldtrips/oceans_threat/> (2nd November 2011).

FAO Fisheries & Aquaculture Department. 2010. *SOFIA: State of the World Fisheries and Aquaculture* (online). Available: <<http://www.fao.org/docrep/013/i1820e/i1820e00.htm>> (20th October 2011).

Pegg, J.R., 2003, "Report Finds U.S. Oceans in Crisis", Environmental News Service, 4th June (online). Available: <<http://www.ecoearth.info/shared/reader/welcome.aspx?linkid=23226&keybold=ocean%20AND%20%20dead%20AND%20%20zone%20AND%20%20lack%20AND%20%20oxygen>> (3rd November 2011).

Hubbard, R 2009, "Tasmania's Outstanding Marine Environment", A study of the values of Tasmania's unique marine environment, Ocean Planet Tasmania Conservation Group, August 2009.

Parsons, K.E 2011, *Nowhere Else on Earth: Tasmania's Marine Natural Values Report* for Environment Tasmania. Aquenal, Tasmania.

"Bruny Marine Reserve Proposal Criticized", 2008, *ABC News* (online). Available: <<http://www.abc.net.au/news/stories/2008/03/19/2193660.htm?site=news>> (25th November 2011).

Environment Tasmania, 2009. *Background Description of Organization* (Online). Available: <<http://www.et.org.au/background>> (15th November 2011).

Ocean Planet Home, 2009, *Homepage of Ocean Planet* (Online). Available: <<http://oceanplanet.org.au/>> (2nd November 2011)

Thompson, J. 2003, "Intergenerational Equity: Issues of Principal in the Allocation of Social Resources Between this Generation and the Next", Research paper No.7, Social Policy Group Consultant. 13 May 2003.

Witham, C. 2003. *Western Tasmania: A land of riches and beauty*, Reprint 2003 ed.. Queenstown: Municipality of Queenstown.

Personal Communication

Hubbard, Rebecca. Coordinator of Ocean Planet and Marine Coordinator of Environment Tasmania. Personal communication in face-to-face discussion, 20th and 23rd November 2011.

Barron, Michael. Owner of Eagle Hawk Diving and marine biologist. Personal communication in face-to-face discussion. 11th November 2001.

Moore, Thomas. Coastal Campaigner at Environment Tasmania. Personal communication in face-to-face discussion, 3rd November 2011.

7. Appendix

November 2nd

Robert Gott (Director Marine Resources)
Department of Primary Industries, Parks, Water and Environment
1 Franklin Wharf
Hobart, Tasmania
7000
Subject: Marine Pests

Dear Robert Gott,

I am writing to you in regard to a concerned letter we received, detailing how within just a few years a man living in Northern Tasmania witnessed the sharp decline of native crab species in his area, coupled with the sudden burst of invasive New Zealand half crab populations. These invasive crabs have replaced native wildlife and the consequences of their presence are unknown. This species could potentially disrupt the current ecosystem, alter the food web, eradicate endemic species, and affect the fishing and tourism industries. Due to a combination of geographic isolation and Sub-Antarctic waters, Tasmania's marine ecosystem is utterly unique with much of its marine life endemic to the area. It is of vital importance that we act now to stop the spread of invasive species and to protect Tasmania's rare native wildlife. □

The website for the department of Primary Industries, Parks, Water, and Environment claims that, "aquatic pests can cause serious impacts. They have the potential to destroy marine and freshwater environments and to decimate recreational and commercial fisheries and other aquatic industries" (DPIPWE, 2011). Although the department recognizes the immense impact marine pests have on the environment and industry, they have only taken basic actions towards prevention and eradication. It is understood that at a national level, the Marine Pest Sectorial Committee, which is working to prevent the spread of invasive species, controls marine pests. However, there is more work that can be done on a state level to further reduce the impact of marine pests in Tasmania.

The National System for the Prevention and Management of Marine Pest Incursions is slowly being adopted into Tasmanian government within budgetary and resource constraints. While this system seems to be an effective plan towards tackling the issue of invasive marine pests, there is no specific timeline for how long it will take to be fully implemented in Tasmania, and in the meantime invasive species like that of the New Zealand half crab are proliferating at alarming rates, wiping out native endemic species. It is the responsibility of the Department of Primary Industries, Parks, Water and Environment to be proactive by engaging in preventative measures to stop the spread of marine pests.

