UNIVERSITY OF PRINCE EDWARD ISLAND

Connecting Spiritual Values and Sustainable Farming and Fishing Practices on Prince Edward Island and Cyprus

by

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Abstract

In a world where development choices are predominantly shaped by capitalist economic values, the importance of spiritual values in maintaining individual and community identity and culture is often overlooked. Being conscious of the relationship between the island environment and spiritual values could assist islanders to make decisions that preserve what they truly value about their islands. Farming and fishing have traditionally played an important role in shaping island culture and identity, and continue to represent a vital connection to the land and sea. This thesis looks at literature that addresses the spiritual relationship between humans and the natural world from various faith traditions. It then explores how the interactions between Cypriot and Prince Edward Island farmers and fishers, and their environment, could help us understand how values are shaped by place, how place is in turn shaped by values, and the ways in which beliefs find expression in work ethics.

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Dedication

This thesis is dedicated to the farmers and fishers of Prince Edward Island and Cyprus, whose commitment to their providing their communities with fresh food keeps all islanders connected to the land and sea that have shaped island identity and culture since the beginning of time. I feel deeply honoured to know you, and to have had the opportunity to hear your stories. I hope that these stories will encourage islanders to contemplate the ways in which our "islandness" influences our spiritual values, and to question whether the choices that each of us makes every day reflects values that are going to help preserve what we love most about our islands. May the experiences of Cypriot and Prince Edward Islanders remind us that saying "I am an Islander" is not just a birthright. It is also a sacred responsibility. I offer the following prayer in gratitude to the farmers and fishers who have so generously and lovingly shared their experiences with me:

Blessed is the spot, and the house,
and the place, and the city,
and the heart, and the mountain,
and the refuge, and the cave,
and the valley, and the land,
and the sea, and the island,
and the meadow where mention
of God hath been made,
and His praise glorified.
~ Bahá'u'lláh ~

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Epigraph

A human being is a part of the whole called by us universe, a part limited in time and space. He experiences himself, his thoughts and feelings as something separated from the rest, a kind of optical delusion of consciousness. This delusion is a kind of prison for us, restricting us to our personal desires and to affection for a few persons nearest to us. Our task must be to free ourselves from this prison by widening our circle of compassion to embrace all living creatures and the whole of nature in its beauty. The true value of a human being is determined by the measure and the sense in which they have obtained liberation from the self.

~Albert Einstein~

INTRODUCTION: A PERSONAL CONNECTION TO ISLANDS

Being an islander is not something one gets to choose. It either runs in your blood or it doesn't. Birthright or birth curse, those island born can leave, but the connection to place—to your place, remains. You run away from it, but eventually you must return. There is a sense that when you leave there is a piece of the island puzzle that is missing, will not be complete until you return. Islanders are as much a part of the island as the land is a part of islanders' identity. Sometimes it takes a lifetime, sometimes a generation, sometimes two. But one day, blood pulls you back home, and the missing piece falls into place and suddenly everything is complete.

My connection with islands began with my great-grandparents three generations ago in Sant'Agata di Militello, on the island of Sicily. At the age of 23, my great-grandparents pulled up their roots and took a boat to America in search of a new life, an escape from the destitute poverty in which the peasants of southern Italy were steeped at the time. They settled in New York, where my grandparents and father were born. They never returned to Sicily. The missing piece was carried down through two generations of city-dwellers raised in the fast-paced urban beat, oblivious of their past, their blood, their language, their island identity.

When I was six years old my parents, having recently become members of the Bahá'í Faith, decided to sell all of our belongings and move to the Mediterranean island of Cyprus to serve the budding Bahá'í community there. Their new faith taught that the world was one, that all people, regardless of their faith, language, the colour of their skin, economic class, were one family, and that the solution to the problems in the world was to learn to celebrate the unity in diversity existing on the planet. In order to pursue this,

my family moved to Cyprus and spent the next fifteen years learning to love Cypriots, their rich culture, the intricacies of the Greek language, the traditions, and the colours, smells, and sounds of the land.

