

Tides of change: Place meanings in the Broughton Archipelago

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Abstract

Rural Vancouver Island is in a state of transition from reliance on traditional resource based industries such as commercial fisheries and forestry (Robinson & Mazzoni, 2003) to a more diversified economy which includes tourism and aquaculture. Long standing patterns of life become threatened in remote coastal communities like Echo Bay and the greater Broughton Archipelago as traditional meanings of “places” become “unmoored” in an increasingly globalized world (Williams & McIntyre, 2003). “Place” or “sense of place” are the perceived fusion of social history, community identity, scenic beauty, family heritage and spiritual values that give meaning to a place (Williams & Stewart, 1998). They are also the connection between social experiences and geographic areas (Galliano & Loeffler, 1999) such as people and their ties to the Broughton Archipelago.

Understanding the concepts of “place” can enable natural resource managers to interpret more clearly the relationships people have to the land (Kruger, 2005). However, inclusion of “place” in the dominantly technical milieu of planning often poses interesting problems in appropriate and sensitive representation.

In this qualitative study, an interview technique derived from Tobias’ (2000) map biography was employed. By locating places on maps during the interview process, a map-based interview enabled narrative data to spatially represent sense of place or landscape meanings and values. When combined with phenomenological interviews that sought the “essence” of “lived experience” of the Broughton Archipelago, map-based interviews provided a perceptive and creative medium for the elicitation of landscape values and sense of place. Voices from these interviews resound with images of socioeconomic and environmental transformation.

Phenomenological literature such life histories, historical fiction and place histories specific to the Broughton Archipelago were also employed to provide a historical perspective of the area in order to ground it in the present. As the greater story of place meanings in the Broughton Archipelago unfolds, salmon emerge as a symbol of the cultural landscape, ecology and economy of the Broughton Archipelago. Moreover the salmon surface as a metaphor for traditional rural livelihoods and a way of life but also for globalization and its processes. Such symbols become more important when threatened and the consequences of the loss of salmon challenge the resiliency of a complex social ecological system in the Broughton Archipelago. A call for adaptive management emphasizes feedback from the environment and the state of the resource through social and ecological memory over time to develop policy. Moreover, social networks that inform each other from a wide range of local and international governance create an overall adaptive governance system.

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Prologue

“Enjoy Our Beautiful Country”

Sprawled out on Bill Procter’s dock amidst a mess of charts in the afternoon sun I am absorbed in a scene framed by the image of a freshly painted boat “Ocean Dawn,” “an absolutely beautiful classic troller built for open waters by second generation shipwright Morris Gronlund in Vancouver” (Morton & Proctor, 1998). The boat is set against a backdrop of glassy water and homes perched along the densely treed and steep rocky shoreline of Procter’s Bay. I have known Bill casually for about five years since I began bringing my kayaking groups into Echo Bay as a guide on commercial sea kayaking expeditions in the Broughton Archipelago and Johnstone Strait. A visit to “Billy’s Museum” situated in the Procter Homestead was a highlight of these trips. Lining the floor and shelves are artifacts or what he calls “junk,” collected during a lifetime of logging, fishing and beachcombing. The scene always reminds me of Grainger’s (1908) description of the shops on Cordova St. in Vancouver in the early 20thth century:

You come to shops that show faller’s axes, swamper’s axes – single bitted, double bitted; screw jacks and pump jacks, wedges, sledge hammers, and great seven foot saws with enormous shark teeth... (p. 11)

Antique bottles are lined up on the shelves in translucent rows and glass topped wooden boxes house large displays of ancient projectile points, awls and hammer stones. The trolling spoons on the wall hang in testament to a legacy of commercial fishing history on the coast and an adjacent building sells local art, crafts and literature. I liked dropping by the Procter’s because it offered a glimpse into rural coastal life and its history and Bill was always happy to talk or “bulls...t” with my groups about his

home: “The area from Drury inlet to Johnstone Strait ... called the Broughton Archipelago by government agencies, but the residents of the area simply call it the Mainland” (Morton & Proctor, 1998, p. 108). Moreover, “[t]here are very few family homesteads left on this coast and here is unique, with three generations living on it until 1997...” (Morton & Proctor, p. 144).

Echo Bay also complemented aboriginal cultural tours on Village Island further south in the Archipelago at the beginning of our kayaking trips. It is the site of a large abandoned native village which is documented vividly in James Sewid’s life history (Spradley, 1969). Dressed in aboriginal regalia, a First Nations interpreter provided tours augmented by Kwakwaka’wakw legends and occasionally, music and dancing that dramatized the significance of the fallen totems and village ruins. Both places book end our journeys through the islands, inlets and open sea between. These visits also provided experiences from which a cultural landscape could be formed in people’s imaginations which I hoped would enrich and frame their paddling experience with a heightened sense of place that people could carry away with them.

After a week spent camping on shell midden beaches and weaving through a dizzying maze of islands, we paddle slowly into Echo Bay’s small protected harbour. A faded pictograph on the steep south facing cliff at the entrance beckons, and the Windsong Sea Village with its funky disarray of brightly painted float houses in varying states of repair comes into view on the north side of the bay. These houses, floating on log booms, display a decidedly Caribbean-like disposition in contrast to the characteristic diffused light of the west coast which a local artist described as “mother of pearl white” (Yvonne). On the south side of the Bay sits the Echo Bay Store and the Echo Bay Resort. In peak season, float planes buzz in and out arriving from Seattle and Vancouver and

large cruising vessels and sport fishing boats sit moored along the docks. But, now, it is early in the spring with few tourists about and it is quiet.

On a typical trip during the summer, we would land on the white shell midden beach at the head of Echo Bay and set up camp high on the meadow above the rim of black organic soil and shell bank built up during thousands of years of human settlement. Eventually, we wandered off to the Proctor homestead walking past the community hall nestled in the meadow beside our campsite, past the Echo Bay School and across the tidal flats.

This visit was different, I was alone, and my goal was to interview a number of the local residents. My kayak and I had hitched a ride to the bay on an outgoing boat with the intention of paddling around to visit a number of people in the area and then make my way back to Vancouver Island through the Broughton Archipelago. I strolled down the boardwalk leading to the water and Bill appeared from somewhere behind the small shed on his dock. He had been painting his boat. As I greeted "hello" from a distance he commented "now I can put a face to the name...I was waiting for you." I had mailed a month earlier to explain about my study and asked if he would be interested in participating. I had not received a response, so I was feeling a little apprehensive and relieved to hear that the letter had likely been accidentally burned in the wood stove.

We settled down on the dock and I spread out the charts, however I was not sure how to begin our conversation. I began by asking "Can you tell me a bit about your history in the area?" Bill chuckled and replied "Well everybody knows that." Much of Bill's personal history, environmental values, and political views were well known, as he had published them in a biography and place history of the Broughton Archipelago. These were employed throughout my study as additional "voices" in lieu of Bill's hesitance to

discuss them any further for fear of repeating himself. However, Bill knew me as a kayak guide, so we meandered easily in and out of “special places” on the chart that were good for kayaking or camping. I let our conversation slowly take its own form and after some time, it was increasingly interspersed with informative updates on local events and current issues that were grounded in his book and in related literature reviewed towards the end of my study.

I had realized from earlier interviews that conversation about an area could be enhanced by using a nautical chart (a marine map) to virtually (and spatially) locate “self” in “place.” It seems that poring over the chart together facilitated the individual’s capacity to articulate meaning in a thoughtful manner. Towards the end of the interview I spontaneously asked Bill to describe or define his “sense of place” by inquiring “if you have...one sentence...to describe the area or what the area means to you ...?” This question elicited a thoughtful pause and a good natured, hearty laugh. Bill shook his head and exclaimed a jovial “I don’t know. I have no idea,” that expressed the obvious difficulty in trying to describe something so complex. He declared “Anybody...comes and leaves here I always tell them to enjoy our beautiful country...” It’s what he says to everybody who comes to visit him at his home in Echo Bay. “Tourists [also] always ask me how often you go into the real world, and I tell them that this is the real world...”

I felt I understood the meaning of Bill’s reply from his writing and from a decade exploring the area myself. For Bill, “reality” encapsulates a lifetime of residence in the Broughton Archipelago and a passion, intimacy, depth of knowledge and deep connection to the land gained by exploration of its islands and deep inlets as a commercial fisherman, a logger and a trapper. His response also had a humour and

ease that left one with an openness to interpretation that I liked. "Beauty" and moreover, "reality" could have many different meanings that are subject to our social and cultural milieu (Greider & Garkovich, 1996).

Chapter 1

Welcome to the "Mainland"

1.1 Overview

This study is about place meanings of people who live, work and paddle in the Broughton Archipelago, a remote group of rocky islands and islets situated north of Johnstone Strait off the northeastern coast of Vancouver Island, British Columbia, Canada. Its land and waters encompass the Broughton Archipelago Provincial Marine Park and have a history rich in natural and cultural values. Place, or "sense of place" is about meanings of the landscape that are constructed and reconstructed within individuals, but also the shared cultures, social practices and the cultural, historical, spatial context in which meanings, values and social interactions are formed.

The above narrative dramatizes these elements and illustrates the various meanings of place. The subsequent images portray not only Proctor's reality, but also the multiple realities present in my study which are steeped in resource extraction with fishing and forestry, aboriginal culture and nature-based tourism. Through this social constructivist lens (Burr, 1995), place is fundamental to understanding the human dimensions of ecosystem management.

Exploring the human dimensions of ecosystem management typically requires consultation and collaboration with various stakeholders (Deardon, 2004) and can enable resource managers to become better acquainted with the relationships people have to the land (Kruger, 2005). Traditionally this has been attempted through highly technical skills, expert knowledge and a positivistic search for the "right" answer. However, the use of collaborative stakeholder involvement, local knowledge and creative

experimental fusions of thick, rich, descriptive qualitative data that concerns itself with multiple realities and meanings of places are becoming more common.

Map biographies (Tobias, 2000) or open-ended map-based interviews which employ maps of the area as a visual and interactive interview tool, were used in this study to operationalize sense of place. Throughout the interviews, people indicated special places on a nautical chart of the Broughton Archipelago. This device spatially located the individual's comments and stories within the area, but also served as an important tool for stimulating thick, rich descriptions of special places and the place narratives associated with each. These interviews or conversations reflected value discussions in every day life and did not avoid the emotional or symbolic content (Satterfield, 2001) of socially constructed place meanings.

Moreover, the map-based interview elicited emotional bonds that people form with places over time reflected in meanings and symbols that are sometimes difficult to identify and may not become apparent until threatened (Williams & Stewart, 1998). For example, the above image of a traditional west coast fishing boat, freshly painted, poised and ready for action symbolizes a way of life and traditional culture. However, the boat's stillness belies a greater story of rural coastal communities caught up in a turbulent sea of change.

In this study, I embarked on an exploration of this change through the stories and historical texts of the people who live in and visit this landscape. What is the nature of the emotional, cultural and social connections that bind people to this place? How has this changed over the course of human settlement and what has this meant for the landscape, the people, the animals and plants that live here? What forces have shaped those changes and how are people adapting to them or not?

This was a journey that began by exploring sense of place and how it might best be represented in a manner useful to managers for planning. I imagined the destination as the development of a process that would give equal voice in the planning process to the “hard to define” character of special places. As it turned out, my journey took quite another turn and ended in an entirely different place.

Chapter 2

Sense of Place, Social Construction and Ecosystem Management

2.1 Introduction

Consideration of “place” (e.g., values, meanings and symbols) is becoming more common in academic and agency practice (Brandenberg & Carroll, 1995; Kruger & Jakes, 2003). Accordingly, natural resource managers and scientists are using an array of methods to explore the meanings, experiences and actions that help them to understand “place” and relationships people have to their surrounding environments (Cheng, Kruger & Daniels, 2003). The shift toward ecosystem based management recognizes people as a part of ecosystems and theoretically employs collaboration with a wide variety of stakeholders to guide the decision making process in natural resource management. However, these principles pose interesting problems for appropriate and sensitive definitions of places, which are difficult to express and represent in the technical milieu of planning.

The concept of “mapping place meanings” has gained an increasing focus in social science in natural resource management. Connecting social experiences to geographic areas (Galliano & Loeffler, 1999) through mapping provides a context for the ideas of “place” and a creative and insightful medium for the elicitation of landscape values. Subsequently, this has stimulated recent work in spatially representing social science data, particularly in regard to landscape values (Brown, 2005; McIntyre, Yuan, Payne, & Moore 2004; Overdest, McNally, & Hester, 1995; Williams & Stewart, 1998). This method of eliciting place-based information has been used more extensively with aboriginal peoples (e.g., in documenting oral histories) and is known as “land use and occupancy mapping” or more generally as “map biographies” (Tobias, 2000).

This chapter has three objectives. The first is to examine sense of place and its role in natural resource and wildland recreational management as a theoretical background for studying the human dimensions of ecosystems. Next, the relationship between social construction, collaboration and ecosystem management will be discussed. Finally, a discussion of mapping place meanings for natural resource and wildland recreation management will be presented.

2.2 Sense of Place

In a planning context, the incorporation of place ideas seek to expand data collection beyond “the limitations of scientific and technical information which (only) seeks rational, comprehensive... understandings of the world abstracted and removed from specific contexts” (Galliano & Loeffler, 1999, p.3). Moreover, sense of place has the potential for expanding the management of ecosystems beyond the physical and natural sciences through collaborative and holistic planning which recognizes people as a part of ecosystems (Brandenburg & Carroll, 1995; Mitchell, Force, Carroll, & McLaughlin 1993; Schroeder, 1996; Williams & Carr, 1993; Williams, 1995).

Sense of place is about people’s experiences of their environments that are imbued with meaning from which attachment and interconnectedness are formed (Kruger, 2005; Stewart, 2005). These relationships are developed through residence or frequent visits to a place (McAvoy, MacDonald, & Carlson, 2003). Based on the early work of Relph (1972) and Tuan (1974), sense of place has been gaining popularity in ecosystem management on account of its potential to include the depth and variety of human relationships with landscapes, resources, lands and ecosystems (Williams & Stewart, 1993, Cheng et al., 2003; Kruger & Jakes, 2003).

The most elusive aspect of place is a holistic sense that combines past experience with social and cultural meanings (Petrich, 1984) or the “sociocultural” elements of place (Williams & Carr, 1993). The sociocultural paradigm has been used to describe meanings in the natural world for social groups, individuals and the different territorial meanings of place (McAvoy et al., 2003). These examine how meaning structures (and is structured by) the environment, and explores the connection between sociocultural and economic factors and individual environmental concerns (Williams & Patterson, 1997). Lee (1972) found that place meanings are constructed through local knowledge and definitions of informal territories while Hester (1985) discovered that sense of place became stronger when meanings became threatened.

Identity and attachment to outdoor landscapes (Mitchell et. al., 1993; Williams et al., 1992) express more individual levels of meaning in which people actively create and construct a sense of self (Williams & Patterson, 1996). Nash (1982) and later Williams (2003) used the poignant example of American identity and its relationship to the frontier of the American west as a symbol of self-expression. Place identity can also be reflected on a smaller scale within individuals or groups, of an environment like a cottage, or cottage country such as the “Muskoka” region of central Ontario, Canada or the “North Woods” of Minnesota (McIntyre, Williams, & McHugh, 2006). Brandenburg and Carroll (1994) suggested that places allow people to create personal landscape meanings and environmental values that differ from their primary social group. Places are also “embedding” because their associated meanings and values can be passed on to the individual and shared with social groups vice versa (Brandenburg & Carroll).

Places that exist in our subconsciousness are textually rich and loaded with socially constructed and symbolic experiences, values and meanings (Greider & Garkovich,

1994). However, the sociocultural approach to place has not been well developed in natural resource management (Williams & Patterson, 1996). Some of the most important meanings for ecosystem management and environmental conflict contain cultural, symbolic and expressive meanings of a given culture (Geertz, 1973).

Awareness of the intangible or symbolic meanings of places can help managers better understand social processes that are developed through social interaction and found within social practices and institutions which emphasize the spiritual, cultural, and historic context of everyday life (Williams, 1995; Williams & Patterson, 1999).

Understanding their interrelationship with how we value the landscape moves beyond a viewpoint that regards natural resource as a series of attributes (Williams et. al., 1992) and provides an ecological view that situates and integrates people within ecosystems (Williams, 2003).

These interrelationships resound strongly with environmental views held by First Nations as sociocultural meanings and values such as those associated with culture, tradition and personal meaning become intertwined with commodity oriented values (Jorgensen, 1984; Rudner, 1994). For example, places can be managed to “provide food, medicines and materials for transportation, household use and artistic expression and they serve as a sanctuary for worship, contemplation and inspiration” (Morishima, 1997, p. 5). According to MacDonald and McAvoy (1997), indigenous land ethics are based on the sacredness of life and a heightened sense of place. Emphasis is placed on the inextricable relationship that humans have with nature and historical ties to the land. Moreover, there is a reciprocal and interdependent relationship with environments in which people are inseparable from nature. This is strongly linked to ideas of harmony, balance and cyclical patterns of life and shown in rituals and traditions.

This symbolic sense of place is also expressed in Western culture. It can be reflected as sentiments of people's attachment to places and settings like rural areas in which people live and work through collective expressions of their psychological, emotional, and intellectual values (Tuan, 1974). Ryden (1993) articulated this most eloquently when he stated that:

[E]xtended residence in a place tends to make us feel toward it almost as a living thing... the place has become a shaping partner in our lives, we partially define ourselves in its terms, and it carries the emotional charge of a family member or any other influential human agent. (p.66)

2.2.1 Narrative Valuation

Indigenous land ethics which intertwine mythology, hunting and gathering practices, spiritual events and values (Galliano & Loeffler, 1999) are also commonly expressed in oral histories (Macdonald & McAvoy, 1997) and can be spatially represented on maps (Brody, 1981) as they tell of one's life story on the land (Tobias, 2000). Similarly, in western culture our relationship to the land is often "mapped" in knowledge and place histories of fishermen, loggers, kayakers, guides and long term residents in rural settings.

Humans are natural storytellers (Shanahan, Pelstring, & McComas, 1999) and place meanings are told in stories of lived experience (Stewart, 2005). In a western context, experiences are recorded through stories where we remember and share our history and learn about our present (Johnstone, 1990). In Johnstone's study on place making and story telling, she discovered that one of the most common of these forms are narratives created about places, or place narratives. "Stories represent patterns and express the meanings of place across society and ... no place is a place until things that have

happened in it are remembered in history, ballads, yarns, legends, or monuments” (Stegner, 1992, p. 22). Similarly, Stokowski (2002) commented that places are expressed in language “using icons, imagery, argumentation, symbols and metaphors and these symbols of place appear as narratives, myths and fables” (p. 22).

In the same multidimensional ways that people and cultures define themselves through landscape, similar pluralistic, multidimensional, interdisciplinary techniques must be adapted to elicit these types of responses and probe deeper into the meanings and values people assign to landscapes. Rural communities, wilderness areas, parks, and protected areas pose interesting problems for appropriate sensitivity to natural resource and recreation management. Planning natural areas effectively requires planners to be ambitious about developing accessible and practical tools for resource managers.