DPIPWE can take action by banning the import of foreign seaweed species for aquarium owners and by establishing a system of regulations for disposal that aquariums must abide by. This would reduce the spread of invasive species, as the method of disposal for many home aquarium owners results in foreign species entering the local body of water, providing an opportunity to spread. When entering Tasmania, stronger quarantine regulations should be put in place for items such as wetsuits and other diving

gear to reduce the possibility of pests travelling on visitors' items. The department should also improve upon its monitoring program to seek out new arising invasive species to combat pests before population growth gets out of hand. For example, the DPIPWE website lists current marine pests in Tasmania, but failed to mention many that were picked up by the Woodbridge Marine Discovery Center, such as the New Zealand half crab, the pie crab, chiton, screw shells, pacific oysters, New Zealand sea stars, and more (MDC, 2011). This indicates that there may be a lack of awareness towards the extent of invasive species around Tasmania. Further, the DPIPWE website lists possible threats of marine pests in Tasmania that are important to look out for. Although it is great to acknowledge the possibility of these pests, it would be beneficial to supplement this list with a detailed plan of action to prevent these possible pests from becoming a reality, as it seems that DPIPWE is currently just waiting for them to be a problem before any action is taken.

Presently, the issue of marine pests is not taken on by one single body within the DPIPWE, but is rather spread out across various groups such as Sea Fishing and Aquaculture, Bio Security and Product Identity, and Natural Resource Management. Because no single department is responsible for establishing an action plan against this issue, minimal action occurs. To make it easier for the department to tackle marine pests, the issue should be assigned to one group within DPIPWE so that they have full control of the problem and are able to be held accountable for lack of action. □

Finally, while waiting for the National System for the Prevention and Management of Marine Pest Incursions to be fully implemented, DPIPWE should begin working on establishing agreements with vessels coming into Tasmanian waters and try to create a treaty in which the vessels minimize their accumulated biofouling. Not only would this action help prevent new invasive species from entering Tasmania, but it would also create a solid structure so when the national system plan is fully implemented, the Tasmanian government will already have a strong marine pest preventative system in place.

Invasive marine pests have the potential to alter Tasmania's unique marine and coastal environment, which is essential to the tourism and fishing industries. It is simply common sense that we act now to prevent the deterioration of the unique underwater landscape for the sake of both the environment and industry at large. DPIPWE has the ability to be proactive through systems such as minimizing biofouling on ships, establishing stronger quarantine rules for marine equipment, creating laws on the import and disposal of marine materials, and improved monitoring and response to current marine pests, such as that of the New Zealand half crab that has been left to proliferate freely over the past few years. We are asking you to please act now as the longer we wait, the faster these invasive populations spread.

Thank you for your time,

Sincerely,
Lauren Markram

25 November 2011

Scott Bacon (Minister of Tourism)
Ministerial Office
Level 1, Franklin Square
Hobart, Tasmania, 7000
Subject: Eco-tourism in Bruny Island

Dear Minister Bacon,

I am writing to you due to concerns that some members of the Bruny Island community have expressed in regard to the Pennicott Island and Wildlife Adventure tours and the effect they may be having on the health of local wildlife populations. As a group that is trying to increase public awareness of the endemic majestic creatures our waters are home to, we appreciate the public attention these tours have fostered. Because we would love to support the Bruny Island eco-tours and are aware that both businesses are concerned with the environmental consequences of their tours, we would like to raise the point that there is still much room for improvement in regard to the environmental impact of these businesses. Therefore, we would like to make some suggestions for you to put greater pressure on both groups to encourage them to minimize their impact on native wildlife.

First, it is important that a thorough scientific assessment of Bruny Island is conducted in order to:

- Monitor any effects that the tours have had on the natural environment since the Pennicott tours inception in 1999. For example, how the use of Adventure Bay as a launching site has affected this fragile coastal environment. Or whether the rare dolerite reef in the D'Entrecasteaux Channel has been affected by Wildlife Adventure's large *Peppermint Bay II* 160 passenger boat that brings customers from Hobart to Bruny Island.
- Record the breeding behavior of endangered animals that inhabit or migrate through the South East of Bruny Island, such as the New Zealand and Australian fur seals that breed on Friars Rock, and the migrating endangered Humpback Whales.
- Discover the nesting sites of endangered birds.
- Conduct surveys of species populations to determine whether wildlife population rates have been affected in the past twelve years that the tours have been running.