I spent a great deal of my childhood and youth exploring the Cypriot countryside, swimming in the coastal inlets and bays, watching local birds come and go with the seasonal tides of migration, finding edible mushrooms in the forest, helping my friends harvest grapes and make wine, walking up and down the rows of brightly painted fishing boats in the Paphos and Polis harbours watching fishermen clean their nets and unload freshly caught fish. My favourite moments were those spent outside, swimming in the sea, roaming the countryside with a sketchbook or journal, and the hours spent conversing with the people and listening to their stories.

After high school I left Cyprus to pursue my studies. My desire to reconnect with my Sicilian roots took me to Italy to study the language, and then on a journey back to my family's village to re-connect with lost relatives. My travels led me all over Sicily, as well as to the Aeolian islands of Sicily's northeastern coast, and the island of Pantelleria off the coast of Tunisia. Further travels took me to many of the Greek islands, as well as Mexico's Midriff Islands in the Sea of Cortez. I started to notice recurring stories and scenes: the strong sense of identity ingrained in people; the overwhelming power exerted by the church on the lives of islanders; the absolute faith in God's will and His omnipresence in virtually every aspect of everyday life; the pervasiveness of privately owned land and complete lack of land-use planning; the multiple hats worn by islanders; the conflicts resulting from physical overlap of activities – agricultural fields planted right up to the beach to maximise space; fishermen just off the coast complaining of fish

kills; the massive over-application of fertilizers by farmers; the white powdery faces and hands of farmers who had just applied pesticides to their crops with no protection; the burning of fields in the fall to release nutrients back into the soil; the collapse of fish stocks and increase in the amount of imported fish being offered on menus; the absolute poverty of the few full-time small-scale commercial fishers still remaining in the fishery; agricultural fields being sold off, lot after lot and developed into apartment complexes, luxury hotels, tourist shops; crops being left to rot on the trees because farmers could no longer compete with the price of imported goods but could not bear to let their trees die. The fate of the farming and fishing communities and the systematic development of some of the most fertile and visually attractive land on the Mediterranean islands was especially disturbing to me because we appeared to be irreversibly sacrificing long-term renewable resources, and instead specializing in the provision of services—namely the tourism industry—which has always been highly a variable activity. Farming and fishing epitomise local culture. They define islands' unique sense of place; have always been the backbone activities that created community; ensured the availability of fresh, locally grown food to the population; and provided a degree of self-sufficiency that acted as a buffer between the islands and the ever-shifting variations in the world market. The primary sector established the foundation on which remaining sectors of the economy, and local social structures, were built.

In 2004 I moved to Prince Edward Island to pursue my Master's degree in Island Studies, with the intention of increasing my understanding of the factors at play on islands. How can they best utilise their resources to enable them to take an active part in the global economic market without compromising their quality of life, or the unique

characteristics that differentiate them from the mainland? I arrived in the fall. The rains were falling, brick-red water running in the creek beds, pooling in potholes, staining anything in their pathway red. When I walked along the coast on more turbulent days, even the ocean was red. Soil erosion, I soon learned, was only one of the problems being experienced on the island as a result of current farming practices. A farming community, Prince Edward Island had historically been covered in thousands of small, family run farms (MacKinnon & Vass, 1989, p. 4) that formed a patchwork of cohesive family enterprises that, when knit together, created the strong sense of identity and community necessary to support this way of life. The island is well known for its potatoes, traditionally one of the most grown root vegetables. It is also known for its strong winds that blow almost year-round. Over the last generation, an increasing number of families, unable to compete with large-scale, factory farms, have sold their plots off to developers or large farm companies. Small fields, separated by hedgerows, which help reduce wind erosion and provide habitat for local birds, have been replaced by large, unprotected fields of exposed soil that stretch out for miles, rendering them vulnerable to the loss of valuable topsoil.