2.3 Social Construction, Collaboration and Ecosystem Management

An understanding of how wilderness meanings and values are socially constructed and contested is necessary for effective protection and management of natural areas (Williams, 2001). Places are created and recreated in our subconsciousness and consciousness through textually rich and socially constructed and symbolic experiences, manifested as values and meanings attached to places (Greider & Garkovich, 1994). When viewed through this social constructivist lens, we can understand sense of place as multiple, subjective meanings created by history and culture through both our interpretations of the world and interactions with others (Creswell, 2003). “A social constructionist approach to wilderness meaning is a dynamic and twofold process. It involves the interplay between representing and mapping meaning (for example wilderness assessment and management plans) and managing that landscape guided by this assessment of meaning” (Williams, p. 123).

This strategy is reflected in a shift towards ecosystem based management which theoretically employs collaboration from a wide variety of people to guide the decision making process (Bengston, 1994). In ecosystem management, constructivist meanings from indigenous and local knowledge are combined with natural science knowledge (UNESCO, 2000) to develop an understanding of the complexities of the social-ecological systems (Berkes, 1998) with which managers are grappling.

Slocombe (2004) noted two themes that arise out of this definition of ecosystem management. The first theme suggests that management of protected areas maintains a comprehensive natural science orientation. In this element, there is a strong focus on data collection and management, analysis, ongoing monitoring and assessment. Secondly, ecosystem based approaches in parks and protected areas management also seeks to better understand public attitudes, meanings and values of people, communities and institutions through local and traditional ecological knowledge to foster collaborative management.

2.3.1 Opportunity Structure and Planning

Pre-existing planning frameworks typically did not recognize place centred values. Yet understanding the diversity of values allocated to different uses of the landscape by stakeholders from a place based perspective is one way help to mitigate conflict (McIntyre & Pavlovich, 2006), improve decision-making through use of local knowledge and build capacity for support for management decisions (Shindler & Neburka, 1997). The traditional “top down” technical nature of planning (Lachapelle, McCool, & Patterson, 2003) often fails to bridge the gap between differing values for places that commonly exist between professionals and laypersons (Wagner, Flynn,

Gregory, Mertz, & Slovic, 1998). People possess a wealth of values but are not able to express them in conventional elicitation methods (Satterfield, 1991).

Traditionally, resource management and planning revolves around an emphasis on how people process information in decision-making and attitude formation. In this approach, meaning is a tangible part of the environment that has an instrumental relationship to behavioural and economic goals. Its popularity resides in its suitability to the rational, instrumental and commodity oriented traditions of resource planning (Williams & Patterson, 1996). In this model, meaning is reduced to behavioural values and ignores the symbolic nature of the environment. Like consumer products, recreational or natural settings are often viewed by land managers as collections of features and attributes in which settings are interchangeable and reproducible (Williams et al., 1992). According to Williams et al., a place perspective holistically values places and recognizes natural resources as places with histories that “embody a sense of belonging and purpose that give meaning to life” (p. 44) rather than “raw materials to be inventoried and moulded into a recreation opportunity” (p. 44).

2.4 Mapping Place Meanings

In order to make appropriate and sensitive decisions, resource managers must also be able to identify the meanings that individuals, groups or cultures assign to particular landscapes. Through decision making that “employs user friendly meaningful contexts to help participants think carefully and reflectively and imaginatively about value of place, we can provide alternative models for value elicitation” (Satterfield, 2001, p. 356). Consequently “[t]he challenge for the professionals is to develop more effective and theoretically sound methods for incorporating public values into planning” (McIntyre & Pavlovich, 2006, p. 3).

The term mapping is often used to describe the process of or taking inventory of people's relationships to landscapes or places. These tell of one's life story on the land and relationships with special places (Tobias, 2000). However maps in resource planning most commonly illustrate biophysical features of the landscape such as varying soil types, geology or vegetation. Social data may be mapped similarly including layers of information that represent special places or hard to define concepts such as community, place attachment, symbolic meanings and spiritual values and provide a way forward in incorporating place meanings in natural resource management (Williams & Stewart, 1998).

This reflects the current interest in place centred, values mapping projects in natural resource management. Most recently, Brown (2005) employed a pre-existing typology of landscape values to elicit special places of residents in Alaska. Surveys that required residents to indicate special places directly onto maps of national forests indicated hotspots and areas of conflict. Tyson, Worthley and Danley (2004) used a landowner survey to elicit information on conservation practices which were linked to natural resource inventory. In another example, Overdest, McNally and Hester (1999) designed a process which laid out a step by step method for operationalizing place attachment. It employed surveys to elicit spatial data that were later integrated with computer mapping.

All of the above examples illustrate how sociocultural information can be elicited and integrated with biophysical data through the use of maps and survey research. However, understanding the relationships between people and the world of natural resource management also requires interpretive methods such as ethnographies, oral histories and personal place-based narratives to elicit values and sense of place (Cheng et al., 2003;

Satterfield, 2002). These methods draw out thick, rich descriptions of places which are unattainable in traditional surveys.

Tobias (2000) used a place based technique to “map” the oral history tradition of First Nations, called land use and occupancy mapping or more commonly, map biography.

Tobias commented:

First Nations people carry maps of their homelands in their heads. For most people, these mental images are embroidered with intricate detail and knowledge, based on the community’s oral history and the individual’s direct relationship to the traditional territory and its resources. Land use and occupancy mapping is about documenting those aspects of the individual’s experience that can be shown on a map. (p. 4)

Map Biographies were created by locating places on maps during the interview process. Later, special places were integrated with GIS to spatially represent multiple layers of meaning and used as evidence of traditional territory in land claim settlements. This effectively linked narrative elicitation such as in depth interviews, participant observation, and text analysis commonly employed in qualitative research traditions and combined it with a technical planning tool commonly used in natural resource planning.

In a western context, Galliano and Loeffler’s (1999) place assessment procedure also employed an interpretive approach that was designed for human dimensions research in ecosystem management. Interviews were conducted using open-ended place oriented questions and people were required to indicate “special” place locations on maps as part of the interview process. When applied as an ecosystem management tool, sense of place acted as a creative and accessible medium for resource managers to interact with the people in terms of the lived reality of place (Galliano & Loeffler). During the interviews,

people were asked to identify themselves with a place through their interactions. It was found that people could not express who they were without the setting within which they lived, worked and played (Galliano & Loeffler). Results gave concrete information about the “intangible” and provided a better understanding of management goals and changes to valued areas (Galliano & Loeffler).

2.5 Summary

Sense of place is invariably an element of the political and social process involved in land-use decision making (Eyles, 1985). People socially construct values and meanings about special places where they recreate, gain spiritual fulfillment, and re-enact traditions (Brandenberg & Carroll, 1995; Greider & Garkovich, 1994). The values and meanings attached to specific places by different social groups are, more often than not, multiple and conflicting (Williams, 2002) which creates special challenges for land managers (Williams & Stewart 1999; Dustin, Schneider, McAvoy, & Frakt, 2000). For example, a white shell midden beach may carry multiple meanings in relationship to the “self definition of people in a particular cultural context” (Greider & Garkovich, p. 1). To a kayaker slowly moving by at the end of a long day on the water, this midden offers an ideal place to land and set up camp for the evening. In leisure oriented context it may be a favourite place based on personal or emotional ties through familiarity (Williams et al., 1992). To an aboriginal person, a midden may indicate a traditional food-gathering site demonstrated by the sloping broken white shell surface from possibly thousands of years of harvesting clams at a particular time of year.

Recognizing potentially conflicting meanings are important to planning because place meanings and values are inextricably connected to the acceptability by users of management intervention. Contestation over diverse meanings is commonly deferred to

regulatory processes that tend to privilege one set of meanings over others (e.g., economics over conservation). The historical inadequacy of legislative approaches to resolve such conflicts suggests there is a need for a change in methods to allow differing cultural and symbolic meanings of places to be accessed and negotiated.

People may have the capacity to verbalize multiple dimensions of meanings and values through narrative and imagistic elicitation; however this type of symbolic, place oriented literacy should also provide some understanding of what verbal descriptions mean for options at a policy level (Satterfield, 2001). These issues suggest that a synthesis of conventional and unconventional practice would be beneficial (Satterfield; Stedman, 2003). In prior studies and applications, maps combined with interviews have provided an effective collaborative tool for drawing out values and meaning (Galliano & Loeffler, 1999; Tobias, 2000) in a manner that recognizes the political nature of natural resource and wildland recreation planning. Moreover, map biographies provide opportunities for planners, managers and laypersons to negotiate informed and sensitive solutions that respect the symbolic and cultural meanings of places (Galliano & Loeffler).

Chapter 3

Phenomenology and the Mapping of Lived Experience

3.1 Strategies of Enquiry

Qualitative research has roots in cultural anthropology and American sociology (Vidich & Lyman, 1998) and is becoming more common in natural resource and wildland recreation management research (Dupuis, 2000; Patterson, Watson, Williams, & Roggenbuck, 1998; Patterson & Williams, 2002; Walle, 1997). In this study, I employed phenomenological research methods. Phenomenology is an inductive process which asserts that context and experience are fundamental to knowing and the knower is a large part of what is known (Van Manen, 1998). In this sense, the researcher and interviewee embark upon a co-created investigative process which gradually makes sense of a particular social situation, event, role, group or interaction. In-depth and open ended interviews are employed to elicit rich descriptive narratives, stories or conversations of a particular phenomenon that engage us in the “lived experience,” “essence” and embedded meaning of every day life (Bogden & Biklen, 2003; Van Manen).

Phenomenology takes “into account the sociocultural and the historical traditions that have given meaning to, or ways of being [in the world]...” (Van Manen, 1998, p. 12). By understanding meanings, or “sense of place” and its holistic character that encompass past experiences and social and cultural meanings (Kruger, 2005), we become more perceptive of the lived experience. Phenomenological literature such as poetry, biographies, historical fiction, non fiction and place histories among others are commonly used and can add to a deeper understanding of the phenomenon being studied (Morse, 1994).

My study employed creative strategies which were driven by the context of the research and the questions asked (Denzin & Lincoln, 1998). Consequently, prior to my fieldwork, I conducted a preliminary literature review that familiarized me with the ideas and concepts of sense of place, social construction and ecosystem management. During data analyses, this initial review was expanded to encompass themes pertaining to globalization in resource-based communities in transition which emerged from the map-based interviews.

Fundamental to my research was the concept and technique of map biographies (Tobias, 2000) from which the map-based interviews in this study were designed. Map biographies (Tobias) are created by locating places on maps during the interview process, enabling narrative data to spatially represent sense of place meanings and values. Moreover, the maps served as a catalyst for natural interaction and conversation between two people familiar with the area. Data analysis was conducted using NVivo, a qualitative data computer analysis program that helped organize and draw out emergent themes of place meanings, or important and special places, from the map-based interviews.

3.2 Researcher's Role

The researcher is the primary data collection instrument (Shank, 2002) and this thesis subscribes to a qualitative research tradition which believes it is important to identify personal values, assumptions and biases of the researcher at the beginning of the study (Morse, 1998). My first experience in the Broughton Archipelago, the site of this research study, was in 1995 as a tree planter. In 1996, I began my career as a sea kayaking guide in Johnstone Strait, adjacent to the Broughton Archipelago. Over the

next ten years, I returned to the area to guide throughout the summers and continued my exploration of the region.

During that time I developed my own sense of place characterized by a decade spent kayaking in the Archipelago among its intricate web of islands and beachcombing their rocky shorelines and white shell midden beaches. As a guide, I have gained intimate knowledge of the area's weather patterns and the cycles of the ocean. I have experienced roaring gales but also, calm mornings where fog has rendered the separation between water and air indistinguishable.

The ebb and flow of tides create standing waves, riptides, eddies and boils from the currents that whip through deep inlets, narrow channels and around rocks and islands, but also become still and navigable at slack tide. These reveal waters that are rich and vibrant with marine life. I have come to know many of the North Island's birds and their habitats and the social patterns of various species of marine mammals. Moreover, I can visualize familiar paddling routes and the way the wind creates movement on the water as it mingles with current and refracting waves off the land; remember intimate details of shorelines, rest stops and campsites in my mind to which stories and experiences are attached.

This image sits in tension with industrial development. Rural areas in British Columbia are synonymous with extractive resource-based industries like logging and fishing, and increasingly, non-extractive industries like nature-based tourism. Nature-based tourism appears to be a viable alternative but only in terms of diversification rather than total reliance. I recognize fishing, forestry and nature-based tourism as an integral part of my own socioeconomic and cultural milieu; however, I question their sustainability. Poor logging practice destroys watersheds and biodiversity while

aquaculture threatens wild salmon stocks and is linked to the disappearance of Orca and wild salmon stocks that were once abundant in the area. I have also witnessed its beaches become overcrowded and its waters increasingly populated and overwhelmed with kayakers, sport fishermen and whale-watching boats.

I am now watching nature-based tourism slowly increase in the Broughton Archipelago. This perhaps foreshadows its future while the Broughton Archipelago Provincial Park's political boundaries or laws in its surrounding area do not protect it from further industrial development. A Park Purpose Statement, Zoning and Management Plan indicated a knowledge gap in sociocultural values and the impact of aquaculture on recreation and tourism. I believe these reflect greater overarching issues that threaten the viability of North Island communities and their surrounding natural areas. While the creation of a park is a step in the right direction, the development of a management plan in isolation from the larger issues that beset the area as a whole renders it ineffective and powerless.

3.3 Ethics

Permission to conduct research was granted from the Lakehead University Internal Review Board. The following measures were taken to safeguard the participants' rights (Creswell, 2003):

1. The objectives, time requirements etc. of the research were communicated to each participant in writing (see Appendix A).
2. Written permission to proceed with the research as expressed was received from the participant (see Appendix B).
3. Transcriptions and written interpretations and reports were made available to the participants upon request. The participant's rights, interests and wishes

were considered first when choices were made when reporting the data. Care was also taken to maintain the anonymity of participants (see Appendix A & B).

4. Participants remained anonymous unless otherwise desired by the individual. Pseudonyms are employed with the exception of Echo Bay residents Bill Proctor and Yvonne Maximchuk, both of whom are also authors of some of the literature cited. This created some difficulty in concealing their identity as their voices from the interviews and the literature often became integrated. Permission to use their names was solicited and granted in writing (see Appendix C, D, E & F).

3.4 Setting

A portion of this study was conducted at the homes or workplaces of some of the study participants in Crescent Beach and Coquitlam near Vancouver, British Columbia Canada, and the Vancouver Island communities of Gabriola Island, Courtenay, Sayward and Alert Bay. Another segment was conducted in the Broughton Archipelago at campsites and in the community of Echo Bay (Figure 1) on the southeastern end of the park boundary.

The Broughton Archipelago Provincial Marine Park also referred to in this study as the Marine Park, is presently BC's largest. It consists of a myriad of undeveloped islands and islets situated at the mouth of Knight Inlet on the west side of Queen Charlotte Strait near the north tip of Vancouver Island. Its location is illustrated in Figures 1 and 2. The park area has become somewhat of a hidden gem to the kayaking world, belying its popularity to the more accessible Johnstone Strait (Figure 1) further to the south, an

increasingly popular whale watching, kayaking and sport fishing destination and its busy hub of activity, Telegraph Cove (Figure 1). The area surrounding the Marine Park will

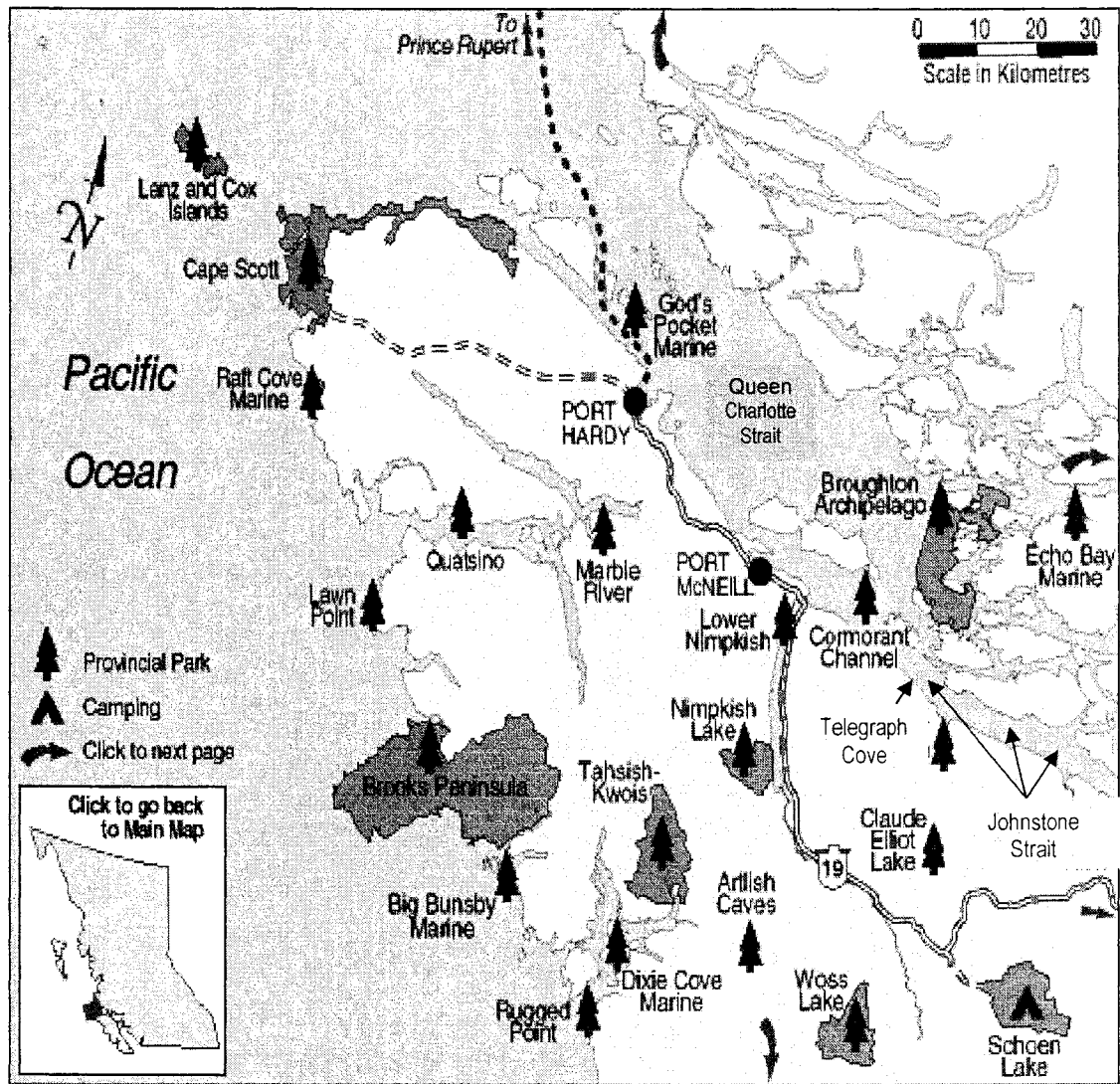


Figure 1. Broughton Archipelago Marine Provincial Marine Park location (adapted from BC Parks, 2003).

