North Vancouver Ecotourism and Sustainable Management

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Introduction

The Lynn Canyon Ecology Centre is a municipally owned public centre with a focus on public awareness of local BC flora and fauna. It is the centre's goal to implement various programs and workshops to educate the public on matters of sustainability and environmental protection. The building is located in Lynn Canyon Park in North Vancouver, BC and has two main features in close vicinity: a suspension bridge and a café (See Figure 1).

The Ecology Centre has been looking into ecotourism options for the park. Reasons for this include implementing some type of control factor for the people who regularly visit the park in the summer months to utilize the free suspension bridge. Many tour groups include the bridge in their tour packages to bring tourists to the bridge as part of an authentic Vancouver experience. From experience, it is already known that most of these tourists put extreme amounts of pressure on this area of the ecologically fragile park.

Tricia Edgar was my contact for the centre and some of the key concerns brought up were to look at what types of people were coming to Lynn Canyon as part of a tour package, to understand what made the park stand out compared to other tour options, and ways to manage large flows of people through the suspension bridge area. From these questions, I developed some guidelines for gathering information to create an informative stance on the subject. I broke up the research into three main components. The first one pertains to basic factual information on Vancouver's Tourist industry. With this data, tourism trends can be evaluated to see how many tourists are coming from Europe and Asia which are two primary groups of interest for the ecology centre. Also, it will be possible to come up with some form of hierarchical list of tour packages suitable for the implementation of an ecotour of Lynn Canyon. Secondly, there is a specific social profile of an ecotourist as well as certain expectations of ecotours.

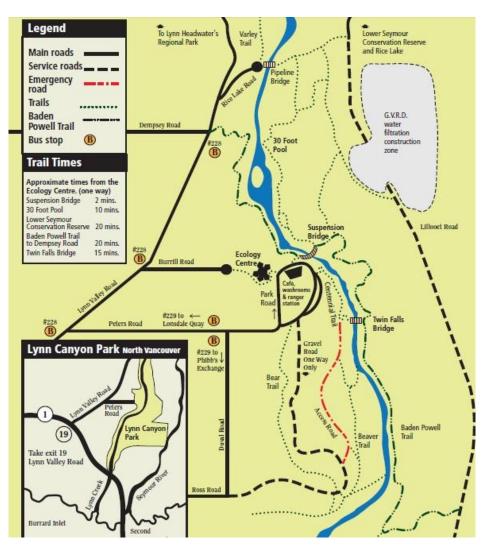


Figure 1: Map of Lynn Canyon Park (Source: http://www.dnv.org/ecology/files_pdf/Lynn%20Canyon%20Park%20Map%202010.pdf)

This Paper will analyse current tourist trends in Vancouver to gain some scope of ecotourism in the city. From here, I will evaluate methods of managing tourists in the park and suggest some key changes that need to be made in park management etiquette. To define ecotourism briefly, it is the sustainable consumption of natural areas involving an educative and conservation-supporting component while overlapping characteristics of wildlife, adventure and nature-based tourism, rather than large-scale tourism (Hill and Gough, 2009). Defining an ecotourist is slightly more complex as the definition has changed throughout the past 20 years. These definitions will be evaluated under the social profiling portion of this paper.

Methodology

The methods I used for evaluating the potential options for the Lynn Canyon Ecology Center, consisted of a secondary analysis of literature already presented on the subject of ecotourism. Most of this study is essentially an evaluation of the results obtained from different management strategies in place in eco-tours around the world. Two of the main case studies I rely upon are taken from eco-tour operations in Queensland, Australia and New Zealand. The reason behind this stems from the climatic similarities between these locations and Vancouver, which both have large amounts of orographic precipitation. Along with this literature review, I analyse statistical data on Vancouver's tourist trends that have been collected by various organizations. Two primary sources will be government data and data collected by Tourism Vancouver. After evaluating these trends and looking at different management strategies for the park, I will suggest some options that the Ecology Centre could implement to improve the flow of people through the park as well as discuss some of the tour packages that would synergize well with than eco-tour.

<u>Data</u>

The data gathered from this study is from secondary analysis of literature reviews performed by various scholars interested in management strategies for tourism operations. This data is the foundation of my analysis, and also works in conjunction with statistical data collected on tourist demographics within Vancouver. The research papers I chose to analyse all included some form of questionnaire in order to gain some basic feedback on how useful certain management techniques were in these locations. This was helpful for my own research since I did not have time to allocate for any such questionnaire or survey of my own. Also, the ecology centre is looking to implement a summer tour, so gathering data in the winter, the time when I began research, would not have yielded the same results as in summer.