An important factor in pursuing this research is that it must be conducted by an unbiased party. Therefore, instead of having the Pennicott and Wildlife Adventure companies involved in the research, we encourage that you seek out graduate students pursuing a marine biology Masters or Doctorate degree to propose this research be conducted as part of a dissertation or thesis. It is important that these studies be conducted in order to monitor the effects of the tourism industry around Bruny Island, especially since the tours are conducted in a National Park that maintains high natural values.

Because the Pennicott and Wildlife Adventure cruises promote themselves as being concerned with the health of Bruny Island's ecosystem, they should be eager to have these studies conducted, as the results would allow them to tailor their behavior towards creating a less impactful business. For example, if the population surveys depict a

significant decrease in the population of a certain species, such as the Australian Fur Seal, then they could reroute the tour in order to place less stress on these endangered mammals by avoiding their breeding grounds. Or if there is data to show that using Adventure Bay as a launch site has harmed this fragile coastal environment, they could consider changing the launch site to a less delicate destination. All of this research is vital to securing the sustainability of the eco-tourism industry around Bruny Island as well as ensuring the health of the Island's marine life.

A second point that would be important for you to enforce is the National Park regulations of the proximity to marine mammals that these vessels are allowed to approach. According to the National Parks and Wildlife Regulations, vessels are not permitted to actively come within 300 meters of a whale or 150 meters of any other marine mammals. The Wildlife Adventure and Pennicott tours have blatantly disregarded this rule, as they enter the National Park located on the South-east of Bruny Island and continue to approach marine mammals at a close distance.

This is sure to make the animals feel trapped, threatened, and stressed. Based on an experience relayed in regard to a Pennicott tour, two boats gathered on either side of a Humpback Whale, causing the whale to feel trapped and attempt to escape. It is understandable that people go on these tours to see and experience wildlife. But it is not necessary to get so close that it causes the animals discomfort. Instead, it would be more beneficial for the boats to keep a good distance so that these wild animals can be observed in their natural environment.

Finally, it is important that a speed limit is enforced, as these vessels often travel up to 20 knots in waters teeming with marine life. Not only does this speed cause noise pollution that can traumatize birds, fish, and cetaceans causing them to abandon the area, it also means that an animal within the boat's path may be hit with the engine props without the skipper even noticing. The National Park and Wildlife Regulations state that when a person in control of a vessel is within 300 meters of a whale, or 150 meters of a marine mammal other than a whale, they must slow their boat to 4 knots. There have been a number of disturbing accounts from community members commenting on injured or dead marine life being found washed ashore Adventure Bay Beach. Although the cause of these deaths is unknown, it is important that precautionary steps are taken to reduce boat speeds and lessen the possibility for marine creatures to be affected by the tour vessels.

Putting these pressures on the eco-tourism companies around Bruny Island will benefit both the companies and the natural environment as it will ensure the sustainability of this industry for generations to come. If current practices are harming marine wildlife, then it is important the tourism companies are aware of the impact they are having, as the success of the tours are tied to the health of the natural environment around Bruny Island. Therefore, it is essential that research be conducted in order for all parties to understand the impact these tours have had so far, and what must be done moving forward to prevent any further impact.

Thank you for your time,
Sincerely,

Lauren Markram

Macquarie Harbour Fact Sheet

Natural Values of Macquarie Harbour

- The ancient wonders of Macquarie Harbour have remained vastly unchanged since the Gondwanan era.

Geology:

- The underlying rocks of Macquarie Harbour date back about a thousand million years, placing it as an outstanding example of earth's evolutionary history. This ancient complex geological system is made up of a variation of rocks types, from hard dolerite to soluble sandstone. The sandstone, siltstone, and conglomerates within this system are particularly significant as they maintain a vast amount of ancient marine fossils from the Ordovician era (505-433 million years ago), when Tasmania was located beneath the sea.
- The shores of Macquarie Harbour maintain some of the oldest plant fossils ever found.

Water:

- The harbour is a unique layered waterway of freshwater flowing in from the Gordon and Franklin rivers with an under layer of salt water from the Southern Ocean.
- Macquarie Harbour is recognised as the second largest natural harbour in Australia, at six times the size of Sydney Harbour.