be referred to as the Broughton Archipelago, the Broughton or the Archipelago and is known to long time residents as the Mainland. The region also has a long history of logging, fishing, more recently and aquaculture. This legacy has left reminders of the

past with remnants of discarded equipment, old log booms and cabins decaying in the woods. More recent reminders are the highly visible clear cuts on islands and

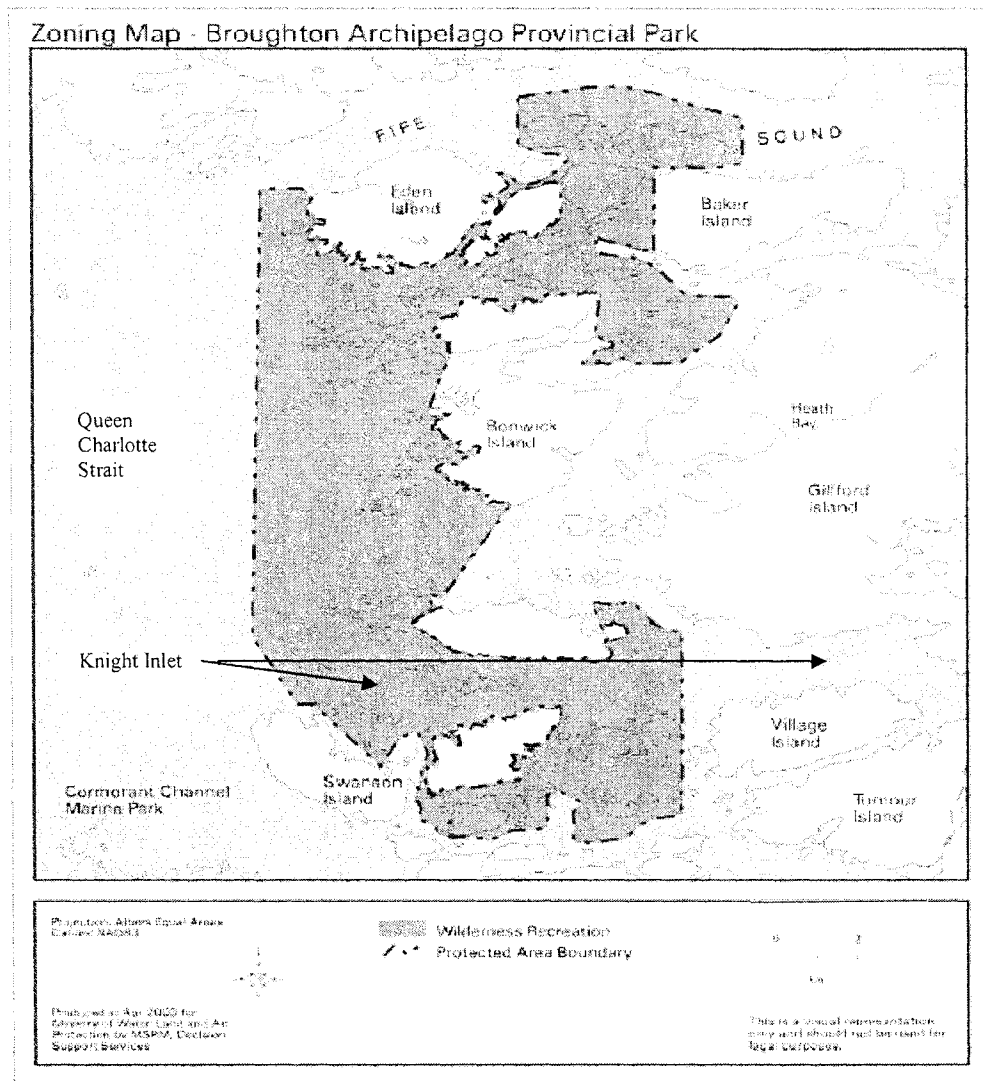


Figure 2. Broughton Archipelago Provincial Park (adapted from BC Parks, 2003).

mountain sides on Vancouver Island and the mainland of British Columbia. The common sight of seiners, trollers and gill netters also tell of a culture steeped in fishing history, most notably salmon. The fish farms that dot the area reveal the latest wave of fishery resource use in British Columbia. The Archipelago and the Marine Park also overlap on several different Kwakwaka'wakw traditional territories. The landscape is etched with evidence of their occupation revealed in white clamshell midden beaches,

clam gardens, numerous village sites, pictographs and burial sites. Small populations of both Native and non-Native cultures continue to reside in the area. An increase in seasonal residents reflected in homes built in and around the park has also been noted and nature-based tourism is becoming a more prominent feature of the cultural landscape.

3.5 Sampling Principle

The sample population of this exploratory study was directly or closely involved in the sea kayaking industry. I purposively selected a sample of thirteen participants from this population (snowball/convenience) but not without some guiding principles. Four stakeholder classes were considered to broadly represent the local knowledge of this population. Three participants from each of the following groups (with the exception of four local residents) were selected: kayak guides; aboriginal tourism interests; local residents from Echo Bay and; recreational kayakers (Table 1). In this way I hoped to get a broadly representative view of place meanings rather than a statistically generalizable case.

Studying work settings in which one is involved carries the risk of compromising the ability of co-workers to disclose information (Glesne & Pershkin, 1992). Although some of the eight participants in the study were known to me from my time spent in the area, the relationships I had developed with them were mostly casual rather than close. This type of relationship, while it facilitated access, did not hinder disclosure. Two recreational kayakers were approached on site while one local resident and two aboriginal tourism interests were referred by other participants. Two of the guides were known to me as friends and co-workers. This resulted in easy and flowing conversations that were entirely natural.

Table 1.

Interview Participants

Name	Representative Type	Residence	Occupation (s)
Bill	Local Resident	Echo Bay BC, Canada	Homesteader, commercial fisher, naturalist, author, activist, local historian & beach comber. Retired logger, & trapper
Yvonne	Local Resident	Echo Bay BC, Canada	Homesteader, artist & B&B operator, naturalist, author, activist & local historian. Former commercial fisher
Meg	Local Resident	Echo Bay BC, Canada	Homesteader, commercial fisher, logger, trapper wife & mother
Colin	Local Resident	Echo Bay & Cortes Isle. BC, Canada	Homesteader, nature based tourism, poet. Retired tree planter & silviculture contractor
Rich	Aboriginal Tourism Interest	Sayward, Van. Isle. BC, Canada/ Broughton Archipelago	Nature based/cultural tourism & water taxi owner/operator. Former commercial fisher
Judd	Aboriginal Tourism Interest	Alert Bay BC, Canada	Aboriginal tourism consultant
Sophie	Aboriginal Tourism Interest	Alert Bay / New Vancouver BC, Canada	Cultural tourism
Logan	Kayak Guide	Courtenay, Van. Isle. BC, Canada & Broughton Archipelago	Guide, naturalist, outdoor educator, researcher, college instructor, tourism consultant
Fran	Kayak Guide	Vancouver BC, Canada & Broughton Archipelago	Guide, naturalist, outdoor experiential educator
Mike	Kayak Guide	Gabriola Island BC, Canada & Broughton Archipelago (formerly)	Guide, kayak tour operator, mechanic, carpenter & municipal park & campground manager
Ryan	Recreational Kayaker	Coquitlam BC, Canada	Security consultant & analyst
Chris	Recreational Kayaker	Whistler BC, Canada	Banker
Sam	Recreational Kayaker	Victoria, Van. Isle. BC, Canada	Retired lawyer

3.6 Data Collection

In depth, open ended, tape recorded interviews and the creation of map biographies took place during April, May and September of 2005. Thirteen 0.5 to 1.5 hour interviews

were conducted and accompanied by field notes to document the more intangible elements of the interview like mood, atmosphere and expression (Shank, 2003). These were written after each interview on ferry rides, in coffee shops and on beaches during my travels up and down Vancouver Island and to the mainland. They acted as a reflective narrative which allowed for reflexivity during each stage of the research.

An interview guide was used initially to remind me of particular subject matter or questions of interest. These dealt with the nature of the emotional, cultural and social connections that bind people to the Broughton Archipelago; how these connections have changed over the course of human settlement and what this has meant for the landscape, the people, the animals and plants that live there and; the forces that have shaped those changes and how people are adapting to them or not. However, after the first two interviews, I rarely referred to the guide preferring to allow the conversation to evolve naturally as I explored the history of the area, background and perceptions of the individual, interjecting with probes and questions as they emerged. Interview data were digitally recorded on a laptop computer using Easy MP3 software. WavPedal transcribing software was used to transcribe the interviews throughout the summer and fall of 2005 for analysis and interpretation. When fieldwork dictated travel by boat and/or kayak, audiotapes of the data were recorded for use with a tape recorder transcriber. I found using the laptop for recording interviews awkward due to its size and visual obtrusiveness. The cassette recorder was effective for creating a more “natural” interview environment and I would opt to use this or a small digital voice recorder in the future.

Over the course of my research, I was based in a central Vancouver Island location on Gabriola Island, which situated me within driving, boating, paddling and/or ferry

distance from the interview locations. Data were copied and stored in my “office,” a twenty-foot trailer on Gabriola Island, the most northern of the southern Gulf Islands that dot the inside passage along the east coast of Vancouver Island. On the water, all necessary equipment and documents were stored in waterproof cases for safe boat and kayak travel.

3.6.1 Map-based interviews.

Map-based interviews are created by indicating special places on a map during the interview. Stewart (2005) asserted that place meanings derive from stories of lived experience and map-based interviews connect people and stories to geographic places that conjure up emotion, spirituality or attachment that are generally defined as sense of place (Galliano & Loeffler, 1999). During the interviews, nautical charts of the Broughton Archipelago were used to create map-based interviews, upon which participants marked meanings and told associated stories of places on a nautical chart of the area to spatially represent sense of place values and meaning throughout the conversation.

I originally began using a tracing paper overlay fastened on top of the original chart with tape. However, I found this tedious and realized it would not work on docks, boats, beaches or any other location which would be exposed to the elements. After the creation of the first map, I switched to using full sized photocopies of the charts. These proved durable and easy to use, but were occasionally difficult to read in black and white. To overcome this I carried original copies of the charts for reference. Coloured indelible ink markers were provided for participants to mark different meanings and special places directly on the charts.

Map-based interviews were co-created as the participant marked, drew lines and circles and wrote on the chart. I found it necessary to accompany this with my own note taking on the chart in order to clarify meanings. Often, the participant would speak while I wrote on the chart. Each map biography was bound together by our notes, lines and symbols on the chart which linked the associated meanings, perceptions and experiences of the narratives to places in the Broughton Archipelago. Using the charts in this manner was similar to an everyday conversation between two guides, mariners or paddlers in the process of trading routes and sharing stories. It was an enjoyable exchange and the map-based narratives complemented an ongoing conversation and facilitated a natural interaction between the interviewer and respondent to elicit rich, descriptive information

3.7 Analysis

The goal of phenomenology is to discover emerging themes (Struthers & Peden-McAlpine, 2005). This is accomplished by a process which systematically searches and arranges the interview transcripts and fieldnotes to gain a deeper understanding of the narrative text and present data in an understandable manner (Bogden & Biklen, 2003). Analysis and interpretation was an iterative process (Creswell, 2003) and I found it necessary to go back and forth to the transcripts for many subsequent readings to clarify the meaning and context of words, statements and phrases (Neuman, 2003). Subsequently, reflection on the narrative text through writing and re-writing built a deep level of interpretation of the phenomenon (Caelli, 2001).

Throughout the analysis, I followed a general guideline created by Tesch (1990) that was organized into different steps. This was facilitated by NVivo, a qualitative analysis software program which helped to organize large quantities of data into a user friendly database. Following Tesch, the transcripts and field notes were read over a number of

times to get a general “feel” for the material. Data were then imported into NVivo and each transcript was organized into paragraphs for ease of access. I chose one interview which particularly intrigued me and proceeded to go through it carefully looking for a sense of what it was about. I used the “NVivo coding” feature of the program which allowed me to highlight and save particular phrases, sentences and paragraphs that represented topics of interest on the database. When this task was completed for all of my interviews, I clustered similar topics together and organized them into major topics and related sub topics.

This process was performed a number of times until an appropriate and manageable number of categories or codes were created. I found NVivo to be useful during all stages of the research as a tool that enabled me to manage my data in an organized, yet flexible “living” database which evolved with the project as topics, categories and codes were created, merged or eliminated. It also facilitated easy access to the data and offered multiple perspectives through linkages between and among different codes and categories.

The data generated themes that were “embodied and dramatized in the evolving meanings and imagery of the work,” or structures of experience that emerged from the data (Van Manen, 1998, p. 79). I also employed phenomenological literature such as place histories, biographies, life histories and historical fiction of the Broughton Archipelago in order to gain a temporal and holistic picture of the area.

The volume of data does not make it possible to include all comments from every map-based interview and selection of phenomenological literature that are related to a particular theme. Rather than present a detailed description of every individual map-based interview and piece of phenomenological literature, the excerpts were chosen to

illustrate views and opinions expressed within the entire set of map-based interview and selected phenomenological literature. Quotes were chosen to represent the range of views within the entire data set and also, for clarity of meaning, succinctness and representativeness. The quotes portray the respondents meaning but also reflect the viewpoints of others with similar perspectives who were unable to express them as clearly. It is also important to note that the quantity of excerpts does not represent the number of people who discussed these issues. The themes illustrated in this study were issues that continually surfaced across the map-based interview and phenomenological literature. Finally, the number of excerpts reflects the wide range of views regarding the theme, not the number of individuals discussing it (Montag, 2003).

3.8 Validating the Findings

The primary sources of validating my findings are Patterson, Watson, Williams and Roggenbuck's (1998) and Patterson and Williams (2003) principles of persuasiveness, insightfulness and practical utility. While the map biography transcripts could be subject to other interpretations, persuasiveness refers to the researcher's ability to convey the findings to the reader in such a fashion that interpretation of the text persuades the reader of its interpretation warranted by the evidence. Insightfulness increases understanding as the reader moves through a thoughtful and well organized presentation of the data. Moreover, it should unearth greater insight into the phenomenon than previously held. The final principle of evaluation is practical utility. This criterion takes into account the concern or problem that motivated the research and that a useful interpretation reveals an answer to the problem driving the study. However, a limitation to this study and the criterion proposed is that it uses a different language than the positivistic terminology and understandings typically employed in resource management.

3.9 The Qualitative Narrative

The presentation of my study begins with a personal narrative which dramatizes the Broughton Archipelago, Echo Bay and my experience in order for the reader to gain insight into the phenomenon and vicariously develop a sense of place. It also creates a reflexive backdrop using the first person “I” or collective “we” which was maintained throughout. The results and discussion are presented in such a way that illustrates how they emerged in the study. In my interpretation and analysis the “voices” echo value discussions of “place” from the participants in my study (Table 1).

Voices from phenomenological literature specific to the Broughton Archipelago are also present and intertwined with those of the interviewees to augment a storyline that is grounded in history in order to develop a better understanding of the present (Table 2). This is enhanced with thick, rich descriptions and interpretations of the “essence” and the “lived experience” of the area using a variety of conventions. These include the use of long and short quotations, using the wording from the participants and intertwining quotations with my interpretations (Creswell, 2003) and a review of related literature.

3.10 Definition of Terms

Constructivist: Philosophies that maintain humans actively construct identities, reality and knowledge. Knowledge gathering is viewed more as a production process than a process by which researchers discover facts about an objective reality.

Commercial kayaking groups: Groups of kayakers who have solicited business through a recognized company that offers professional guiding service to individuals or groups of individuals with minimal kayaking experience or lack of familiarity with the area.

Table 2. *Phenomenological Literature*

Author (s)	Book	Date	Type of Literature
Martin, Alldale Grainger	<i>Woodsmen of the West</i>	1908	Historical fiction
Muriel, Wylie Blanchett	<i>Curve of Time</i>	1969	Autobiographic place history of the BC coast
James Spradley	<i>Guests Never Leave Hungry: The Autobiography of James Sewid a Kwakiutl Indian</i>	1969	Autobiography
Alexandra Morton & Bill Proctor	<i>Heart of the Raincoast</i>	1998	Life history of Bill Proctor
Bill Proctor & Yvonne Maximchuk	<i>Full Moon, Flood Tide</i>	2003	Place history of the Broughton Archipelago

Farmed Atlantic Salmon: Commercially grown non-native species of Atlantic salmon farmed in open net pens in the ocean in British Columbia and other parts of the world.

Kwakwaka'wakw: Native peoples also known as the Kwakiutl, who live on Northern and eastern side of Vancouver Island and within the Broughton Archipelago.

Midden: An ancient refuse pile built up over years of habitation and use. White shell midden beaches are common in the Broughton Archipelago from shell fish harvesting.

Private kayaking groups: Self guided and self sufficient groups of kayakers with varying degrees of skill and experience.

Wild Salmon: Native Pacific salmon endemic to British Columbia. The five species of wild salmon in BC are: chum, pink, sockeye, coho and chinook.

Sea Lice: Parasitic lice naturally found on wild adult salmon and increasingly found on juvenile wild salmon in areas near fish farms in the Broughton Archipelago.

Chapter 4

Can You Tell Me Story About This Place?

4.1 Introduction

People are natural story tellers (Shanahan et. al., 1999) and the map-based interviews elicited stories about “place” or individual “place narratives” (Johnston, 1990) by remembering recent or distant events (Stegner, 1992). “Special places” associated with each were identified in the surrounding landscape and marked on the nautical charts used during our interviews. These same places also tell a story of resource based communities in transition.

This chapter begins by weaving its way through an evolution of commercial fishing, aquaculture, forestry, and transitioning resource based communities through the story of the salmon and their significance to coastal cultures. This storyline provides a context that illustrates “symptoms” of globalization caused by change, mechanization and technology, and loss of local control. Finally, community responses to these globalizing influences are reflected in a dialogue of regaining control and diversification into tourism such as sport fishing, whale watching, kayaking, hunting and cultural tourism.

Figure 3. demonstrates the progression of the storyline throughout the chapter.

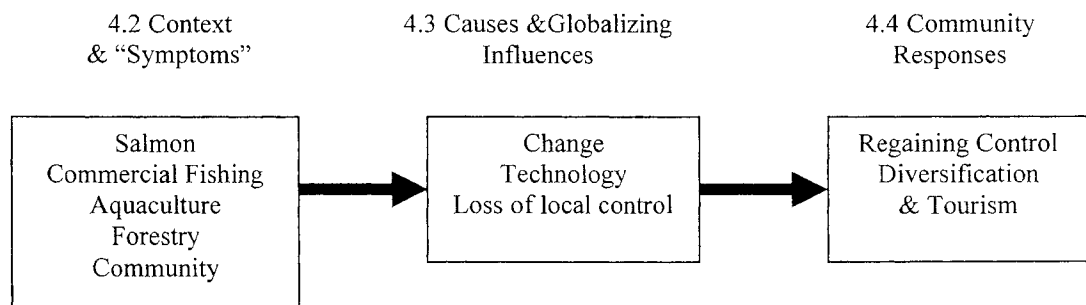


Figure 3. Progression of the Storyline.