As previously mentioned, Tourism Vancouver was a great tool for market research in the tourist sector. The only issue with this data is that it was not narrow enough to do searches of only eco-tour options. However, it did have sufficient data on where tourists to Vancouver were coming from, and also how much revenue the city was generating from this one portion of the service sector. Figure 2 is just a brief summary of the revenue generated over the years.

Historical Visitor Volumes and Spending 1986-2007				
1500-2007	Number of	Total visitor		
Year	visitors	spending		
2007	8,912,525	\$4,603,579,408		
2006	8,692,925	\$4,436,350,419		
2005	8,604,870	\$4,317,129,536		
2004	8,523,304	\$4,161,758,877		
2003	7,967,198	\$3,598,942,681		
2002	8,321,683	\$3,559,599,903		
2001	8,347,153	\$3,533,767,223		
2000	8,448,542	\$3,514,171,045		
1999	8,286,220	\$3,362,382,352		
1998	7,865,483	\$3,191,804,616		
1997	7,760,994	\$3,255,969,813		
1996	7,619,389	\$3,161,640,622		
1995	7,053,472	\$2,797,392,578		
1994	6,511,606	\$2,486,515,435		
1993	6,120,178	\$2,251,442,900		
1992	5,949,036	\$2,131,618,429		
1991	5,936,332	\$1,977,984,440		
1990	5,997,668	\$1,845,009,492		
1989	5,907,800	\$1,706,415,930		
1988	5,708,555	\$1,616,877,436		
1987	5,296,381	\$1,474,431,983		
1986	5,810,347	\$1,547,564,776		

Figure 2: Historic Spending (Source: Tourism Vancouver, 2008)

So from this data set, it can be seen that there is a definite increase in the amount of people coming into Vancouver, which directly influences the amount of revenue that is generated. One problem with this dataset is that is it slightly dated for the timeframe I am looking at in this study. Most of the datasets from this website are only dated up to 2007, the year before the economic recession, so it is inconclusive in showing any trends of a regenerating industry.

The Lynn Canyon Ecology Centre specifically wanted to know information on how many people were visiting Vancouver from Asia and Europe. The Metro Vancouver government website was perfect for gathering this information. Figure 3 shows the totals for people visiting from these two continents. These numbers will be useful to the Ecology Centre

> June January - June juin Janvier - juin 2010/2009 Country of residence 2009 2010 2009 2010 2010/2009 Pavs de résidence (%) (%) Grand - Total - Global 146,989 170,917 16.28 581,366 620,838 6.79 Europe -Total 56,991 59,648 4.66 194,484 218,010 12.10 1,078 64.83 2,622 4,994 90.47 Austria - Autriche 654 Belaium - Belaiaue 715 875 22.38 2.061 2,708 31.39 916 1,048 14.41 3.066 2.900 -5.41 Denmark - Danemark 1,419 98.03 Finland - Finlande 300 394 31.33 2.810 2.712 France 2.410 12.53 7.982 10.177 27.50 Germany - Allemagne 10.032 10.012 -0.20 31,593 34.125 8.01 Greece - Grèce 138 179 29.71 492 877 78.25 reland - Irlande 1,744 2,344 34.40 4,743 7,657 61.44 Italy - Italie 1,318 1,393 5.69 5,376 6,217 15.64 Netherlands, The - Pays-Bas 4,073 3,571 -12.33 12,205 13,443 10.14 650 757 16.46 2,369 84.80 Norway - Norvège 4.378 Portugal 336 271 -19.35 1,268 872 -31.23 1,302 1,350 4,486 3,913 Spain - Espagne 3.69 -12.77 Sweden - Suède 860 985 14.53 4,305 5,006 16.28 Switzerland - Suisse 2,313 2,692 16.39 7,865 9,429 19.89 United Kingdom - Royaume-Uni 26,196 26,588 1.50 92,301 92,504 0.22 Other - Autres 3,034 3,399 12.03 10,331 16,000 54.87 Asia -Total- Asie 277,311 6.86 58,024 76,293 31.49 259,501 China(Mainland) - Chine 8,837 12,123 37.18 44,913 48,222 7.37 Taiwan - Taïwan 4,809 5,346 11.17 19,147 18,491 -3.43 Hong Kong - Hong-Kong 8,270 9,243 11.77 35,097 35,613 1.47 34.15 18,157 22,343 23.05 India - Inde 5,077 6,811 Indonesia - Indonésie 1,157 1,614 39.50 2.687 2,992 11.35 16.67 srael - Israël 834 905 8.51 1.656 1,932 Japan - Japon 8,316 13,889 67.02 48,564 55,389 14.05 Korea (South) - Corée (Sud) 9,402 13,361 42.11 41,975 48,037 14.44 Malaysia - Malaisie 1,288 77.17 2,295 2,939 28.06 727 4,746 25,749 19,957 -22.49 Philippines 5.037 -5.78 Singapore - Singapour 1,884 2.835 5.949 12.07 50.48 6.667 Thailand - Tailande Other - Autres 835 1,090 30.54 7.15 3,552 9,760 3.940 10.92 10.54 2.839 3.042 10,789