Just before my arrival on the island there had been a fish kill, a large number of eel washing up dead on the shore of the Southwest River, along the north shore. While there was never a conclusive determination of the cause of the kill-off, local ecologists, marine specialists and fishermen said that they think farmers working on adjacent plots had been applying pesticides in windy conditions and a sufficient amount had been carried into the water to poison the fish. Since then, water contamination from chemicals applied to agricultural fields seeping into the ground water, being washed into rivers by

heavy rains, or simply blowing into bodies of water on windy days has made the headlines numerous times. Although no conclusive studies have been conducted specifically on the connection between chemicals being applied to agricultural fields and cancer rates, a 2006 study on the incidence of cancer on Prince Edward Island indicates that between 1996 and 2006 the incidence of cancer was 10% higher in island men, and 8% higher in island women than the average for the rest of Canada during that time period (Dryer, Van Til & Vriends, 2007). There are many factors that could be influencing this statistic, but recently islanders have started speaking out about what they see as a very plausible connection between the higher level of cancer on the island and the widespread use of synthetic pesticides and fertilizers (Delaney, 2006; Mittelstaedt, 2006). Recently CBC news reported that one farm group was advocating the reintroduction of the traditional farming practice of applying shellfish waste as a fertiliser for agricultural fields. This was an attempt to reduce the nitrates in the local water supply after Martine Savard from the Geological Survey of Canada highlighted the fact that the higher than recommended levels of nitrates in nine watersheds across Prince Edward Island are coming from chemical fertilisers being applied to fields ("Use fish waste as fertilizer," 2007).

Over the last three years, the interconnectedness of farming, fishing, the health of the local population, local culture and economy, social community well-being and resilience of the island in the face of change, has become increasingly obvious to me. While these elements are connected in larger places also, the effect that any shift in one area has on another is almost immediately evident on an island. Change is inevitable as the forces of globalisation reach deeper and deeper into the socio-economic structures of

even the most remote of places. Islands all over the world must develop ways of adapting their resources and adjusting their development goals so they can actively participate in the global economy, while not undermining the integrity of the resource base upon which their development strategies and the future of their societies depend.

This thesis is my contribution to this process. It is based on a deep love for and connection to islands and islanders worldwide, but especially for the Mediterranean islands of my childhood, and my current home on Prince Edward Island. As an artist, I feel exceptionally fortunate to have been able to experience and be inspired by the profound natural beauty of both of these geographic areas, and feel it is my responsibility to help preserve the land and seascapes, and the cultures based on them which have inspired so many for so long. Many farmers and fishers have welcomed me into their homes and shared delicious, fresh, colourful food with me while they fill a sunlit kitchen with laughter, tears, and stories of frustrations, pride, courage, justice, and love for their land, their sea, their island way of life. I have listened to stories for the last year and a half, spellbound, peering across the table through a thick haze of cigarette smoke. While my hands were warmed by my fourth cup of well-sugared, very black tea, or over apple pie and home-made cider in the chilly falls of Prince Edward Island, the first snows dusted the red, undulating ridges of ploughed fields and crows perched on the tops of wind-bent pines. I have listened as sturdy fishermen unloaded traps on the docks with ease, the frigid water numbing my fingers and stinging my eyes, the wild vertical ache of shellfish strong in my nose. I have listened standing in vegetable fields; at the counter of the organic food shop, sitting on verandas in late summer, eating cool fruit and sipping rose-water; or next to the stove while dinner was made and children dashed in and out

playing catch. This thesis is the result of the willingness of the farmers and fishermen of Cyprus and Prince Edward Island to share their lives with me. Their experiences have helped me to see that while we may not be able to choose whether or not we are islanders, or change the geographic constraints of insularity, we can choose how we live on our islands. It is this choice and what inspires it, that is the subject of this thesis. I believe that islands should still be places of inspiration, of artistic expression, of healthy lifestyle, clean air and water in the future. They should still be unique places to live and visit because they have a character that differentiates them from one another, and from other places. In order for this to be a possibility however, it is necessary to understand what shapes our relationship to our land and sea, and what drives us to make choices that preserve or undermine the integrity of our island environment.