4.2 Context and "Symptoms"

The context and symptoms of globalization can be illustrated through a timeline of industry in the Broughton Archipelago. This embarks on a discussion of the symbolic salmon and develops into a storyline and history of commercial fishing, aquaculture, forestry and their cumulative impacts on the local community.

4.21 Salmon

Second only to the rhythm of the ocean, the wild Pacific salmon emerged as a singularly important aspect of the Broughton Archipelago underpinning economy, sustenance, culture, identity and history. They were also perceived as an indicator species for a healthy environment and community whose lives have revolved around their harvesting. As Proctor and Maximchuk (2003, p. 14), local residents and authors of some of the phenomenological literature cited have explained,

[t]he most significant factor affecting the lives of people who live by the sea is the association of the big flood tides with each full moon. Innumerable activities of both human and animal residents are timed to these tides and a lot of human activities are dependent on the movement of the five species of Pacific salmon. When the salmon are migrating home to their natal rivers and streams they always come in from the ocean on the full moon tides, therefore this is the best time for fishing. The trollers wait for the flood tide to bring the fish in. The big seine boats wait off a point for the flood tide. Gill-netters love the full moon... For thousands of years the aboriginal people of the coast waited for the big tides, for this was when they caught their fish.

After a life time of fishing, Proctor sadly noted a change in the number of fish in the area over time:

It's pretty sad, when you think about it, what this country used to be like. I've seen a fair bit of it, but before I was born even..., it must have been pretty phenomenal around here for fish. Canneries booming away in Knight Inlet, Kingcome, Alert Bay, Bones Bay. Kingcome used to have a run of a couple million pinks and 20,000 chinook... now it's got nothing, 68 fish... (in Morton & Proctor, 1998, p.197)

The following illustrates the downward spiral of fishing in the Broughton Archipelago:

In response to the low numbers of returning salmon, fisheries closed in many areas... Traditional fishing grounds were barren and who is to blame? Loggers were damming streams preventing salmon from going upstream, and clear-cut logging was killing eggs on the spawning beds. Salmon eggs incubating in gravel need a constant flow of water to survive, and when a hillside is clear cut, the soil washes downhill with each rainfall, clogging the little spaces between the pebbles and smothering the eggs. Clear cutting also warms river water, which is deadly to the cool-water loving salmon. Pesticides were flowing into creeks, poisoning juvenile fish. Relentless increasing fishing pressure meaning fewer and fewer salmon were returning to these damaged rivers decreasing survival. (Morton & Proctor, p. 118)

Aboriginal tourism interest Judd speaks passionately about salmon from a particular cultural perspective. However, his voice echoes the concerns of many and hardship is poignantly noted within all North Island communities:

Now more than ever, we have to take a stand... particularly in this case, this is basically our whole culture we are talking about. ..Without these salmon, we don't have a ceremony...that is our identity and what are the whales going to do?

It goes hand in hand with everything. [Everything] that we do revolve[s] around ... [the] salmon. You take that out of our culture and our way of life, that's it... we become like the east coast people and ...that's what I talk to our people about. So all of the potlatches throughout this year now because economically we are... just like everybody in the north because the fishing and the logging... [are gone]. But [the] hardship. [E]ven just the food part of it, if we don't have that, what are we going to do with the ceremony? Not have the fish? Our whole way of life really gets cut down if that depletes our whole stock...so that's ...the bigger picture. If we are going to take a stand for who we are and for the next generation... that has to be it, [be]cause without it, there is going to be nothing. That is the reality.

This last quote sums up the influence of the salmon in the lives of the West Coast inhabitants. Since the beginning of time, the lives of aboriginals and later 18th century settlers have revolved around the rhythms of the sea and the salmon. The salmon, more than any other creature symbolizes the integrity of this environment and its struggle to survive documents the effects of human intervention in the natural systems of the West Coast.

4.2.2 The evolution of commercial fishing.

Clues that can link history and change over time in places are often sedimented and hidden like the layers in white shell midden beaches. Charles Creek, in Kingcome Inlet, was once the site of a big native village that was destroyed by a landslide before the arrival of Europeans. It was placed near large runs of salmon that spawned in the Wakeman and Kingcome rivers (Morton & Proctor, 1998) and as early as 1906, a

cannery was strategically located on that site to harvest the same runs of salmon. In 1933 another landslide devastated the cannery and it was never rebuilt (Morton & Proctor).

When I was speaking with local resident, former silviculture contractor and ecotourism entrepreneur Colin, we talked about tree planting in Charles Creek, reforesting clear cuts only accessible by helicopter. He poetically described Charles Creek among other areas as possessing a “roaring silence” captured by the lack of sound, yet speaking volumes of its intrinsic value, but also of its past. Uncovering Charles Creek’s history exposes layers that speak loudly of human occupation and industry. It also declares an evolution from the localized subsistence economy of its original inhabitants, to a commercial enterprise of the cannery and later, the highly mechanized industries of logging and fishing driven by technology and an increasing demand for natural resources.

In his life history, Chief James Sewid reflected on subsistence fishing in his early life: “Now my Indian people in the early days used to go up the rivers ... and reap the harvest of the sea. There were not nets or sailboats or gill-net boats in those days. (Sewid in Spradley, 1969, p. 265). Proctor and Maximchuk (2003) illustrated how throughout history, increased efficiency and mechanization in trolling evolved from aboriginal bone hooks baited with herring or sand lances trolled from dug out cedar canoes. Rowboats used for trolling appeared around 1890 in which fishers would move with the runs of the salmon. In 1916 small engines were installed which could run four lines and with up to four lures on each line. Bigger boats and engines came in the 1940’s. Soon, mechanical devices permitted fishing at greater depths, thus allowing more lures on each line. With mechanization came speed and the ability to run more lines that allow a modern 65 foot troller to run 20 lines with 15 to 28 lures each per side. In 1988, the Department of

Fisheries and Oceans cut back on the amount of lines and hooks allowed but unfortunately “[h]uman ingenuity hasn’t been a great thing for the salmon. We can only hope that it is not too late now to use some of that ingenuity to benefit the salmon” (Proctor & Maximchuk, p. 182).

4.2.3 Aquaculture.

Salmon initially emerged as an industrial commodity with the first cannery opening in the 1860’s in California (Eagle, Naylor, & Smith, 2003) and began in the Broughton Archipelago soon after (Morton & Proctor, 1998). Fuelled by an insatiable demand for salmon in a lucrative global market, fish farms that breed non-native Atlantic salmon in open pens in the ocean are a more recent addition to the Broughton Archipelago. Salmon has evolved to become a highly competitive “super commodity” feeding an ever growing demand with production worldwide, now twice what it was a decade ago (Eagle et al.).

Morton & Proctor (1998) documented their evolution and subsequent impact. Introduced in 1987, they initially avoided salmon migration sites, holding and nursery areas, herring spawning sites, clam beds, prawn habitat and seal haul outs. As more fish farms moved into the area, marine mammals were shot in order to prevent them from becoming predators. Acoustic harassment devices were also used to fend off seals. However, these devices also scared off whales from the area. Fish that had been infected with a disease called *furunculosis* began to infect wild fish and later, a bacterial kidney disease that was spreading between fish farms and another antibiotic resistant disease have been linked to the disappearance of local salmon stocks.

In a year when salmon farms were fighting bacterial kidney disease, the chum salmon returned to the Mainland...But they never arrived on their spawning

grounds. The entire Viner Sound stock crashed that year, from 65,000 to mere hundreds and has never returned... Later; another company put fish infected with another antibiotic resistant disease into Suttlej Channel... The disease spread rapidly to another farm in Greenway sound and the young wild spring salmon living in that area vanished too. (Morton & Proctor)

In a current context Colin stated that “this year they have caught none and nobody is catching any ... it is pretty funny that as soon as the salmon farms came around there is no fish anymore.”

A more recent issue surrounding aquaculture has been the infestation of sea lice among juvenile salmon transmitted from farmed fish (Krkosek, Lewis, & Volpe, 2005; Krkosek, Morton, & Volpe, 2005; Morton, Routledge, & Williams, 2005). During the course of my study in the Echo Bay and surrounding area, I met some biologists in the Fox Group affiliated with the Raincoast Research Society, conducting research on salmon fry that were leaving their birth streams in the deep inlets and making their way out to sea. As the fish swam by the open pens of fish farms, they became infected with sea lice and the researchers were counting the number of sea lice on each one. The analogy I was given was that the size of one louse on a salmon fry would be similar to that of a poodle on a human. “[T]hese correlations are concurrent with declines in wild populations but their causal nature is highly contentious” (Krkosek, Morton, & Volpe, p. 711).

Ironically, Yvonne noted similar observations a few years ago when she first discovered lice on juvenile salmon:

So, about three years ago, Billy pointed out to me that that fry didn't look right... we were able to hang over the side of the boat and watch them... just little

schools. They (salmon fry) are like an inch long...they are so weenie. Its like if you had seven dinner size plate leaches hanging off your body, is there any doubt that you could survive that? I don't think so. But we began to notice that.

Sea lice are quite common on adult salmon. However, the degree to which they have been found on the Department of Fisheries and Oceans biologist during an information and educational workshop hosted by the aquaculture industry, Colin stated:

It was amazing that the biologist said: "well you know if you have ever caught a salmon...are there lice on them? So we don't really see that there is a problem if there are a few lice on these babies. There have always been lice, not a problem" and it was not until later that I kicked myself...I wish I could have come back...and said...when I catch the salmon this big with five lice on it that's different than catching a salmon this big with five lice on it. I think that catching a salmon this big with five lice in it is going to have more impact...

Similarly, kayak guide Mike expressed concern about who to believe:

Like I say, I don't know enough. I've heard lots about it. But it is just like anything else. Nuclear power is fine depending on who you talk to. It's like who the hell do you believe? We are just the peons out here and you can get a scientist...paid off to tell you that [aquaculture] is fine. You are going to believe the guy maybe, or do you?

A couple of day's earlier, Bill commented about his ongoing dismay and frustration with the state of British Columbia's Fisheries:

Some of the things I read in the paper yesterday, I got the fisherman's paper and I just can't believe what the DFO (Department of Fisheries and Oceans) are doing to the wild salmon stocks on this coast. It's horrible, absolutely horrible.

They are giving the fish farmers millions of dollars and we can't get a cent for salmon enhancement. Don't make sense to me but nothing does anymore. Too nice a day to worry about it. Too nice a day to worry about it. (Bill)

In terms of the long term sustainability of aquaculture, Colin stated:

And I think it is a little bit unfortunate...that they have been so open and generous with the aquaculture claims...They've gone into places...they've got all these land leases...what are people going to think when aquaculture is gone...[You think] aquaculture will never be gone? B.....t. Logging is gone and aquaculture will be gone before we know it if... If we manage ourselves properly [maybe not], but we don't manage ourselves properly...

In 1995 the government of BC issued a moratorium on salmon farming expansion, however any firm decision was delayed for two years and eventually cessation was lifted due to improved public perceptions and attitudes (Noakes, Hipel, & Kilgour, 2003). During 2002, the pink salmon run in the Broughton Archipelago collapsed (Pacific Fisheries Resource Conservation Council, 2002) and in combination with the effects of logging, this has been a devastating blow to wild salmon stocks, and the local culture and economy. Currently the Department of Fisheries and Oceans appears to be caught in a trap between protecting wild salmon and developing Canada's aquaculture (Department of Fisheries and Oceans, 2000). To date, it has not done a good job of either (Morton & Proctor, 1998).

Aquaculture was also perceived to devalue the richness and biodiversity important for nature based tourism. Sea kayak guide Fran commented "it's just...devastating ... I mean...I've grown up on this coast and salmon to me are like a lifeline so it is really distressing to me that [fish farms] exist." Similarly Logan, another guide expressed "I

think they are a really terrible thing...I've changed my [kayaking] route in the last three years...I try and skip the fish farm because I hated going by it."

Noise from fish farms also became an issue: "[I]t was just really peaceful and then boom, this kind of activity was going on... [M]y original reaction was kind of like whoa..." (Fran). Recreational kayaker Sam noted that "it can be annoying. Have you ever camped by one? Well they keep this generator going for a long time." Access became another perceived problem:

"[T]hey are in the way...all of a sudden you have to go around these things. I'll bet if you get a lot of them, you'd find that offensive. You get that impression that they are denying you access to area...water, you know ... you don't want the coastline littered with these fish farms... (Sam, recreational kayaker)

However, there appeared to be confusion over the viability of aquaculture. For example Sam also believed it had been successful in Europe while they have suffered similar consequences as in the Broughton Archipelago: "I think that they should be allowed to operate. They seem to be doing ok over in Europe..." Ironically, Scotland and Norway have suffered from similar problems of disease and sea lice infestation (Morton, Routledge, Peet, & Ladwig, 2004).

In another case, aboriginal tourism interest Rich was less outspoken about aquaculture and was using fallowed fish farm pens as highly productive sport fishing sites:

Do I support fish farms, am I against them? I am neither, but I do know they are artificial reefs and they are producing some good fishing sites. They are also producing some good nursery zones for smaller fish, but most of all they are making a hell of a good spot that you can go for a kilometre jog and fish halibut

at the same time. And the ones further up Knights Inlet in places such as Doctor Islet and elsewhere...when they are fallowed, they are one of the most productive zones to go to prawn fish...Most people won't go there because... they think it is private property which it isn't in a sense... Also they think that they are death zones with nothing underneath. I know the truth...Underneath is abundance of sea life, everything ... Your prawns, your halibut your cod, even your salmon I'm finding because it is an artificial reef.

There is a sense of irony in Rich's acceptance of aquaculture in the area and its positive depiction as a "life zone" in comparison with the majority of the perceptions and attitudes expressed. I suspect winter employment protecting the pens from predators had a great deal to do with this stance as a matter of economic survival in a depressed economy than support for the industry. However, it also reflects entrepreneurial resourcefulness and creativity in order to remain living in an area that has experienced a systemic rural out migration due to lack of employment opportunities.

Fish farms continue to flood the market and out-compete commercial fisheries with supply and product advantages that cannot be matched by commercial fishermen (Eagle et al., 2003). Farmed Atlantic salmon can accommodate market demands at any time of year while commercially caught wild salmon are subject to temporal and spatial variations in availability. They are also cheaper to produce and perceived to be more aesthetically pleasing with consistently attainable colour (Eagle et al.). While aquaculture and commercial fishing have had an obvious impact on the survival of the salmon, logging activities on adjacent lands have also had significant effect.

4.2.4 Forestry.

A chronology of logging practice on Gilford Island by Morton & Proctor (1998) mirrors the story of mechanization and increased efficiency in the salmon fishing and aquaculture industries. Proctor & Maximchuk (2003) documented handlogging that began around the 1700's for Douglas fir spars to rig sailing ships. In the 1890's hand loggers appeared in Kingcome and Knight Inlets. An individual would work alone with minimal equipment and approximately six miles of steep shoreline were needed to fell trees that would slide down into the water by force of gravity. Moreover, handlogging was simple. It selectively chose the best trees and site specificity deferred any need for mechanization to reach difficult to reach places:

In the early days of hand logging, a claim would produce good trees for up to ten years and when the logger left the claim, you would hardly know he had taken any trees. This method of logging had very little impact on the land, as only the biggest trees were taken. (Proctor & Maximchuk, p. 49-50)

Proctor also noted:

Handlogging was easy on the forest because no roads were cut or sorting areas flattened, and the small cuts regenerated quickly. Also, no one could log far from the ocean and the gentle slopes of the estuaries were untouched. But in the early 1970s handlogging was made more difficult when government policies shifted favouring corporate logging. (in Morton & Proctor, p. 124)

Horse and oxen loggers also arrived in the 1800s and a shingle bolt mill was built in Echo Bay around that time. In 1897 steam donkeys were introduced. Fore and aft roads were also constructed around this period: "A fore and aft road was essentially a chute constructed with three logs. Fallen trees were rolled onto these roads and dragged down

to the water” (Morton & Proctor, 1998, p. 109). Over time more loggers that came to the area brought with them new technologies to get logs down to the ocean as lakes were dammed to raise water levels from one lake to the next. Timber would then be floated down to the ocean in big wooden troughs called flumes. Chutes were also built on hillsides to slide the logs down. Its resultant effect was that salmon were unable to reach their spawning grounds because of the dams and the diversion of water.

The A-frame loggers and the sky line loggers came next:

“A” Frames are two logs lashed together at one end, set upright in the shape of an “A,” and held rigid with guy lines. A cable passes through a block at the peak of the “A.” The skyline was a heavy cable stung between two A frames. With a powerful winch, logs could be moved over a considerable distance suspended on the cable. (Morton & Proctor, 1998, p. 110)

Railroad logging came to Viner Sound and Retreat Pass in 1927 and increasingly, these were augmented by tractors and skidders. A local resident frames an image of Viner sound today “I worry about the impact of logging on some areas... ..this whole side hill here all the way up Viner has been logged and the damage, the habitat damage is extensive” (Yvonne). Aside from the obvious visual impact and wildlife habitat destruction of clear cutting, the cumulative effects of logging illustrated earlier by Bill and also noted by Slaney, Warburton and Wilson (1996), caused sedimentation in streams and disturbed the nutrient flow and water qualities of salmon habitat that is critical for spawning. Local resident Colin elaborated further with personal observations:

Viner Sound...it’s beautiful in there. ..I’ve been [living] here [near Viner Sound] for a long time...[and] there was no logging up in the top ... when I used to paddle up in there...There [also] used to be 20,000 dog salmon running up in

there...and [now] there is almost nothing up in there anymore. And of course it doesn't have anything to do with logging (sarcastically), but as soon as they logged Mt. Reid, block 106 which I have planted and replanted, caged and tubed and fertilized and replanted, it [was] just a horror show [with land] slides. They never should have logged most of it... [because eventually], it all ended up in Viner Creek, sediments...you know the story... Nowadays everybody thinks the reason there is no fish is because of aquaculture and nobody is even thinking about logging... (Colin)

Later, truck logging began in Scott Cove around 1939 on plank roads. Foreshadowing the increasing global demand for Canadian lumber, a saw mill started in 1938 in Gilford Bay to cut railroad ties for export to Pakistan. Today there are two international logging corporations with miles of roads on Gilford Island with log dumps in Scott Cove, Shoal Harbour, and Gilford Bay.

Increasing global demands for forest and fish products and subsequent mechanization have had a dramatic effect on the economy and the surrounding ecosystem. As trade has evolved from highly localized patterns of subsistence illustrated in fishing to large corporate scale logging, commercial fishing and aquaculture of more recent vintage, their effects have had equally profound consequences on the local community.