Estimation of tourists⁽¹⁾ from Countries Other than the United States entering Canada Estimations des touristes⁽¹⁾ de pays autres que les États-Unis entrant au Canada Province of entry: BRITISH COLUMBIA - Province d'entrée : COLOMBIE-BRITANNIQUE

Figure 3: Travel From Asia and Europe (Source: Metro Vancouver Government Website)

because the centre is has a language school program specifically directed towards ESL tourists. One of the eco-tour options will be directed towards Asian and European tourists, and this dataset shows that there is a predominant population of people coming into Vancouver from these locations.

Other than basic tourist demographics, I needed to find out what tour option best synergizes with a Lynn Canyon eco-tour. As it stands, many tour packages come to the Lynn Canyon in order to take advantage of the free suspension bridge. Large amounts of people come off of tour buses and essentially put loads of pressure on this one location of the park. The Ecology Centre's concern here is twofold; first, they want the eco-tour to spread out the impact of these large fluxes of tourists throughout the park, and second, they want to make it a guided experience that also generates some form of revenue for the centre. I analysed a number of tour websites to see what packages are offered to incorporate these eco-tours into so that the tourist impact to the area surrounding the suspension bridge will be mitigated. Tour packages off of Info Hub seemed like a good place to start, as many of the eco-tour options in Vancouver are advertised through this site. Info Hub is a specialty travel guide that offers a variety of tour packages at different price ranges (InfoHub, 2011).

Two other tourist packages I looked into were Tours by Locals and Maple Leaf Adventures. Maple Leaf Adventures is a sea-based eco-tour program that offers multi-day excursions along the beautiful B.C. coastline (MapleLeaf, 2011). These tours offer an environmental and historical education experience (ibid). However, these tours are very expensive and definitely cater to a certain age and socioeconomic demographic. This does not cater to the general population that would be visiting Vancouver, as these tours generally take place along remote areas of the coastline. The other option that I looked into was Tours by Locals. This tour company offers specialized packages for doing tours with guides who are from the area where the tour will take place. These guides could be self-employed or hired by companies and advertise their services on the Tours by Locals website. This option caters to a more average socioeconomic demographic and these tours can be booked well in advance. So there are two benefits for having this option. The first is that it would be locals who would be giving these tours; people who are hired by the Ecology Centre to educate and guide people through the park. Secondly, these tours are very affordable and can be well integrated into the Lynn Canyon Ecology Centre's agenda, as the Tours by Locals site merely acts as a medium for people to get connected with different tour packages. One problem that arises is that the guides chosen to work at the Ecology Centre must go through the Tours by Locals screening process before their site can be utilized advertising the eco-tour.

These different tour packages need to be assessed using some form of cost-benefit analysis. All of the parameters of the eco-tour need to be taken into consideration to see which option to choose in regards to seeing which package to add Lynn Canyon to. So more research on what the tours will look like needs to be done so that this type of analysis can be evaluated. Some characteristics that need to be known are the prices for these tours, their duration, and the type of educational experience will be offered on the tour. So coming to any form of conclusion for what tour package Lynn Canyon will fall under seems uninformed at this moment.