Flora:

- The World Heritage section of Macquarie Harbour maintains some of the world's last remaining temperate rainforest, featuring myrtles, leatherwood trees, and native pines endemic to Tasmania.
- The endemic Huon pine, a majestic species recognised for its significance to the World Heritage values of the area, grows along the river. This remarkable tree is noted for its evolutionary rarity and longevity. Individuals can grow to reach ages in excess of 2500 years. These ancient species are related to the family of pines that existed over 165 million years ago, providing living evidence to a remote past and holding the key to understanding the floral relationships between Tasmania and other Gondwanan relics.
- The endemic lily, *Milligania Longifolia* and *Oreomyrrhis gunnii*, are restricted to the Macquarie Harbour region, as they are found nowhere else in the world, and act as a home to a variety of rare invertebrates such as certain species of caddisflies and stoneflies. These endemic species of lily are at risk should their habitat be disturbed.

Fauna:

- Of the 54 species of vertebrates listed as rare or threatened in Tasmania, at least five occur in the Macquarie Harbour region.
- The endangered orange-bellied parrot, of which less than 200 individuals remain, breeds solely within the south-west corner of the Macquarie Harbour WHA.

Economic values of Macquarie Harbour

Tourism:

- The Harbour has been a hotbed for tourism since the 1980's, when the proposal to dam the Franklin River was aborted due to large public outcry and a vast amount of media attention. It was during these anti-hydro protests that people became aware

of the natural wild beauty of Macquarie Harbour and its surrounds. Since then, people have flocked to the area in order to see “nature at its best”. The once rustic fishing and mining town of Strahan has been transformed into a natural Mecca known as the gateway to the renowned World Heritage Area that offers sites of beautiful reflective waters and ancient rainforests. Presently, cruises on Macquarie Harbour are the second most popular visitor destination within the Tasmanian Wilderness WHA, with over 100 000 visitors each year.

Fishing:

- Many involved in the fishing industry in Macquarie Harbour could be negatively affected by the expansion of aquaculture as this process pollutes the waters with excess nutrients and antibiotics that harm free ranging fish in the surrounds. Further, increased yields from large fish farms will result in reduced fish prices, eventually hurting the small-time fishermen in the area.

Proposed Aquaculture Expansion

- Three aquaculture giants, Tassal, Petuna Seafoods, and Huon Aquaculture have banded together in order to request a joint expansion of their leases in Macquarie Harbour to a total of 360 hectares.
- Because of predictions of warming waters on the East Coast of Tasmania, aquaculturalists are setting their sights on Macquarie Harbour due to the cool fresh and salt-water mixture of water from the Gordon River and Southern Ocean. If these three companies are granted permission to expand, they will monopolise the aquaculture industry in Tasmania. The biggest losers in this situation would be the small-time fishermen and fish farmers in the harbour who can't handle the high operating costs of aquaculture combined with the low market price of fish. This would drive competitors out of the market, leaving these three company giants to take over. This is not a healthy economic decision.
- Currently, the fish farms in Macquarie Harbour produce 9000 tons of fish, and they are looking to double that production rate with this proposed expansion. Macquarie Harbour cannot support such growth without experiencing environmental damage.
- There has not been any full scientific study on the effects of aquaculture on Macquarie Harbour. It is worrisome that such an expansion could be put forth when there is a lack of baseline data on the current consequences of fish farming in Macquarie Harbour.

Harmful Aquaculture

Industry Exclusion:

- Having a large system of aquaculture reduces alternative uses of the waterways, such as boating, tourism, diving, and more. Tourism is a large part of industry in Strahan, as it is the launching site to experiencing Macquarie Harbour's beautiful landscapes, World Heritage Area, and pure natural sites. Therefore, the tourism industry could be negatively affected by increased aquaculture, as the water would become littered with fish farms that are aesthetically displeasing and limit boat access. When seeking out a natural wonderland, as many do when they come to Macquarie Harbour, they expect to see true wilderness, not waters polluted

with circular metal pods overcrowded with non-native fish.