4.2.5 Community.

Describing the history of Echo Bay during the 1930's, a long time local resident born in the area documents the vibrancy of early settlement in the Broughton Archipelago supported by the availability of employment through logging and fishing:

...When we were going to school, we went to school in Echo Bay and ...it was in the 30's and still there were an awful lot of kids there. They moved their

houses...when dad had his [logging] camp. There was our house...a bunk house and a cook house and a washing house...everybody had their private house and they towed them all into Echo Bay. They stayed in there and went to school. And when summer comes along, they'd go back down again to wherever they were living [and working in either fishing or logging]. [There were] a lot of kids. There were two lines of houses in Echo Bay. There was a store and there were houses down one side and a boardwalk and another bunch of houses. (Meg, local resident)

Blanchett (1969) depicted an image of a typical coastal community in the Broughton Archipelago located in Simoom Sound:

As is quite usual on the coast, this small logging company was built on a series of huge log rafts, planked over like wharf floats and connected with gangways where there were comfortable houses for the married men; bunkhouses for the bachelors; cookhouse, workshop and storehouse...And a school. (p. 57-58)

What Morton & Proctor (1998) poignantly commented about communities and industry during this period of time was that companies were family owned and operated and not dominated by the large corporate companies like today. Those families lived on their claims and created communities with stores, post offices, schools, and freight boats. Money earned was spent locally. Modern logging operations are owned by large corporations who have never been to the area in which they work. The people who work in them do not own the company and reside elsewhere. Today, the money is dispersed out of the area rather than supporting the local economy. "Billy figures seaplanes caused a big change in remote communities. They allow people to live here without living here" (Morton & Proctor, p. 188).

Discussing change over the period of time that he has lived in Echo Bay, Colin provided a history from about the mid 1980's onward:

The only people that are still here are people that are really ...serious...about being here. There are no casuals anymore...There has been a lot of people come and go. I couldn't tell you how many people have come and gone in the time that I have lived here...When I first moved here in 1980 there were probably somewhere around 200 people...of which probably 40 or 50...lived here pretty independently. They lived here because they wanted to live here and they were mostly [in] float houses...The remaining 200 that were living within the community were living in the logging camps because... [they] used to support communities and....If you were going to work there, [you were going to work there] for years.[W]e didn't go into a valley and wipe it out in 18 months and have to move to another valley. [Logging companies would move into a place] and be there for 10 years... [Maybe you would buy] a trailer and move in with your wife and your kids. There were probably 15 homes in Scott Cove and a few of those homes were full families. Otherwise the wife and kids would come in periodically...there were still lots of people... [Somebody] around the bay used to run [the] school boat...every day...take the kids into Echo Bay School and drive them back...in the evening. There was a lot of people...and activity around. [Now]...the industry has decided that it does not want to support families... They are buying propane and fuel [from the "outside"] and flying people in [from far away]. They just want to maximize the profits so basically all the families...[due to] policy changes...they told them that they had to leave...It

basically just became the bunkhouse scene which is the same thing that the aquaculture industry does now.

While immigration and development would help to revitalize the community, local resident Yvonne describes her worst development fears for the future of her community that were manifested in images of “pink condos:”

You know what happened years ago I had a dream that Echo Bay it was ringed with pink condominiums and somebody said that is called condo phobia. Well, that makes sense to me because I do have a condo phobia. I know that people do need to live somewhere but in this area, actually people don't live here in great numbers because physically it doesn't support large numbers of people. You need to have a good water supply, you need to be able to deal with sewage, you need to be able to deal with infrastructure... They want electricity, they don't want to have to do the kinds of things that I have done or that we have done in order to have the services so what are they going to do with their garbage. At least I hope you are never going to have condominiums ringing Echo Bay Park.

Fear of community change and development illustrated through Yvonne's “pink condo dream” are perhaps reminiscent of the heavily commercialized example of Telegraph Cove to the south situated on Johnstone Strait and a hub for the booming whale watching, kayaking and sport fishing industries. On one side of the cove, the old buildings that were once homes and sawmills have been kept intact and transformed into commercial, busy yet tasteful operations with stores, restaurants and accommodations that are sympathetic to the history and landscape. In blatant contrast, the other side of the bay has pink apartment block condos by the water. The land behind is clear-cut and serves as an RV park and at one period I had heard that a golf course that overlooks

Johnstone Strait is planned. Perhaps this foreshadows the Broughton Archipelago's and Echo Bay's future and Yvonne's development nightmare with its associated sewage, water and infrastructure concerns.

Fear of development may perhaps become a reality. According to local resident Colin “[t]his year it seems like quite a different vibe. We come back and Echo Bay is theoretically sold, that is going to make a big change...” As more parts of Echo Bay come up for sale, such as the Windsong Sea Village, the Echo Bay Resort, marina and general store and two of the five homes in Proctor's Bay, the community sits precariously balanced on the edge of change. In a recent correspondence, aboriginal tourism interest Rich spoke in dismay about development in the area over the winter:

[It] looks like another urban setting with all the new homes built...over the winter.

The good 'ole days are gone, so I am booking into the wilds of the Sayward region. Southeast Bay offers what upper Johnston Strait offered 15 years ago, no human congestion.

Development is perhaps inevitable and Rich's dismay illustrates frustration as the natural resources of perceived “wilderness” for his ecotourism business slowly disappear. The development or “redevelopment” of the area refers more to a repatriation of a reserve by a local band and a reestablishment of community in an area that has typically experienced out migration. The new development facilitates “rootedness” to the Archipelago and its greater community and empowers its people with a sense of identity and pride with connection to “place.” However, this particular example illustrates a loss of control over natural resources important to Rich's business more commonly experienced in the Broughton with a shift from local control to large foreign companies in forestry, fishing and aquaculture.

4.3 Globalizing Influences

The voices in this study resonate with descriptions of socioeconomic and cultural transformation in rural communities and the natural spaces that surround them. Through the effects of an increasingly globalized world, long-standing images of places became contested as goods, technology, money, people and information that move rapidly across great distances over short time frames (O'Loughlin, Staeheli, & Greenberg, 2004).

Harvey (1996) refers to this phenomenon as a compression of time and space made possible by technological innovation creating a decrease in the costs of transportation, enhancing communication, decreasing production costs, and changing the rules that once created barriers against the flow of people, goods and services.

Over time, increasing and often destructive global demands for the resources that support rural economies like that of the Broughton Archipelago challenge livelihoods, threaten ecological integrity and alter traditional patterns of life and culture. These effects dilute cultural landscapes, which are rich in meanings such as social history, natural values, community identity, family heritage and spirituality of the people and communities inextricably linked to them, through technological change and loss of local control

4.3.1 Change, technology & mechanization.

Respondents and the literature noted social and environmental change related to the effects of 200 years of logging and fishing and the more recent boom in aquaculture. According to a local resident, “unfortunately because of our voracious appetite and lack of patience and foresight, we’ve logged and [have fished] faster than we can [sustain a viable ecosystem]...” (Colin). These effects were reflected in threats to biodiversity and wildlife depicted by long time residents, yet was juxtaposed against a perceived

abundance and richness by guides and recreational paddlers. Colin illustrated this dichotomy through his experience of returning to Echo Bay after a period of absence:

It's like you come back into the community and maybe Alex is talking about how everything is dying (due to aquaculture) and from a forestry perspective, we've really done a number and it is all pretty negative. And you know what? Compared to Stanley Park or downtown Vancouver or around Cortes Island there is so much vibrancy.

However, change was most evident through a dramatic shift in the economy of the Broughton Archipelago over time. Today, enhanced transportation and communication allow people who did not live in the area to work in logging camps and fish farms. This, combined with the increasing efficiency of mechanization offered limited employment opportunity for local residents, causing an out-migration of people and a gradual devolution of community. Mechanization has been at the core of a decline in rural employment opportunities during the 20th century (Jones, Fly, Talley, & Cordell, 2003) and a systemic rural out-migration, most notably among youth (Johnson, 2002). According to Yvonne, "there aren't people working and it's not because of environmentalists. It's because of mechanization." Similarly Colin illustrates the profound influence of technology and enhanced communication however, with a feeling of nostalgia for the lost way of life:

The way of living out here has changed boats and transportation, generators and power systems... Communication has come in...at 8 cents a minute on cell phone...you couldn't even have a phone before you know... that makes a big difference...Years ago it was quite rustic...back to the land and simple. I kind of miss that, parts of it ...the only people that are left that are people that have been

here a long time now...[P]robably the greenest people here... [have]...been here 14 years now...[L]ast year when we were here it seemed like the community was really dying. It was kind of depressing. ... [T]he few people that were left were talking about moving out [because] there is no employment... It seemed really discouraging.

4.3.2 Loss of local control.

Echo Bay and the surrounding area have experienced a radical departure from what was historically, a highly localized logging and fishing economy, to an industry now controlled by trans-national corporations distant in both geography and context from the local area. This change has had profound social and cultural effects to the “rootedness” of people to places and communities and dramatically alters the amount of control the local community has over its resources. While raw products like wood and fish have always been sold to outside markets, increasing global demands combined with technology and mechanization result in a systemic detachment of the people and the wealth from their place of origin. Maximum profit becomes the bottom line in order to stay competitive in a challenging global market. However, this can have devastating effects on the local economy, community, ecosystem and culture.

The globalizing forces of tourism in more developed areas as illustrated in Yvonne’s “condo phobia” illustrate a loss of control over development and natural resources in rural communities. “Leakage” is a term used in tourism to describe the flow of money out of communities and countries to foreign interests. Good examples of this are the American owned “pink condos” in Telegraph Cove and similarly, foreign owned trans-national corporations in fish farms and logging. Both of their effects reflect the

“bunkhouse scene” (Colin), created by mechanization of forestry and aquaculture, which redistributes wealth to people in communities located far from the actual resource:

I think the main thing is for me...is to see the value of the resource end up far away from the location that it was grown. Like I want to employ local people I think the resources, the bulk of the value of a resource should generate wealth in the immediate area. It really doesn't...this whole Kingcome Forest District is so wealthy and the wealth, I don't know where the hell it goes, but it is not going around here and its getting worse and worse...(Colin)

Local control over forest products is also deferred to provincial government and subject to scrutiny due to slack regulations that are perceived to favour economic gain over ecological integrity and long term sustainability or as local resident Colin put it; “a horror show.” The current *Forest Practices Code* and *Forest and Range Practices* does not mandate buffers and riparian zones on smaller spawning streams (Martin, Moola, Calof, Burda, & Grames, 2004) like those found in the Archipelago. Increasing demands for resources facilitate short term visions of unsustainable forestry practice that favours economic generation over ecological integrity. Local resident Yvonne declared “I guess with this new government now we don't think we even have a forest practices code ...everything you hear about how the logging industry is in so much trouble is belied the constant traffic of tows of logs going out of here.”

Similarly, the aquaculture industry was perceived to favour an increasing global demand for salmon regardless of their impact on the surrounding ecosystem.

[T]here is a [fish] farm here and I actually fought this farm vigorously because this farm started over here over in Simoom Sound...This farm...ended up having an algae bloom somewhere within the first year or two... And they got a special

quickie permission to temporarily move their farm out of Simoom where there is no free flowing water which is a bad spot to have a fish farm anyways. For that reason, they got to site it here, just inside of Raleigh point and they just stayed there... then a little while later they put a new farm in Simoom Sound. So this farm, as far as I know never had any proper procedural processing for leases but there it sits. (Yvonne)

Aquaculture defers its authority to the Department of Fisheries and Oceans which has a dual mandate of promoting the aquaculture industry at a federal level, yet protecting British Columbia's wild salmon on a provincial level (Department of Fisheries & Oceans, 2000). Judging from the state of the Broughton's salmon fishery, it has chosen the former. In a similar tone of protest, local resident Colin expressed his dismay of fish farms locking up large pieces land on the coast: "These big huge corporations own some of these beautiful spots and I don't know what they are going to do with them. I don't like that too much."

While "participatory processes" and "community consultation" appear to be *de rigueur* in agency language and theory that touts the use of "ecosystem management," it appears to have failed the Broughton Archipelago. Original boundaries of the Marine Park were reshaped to allow fish farms to stay in their current locations while some residents called it a "joke" (Bill; Yvonne) and would have preferred to have them "kicked out" (Bill). In 1991, the creation of the Broughton Archipelago Provincial Marine Park provided the opportunity for local community involvement and a certain degree of control over their natural resources:

Well the parks board actually consulted with the community quite extensively...

What concerned some of the people here [was] they would still be able to fish,

because sometimes parks, they turn it into a park and people can't fish there anymore. (Yvonne)

However, the consultation process and the park designation proved to have little effect on aquaculture by redrawing the park boundaries in order to allow fish farms to operate on its boundaries:

They came out with different boundaries at first. They just drew a straight line and then they found out that there were 7 or 8 fish farms inside it so they had to rearrange the boundaries so they didn't kick the fish farmers out. We were all hoping that they were going to kick them out, but no, they just changed all the boundaries. (Bill)

Inevitably, land claims and traditional territory were a significant issue. Voices from a couple of generations prior echo similar sentiments:

I think the biggest problem to be solved and the most important is the land question. We are non-treaty Indians on the coast and I think that we should be compensated for our land. When the Europeans came here and settled, they just took our mineral and timber and our salmon and everything that we rightfully owned and they have never settled with us. (Sewid in Spradley, 1969, p. 261)

In the context of the Broughton Archipelago Provincial Marine Park, a First Nations perspective recalled no consultation process for creating the park:

The government always talks about a consultation process. In 1991... we were all home, it was probably the end of September, the beginning of October... The minister, provincial minister came on news hour, BC TV, CBC and announced how they had come up with the Broughton Archipelago Marine and Land Park and here is a map and here is its boundaries... They never came to us and

consulted with us and said we would like to make a provincial park and... exclude you from... socioeconomic develop[ment] through your traditional territories. Now we don't ... recognize the Broughton Archipelago Marine and Land Park ... And until land claims are settled and under Delagamuk and Sparrow, with inherent and vested interest in our traditional territories, to us there is no Broughton Archipelago Marine and Land Park. (Rich)

In a current context, the multi-stakeholder participatory process of the Central Coast Land and Resource Management Plan and Great Bear Rainforest has also been criticized for not providing enough area for conservation, protection from sport hunting, mining and roads (Gilbert, Craighead, & Paquet, 2004; Martin et al., 2004). Its purpose is to ensure the long term ability to maintain ecological integrity of key focal species such as grizzly bears and salmon (Gonzoles, Arcese, Schulz, & Brunell, 2003; Martin et al., 2004; Paquet, Darimont, Nelson, & Bennett, 2004). However Yvonne stated:

I participated in some of that as well. It seems to have fallen by the wayside as an objective...I mean we filled out forms, they listed river systems that we thought were troubled and needed attention. What was supposed to come out of that, I have to say it was never really clear.

Yvonne recalled filling out forms and indicating sensitive areas for the Central Coast Land and Resource Management Plan. However, she has not seen any results reflected in protective zoning of unprotected grizzly habitat. Ironically, it is so close to the Great Bear Rainforest, yet still subject to hunting with no protective zoning from the same threat as exists in Campbell River.

It was my hope that places could be preserved like Bond Sound for grizzly habitat. So far that hasn't happened [and] there are still people that come... You

know, they go shoot...grizzly. It just seems wrong. It's wrong to me when you have this beautiful little habitat and it's so close to the rainforest, what do they call it?, you know the rest of the grizzly bear habitat that has not actually been defined. (Yvonne)

The (mis)management of the Central Coast Land and Resource Management Plan appears to be a similar situation which Judd has depicted with the Ministry of Environment and BC Parks in the Broughton Archipelago Provincial Marine Park: “[Although Parks] has not done a bad job...Parks has their hands in too many places and they make it harder to manage. It's just like a third wheel in there...” Perhaps regaining local control over lands and resources through community based organizations can have a more profound impact on the immediate environment.

4.4 Community Responses and Regaining Control

Community response fueled by creativity, learning, increased capacity and moreover passion drive the struggle to regain local control. The local hatchery and the Mainland Enhancement of Salmonid Species Society situated in Scott Cove is an example of a community based organization that has empowered the community and revitalized salmon in its ability to retain some degree of local control in rehabilitating the fish stocks in the area: “[W]ith the hatchery organization... we have been enhancing Coho here in Scott Cove for almost 20 years. Coho have been planted in a huge radius of miles. We plant them up here in Ellen cove, Charles creek, Wakana...” (Yvonne).

However, the Society's efforts have been challenged by lack of support. As earlier illustrated by Bill, aquaculture is currently receiving millions of dollars while salmon enhancement receives little support. Yvonne sadly remarked, “... its kind of like beating

a dead horse but we keep trying...Just because we are stubborn I guess. But we keep trying to enhance the salmon.”

In what seemed to be an act of desperation to protect the salmon of the Broughton Archipelago, members of Native and non-native communities gathered in the Burdwoods, just outside of Echo Bay, on Mother’s Day of last year in an emotional and spiritual attempt to wish salmon safe passage from their natal streams in the Broughton Archipelago and mainland inlets to the ocean on their search for food:

[W]e had a great big get together out there the other day with the natives...It was about 120 people...[a boat] brought 50 over and ... both speedboats were loaded...there was some other private boats and it was kind of ...a salute to the salmon but in the native sort of way...It was all across Canada actually. At 12:00 if anybody was interested you were supposed to sit with, 2 minutes, your hands in the ocean, there in the water...It was about a month ago...and you sat with your hands in the water and then made a little drum beats. It was pretty neat. And then...the lady on the yellow and grey boat that’s tied in Echo Bay, she’s a Métis, so she done a little ceremony too and threw feathers and cedar bark on the water and it was a, not saluting the salmon, but anyways...wishing them good passage...is was all over the sea lice issue thing, but anyway... (Bill)

The above image plays into a common perception of the disappearing salmon as “an emotional issue.” However, I think the gathering reflects rather a growing alliance and increased capacity building between and among increasingly powerful interest groups of First Nations, nature based tourism and local residents.

While lifelong Echo Bay resident, fisher, logger, and environmental activist Bill Proctor has been an outspoken “voice of reason” for local stewardship of ecological

integrity and natural resource sustainability (Morton & Proctor, 1998), new people entering the community can often help to build capacity to regain local control.

The ebb and flood of rural population driven by boom and bust cycles of resource based economies has experienced a slower, steadier influx of “natural amenity” migrants attracted to places for their scenic qualities and recreation opportunities. Jones et al., (2003) referred to this as a “green migration” of urban dwellers into rural areas that bring with them pro-environmental values and catalysts for change in rural areas.

Building on Blahna’s (1990) “cultural infusion” and Fortman and Kusel’s (1990) “new voices,” green migrants (Jones et. al., 2003) can “infuse” entrepreneurial, leadership and organizational skills into rural communities and give voice to pre-existing, or traditional pro environmental values like local resident Bill’s or those expressed in the Burdwood gathering. These often challenge long withstanding pro-commodity interests and consequently, such different views as to how landscapes should be managed and used inevitably intensify conflicts (Jones, et. al). Cheng et al., (2003) contend that “natural resource politics are as much a contest over place meanings as they are a competition over the allocation and distribution of scarce resources among interest groups” (p. 98) of forestry, fishing, aquaculture, First Nations and tourism.