There is a lot of competition for the eco-tour industry in Vancouver, and most of these options are only available during the summer. The Lynn Canyon Ecology Centre is going to be

entering into some steep competition, so one question remains: what makes Lynn Canyon stick out from the crowd? The general consensus from numerous ecotourism blogs is that Lynn

Land - Based	Vancouver, Coast & Mountains (Number of businesses)	British Columbia Total (Number of businesses)	% of BC Total
Land-Based Summer	126	407	31.0%
Mountain Biking	25	44	56.0%
Land-Based Winter	28	100	28.0%
Heli-Skiing	7	32	23.0%
Total	537	2,193	24.5%

Figure 4: Number of Tour Options in Vancouver (Source: Metro Vancouver Government Website)

Canyon Park is highly accessible from the city, and that the suspension bridge offers a unique and free experience. The location of the Park is just a short distance from Highway 1 making it close enough to city life to not require any sort of extended time just to travel to the location. Also, the fact that there is no fee to use the suspension bridge makes it a more viable option for people rather than paying to use the Capilano suspension bridge.

Another question to ask is what are people looking for in an eco-tour experience? The responses to this question that other scholars have gathered are highly subjective, ranging from educational experiences to pure aesthetics, or just passing time (Hill and Gough, 2009; Dimoska and Kocevski, 2010; Meric and Hunt, 1998; Wight, 1996; Yacob et al., 2011) . One of the case studies based in Queensland, Australia came up with a standard list of what was the motivation for going on an eco-tour. Figure 5 is a list of the results that Hill and Gough came up with based off of a questionnaire that was issued to tourists entering the park (2009). The results were statistically organized into mean scores from the raw data and compiled into tables. Most of the data is otherwise unprocessed and not strictly analysed. The compatibility

Motivation statement	Mean score
Encountering scenic beauty	3.66
Seeing the rainforest wildlife	3.61
Enjoying the sounds, smells and feel of the rainforest	3.56
Exploring something new and different	3.40
Having fun and enjoying yourself	3.36
Encountering the rainforest structure and trees	3.22
Learning about the rainforest	2.97
Escaping from the stress of everyday life	2.79
	2.63
Taking exercise Being creative such as painting or taking photos	2.54
Doing something to tell friends about	2.50
Gaining a sense of rainforest history	2.44
Sharing your knowledge with others	2.40
Delag with friends and family	2.35
Being with friends and family Passing time whilst in Queensland	1.83

Note: 1 is not at all important, 2 is slightly important, 3 is important and 4 is very important.

Figure 5: Motivation for embarking on a rainforest walk (Hill and Gough, 2009)

of this data to a Lynn Canyon Ecology Centre is possible due to the climatic similarities between Queensland and Vancouver. Also, this data was specifically gathered based off of a rainforest walk, which is essentially what the Lynn Canyon tour would most likely look like. From the results, it can be seen that the highest motivational factor for going on an eco-tour is encountering scenic beauty (Hill and Gough, 2009). However, other scholars have recorded other reasons principle motivational factors for going on eco-tours, such as gaining knowledge about an ecologically fragile area (Mehmetoglu, 2005).

There is this clear dichotomy of what people are expecting on eco-tours which also suggests that there are two different categories of eco-tourists. Mehmetoglu breaks down the differences between certain types of eco-tourists and broadly categorizes them into two categories: generalists and specialists (2005). Generalists are categorized as the local masses of tourists, and essentially go on these tours for the aesthetic qualities of the tour (Mehmetoglu, 2005; Luzar et al., 1998; Wurzinger and Johansson, 2006). Generalists are also expected to travel to tour locations via tour packages, and most of these tour packages include a tour bus (ibid). These are the types of tourists that the Lynn Canyon Ecology Centre is specifically trying to cater towards, so there should be an eco-tour that fully focuses on the beauty of the location. Specialists usually travel alone or in small groups, and generally stay out of these mass tour package options (ibid). These specialists are focuses more on the educational aspects of the tours; going to actually learn about how these environmentally fragile areas can be protected (ibid). The Ecology Centre should also look into a tour option for the specialist category of ecotourists.

With these two different categories defined, different management strategies need to be implemented to protect the park as much as possible. Two prominent ways to do this that have been successful in eco-tours in New Zealand are constructing mindfulness and and the development of an interest scale (Frauman and Norman, 2004; Juric et al., 2002). Constructing mindfulness is gearing tourists to enter a state of mind where people are fully aware of the fragility of the environment that they are in. This can be done in a matter of methods, such as handing out brochures or gaining information from signage and kiosks (Frauman and Norman, 2004). The results show that people are much more aware of their location and make sure to stay on trails and follow the rules of the park.