Over the last few years I have become increasingly interested in why some islanders' relationships to their natural environment seem to reflect a lack of appreciation for its value, or perhaps a disconnect between the value they see in their environment and how they interact with it. Trying to understand this relationship by directly studying the larger population was a task too large for this paper. What occurred to me was that by exploring this relationship in island communities whose livelihoods necessitate caring about the health of their natural environment, I might gain some insights into the attitudes and motivations of the rest of the population. Farming and fishing are two professions that necessitate care and an acknowledgement of their dependence upon their natural resources for survival. In the past I thought that the deciding factor in behaviour was public policy, but watching and speaking to farmers and fishers has made me aware that many of those who practice their profession in a manner that reflects respect for their

resource do so despite current policy recommendations rather than because of them. The struggles that these individuals and families are willing to confront in order to continue farming and fishing tells me that there is something deeper than policy and financial gain inspiring them in their work. As I read and listened, the underlying force behind people's stories that to my surprise emerged again and again was spiritual beliefs or values; faith in something larger; a mysterious inspiring power; religion; Spirit; God. While this is not easily quantified or qualified, it is the relationship between island farmers' and fishers' spiritual beliefs and values and their work practices that this paper seeks to begin to explore. It is my hope that this study will contribute to other research in the field of island studies whose goal is to encourage islanders to translate their values into action, to creatively and proactively develop development strategies that are designed by islanders for their place.

It is important to note here that I am a creative writer and visual artist, and how I describe the places and people in this paper is coloured by this sense of creativity. Communicating my topic in a purely academic manner is neither something that I can believe in, nor would it reflect the whole concept behind this paper, which is the translation of personal values into practice. My aim in this paper is to find a way to present all of the relevant issues clearly and precisely without compromising creativity. Hopefully, doing so will keep the essential issues as tangibly alive within the island context in the mind of the reader as they were when they were first shared with me.

THE ISLAND ENVIRONMENT

Islands are special places. The particular nature of islands has drawn an increasing amount of attention over the last 15 to 20 years from the international community for a number of reasons. Their small size makes islands ideal locations to study situations and interactions that are less easily observable, or at a less advanced stage, on mainlands. As Charles Darwin's theory of evolution, developed on the Galapagos islands, and Alfred Russell Wallace's biogeographical research based on eight years of wildlife observation in the Malay archipelago (Quammen, 1996) demonstrate, physical isolation makes islands exceptional natural laboratories in which to observe the effects of insularity and lack of migration, predation and competition in flora and fauna (Carlquist, 1965). Biologically therefore, many islands are host to a high number of endemic species and important nesting and breeding locations for migrating birds. The geography of islands, frequently created by the forces of tectonic shifts or volcanic eruptions (Biagini & Hoyle, 1999) attracts the attention of geologists; the location of islands along major trade and defence routes and their occupation and integration into many of the ancient civilizations of the past make them ideal places for the study of archaeology and anthropology (Braudel, 1966).

In addition to being a site in which to study phenomena observable elsewhere, but on a more manageable scale, islands have been getting attention for the unique environmental, social and economic challenges that they face. Their proportionally high ratio of coastline to land area may give them an exceedingly large Exclusive Economic Zone (EEZ), but there is often not sufficient manpower to police it, which increases the likelihood of over-fishing by larger neighbours. Local agriculture is often characterized