Local residents Yvonne Maximchuk, Alexandra Morton and Colin were reflective of a first wave of “green migration” of amenity migrants into Echo Bay. Attracted by its rural quality (Jones et al., 2003), they brought with them new ideas that “infused” entrepreneurial, leadership and organizational skills and “voice” to pre-existing, or traditional pro-environmental values (Jones et al.).

Colin started a tourism business in combination with a silviculture contracting company which has morphed into various forms over the years. Colin has also been

outspoken on poor forestry practices with government agencies, logging companies and more recently with “audible landscape” zoning and, echoing the pro environmental voices of most of the community against fish farms. In order to secure a future in the evolving economy of the Broughton Archipelago Colin asserted:

I’ve been pushing on crown lands quite a bit and I’m pushing pretty hard on them right now to get some kind of a zoning around audible landscapes... because everybody is talking about visual landscapes. In Nimmo Bay they’ve gone pretty simple. They from a lease system to...owned land. I’ve talked to them a fair bit but I haven’t talked to them about this particular issue. ...From what I understand from the regional district, who I am not shy to relate with...that they gave him some visual landscape protection. I’m [also] interested in visual landscape protection...

Similarly Yvonne, an Echo Bay author and artist, has an art studio where she sells her paintings and pottery and offers week long art retreats. She has also helped to give voice to pre-existing, or traditional pro-environmental values through collaboration with Bill Proctor on their book, *Full Moon Flood Tide* (2003).

Alexandra Morton, a biologist and activist who came to Echo Bay to research whales in the early eighties, has also collaborated with Bill on an earlier book of his life history, *Heart of the Raincoast* (1998), which espoused both their environmental values. While not a participant in my study, Morton’s voice is strong in the community and her “migration” to Echo Bay to research whales occurred during the same period as Colin and Yvonne. In addition to her work with Proctor, she has written prolifically on whales, wild salmon and sea lice, contributes regularly in a local paddling magazine distributed throughout BC about the Broughton and has had articles published in major newspapers.

Morton also spearheads the Raincoast Research Society, a grass roots Non Governmental Organization based in Echo Bay. Colin commented on the need and importance of people like Morton to conduct scientific research in order gain a more powerful voice for conservation and local autonomy. The day before I was in Echo Bay to conduct my fieldwork that spring, I was listening to CBC radio and heard that Morton had pressed charges against the provincial government for not upholding its mandate to protect British Columbia's wild salmon stocks.

Recently, local tourism operators like Nimmo Bay have become more outspoken and involved in establishing local control over aquaculture. Nimmo Bay, the Broughton Archipelago and the aquaculture issue gained international exposure on the television program *Boston Legal* this fall:

[T]here has been some pretty influential people in the [tourism] industry [getting involved in protesting fish farms]. One of the guys who has been taking a major step... is ...from Nimmo Bay... Really taking the big stand on fish farms...They actually did [a television show] on Oct. 11 at 10:00. Do you watch *Boston Legal*? Watch it Oct 11. They actually shot one episode at Nimmo Bay and it's going to airing that day. It's right on fish farms...*Boston Legal* with William Shatner. Anyways, it shows that whole area...the whole Broughton and everything...It actually shows a court case in Port McNeil. ...Anyways, it can be an idea [for more exposure protest and change]. (Judd)

I think perhaps one of the newest waves of "green amenity migrants" are the kayaking guides who work in the area. This reflects a movement of younger people into rural areas (Jones et al., 2003), but only on a seasonal basis. Testament to the globalizing forces of tourism, many of them, and the companies they work for, are from Vancouver

Island or Vancouver and do not live in the area; however, they do have vested interests in the overall health of the area through their seasonal employment. It seems unlikely that they would become deeply connected to the community, but rather that they owe allegiance to the Archipelago and a larger, more globalized community of people visiting and working in the area for tourism. They provide “voice” and “infusion” through connections like Logan’s affiliation to Non Governmental Organization Georgia Strait Society, tourism research and consulting conducted in the Broughton Archipelago. Perhaps I would also include myself in this demographic as well.

The guides’ connection to a greater global community of people informs and educates clientele on issues in the area like aquaculture, communities in transition, the North Island economy among the natural history and cultural interpretation required for guiding. As tourism becomes increasingly important, anti-fish farm attitudes of guides and other tourism providers in the area may play a more influential role. An older, more affluent retired baby boomer generation that has been shown to flock to rural areas (Jones et al., 2003) are not evident in Echo Bay. They have rather, been represented with recreational paddlers who were around 40 or older and more likely (from personal observation), the clientele on many of the guided trips in the Archipelago.

As a growing demographic, this clientele may become important supporters for environmental issues facilitated by guides, “local” guides, and tourism providers. According to Fran, “I think probably, well in my experience, in this area people don’t realize how, how extensive it is.” Similarly Logan stated: “They don’t know anything about farmed salmon or what the consequences are, or the potential consequences...” There also appeared to be a great deal of confusion over the viability of aquaculture. Consequently Logan has found that [the presence of the farms can be] very useful as an

educational tool. Perhaps at a minimum, by giving “clients that first hand basis [interpretation by talking about aquaculture and visiting the locations and talking to people]... maybe when they go into the shopping mart for the next time they won’t buy that farmed fish” (Fran).

The influence of the more affluent baby boomer and older generation is also reflected in the wealthy and transient yachters who cruise the Broughton Archipelago. One individual actually provided a \$50,000 cheque to start a hatchery in Scott Cove to help revitalize the areas’ depleted salmon stocks (Morton & Proctor, 1998). All of these variations of “green migrants” challenge the persistent pro-commodity interests of forestry and fishing and “[a]s these new coalitions mature, they may become more effective at challenging procommodity and other political and economic interests that have tended to dominate rural discourse in the past” (Jones et al., 2003, p. 227).

A recent co-management agreement between provincial government and local bands is perhaps a step not only towards the recognition of traditional territory, but also conservation by working with agencies to foster positive socioeconomic development in First Nations communities:

There are three First Nations... bands that have joined together ... and they have been given permission from the provincial government to manage the lease for Hanson [Island]... They’ve [also] taken over... commercial recreation tenures and ... [are] offering them as leases... [T]hey’re going to be managing a series of campsites for public... private kayakers and... also for ... commercial groups... [T]hey are also proposing to develop a network of trails, which has been started already... [I]t’s exciting because it’s the first time anything like this has happened. It’s definitely [a] precedent setting decision from the government...

[for] the local First Nations to manage what has been traditionally...part of their (First Nations) territory...(Logan)

In a First Nations context, the agreement appears to have set a precedent in re-establishing a sense of local control of natural resources in traditional territory:

They approached us...the case that really sets us apart in BC is the case that the Haida's won in the supreme court...now everybody has to follow that. So before anybody does anything anywhere in the whole province, whatever band treaty area they are in, they have to talk to the band and they have to do a full exposure of what their plan is, and how the band can become a part of it. (Judd)

However, there was a great deal of apprehension about allowing commercial land tenures to exist. Provincial compensation legislation under the current government would award displaced business money for projected loss of revenue if they were expelled in the event of a land claim settlement:

This thing... [with] land claims ... [is that most] don't understand about this compensation thing. This is why we have to stand firm and not allow anything in the Broughton Archipelago in or out of that entity called the park they ... or even on what we know as disputed land, crown lands. So we cannot allow any tenureship because there is a clause of regulation of compensation and if someone operates until 2010 and we have to pay out till 2025, with inflation figures factored in, compounding interest, loss of revenue [and] loss of company growth. Right now, how many kayak companies are operating in this area, 28? So, settle each one at \$500,000 each, it still gets up to \$14 million. That would bankrupt the band. So is land claims reality? Not with Gordon Campbell's policy. (Rich)

These fears may be real; however, increased capacity between and among stakeholders and agency may mitigate the scenario Rich has depicted. Co-management agreements like Hanson Island appear to be a step towards shared governance and stakeholder collaboration. Subsequently, this agreement not only has implications for greater control and stewardship over resources by First Nations groups, but for local residents and tourism providers associated with the same areas in an increasingly diversified economy.

4.5 Diversification & Tourism

Many rural communities across Canada are in an evolving state of transition from economies traditionally driven by a wealth of natural resources. This pattern is evident on Vancouver Island which has experienced a huge decline in its dominant forestry and fisheries sectors in the past decade (Robinson & Mazzoni, 2004; Vaugeois, 2003). As a consequence, communities like Echo Bay and the surrounding region are struggling to accommodate the changing political, social, ecological and cultural impacts of a newer, more globalized economy. Diversification has always been an important theme for those living in remote and rural areas like the Broughton Archipelago. Moving with the cyclical change of seasons, local residents have fished, dug clams, trapped, logged and as communities developed around these resources, provided service industries like fish buying camps and general stores (Morton & Proctor, 1998).

As people move from dying and/or changing resource based economies, tourism has also evolved as a feature of change and a viable industry to support rural communities (Robinson & Mazzoni, 2004). Some local communities have been slow to accept this and many people perceive tourism as a threat to their livelihoods. According to Logan "... [Many have been] completely anti-tourism...until about a year ago... [I]n 1998-99,

there was definitely hostility, or resentment towards kayakers that has definitely shifted and I would say there's far less of that attitude now" (Logan).

While tourism has gained more acceptance, it risks a similar fate as forestry, fisheries and aquaculture if left unmanaged. Rural communities often view tourism as a viable alternative but ironically, it is both a manifestation of and influenced by these same globalizing forces (Brown, 1998; George, 2002; Reid, 2003). While sport fishing and hunting are extractive forms of tourism and likely to cause resource depletion, other industries such as kayaking, whale watching and cultural tourism, while perceived to have minimal impact, can also have negative social, cultural and environmental effects.

4.5.1 Sport fishing.

A natural transition from a region historically rich in salmon is sport fishing. However its extractive nature and poor management mirrors the effects of logging and commercial fishing by destroying the very resource that supports it. For example:

You walk down the dock in 1989 and there was about 15 pink salmon lying there and some tourists said oh do you want those, we don't want those. You know I'm thinking why did they even bother killing them if you don't want them... That was sport fishing. (Yvonne)

"[T]he problem though still is... there is not enough guardianship around the sporties..." (Judd). Yvonne reflects similar sentiments in reference to Bond Sound: "There's no boundaries for sport fishing there either which is another thing that should be rectified." Similarly, Bill commented:

DFO (Department of Fisheries and Oceans) has got to extend the boundaries.

Sport fishermen can go right up into the rivers. I've seen them with my own eyes trying to hook big coho right out of Charles Creek, right out of the river. Even if

the rivers are closed, they can go up to the high water mark... (in Morton & Proctor, p. 154)

Technology (Shultis, 1999) and resultant increased fishing pressure destroy its very substance and long term economic development (Zwim, Pinsky, & Rahr, 2005). Morton & Proctor (1998) also argue that while commercial fishing yields larger catches, the lightweight gear of the sport fisher allows access to inaccessible places and when combined with increasing numbers of participants, they pose the larger threat. For example in Kingcome Inlet, a growing sport fishing industry collapsed in 1987 and along with it most lodge operations because there weren't enough fish. Despite the fact that the area had been closed to commercial fishing since 1979, the closure did nothing to sustain the fish stocks. According to Proctor:

The way it is now, a sport fisherman, if he's in the Gulf of Georgia can go out every day and catch 720 coho a year. That's too many. When you stop to think that if I shake off a coho, and there's 45 sport fishermen there that can keep that same coho, it doesn't make sense. We are trying to build the stocks up. The deadliest ones... follow the fish right from Cape Caution all the way down though areas long closed for commercial boats. (in Morton & Proctor, p. 154)

While salmon stocks have declined from overexploitation, impacts of logging, combined with the potential for increasing sport fishing regulation and the added threat from fish farms, the sport fishing industry itself is being forced to diversify (Shultis, 1999). As Shultis noted, sport fishing operations increasingly included wildlife viewing and "eco-tourism" packages to compensate for a depleted sport fishery. In comparison to sport fishing, wildlife viewing is generally regarded as a profitable non extractive industry; however it can also have a negative impact on the animals being viewed.

Regulating industry remains important as not only the popularity of sport fishing tourism rises, but also in wildlife viewing.

4.5.2 Whale watching.

The whale watching industry provides a lucrative niche in the North Island economy in relationship to Johnstone Strait, the summer feeding range of resident Orca's. While other species like gray and humpback whales, Pacific white-sided dolphins and harbour porpoises are common in the area, the charismatic Orca is what essentially draws people to the area. Logan illustrates "whale fever" and the importance of the whale watching experience for herself and for her clients:

Last summer... it was about the middle of August and I hadn't really had a good whale encounter with my group yet. I realized last summer, that was a big part of what kept me excited about being there. It was those really special encounters with the Orcas ... we were coming back from Lunch Beach from the edge of Robson Bight and we were paddling back in the afternoon just totally leisurely and there weren't too many kayakers around that day which was really nice and this big pod came through ... I can't really remember which direction they were coming from, I think they were coming from the east... and they came up and they kind of hung out at the Sophia Islands... I think there might have even been some others that came out through Blackney and they met up in here and there was probably about 40 of them, maybe more... they ended up hanging out right here for about an hour and a half. There was nobody else around except us, they were going off! They were spy-hopping and breaching like mad! Like four of them would spy-hop at once and then three of them would breach over here and it was like they were having this big party. It was amazing! It was so awesome.

Although popularity of whale watching has had positive economic effects, it has also resulted in harassment of the animals due to excessive numbers of people viewing them from the water (Williams, Trites, & Bain, 2002; Trites & Bain, 2000). Recreational kayaker Ryan illustrates his perceptions of the industry:

The other thing ... well it degrades it, in the sense that I feel slightly guilty out there looking at them because there's ten other boats following them around... And are you harassing the animals? I mean there are rules but they are coming up as close to the edge of the rules as they can, chasing the animals out of there. I really don't know.... Can't be positive to have someone following you around 24 hours a day.

Similarly, in response to the perceived harassment of whales Bill commented:

[O]nce they [the whale watching industry] license the boats to watch the killer whales, now that's going to change everything... It will only be three licenses for the area...But what they [the whale watching industry] gotta do with them whales is, I didn't go to the meeting but I talked to a lot of people... they [the whale watching industry] got to put viewing platforms on the beach...and what they [tourists] see is killer whales doing what they were doing naturally. Cause if... [there were] some [platforms] along the shore of Swanson and down here I guess at Cracroft point... That's a big business...A little bit too much though, the whales are really getting harassed down around here I think...

Bill also noted the absence of whales in the Broughton Archipelago. As a result of fishing pressure from both sport and commercial industries, disease from fish farms and acoustic harassment devices. "They don't come in here at all. I don't know, I guess 'cause there is no fish. I haven't seen a killer whale in here in six months... a few

transients in the wintertime. The residents [whales] never come anymore.” While harassment is associated with motorized vessels, new regulation guidelines issued this winter targeted kayakers as well in an attempt to minimize human impact on the whale populations.

4.5.3 Kayaking.

Popularity of the Orca has led to crowded waters for kayakers in Johnstone Strait. Guides and recreational paddlers have commented on the importance of the whale experience: [Johnstone Strait] isn't the nicest place to paddle at all in this area. I mean it is fine but...Its busy and, busy with boats, busy with people, but busy with whales... (Logan).

In an exasperated tone of voice and knowing glances Logan and I shared the same frustrations in trying to plan our routes for the day in Johnstone Strait:

There are very often groups that are camped all along the shoreline and they all head down to here...you probably remember what it is like so its kind of juggling it to figure out, well where is everyone else going so that we are not a huge big mass of kayakers. (Logan)

Fran and I have also worked in the same area for some time and expressed with shared humour our route plans when traveling through the area: “We stay in the Johnstone Strait as for little as possible... because there is just so many people here, like everyone is looking for the whales, planes, boats, other kayakers, its like (laughter) its insane.” Consequently, we have stopped taking our tours through Johnstone Strait in the last few years. Logan described an increase in the amount of people paddling in the Strait from when she began guiding in the area:

Well, it's definitely changed. I mean it's so much busier now...it seems like there is so many more commercial operators in the Strait than there ever have been. When I started in 1998 there was probably, I would say about six...main companies that were there through the whole summer and ...it felt like that was enough. And there was definitely room for people to get around each other and there was enough campsites and things and now it seems like there is even more [companies]. A lot of them are new companies...and sometimes they're there for just a couple of trips, or...part of the season, which is fine too. But I definitely notice it. It seems like, there's these little migrations where day two everybody goes down to [Robson] Bight and day three, everyone crosses and day four...cause we are all on the same [route]...

Similarly, recreational kayaker Chris commented on his experience in Johnstone Strait:

Both times I have been here, its been really busy, it hasn't been that, I'd say a significant amount of tourism related traveler that have been around on guided trips or whale watchers on daytrips...but both times I've been on the beginning or the end of the busiest season and haven't spent a lot of time in the Strait, I've been more intent on getting across and into the actual Broughton.

Fran expressed the change in the amount of people further north in the Archipelago:

So when we get up in here (showing place on the chart), I just remember, there's kind of like a sense of ease actually once you get around Blackney Passage and into Swanson Island and Crease Island, all this area here and Village Channel, the Carey group, Indian Channel and North... you don't see as many kayakers north of here...

Travel by kayak provides the opportunity to explore the maze of islands and islets characteristic of the Broughton and experience its intrinsic and aesthetic beauty:

...Is it ever nice in there... you look at it and go how in the hell do you ever find your way around ...it was great. I remember going from [Owl Island] this really freaked me out ...This is an awesome spot right outside of Owl [Island] in the Canoe Islets...House Island and all in that area. [I]ts just amazing, just spectacular. Everything is so close and so many Islands. (Mike, recreational kayaker)

Intrinsic values of biodiversity, solitude, wildlife, and intertidal life described the “essence” of the Broughton Archipelago for many respondents. This was often expressed with emotionally driven, experience oriented rhetoric that ranged from evocative imagery and metaphor, to the prosaic. Words and phrases such as “roaring silence” (Colin); “[p]eace and fresh air” (Bill) or; “as a guide I feel like I can breathe a bit better and just kind of putz along the shore, and just enjoy...enjoy more...a sense of ease...peace...” (Fran) illustrated the “essence” of “being” in the Broughton Archipelago. “Places” often evoked poetic narrative:

... [I]t’s like a tapestry. A tapestry that changes ...with the tides. It’s like it has two faces and something in between too. Like a patchwork quilt that is stitched together by the ocean. It’s ever changing always full of surprises. There are no two times that I travel through that area, it is ever the same. There are features that are the same, but there is always something different. Whether it’s just sighting an animal or a marine mammal or a bird or an intertidal species that I don’t normally see there or something, and then sharing that with other people. Magical. (Logan)

Spiritual values were expressed through interconnectedness with wildlife and nature and sense of being somewhere pure, tranquil and biodiverse while kayaking. Often, spirituality was described in an all encompassing holistic sense while simultaneously expressing any number of other values at the same time. Tropes of “heaven on earth” and “cathedral” were used to describe overhanging trees while paddling below them, immersed in the solitude and tranquility of nature:

... [W]e'll come through here when the tide's high enough and ask people to paddle silently and ... they love it. Because it's like this little cathedral of overhanging trees and its quiet and... you can see the bottom and there are great sea stars... This whole passage has great intertidal life especially at low tide.