Nutrient Pollution:

- In fish farms, where an abundance of fish are confined to a small area, there is a build up of faeces and uneaten food. Fish excretion is high in ammonia, nitrate, and nitrite. Once the mass quantities of food and faeces break down, they have the potential to cause large nutrient influxes and instigate harmful algal blooms, eutrophication, and hypoxia in the surrounding environment, causing the death of free ranging underwater creatures that inhabit the area. This idea is displayed in the study by the CSIRO on the Huon Estuary, which showed that around 25% of all nutrients in the system were due to aquaculture. It has recently been recognised that there needs to be a cap on nutrient emissions, and while a total limit exists there is no auditing system in place to ensure that industry actually complies with this limit.

Invasive Species:

- The introduction of non-native species into an environment results in high negative impacts, as invasive species have the ability to alter the ecosystem through food and habitat competition, inter-breeding, predation, and more. The trout farmed in the Macquarie Harbour waters is non-native and the risk of their escape looms over the entire aquaculture operation, as they could have a devastating effect on the current ecosystem.

Antibiotics:

- Diseases spread rapidly in fish farms due to the dense stocking rate which causes stress, degenerated immune systems, and poor water quality (decreased oxygen, increased waste). Because of this, fish farmers use antibiotics to control disease and promote growth. In the D'Entrecasteaux Channel in Tasmania, wild fish such as flatheads, caught by recreational fishers next to fish cages, have been found to be contaminated with up to 5 times the recommended Australian limit of antibiotics.

Inspiration

- In April 2011, a proposal to expand Tassal's salmon farming lease in the D'Entrecasteaux Channel was rejected by the Marine Farming Review Panel due to environmental concerns. Such concerns consisted of the effects of increased waste on the marine ecosystem, and the impact that expansion would have on the dolerite reef in the area. This decision has set the precedent that marine biodiversity and environmental significance of an area must be considered first and foremost when contemplating the allowance of such vast aquaculture expansions. We must look to this example for inspiration that the natural values of Macquarie Harbour may still be saved if the Marine Farming Review Panel make the right choice to prevent aquaculture expansion in the region.



Metro Sponsorship Application Form

Please complete the following application form with as much detail as possible. If more space is required, please attach a separate page to this application form.

Name of Organisation Ocean Planet Tasmania
Organisation Status Not-for-Profit
Contact Person Rebecca Hubbard **Position** Coordinator
Address 100 Elizabeth Street, Hobart, Tasmania, 7000
Contact Details **Phone** 6224-6319 **Fax** N/A
Email Address marine@et.org.au
Date of Application 17 November 2011

Sponsorship Requested Reduced rate for advertising with Metro Bus company. We are looking to have full back advertising on 2-3 buses running for one to three months, but cannot afford the rate as we are a small not-for-profit group with a limited budget, and the regular cost for this advertised on the Transit Advertising website would come out to over \$3,000. We are looking to spend \$500-600.

1. Outline the purpose of your organisation

Ocean Planet is a marine conservation organization that works on protecting Tasmania's unique marine wildlife and securing a sustainable fishing future. Tasmania is renowned for its World Heritage listed lands, yet many people don't know that our underwater environment is as unique and spectacular as our land, with ninety per cent of Tasmania's marine life unique to Australia's southern waters, including the beautiful Weedy Seadragon and the charismatic Handfish. We work to raise awareness of our magnificent marine environment amongst the community, and engage with a wide range of industry, scientists and government to better protect it for our grandchildren.

2. Describe the demographic profile and target market of your organisation

The target demographic for our organisation is really the Tasmanian community. We seek to increase awareness and the salience of marine issues so that individuals can better engage with marine protection and sustainability issues.

3. Detail what the sponsorship will be used for (for specific events, provide dates and locations, experience of staff and management)

The sponsorship will be used to advertise with Metro buses in Hobart. We will run advertisements for one to three months on one to three buses to raise awareness of what is beneath the waves in our local oceans.

The bus advertising campaign is part of a public campaign on what is unique and special about Tasmania's marine environment – this started with a media launch last week of the new report "Nowhere Else on Earth" by Environment Tasmania (our peak body for environment not-for-profit organisations in Tasmania). We will also be screening an advertisement in the State Cinema, holding stalls at events and festivals over the summer period, distributing 10,000 postcards through Avant Card (with the same image as the bus advertisement), and promoting through our Facebook, Twitter and e-bulletin networks.