by small, family held plots and almost every islander is involved with the cultivation of the land in some way, but the small-scale nature of production can mean that many are having to stop producing for the market because they cannot compete with prices of imported goods. Other island characteristics are the importance of family name over qualifications in the job market, the phenomenon of people wearing multiple hats (Benedict, 1967; Simpson, 2007), a seeming absence of privacy, and the high proportion of the population employed by the civil service. Islanders are also remarkably outward looking. Their educational, family and work ties all over the world can expand islands' economic resources far beyond their geographic boundaries (Baldacchino, 2000). The high cost of imports and exports (Royle, 1989) requires creative and strategic plans if islands not want to be cut off from the global economic market. Ambassador Tuiloma Neroni Slade, Samoa's Permanent Representative to the United Nations, points out that their small size puts islands at a higher risk of total economic destruction in the face of natural disasters; but at the same time, being small makes them highly resilient to both social and geographical change (as will be evident in the section on Cyprus' recovery after the Turkish invasion). Despite having extremely low greenhouse gas emissions and very little sway in ensuring the implementation of the Kyoto Protocol, islands are the first to suffer the consequences of sea-level rise, especially where increased pressure on dwindling land resources is exacerbated by over-population and a lack of development planning.

It is evident that islands' geographic circumstances necessitate management strategies specifically designed to address their unique socio-political, cultural, economic and ecological characteristics. Unfortunately most island Governments model their

development plans on those of large developed nations with massive natural and human resource bases. The main assumption of most industrial countries is that development means continual, limitless growth, and that the economy ought to be "the central institution of modern life" (Orr, 1994, p. 178). Thus, "Economies with societies instead of Societies with economies" (Orr, 1994, p.178) has become the accepted norm. An economy with this structure is not restrained by either the obligations to a larger community (Daly and Cobb, 1989), nor the responsibility to protect local resources for future generations. Pursuing development goals that emphasize notions of economic prosperity without recognizing the importance of social, cultural and environmental well-being has led to a severe over-stressing of islands' natural and human capital resources, to the point of collapse.

The international community has, ever since the UN's adoption of resolutions aimed at decolonizing islands around the world in 1960, supported the inclusion of sections directed specifically at islands in international agreements, thus highlighting the particular situations of islands and the need for policies to encourage sustainable development well suited to island societies. The United Nations Convention on the Law of the Sea, adopted in 1982, was another step in identifying the importance of islands as independent entities that exercise jurisdiction over $1/6^{th}$ of the earth's surface. At Rio, in 1992, the United Nations Conference on Environment and Development adopted Agenda 21, which contained a chapter on islands. The result of this was the UN global conference on the sustainable development of Small Island Developing States in 1994 at which a programme of Action was adopted for the sustainable development of island states. Since

then island issues have continued to be addressed independently at international conferences and by the UN division for sustainable development.

A few islands have recognized the implications of their insularity and begun developing creative and innovative notions of development that are tailored to the island environment. These islands have recognized their particular advantages and disadvantages, and found ways of maximising existing resources and minimising costs. What has been emerging is that whereas on mainlands, economic success is often built upon the quantity of natural resources available, an island's success lies in knowing what its resources are, and increasing the efficiency with which it utilizes the limited resources available. Thus, sustainable development on islands is rooted in the knowledge of islanders. The more diverse their knowledge of their own environment, culture and needs, as well as the rest of the world, the less dependent they become on outside entities to prop them up and the freer they are to take an active part in the international arena without compromising the health of their island. The Declaration of Barbados, in 1994, stated quite clearly that:

> The survival of small island developing States is firmly rooted in their human resources and cultural heritage, which are their most significant assets; those assets are under stress, and all efforts must be taken to ensure the central position of people in the process of sustainable development.

For islanders, a prominent feature of their culture and identity is their relationship to their island. This relationship has many characteristics, as will be explored more fully later on, but the most basic and immediate of these for generations of islanders has been learning enough about land and sea to ensure that they could provide themselves with a reliable source of food. The pursuit of farming, fishing, hunting and animal husbandry

was the first contact that initial settlers had with their environments, and undoubtedly played a pivotal role in the development of island identity.