(Fran)

However Logan also commented on the increasing amount of people traveling up in the park: “[T]he last three years, speaking of business, the last three years... I stopped taking my groups ... because we would get there and there would be up to sixty other kayakers there. It was like going to the city.” Ryan also noted the potential crowding in campsites: “So, one of the things that is a problem up there of course is that there is really limited camping. The sites themselves, if anybody is there ahead of you, it's a bit of a problem. Squeeze in baby.”

Even further up by the north end of the park boundary close to Echo Bay, Bill commented that “there are hundreds of kayakers who camp on the Burdwoods.” In a recent email, a local kayak tour and bed and breakfast operator located close to Echo Bay and the Burdwoods announced more bookings from other kayaking companies beginning their tours through the Broughton Archipelago at their establishment.

Also noted by Logan is the heavy trampling of large commercial groups: “[W]e always have such big groups. Too many tents, too much trampling.” Fran suggested the reopening up of a few more sites as sacrifice sites. Also noted was that with high use comes damage to sites such as tree limbs chopped and degradation of sites with kitchen set ups and primitive shelters:

I think out of all of them and again...[it] would be Owl [that has the most visible damage]...And what you’ll find there are you know, there’s like a kitchen set up... benches laid out ...[where] you can put a kitchen... [T]he worst thing for people to see are...limbs [that] have been cut off ... of trees and again, very flattened out sections...it’s a question right? Do you have many different sites and less impact or fewer with more impact...? [H]ere I think that the land is almost telling you ‘look, you have to have fewer sites.’ [The] land often dictates what you can do [and where you can camp] you know. So here you have to have fewer sites and maybe ... [we’ll just] have to sacrifice those sites.

Another topic of discussion was human waste. In Joe’s Cove, Crib Island and Insect Island, pit toilets were recommended due to the low tidal flush of the area. The beach on Crib Island in Sunday Harbour in particular was mentioned: “We paddled in there and it was ... that stank [human waste] smell, you know decay ...” (Fran). Insect Island was noted to have trees used as toilets with toilet paper not properly disposed of and strewn about the forest. Human waste also contaminates clam harvesting beaches which are quite often ancient middens and significant cultural sites.

While legislation requires commercial land-use tenureship agreements with the provincial government for commercial kayaking, such land-use has also led to conflict with First Nation’s territory:

On Crease Island, on the southeastern corner, there is a place called Maggie Point... [A company] is trying to get a tenureship through provincial parks to create a kayak camp there. It is not supported... we look at [it] as a direct intrusion into our traditional territories prior to land claims... (Rich)

Use of the same site was also a threat to biodiversity, situated directly at a Shiner Perch spawning site:

... [T]he whole southeastern corner of Crease Island is a Shiner Perch nesting spot. During May through the end of July is the spawning season for Shiner Perch ... So having a kayak camp at Maggie Point is not recommended. (Rich)

On yet another level it is a significant archeological site:

... [A]t Maggie Point there is also an undisclosed archeologically significant and sensitive site... [I]t comes from a story of a sailing ship... [that came] into the vicinity... There is a rock structure up there that looks like a bunker. Now what it is we do not know and it needs to be archeologically surveyed and hopefully there will be no kayak camp there ... because it might be damaged or altered. (Rich)

Rich illustrates the potential social, cultural and ecological impacts of an activity that similar to whale watching is regarded as non-extractive. While its impact is likely unintentional, commonly indirect and not immediately apparent or dramatic as hunting, its resultant effect can have similar damaging extractive outcomes and land use conflicts as hunting for sport.

4.5.4 Hunting.

In the same context as fascination and familiarity with wildlife and animals, there is a hint of sadness in describing the senseless killing of black bears for sport in Viner Sound

by a commercial hunting outfit from Campbell River: “A lot of black bears (on Gilford Island). We saw eight the other day in Viner at one time...right down on the flats... We went in on high tide... Simoom used to be bear city but they shot them all off...just any guys from Campbell River ... about 5 or 6 years ago...” (Bill). Bill’s fear was that they would also kill the massive grizzly that lives in Bond Sound as a result of poor zoning and does not understand why the grizzly habitat is not preserved:

[Hunters] go up into Bond sound, up in the Ahta [river watershed] every year and try [to shoot bears]... [T]he biggest bear that ever lived [I] think is in there and I’m afraid they are going to get him. God, I’d like to see him die of old age but it’ll probably end up on somebody’s wall. [A] grizzly, absolute monster... All of these places like Kingcome and Wakeman; they all have a mile of no hunting zone in them. Thompson Sound has even got it. Glendale Cove [too] but Bond don’t. Bond is wide open for him...I don’t know [why]...Bond [has] such a short river...[E]ven miles back here in Wakeman and Kingcome, you are really just getting into Grizzly Bear country but they [still] close the estuary...Here [in Bond] they don’t. (Bill)

Unethical practice of bear baiting was common but because of the remoteness it is next to impossible to control or monitor.

Up in Wakeman last year they bought bags of fish farm food and hung it in the trees to attract them... I was in Bond Sound one time about 12 years ago and there was about 5 seals hanging in the trees trying to get them bears to come to them. But that was a different boat. I reported them. By the time the game warden got there he was long gone. But they shot a lot of black bears in this country. (Bill)

Ironically, in another interview at the home of Rich, I showed up the day after a protest of the same hunting issue. I sat down with him to watch him on the news; drumming and dancing in full regalia on the bow of his boat. A sense of pride was noted in his demeanor in his role in protecting the bears, but also in securing his future and protecting a hot commodity for his wildlife viewing business. Also, there was a hint of amusement in the guerrilla marketing tactic for his business which simultaneously illustrated an interesting relationship among commodification of culture and wildlife in the name of ecological integrity, preservation and conservation.

4.5.5 Cultural tourism.

For First Nations communities, cultural tourism provided not only a means of diversification from fishing and logging, but also a way of repatriating communities and creating a sense of pride and identity in culture:

...Because what happens is tourism is about who we are and to be able to do a good job, you need to know who you are. That is your foundation with whatever you do in life. It is about who you are and how well you think about yourself...and [how you] project that...When you are doing tourism, it is the same thing. It's how you can communicate who you are and where you come from. That always goes a long way with interconnecting with other people. For us it is because this is where we live, always lived...how we [have] lived of the land and still try to stay [living that way]. You know that is a lot of ... why people come here... [A] lot of people only go to museums. They talk about us like we are past tense... [Yet] we are still here living and we are still here doing our ceremonies and we are still doing a lot of things. We are just using modern tools to do... [those things] and...[we do them] a lot quicker because [it is just]

the way of the times... [Everything] evolves with time... But the big thing is [that] it helps with everything for our young people. If they have a stronger foundation to go from, they are going to be more successful in everything that they do. (Judd)

This sense of pride in culture and identity that is facilitated through tourism is illustrated by Fran's perception of an experience with cultural tourism:

You know how [he] tells you about how in the olden days... when warriors came to attack, they could hear them on the shells ... (jovial, laughter). [W]e were walking around these old totems and those... residential homes that were... so out of [place]... a really odd juxtaposition... [T]hese girls came up on a boat ... these two young girls were studying at Alert Bay at their college... There's a program I guess... nature tourism... or native tourism... which is awesome... They came and they had their... gowns that they had made... they didn't really tell us much about it at all, but they... danced for us and then told the story about the place but in their language and ... It was... really special and what was so neat about it was seeing their perspective, because either their mom's or dads had been... in the residential school system... So there is a huge gap. They're... that generation that are trying to rebuild their culture... [I]t was really neat talking with them and seeing... their perspectives... on where their culture and where their people stood today in this area ...

A new tourism endeavor on a reserve currently being repopulated on the border of the southern end of the Marine Park illustrated the anticipated use of First Nation culture for tourism:

...If you want a full performance... You'd have a traditional greeting by the chief in full regalia and people there at the end of the dock and taken up to the big house. You'd be told legends and stories in the big house... and then... you'd feast on a traditional feast of [salmon]... you can watch the sockeye salmon being barbequed on the beach and help out if you wish and have an idea and enjoy what you are feasting on and enjoy all the little side trimmings that go along with that and then a dance performance. (Sophie, aboriginal tourism interest)

Operating a thriving business was important for survival of the community, culture, pride and identity. However, when juxtaposed with an existing operation, it provided a forewarning for future development:

And the last three years, speaking of business... I stopped taking my groups ... because we would get there and there would be up to sixty other kayakers there. It was like going to the city. And also... pushing hotdogs... trinkets and things, which our guests aren't necessarily there for... (Logan)

I feel this last statement ties together all of the themes and their related ideas and concepts. Perhaps because it is spoken from a point of view with which I can identify. Not in a literal sense referring to the particular site and situation, but representative of an experience familiar to me. From an emic perspective, it voices the concern of a long time guide in the area about change, diversification, and loss of control in a new cycle of socioeconomic development.

However, it also paints an image which reminds us of problems of the past and perhaps foreshadows future issues in the Broughton Archipelago, the surrounding region and coastal communities in transition. The difference is “[j]ust that now tourists are

being harvested instead of salmon because the pulp mills and paint factories took away most of our salmon. But anyway, that's political [and] we won't get into that'' (Rich).

Chapter 5

Homogenization of Culture, Meaning and the Symbolic Salmon

5.1 Introduction

The preceding chapter discussed the profound changes in the Broughton Archipelago over time through the voices of people who live and visit the area. While globalization emerged as an overarching theme from the map-based interviews, the fate of wild Pacific salmon embodied the struggle and challenges experienced by the community. In this sense, salmon has also become a symbol inextricably connected to the culture and economy mirroring the resilience and adaptability of the people and their community in response to the shifting socioeconomic conditions of modernity.

5.2 The Symbolic Salmon

The readily available cellophane covered, British Columbia Atlantic farmed salmon sitting on the supermarket shelf, with its consistent colour, texture and taste, misses the seasonal and variability of flavour and white colour of a spring salmon in the winter. It reflects the homogenization of not only the fish, but its associated culture and meaning. Sense of place often becomes stronger when traditional meanings of place become challenged or threatened and while globalization emerged as an overarching theme, salmon became its symbol. It embedded itself within each and every aspect of culture and economy in some direct or related form.

Salmon are a keystone species in coastal temperate rainforests and they play a critical role in the ecosystem (Gende, Edwards, Wilson, & Wipfli, 2002). Their disappearance has the potential to dramatically alter the health of the ecosystem, but also the future well-being of the people who live and work in the Broughton Archipelago. The hatchery in Scott Cove illustrates a community effort to restock the areas' salmon bearing creeks,

but also to keep an important part of coastal culture alive. I found irony in Judd's "museum" depiction of people's perceptions of First Nation's culture and an explanation that they still practice "culture;" that it is not gone but very much alive. Without the salmon, a museum depiction may be as much a reality as pictures of the five species of salmon posted beside the trolling lures on the wall in Billy's Museum as another part of coastal history.

5.3 Our "Place" in a Social Ecological System

Place can be defined as an integrated phenomenon in which socio-political processes such as globalization, biophysical factors of the surrounding ecosystem and its socio-cultural meanings overlap (Figure 4.) (Relph, 1976; Sack, 1992; Cheng et al., 2003). In this sense salmon has emerged as a metaphor for "place" through its interrelationship with globalization, its role as a keystone species and its associated meanings. Moreover, the salmon become a symbol of the complex social-ecological systems (Berkes & Folkes, 1998) of this area.

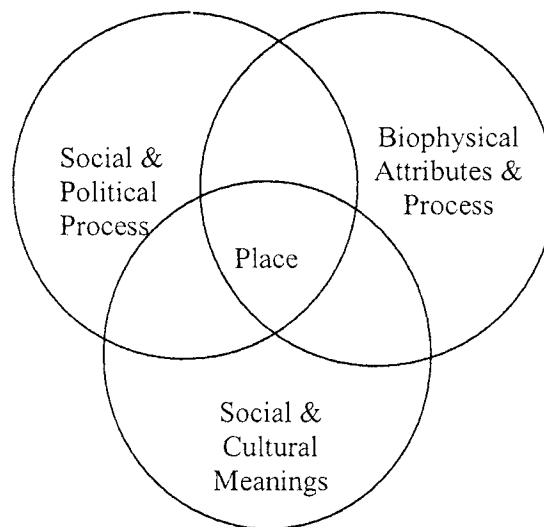


Figure 4. Creation of place (adapted from Relph, 1976; Sack, 1992; Cheng et al., 2003).

Social systems deal with the relationship between humans and nature, rights to land, access to resources and recognize different knowledge systems in relationship to how resources and the environment are used. Ecosystems are self regulating communities of organisms that interact with their environment and each other (Berkes, Colding, & Folkes, 2003). Berkes and Folkes, (1998) holistically merge the two systems and call attention to the complexity of human/nature interactions. They contend that a separation of the two is “artificial and arbitrary” (p. 6). Its relationship to sense of place is defined through the role we play in a social-ecological system through the concept of resilience (Holling, 1973).

Central to social-ecological systems is Holling’s (1973) concept of resilience or how ecosystems maintain themselves through change and disturbance. Resilience can be defined by three characteristics (Berkes et al., 2003): The amount of change the system can withstand while maintaining its function and structure; how capable the system is of self organization; and its ability to create and improve the capacity for learning and adaptation. In the context of this study, resilience applies to how well social-ecological systems adapts to the social and environmental changes imposed by globalization and the capacity for rural communities to adapt to these changes (Berkes et al.).

Adapted from Holling (1986; 2001), Figure 5 illustrates an adaptive renewal cycle in social ecological systems. It consists of a four phase cycle: exploitation; conservation; release and; regeneration. In the first phase, exploitation is represented in two stages of industrial development with forestry, fishing and aquaculture. A second stage in this phase evolves into a more diversified economy of tourism; forestry and fishing.

The second phase of conservation is reflected through industries that provide stable jobs, generate taxes and multiplier effects. In this phase, Holling used the example of a

forest ecosystem which would emerge as a climax forest. In the context of this study, a sustainable industry would be its end point. However, climax forests like industries are subject to disturbance and change.

A third phase creates a system shock illustrated in a natural system breakdown reflected in a sea lice epidemic, the depletion of fish stocks and perhaps forests creating a “rapid release.” This third phase produces a “creative destruction,” allowing for other types of opportunity and renewal. The final phase of community resilience and regeneration, known as innovation, occurs through creativity, learning, increased capacity and new opportunities. During a cyclical repetition, the exploitation phase evolves into the second stage of development reflected in tourism and value added production. Changes are reflected on the x and y axis: The y axis represents the intrinsic potential of accumulated resources and structures in the exploitation and regeneration phases. The x axis characterizes the degree of interconnectedness among the controlling variables of all four phases.

Modern management has been focused traditionally on the “exploitation” and “conservation” phases in attempts to create “stable” systems which have succeeded only in reducing system resilience (Berkes et al., 2003). Less attention has been focused on the “back-loop” of “release” and “regeneration.” The narratives of the people indicate that their community like many others is struggling to accommodate the “system shocks” of over-exploitation and “invent” a path to regeneration through creativity, learning, increasing capacity and opportunity.

In the Broughton Archipelago it appears that system resilience is sorely challenged, perhaps even expended, by conservative management and system rigidity of institutions and the impacts of increasing globalization of industries like forestry, fishing and

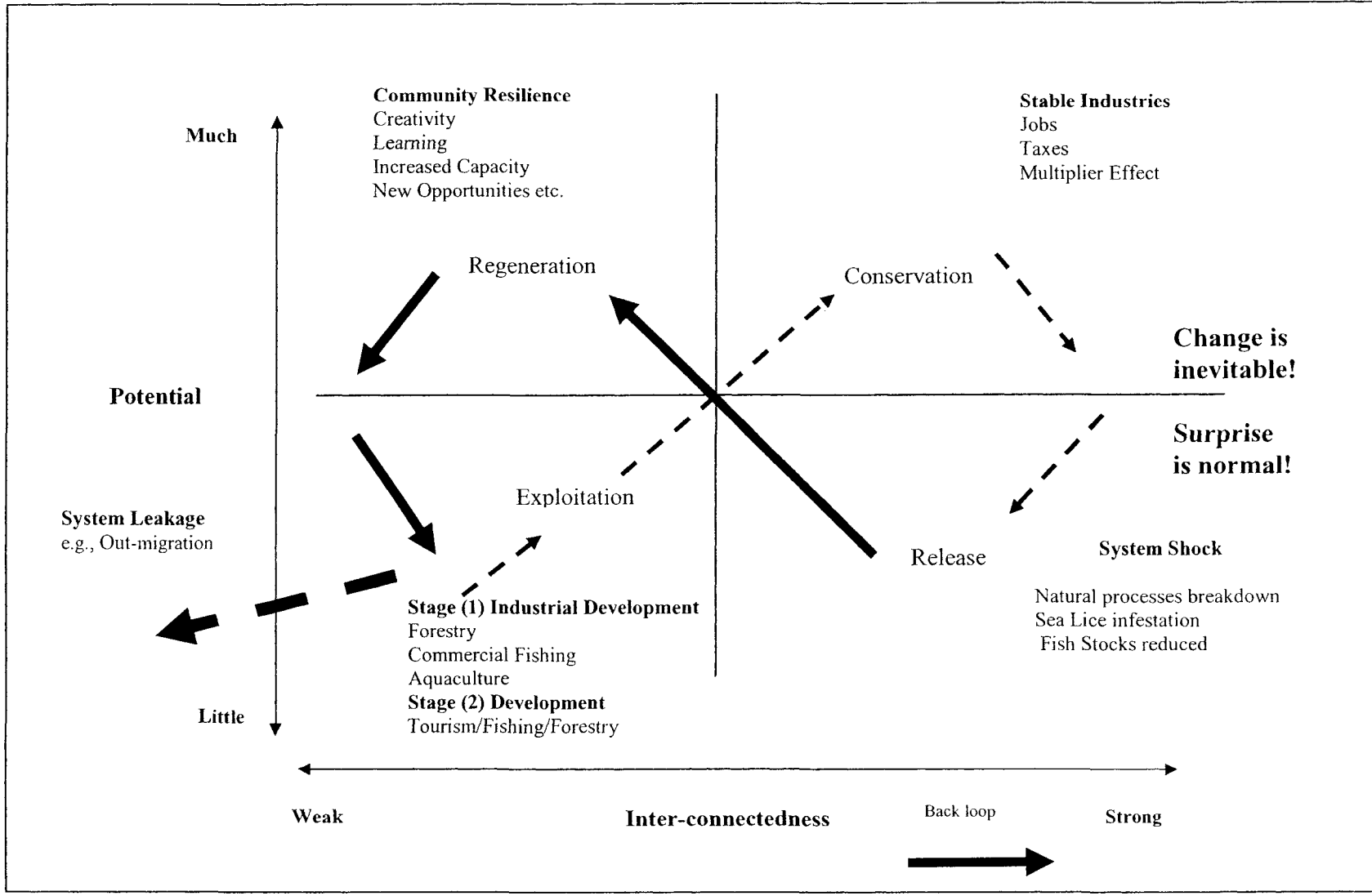


Figure 5. The Adaptive-Renewal Cycle in Social Ecological Systems (adapted from Holling, 1973, 1986, 2001).