4. What other companies provide sponsorship to your organisation

Avant Card has sponsored the production and distribution of 10,000 postcards through their outlets, and we have received funding support from NRM South and NRM North for launching the “Nowhere Else on Earth” report. Generally, as a not-for-profit organisation, we rely on tax-deductible donations from individuals and generous sponsorship from companies.

5. Outline the target audience (demographics and number) and anticipated level of Metro brand exposure

The target audience for this advertising campaign is Hobart residents. We would prefer inner-city buses be used for our advertising campaign to maximise exposure to as many Hobart residents as possible. As mentioned, this will combine with our other events, media, cinema and postcard campaign that is targeting Hobart and Tasmanian regional areas over the summer period.

Because this sponsorship is sought to advertise with Metro, the Metro brand will be directly linked to the advertising campaign. This will demonstrate Metro’s support for Tasmania’s magnificent marine environment and local not-for-profit organisations. Ocean Planet has a respected name amongst the community and within Government, and this would be further grown in the community through this advertising campaign, which Metro would be linked with.

In addition, Metro could be acknowledged as a sponsor on our website in the information and pages linked to the advertising campaign.

6. Outline the benefits to Metro of the proposed sponsorship: Metro will gain recognition and public support for sponsoring a well-respected local environment group. Our aim is to raise awareness in the Hobart community about our unique marine life and hook them into engaging with how to better protect it. By sponsoring this advertising campaign, people will begin to associate the Metro brand with community education, our amazing marine assets, and looking after the next generations of Tasmanians.

a) Naming rights and exclusivity: N/A

b) Image Association: We would acknowledge Metro’s sponsorship on our website

c) Hospitality: N/A

d) Product exposure and trade incentives: Because we would use the sponsorship to advertise with Metro, both our organization and Metro would gain exposure simultaneously.

e) Signage or merchandising rights: N/A

f) Communications, media, PR and advertising: Ocean Planet would launch the bus advertising campaign in the media, in which it would acknowledge Metro’s sponsorship (if desired by Metro). It would be beneficial for Metro’s brand to align itself with a well-respected local marine conservation group working to preserve Tasmania’s magnificent and unique marine life.

7. Estimated value of benefits: It is difficult to quantify the value of benefits, as they will probably be long-term and exhibit themselves in the form of public support for the Metro brand. Because we are seeking sponsorship to advertise with Metro, any money awarded is funnelled straight back into Metro through advertising. Essentially, this means that sponsoring us would be low cost as many bus backs already do not have advertising on them, so nothing will be lost, plus Metro would still get the benefits of association with Ocean Planet.

8. Describe how Metro will benefit from the association with your organisation: Because Hobart is a progressive city the vast numbers of individuals concerned with environmental issues within the community would feel a stronger connection to your company if it were associated with Ocean Planet, which has a growing, strong, positive brand. We acknowledge that Metro considers environmental issues a key issue, and they are at the forefront of your PR campaign as you promote public transport and the reduction of greenhouse gas emissions through efficient transport systems. Therefore, aligning yourself with like-minded environmental groups, such as Ocean Planet, would further solidify this aspect of your green image.

9. How will the benefits be evaluated and reported?

The benefits will be evaluated by responses we receive from the public, through our events, website, Facebook, Twitter and e-bulletin. We will ask people if they have seen the bus advertisements and report back to Metro at the end of the campaign as to its success in gaining exposure.

Increased exposure and awareness of Ocean Planet (and use of our website if Metro's sponsorship is acknowledged there) will also increase awareness that Metro is a supporter of local environment groups, specifically groups that seek to educate the community on the uniqueness of our oceans.

10. Have you read the Metro Sponsorship Guidelines?

Yes

11. Do you agree to adhere to the requirements contained within the Metro Sponsorship Guidelines if your application is successful?

Yes

Signature

A handwritten signature in blue ink that reads "R. Hullett". The signature is written in a cursive style with a large initial "R" and a long, sweeping underline.