In the past, collapses in food systems on islands generally was the result of wars, the over-utilization of local resources, or severe weather conditions. Today, on Prince Edward Island and Cyprus, we still have to contend with the latter two, but in addition, island food producers now have to compete with the forces of the global food market to remain viable. Given the challenges that must be overcome to produce food on islands; it is not surprising that many islanders are opting to give up and move into urban centres to pursue alternative livelihoods, relying increasingly on imported food to meet their needs. What is immediately evident is that loss of a primary sector such as agriculture means that islands are putting themselves in the highly unstable position of depending on a fluctuating international source of food to meet their most basic need – that of sustenance. This in itself seems a good enough reason to give priority to ensuring that local food production continues into the future. What is just as important however, is that the act of farming, fishing, hunting and animal husbandry keeps us in touch with our history and identity, as well as the health of our environment—the bedrock of our entire economy. If we acknowledge the essential value of the primary sector, the next question is how we should go about preserving our farming and fishing communities. It is this question that is dealt with in the next section on sustainable development.

SUSTAINABLE FOOD PRODUCTION IN A GLOBALIZED WORLD: THE IMPORTANCE OF THE ISLAND CONTEXT IN DEFINING SUSTAINABILITY

~Our main handicap will be lack of imagination...This is one of those times when only dreamers will turn out to be practical men~
(Mumford in Lappé, 1990: 158. Taken from Vos, T., p.253)

Many of the terms found in literature on both sustainable development and spiritual values have been used to promote and justify such widely diverse causes and courses of action that I feel it necessary to re-define those that are vital to my effectively communicating my message. For the purpose of this paper, I use what has been termed the 'strong' definition of sustainable development (Hay, 2002, p. 214), taken from *Caring for the Earth* (1991). This document defines sustainability as "improving the quality of life while living within the carrying capacity of supporting ecosystems" (World Conservation Union (WCU), United Nations Environment Programme (UNEP), & World Wide Fund for Nature (WWFN), 1991, p. 9), acknowledging the importance of considering both human beings and the natural world in the equation. Sustainable development is thus not only a network of relationships through time—spanning beyond the present to consider the quality of life of future generations; it also extends beyond the human species to include the natural world in all of its diversity. This definition carries with it an acknowledgement of our responsibility to people we will never meet, to the animals and plants that inhabit the planet, and to the land that currently supports our existence.

Contemplating a concept that puts our individual lives into the a larger context—one that includes consideration for future generations and the natural world—causes us to pause and reflect on the purpose of life and to what or to whom we are ultimately

responsible. Such questions delve into the realm of spiritual reality and values—a topic which has fascinated philosophers and theologians for over a thousand years. Some challenges associated with concretely describing the realm of spirituality are its intangibility, the difficulty of proving its existence, and the lack of universally acceptable indicators that could generate concrete qualitative or quantitative measurement for practical use in informing decision making, and effecting change.

There are far too many factors that influence island sustainability to discuss them all here, so I will mention only a few that are most directly connected to farming and fishing. As will become obvious, the physical implications of island sustainability, and the social and ethical implications, are inextricably linked.

Insularity and the Importance of Community Values: Balancing Self-Sufficiency and Outward-Orientation

By virtue of their insularity, most islands have at some point in their history been primary sector societies. Island cultures, social structures, music, the visual arts, economies and ecological systems have all been shaped by agriculture and fisheries to some degree. Their relative isolation and limited land availability have forced islands to develop systems that enabled them to be relatively self-sufficient in food. Post World War II technological advances and the subsequent processes of globalization have transformed attitudes towards farming and fishing, and how they are practiced. Many islands have adopted intensive monoculture farming methods developed by and for larger countries with little or no appreciation for the distinct geographic, cultural and economic characteristics possessed by land masses separated from the outside world by water.

Around the world, countries are adopting inappropriate economic policies in an effort to conform to capitalist models of production and avoid economic marginalization. This leads to the development of models that exhaust an already over-worked natural resource base, and erodes states' ability to provide food security for their inhabitants. As Douglas Tompkins says in *Fatal Harvest: The Tragedy of Industrial Agriculture*,

> Our conversion from agrarian, fully integrated food systems to industrialized monoculture agricultural production has brought a staggering number of negative side effects, many of them unanticipated. Throughout the entire food system, we can trace this crisis as it manifests itself in soil erosion, poisoned ground waters, food-borne illnesses, loss of biodiversity, inequitable social consequences, toxic chemicals in foods and fibre, loss of beauty, loss of species and wildlife habitat, and myriad other environmental and social problems (2002, p. xi).