The development of an interest scale is a secondary analysis of primary data (Juric et al., 2002). Most of the research that is done in regards to tourist management is based on sociodemographic data that includes where people are coming from, their incomes, how long their vacations are, and also how much money these people spend while on vacation. This data

is then statistically analysed using Chi-square tests and regression models to determine behavioral patterns of people who visit the park

Results and Analysis

There were four questions that the Ecology Centre presented me with to answer. These questions were (1) what are the trends in tourism in Vancouver, (2) how does Lynn Canyon fit into these trends, (3) what are visitors looking for in an ecoutourism experience, and (4) how can large amounts of tourists be managed in the park? The trends for tourism seem to be increasing steadily. This in part has to do with the 2010 Winter Olympic Games being in Vancouver. InterVistas did a cost-benefit analysis of the impact of the Olympic Games on tourism in Vancouver and they came to the conclusion that the Games provide an increase in tourism that will last for a number of years. The following figure is a graph from their report.

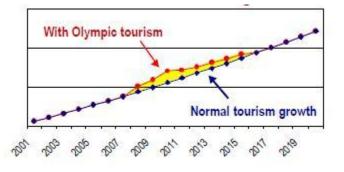


Figure 6: Tourist Flux due to Olympic Games (Source: InterVista Report, 2009)

The tourist trends for Vancouver have increased steadily despite the recession of 2008.

In terms of finding out what tour package Lynn Canyon will best fit into, it is hard to determine due to the tour logistics being unknown. However, I have a number of suggestions that the Ecology Centre can look into for synergizing well with the people who come and visit the park. First off, there should be a number of tour options available to correctly suit the needs of the people coming into the park. As previously discussed, there are two broad

categories of ecotourists: specialists and generalists. There should be tours to fit the needs of both types of people. Also, since the Ecology Centre has an ESL program, there should be a tour option catered towards people from Asia and Europe, as I was asked to find data on tourists from these places. Another option to look into would be looking at cruise packages. Many cruises that dock in Vancouver have full day layovers and most people are just let out into the city with no guidance. If representatives from Lynn Canyon were waiting at the docks to welcome these tourists, there would be a greater flux of people to the park.

Again, what people are expecting on these tours is pretty subjective, but dividing tourists into specialists or generalists groups similar interests. These interests stem from education or pure aesthetics. Finally, the two best ways to manage people in these parks are to include some form of mindful experience so people know that the area they are walking in is environmentally fragile. However, upon further research it has been discovered that creating this mindful environment essentially can reduce the ability for people to aesthetically appreciate the park since they are focused on reading signage or informative brochures. Also, developing a state of mindfulness is not just about having signage around the park, but rather it is an on-going process that needs to be taken into consideration. A study that was undertaken to figure out which companies were doing sustainable practices, such as recycling and consuming less, encouraged tourists to do the same (Rainford and Wight, 2009; Honey, 2008; Huybers and Bennett, 2003). This state of mindfulness must be kept constant on and off the tour to yield the most beneficial results.

Conclusion

A Lynn Canyon eco-tour would be most successful if there were a variety of options implemented to guide a variety of people through the park. There are different types of tourists going on these ventures, so this should be reflected in the type of eco-tour being offered. In regards to what tour package Lynn Canyon would synergize well with, I think that this is the next step of research that needs to be taken. There is a plethora of eco-tour packages available to people visiting Vancouver so knowing what exactly will be done at Lynn Canyon needs to be established before properly addressing this problem. However, knowing what certain types of people are looking for aids the design aspects of the park, and having these different management strategies in place will reduce the impact on the area around the suspension bridge.

In terms of future research, I think that the Ecology Centre should not even classify these tours as eco-tours. The park is in such a close vicinity to the city that there isn't this aspect of entering the remote wilderness. Also, it seems like the park is feeling the impacts of mass tourism since many tours bring people into the park on these enormous tour buses as it is. I think that the Ecology Centre needs to focus on a method to physically restrict the sheer number of people who walk the suspension bridge on a daily basis over the summer months. This will be the simplest and easiest method of protection, so looking into some options here would probably beneficial to the park. Overall, with the current increase of tourism due to the Olympic Games, a tour option in Lynn Canyon seems like it would be very successful since the park is highly accessible, very easy to navigate for beginner hikers, and is in close proximity to the city so that people can have trips that last a variety of timeframes from a few hours to full day adventures.

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