Thank you for your application. Metro will respond in writing within fourteen days of receipt, (thirty days for amounts over \$5 000). If you have any further queries, please contact:

Metro Tasmania Pty Ltd
PO Box 61
Moonah 7009
Phone 6233 4232
Fax 6272 8770

Maria Island Discovery Weekend Form

Name _____

Email _____

Phone

Address _____

What activities are you interested in? (tick all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Volunteer Clean up dive | <input type="checkbox"/> Guided snorkeling |
| <input type="checkbox"/> Rock ramble | <input type="checkbox"/> Night dive |
| <input type="checkbox"/> Dive excursion | <input type="checkbox"/> Fossil cliff walk |

Food Requirements:

- | | |
|--------------------------------------|---|
| <input type="checkbox"/> Vegetarian | <input type="checkbox"/> Food allergies |
| <input type="checkbox"/> Vegan | If tick yes, provide details of foods you are allergic to |
| <input type="checkbox"/> Gluten-free | _____ |

Accommodation:

- | | |
|---|--|
| <input type="checkbox"/> Camping (bring own tent) | <input type="checkbox"/> Stay in 6-person room in Penitentiary |
| serve) | (Keep in mind that only 24 beds available so first come, first |

Maria Island Marine Discovery and Cleanup Weekend Information Sheet

How to get there:

Two transport options, it is up to you to call and book transport:

1. Take a scenic boat ride with knowledgeable diving instructor. \$140 per person round trip

Boat departs from Hobart at 7:30am on Saturday 10th. Only 7 spots available so book soon if interested. Call Sue Wragge at 0417-015-654 or email at diving@underwateradventures.com.au and say you are booking for the Discovery Weekend tour.

2. Catch a boat from Triabunna to Maria Island. \$30 per person round trip

Boat departs at 10:30am on Saturday 10th.

Call Michael Davis (Island Ocean Charters) at 0408-313-904 or email him at michael@islandoceancharters.com.au to arrange booking, and say you are part of the Discovery Weekend tour.

Also, if interested in getting a return bus from Hobart to Triabunna, state interest when calling Michael and if there are enough people, a bus could be organised.

Accommodation: (Free)

Two options:

1. There are 24 beds available (4 rooms each with 6 bunk beds) on a first come first serve basis. If interested in staying in these rooms be sure to book early. Mattresses are provided, but must bring own sleeping bag.
2. Large camping grounds available. Bring own camping gear.

Food:

Saturday – bring your own picnic lunch. Saturday dinner, Sunday breakfast and lunch provided.

Organised Activities:

Cleanup Dive (Saturday afternoon)- Concerned about marine debris and want to make a difference? Volunteer for a clean-up dive, collecting underwater garbage that is degrading Maria Island's pristine waters and wildlife. Dive is free.

Rock Ramble (Saturday afternoon)- Take a walk along intertidal rocks to view and learn about the amazing marine creatures in the intertidal zone.

Night Dive (Saturday night)- Take advantage of the unique opportunity to experience the underwater environment at night. \$50 per person.

Ocean Talks and Film (Saturday night)- Hear from local Parks experts on this incredible marine reserve and the marine life it supports, and watch entertaining and educational films on critical ocean conservation issues.

Diving Excursion (Sunday morning)- Head out towards the historic fossil cliffs for an afternoon of diving with an experienced instructor in one of Tasmania's finest marine reserves. \$50 per person.

Guided Snorkeling (Sunday morning)- Love marine wildlife but not certified to dive? Come along for a guided snorkeling session with a master diver. Great opportunity for children.

Interpretive walk to Fossil Cliffs (Sunday morning)- Take part in a two hour round trip walk to these spectacular cliffs to get expansive views of the island and witness the many animals fossilized in the limestone rocks.

* There are many other activities that can be done at your leisure such as hiking up the mountain, beach rambling, bird watching, etc.

Pricing: (all listed on per person basis)

Required payments:

\$12 per person, per day for National Park Fees (or just use your season pass)

\$30 for food/ activities

\$140 round trip for scenic boat ride from Hobart or \$30 round trip ferry from Triabunna

Optional payments based on activities:

\$15 to rent snorkelling gear

\$ 50 per diving session

Weekend Schedule:

Saturday 10 December:

7:30 am- Boat departs Hobart for Maria Island

10:30am- Boat departs Triabunna for Maria Island

Noon- Arrive on island, lunch

Afternoon activity- clean-up dive, unsupervised snorkel, or rock ramble

Evening: BBQ dinner

Evening activities- dusk snorkel, night dive, talks and films

Sunday 11 December

Morning- breakfast

Morning activity- dive, supervised snorkel, or interpretive walk to fossil cliffs

Noon- lunch

Afternoon – free time to explore, snorkel, pack up and check out anything you missed!

4pm- boat departs