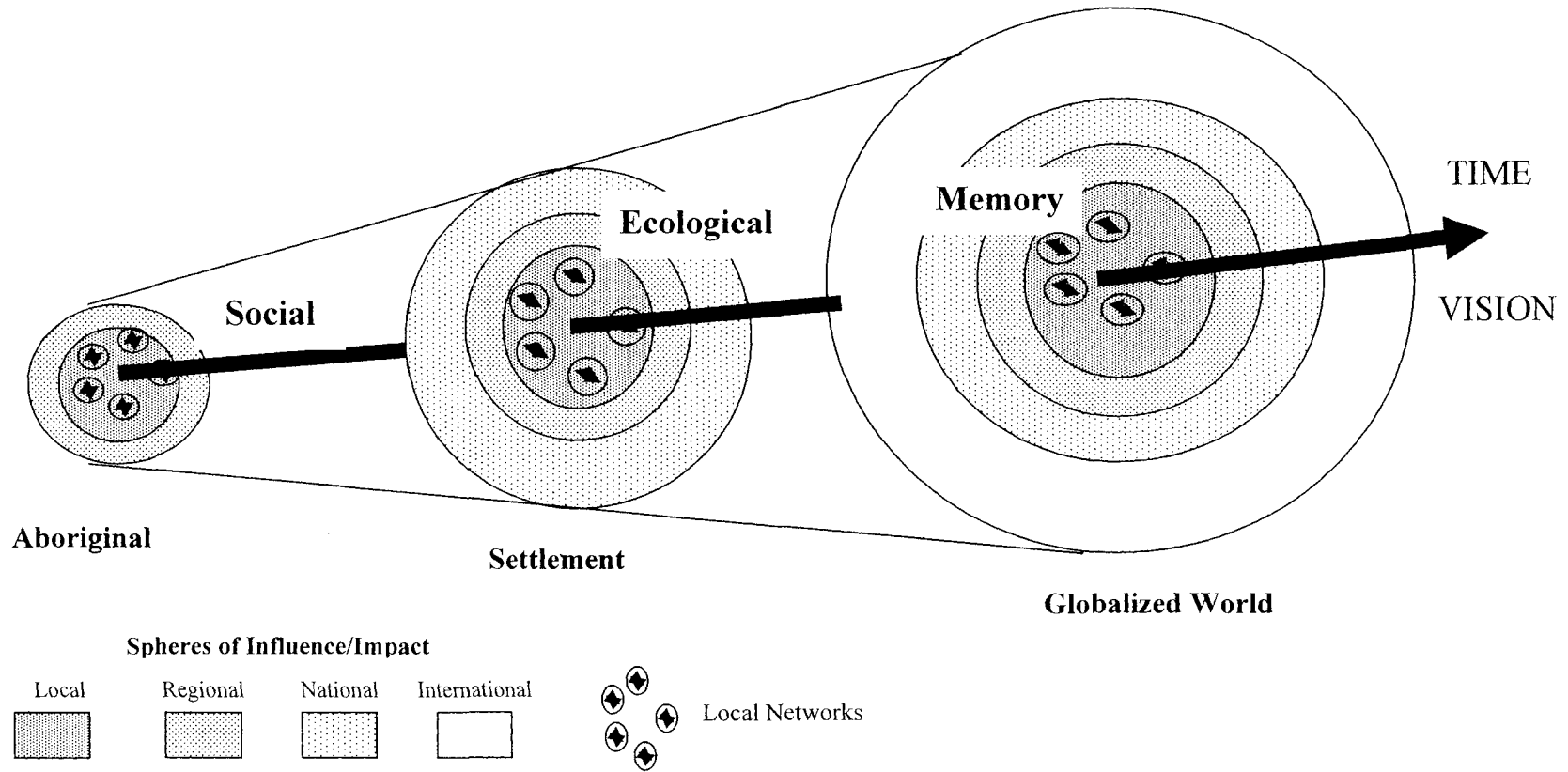
aquaculture. As a consequence, the social-ecological system has moved into a “new state” arguably more degraded than the previous.

To adequately deal with social-ecological systems Berkes et al., (2003) called for adaptive management based on an iterative process which emphasizes feedback from the environment and the state of the resource to develop policy. An adaptive governance system is illustrated in Figure 6. Social and ecological memory creates a vision over time of how the social-ecological systems should be managed. From this memory of traditional and local ecological knowledge, social networks are developed that inform each other, and a wide range of local and international governance in the creation of an overall adaptive governance system. Folke, Hahn, Olsson and Norberg (2005) built upon this and suggested that a resilient social-ecological system can take advantage of a crisis and transform into a more desired state. They focus on adaptive governance during rapid change and crisis and look at social sources of renewal and regeneration which links people, organizations, industry and institutions at multiple levels.

Trust, leadership, vision and meaning are provided by key individuals towards a learning centered environment within and among management. An important feature of adaptive governance systems are the ability to self organize as social networks that draw on a number of different knowledge systems for “the development of common understandings and policies” (Folke, Hahn, Olsson, & Norberg, 2005, p. 441).

Bridging organizations such as Morton’s Raincoast Research Society and the Mainland Enhancement of Salmonid Species Society lower the cost of collaboration and conflict resolution. Moreover, the Raincoast Research Society has created a community-based salmon-sea lice monitoring program (Krkosek, 2005) that incorporates traditional ecological knowledge and local ecological knowledge into scientific knowledge

Figure 6. Adaptive Governance in Social Ecological Systems.



systems. Similarly, the Mainland Enhancement of Salmonid Species Society, a community based volunteer organization, also illustrates a fusion of scientific knowledge, traditional ecological knowledge and local ecological knowledge into restocking the “mainland’s” salmon habitat. Both of these examples allow for legislation and government policies that can support self-organization while enabling creativity for adaptive co-management efforts.

Chapter 6

Conclusion

6.1 Maps and Stories of Place

Map-based interviews connected people to landscapes and embedded each person and their associated values in the Broughton Archipelago and the Broughton Archipelago Marine Park. Moreover, they were effective as an elicitation tool which incorporated the ideas of place with ecosystem management that utilized local knowledge from four different classes of stakeholders. The resultant values offered an initial level of analysis and spatially located these values and associated meanings to particular places. Their uniqueness resides in richness, detail and context which moves beyond the shallow responses commonly elicited in survey research methods that are popular in natural resource and recreation management.

The stories created through map-based interviews provided a basis for a much deeper level of analysis which linked people to place and its holistic character encompassing past experiences and social and cultural meanings (Kruger, 2004). In this approach maps are an integral component of the interview process and serve as a catalyst and an appropriate medium for thoughtful and meaningful everyday discussions about “valued places.” Conventionally maps have focused on biophysical features or political boundaries, and more recently have been used to spatially locate places of special significance (e.g., Tobias, 2000). In this study, map-based interviews offer another dimension, one that focuses on the interpretation of places as cultural landscapes on an intimate level and seeks to uncover the symbolic and emotional content of people’s relationships to places.

6.2 The Resilient Salmon

Salmon emerged as an important symbol that nourishes culture with a traditional way of life for Natives and non-Native people who have relied on their patterns of movement in some form or another for centuries. In an increasingly globalized world, the new tourism economy relies on this same pattern directly through sport fishing, the whale watching industry, biodiversity, or spiritually through a sense of interconnectedness with wildlife, wilderness and nature. As the forces of globalization become increasingly pervasive, these symbols become even more important when faced with the consequences of their loss of traditional meanings. If we are to recognize ourselves as part of the ecosystem and truly move beyond a commodity metaphor (Williams et al., 1992), meanings and their associated values need to be incorporated into natural resource planning and management.

Sense of place in the Broughton Archipelago has invariably emerged as a social-ecological system which interconnected my participants inextricably to the surrounding ecosystem from a variety of perspectives. These were influenced by each individual's cultural milieu such as local resident, guide, First Nations tourism interest or recreational paddler. Their relationship to ecosystem management lies within the first phase of the adaptive renewal cycle in the community resilience phase of the social-ecological system through reorganization, creativity and increased capacity through new ideas, entrepreneurship, and research. Long time community residents like Bill Proctor and the first wave of green migrants such as Colin, Yvonne and Alex create "voice" for environmental values and emerge as leaders of social networks by bringing forth a social and ecological history which has been heavily influenced by the forces of globalization. They also introduce an infusion of ideas, knowledge and entrepreneurship that have

become increasingly important in light of the changes in the social and economic structure of the Broughton Archipelago that have gradually developed over time.

“Voice” and “infusion” present a “vision” for adaptive governance through educating and informing about the existing environmental and social conditions surrounding their community and is reflected in their books, articles, research and direct involvement within the tourism industry. These resound in protest against the globalizing influences of the internationalization of forestry, fishing and the widespread development of aquaculture and the ensuing environmental and social degradation.

Green migrants emerge as leaders of social networks which give “voice” to existing social and environmental issues. They also “infuse” new ideas of conservation and nature-based tourism. As a highly globalized industry, tourism also provides an even greater potential to influence public perceptions through guide-client contacts. While the newest wave in green migration represented by guides and tourism operators have the potential to be major forces of globalization, tourism becomes increasingly important as a crucial element of a newer, more diversified and potentially sustainable economy. Creativity in the “regeneration” phase can mitigate negative effects of tourism as the cycle repeats itself.

Key factors are the extent to which social memory in all its forms will be mobilized in understanding the “new phase” of exploitation, which, in turn, hinges on the resilience of both community and ecosystem in buffering the changes that will inevitably occur. All of these people emerge as leaders of social networks which draw upon diverse knowledge fundamental to social-ecological system. While social networks and community capacity appear to be in place, the reluctance of institutionalized practice that favours unsustainable forestry, fisheries and aquaculture threaten system resiliency.

Powerful forestry, fisheries and aquaculture industries tend to ignore social networks and disregard the need for multilevel communication that ranges from local to international scales. This creates a system in which a new state is developed that is desirable for some, undesirable for others and still for others, remains unnoticed. System leakage through out-migration of people results in a loss of potential leadership, creativity and can have a profound effect on system resiliency.

Promise for a healthy social-ecological system in the Broughton Archipelago lies in the passion of the people which is clearly illustrated in their commentary. Perhaps power lies within the legal system which can override a federal mandate to promote fish farms and a provincial inability and unwillingness to protect wild salmon stocks. Legal success has been illustrated in an aboriginal and provincial government co-management agreement on the management of Hanson Island which incorporates a degree of First Nations control over land, access to resource and adaptive governance. First Nations and land claims will continue to play an increasingly powerful role in the future.

Nimmo Bay resort has also had a degree of success with tourism zoning and other entrepreneurs like Colin continue to apply for legal zoning which protect natural resources. While recent charges against the provincial government for failing to protect BC's wild salmon stocks appear to be a final act of desperation, perhaps it more appropriately reflects a forward step for the community in regaining control of a future in which the salmon re-emerges, as a symbol of hope and faith in the resilience of both the land and the people who live there.

During the course of this study, the people of the Broughton Archipelago voiced concerns, expressed hope and moved to act demonstrating resilience and adaptability in the face of stress and changing circumstances brought on by the "boom and bust" cycles

of the increasingly modernized, mechanized and externally controlled forestry and fishing industries. These industries driven by an insatiable global demand for natural resources have resulted in a legacy of increasing environmental degradation which calls into question the sustainability of these traditional extractive resources based economies. Nature based tourism, which is potentially “softer” on the land has emerged as a natural and practical alternative that might serve to smooth out the roller coaster ride of involvement in the global economy. However, tourism also has the potential and is already demonstrating some of the signs of repeating the same cycle of exploitation and accumulation of negative impacts that characterised the previous boom periods of the fishing and forestry led economies.

6.2 Future Research

Continued monitoring of nature based tourism and moreover aquaculture in the Archipelago may reveal the effect on its social ecological system. System resilience appears to be attainable with adaptive governance through social networks from local to international scales. In this context, more research into successful examples of adaptive governance is recommended.

First Nations will also continue to play an influential role in regaining local control over natural resources. A case study of the co-management agreement on Hanson Island would inform on process and outcomes. The potential of alliances between First Nations and local people in relationship to the strength of legal rights to lands and the common desire for “control” over change are also important areas for further study.

Moreover, continued research on “new” and “old” voices and their influence on policy will be increasingly important with the changing demographic of rural coastal communities. In this shifting environment, community/university research alliances and

participatory action research with communities in transition would help to facilitate sustainable tourism and community planning.

From a methodological perspective, a synthesis of map biographies and GIS is recommended to explore special relationships between sociocultural meanings, values and the landscape. This fusion of methods has the potential to create practical tools similar to those commonly used in resource planning.

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Appendix A

Lakehead
UNIVERSITY

Faculty of Outdoor Recreation, Parks and Tourism

Tel. (807) 343-8882
Fax (807) 346-7836

Hello,

Thank you for volunteering to take part in my study, *Kayaking Landscapes: Place Meanings in the Broughton Archipelago Provincial Marine Park*.

I am conducting interviews and collecting “map biographies” to find out about places in the Broughton Archipelago Provincial Marine Park that have meanings and values for you. Map biographies are places or points that are marked on a map of the area to geographically show places that you use or know of that have special meaning to you. Whether you are a kayak guide, recreational kayaker, tourism operator or nearby resident who use the area only in the summer or all year round, I’d like to hear about places that are important and have meaning.

As North Island nature based tourism continues to grow, a better understanding of the park is necessary for managers. The information collected in the interviews will help to provide data on recreational use, meanings and values in the park to assist in planning.

The interview will take about an hour or two. I will want to tape record our discussion but be assured that the anonymity of your comments/ideas will be maintained and remain confidential. Material may be quoted directly in reports of journal articles but pseudonyms will be used in such situations. Responses will be coded and stored in a computer file at Lakehead University for seven years. The interviews are strictly voluntary and you have the right to withdraw at any moment.

For more information about the project, please contact Matthew Bowes at (807) 346-7941, (250) 616-1549 or mtbowes@lakeheadu.ca.

Sincerely,

Matthew Bowes
Master of Environmental Studies Candidate
Faculty of Outdoor Recreation, Parks and Tourism
Lakehead University
Thunder Bay Ontario

955 Oliver Road Thunder Bay Ontario Canada P7B 5E1 www.lakeheadu.ca

Appendix B

My signature on this form indicates that I agree to participate in a study by Matthew Bowes on Kayaking Landscapes: Place Meanings in the Broughton Archipelago Provincial Marine Park. I have received an explanation about the nature of the study and its purpose. I understand the following:

1. I am a volunteer and can withdraw from the study at any time.
2. There is no apparent danger of physical or psychological harm.
3. The data I provide will remain confidential.
4. I will receive a summary of the project, upon request, following the completion of the project.

Signature of Participant

Date

Appendix C

Matthew Bowes

Hi Yvonne,

How are you? It's been pretty cold here in Thunder Bay this winter as usual. A low of -40 Celsius! However, its starting to get warm, only -7. This weekend we are going to ski 45 km across a number of lakes and canoe portage routes northwest of town while the lakes are still frozen. Icebreakers are starting to move around Lake Superior a bit.

I wanted to thank you again for letting me interview you this spring. I'm in the process of writing everything up for my thesis and had a question. I was wondering if you would mind if I named you in my project, instead of making up a name. With all university writing, because it is research, I have to ask permission to reveal your identity. You had previously mentioned it was ok but I wanted to double check.

I'm finding it difficult to keep you anonymous because I use *Full Moon Flood Tide* and reference your name in that. Things we talked about this spring are linked to these references reinforcing a lot of what has been said already.

My project looks at values that people have for the Broughton and the effects of globalization such as increased efficiency of logging and fishing; diversification into aquaculture; community and environmental change.

While a lot of environmental research is done in things like biology, we are also starting to do social environmental research that recognizes people as a part of ecosystems – because it is people that impose the problems, not the environment.


If its ok, I would need to hear back from you fairly soon. An "OK" on a piece of paper mailed to me in response would be just fine. But it may be easier and faster to just email me when it is convenient for you. I have sent a similar letter to Bill requesting the same. I was also wondering if it would be ok if he replied with an email through you – you would state whether he consented or not. I have suggested this to Bill as well. If you have any questions you can contact me any time at (807) 684-9360 email:

Look forward to hearing from you soon.

Sincerely,
Matthew Bowes

Appendix D

From: "Yvonne Maximchuk" <

 Add to Address Book

To:

Date: Fri, 31 Mar 2006 22:04:05 -0800

Yes for both Bill and me, I am being rushed so will write more later,
Yvonne

From: "Yvonne Maximchuk"

 Add to Address Book

To:

Subject: Re:

Date: Mon, 03 Apr 2006 11:41:08 -0700

Hi Matt, not so rushed now, a beautiful day in Sointula after a
lucrative selling weekend in Coal Harbour, so much history all over the
place. Neither Bill nor I have any problem with having our names out
there in the big world. It is so challenging to get to us that the
privacy concerns many people have do not affect us. Hope all goes
smoothly with your writing, do stay in touch and come back to us
sometime.

Yvonne

Appendix E

Matthew Bowes

Hi Bill,

How are you? It's been pretty cold here in Thunder Bay this winter as usual. A low of -40 Celsius! However, its starting to get warm, only -7. This weekend we are going to ski 45 km across a number of lakes and canoe portage routes northwest of town while the lakes are still frozen. Icebreakers are starting to move around Lake Superior a bit.

I wanted to thank you again for letting me interview you this spring. I'm in the process of writing everything up for my thesis and had a question. I was wondering if you would mind if I named you in my project, instead of making up a name. With all university writing, because it is research, I have to ask permission to reveal your identity. You had previously mentioned it was ok but I wanted to double check.

I'm finding it difficult to keep you anonymous because I use *Full Moon Flood Tide, Heart of the Raincoast* and reference your name quite a bit. Things we talked about this spring are linked to these references reinforcing a lot of what has been said already.

My project looks at values that people have for the Broughton and the effects of globalization such as increased efficiency of logging and fishing; diversification into aquaculture; community and environmental change.

While a lot of environmental research is done in things like biology, we are also starting to do social environmental research that recognizes people as a part of ecosystems – because it is people that impose the problems, not the environment.

If its ok, I would need to hear back from you fairly soon. An "OK" on a piece of paper mailed to me in response would be just fine. But it may be easier and faster to just email me through Yvonne when it is convenient for you. I have sent a similar letter to Yvonne requesting the same and will let her know I have asked you to perhaps send the message through her email. If you have any questions you can contact me any time at (807) 684-9360 email

Look forward to hearing from you soon.

Sincerely,
Matthew Bowes

Appendix F

Date: Fri, 24 Mar 2006 20:55:32 -0800

From: "Roger Laton" <rogerlaton@direcway.com>  Add to Address Book

Subject: from Billy Proctor

To:

Hello Matthew,

Billy Proctor is a friend of mine and he wanted to get this to you faster than our snail mail out here and so I am forwarding his. Yes, that you can write about him.

Roger