These "side-effects" are only more exaggerated on islands where the negative impacts are more immediately visible and more all-encompassing. Specialisation and 'corporatisation'; excessive dependence upon technology to overcome nature's inability to sustain such intensive production practices; and the transformation of farming and fishing from a way of life to a purely economic activity are causing socio-cultural impoverishment. The goal of economic globalization, according to Helena Norberg-Hodge (2002), was to create a world in which:

> [p]eople everywhere eat the same food, wear the same clothing, and live in houses built from the same materials. It is a world in which every society employs the same technology, depends on the same centrally managed economy, offers the same education for its children, speaks the same language, consumes the same media images, holds the same values, and even thinks the same thoughts—monoculture...Although this sameness suits the needs of transnational corporations, which profit from the efficiencies of standardized production and standardized consumption, in the long term a homogenized planet is disastrous for us all. It is leading to a breakdown of both biological and cultural diversity, erosion of our food security, an increase in conflict and violence, and devastation of the global biosphere (2002, p. 13).

The globalization of both farming and fishing practices and consumption patterns is reflected in the loss of local knowledge, a lack of connection with the natural world, and an inability to appreciate the value of ecological health and long-term sustainability over quantity of yield.

On islands, an alternative paradigm must be adopted in which small size and a limited resource base provide the framework for sustainability. The territorial waters around islands are only so large; the spawning grounds for fish within these waters are limited. There is only so much productive land for farming, and this must be shared with other necessary land uses. There are only so many animals to hunt, on islands fortunate to have any at all. There are countless examples globally of islands whose societies have collapsed as a result of disregarding the carrying capacity of the land and sea. Communities inhabiting vaster geographic landmasses also have encountered, or will have to encounter similar collapses, but surplus land and sea available delay the necessity of confronting the result of food production systems that ignorantly continue to override the ability of nature to keep up.

Many claim that we live in a world made limitless by technological inventiveness. This theory suggests that by the time a collapse is imminent, we will have found alternative means of food production that are not constrained by natural limitations. While this claim may be correct, it may well be incorrect. As an analogy, not having enough money now does not mean that we should continue to spend extravagant amounts in the hope or assumption that, at some point in the future, we will win the lottery, inherit a fortune, or get a job that pays ten times more than our current one. Limits seem to

expand as our knowledge and understanding expand and as we learn how to better manage our natural resources. But discarding the notion of limits is like taking the stake out before the tree is strong enough to stand up against the wind independently. If the wind does come and we are not prepared, what will the consequences be? In contemplating food production on an island, the result could be devastating.

The above highlights how the physical and cultural challenges must be addressed creatively within an island context if true sustainability is ever to be a reality. What I have not yet looked at is the role that community values must play in this process. Increasingly, western and even eastern societies are shifting from a paradigm of communal beliefs, spaces, farms and natural resources to one dominated by the ideas of individual, private beliefs, rights, property, and prosperity. We have embraced the idea of the self as the centre of civilisation. On an island, where land and resources are limited, and ownership of small plots of land or traditionally fished areas are divided amongst thousands of parties, communal values need to be developed if they do not already exist or have been lost, and common resources must be preserved. A self-centred society cannot persist in a place that is geographically so small that what one does on their land or in their waters has an immediate effect on their neighbour.

Islanders not only need to have a strong enough communal vision to direct their affairs within their own physical borders, they also have to find the delicate balance between self-sufficiency and an outward-looking orientation. Sustainability will depend on the island community being able to come to an agreement on what constitutes healthy participation in the global economy externally without undermining socio-cultural and environmental priorities internally. Sharing and communicating is essential in

constructing the unified vision of a sustainable future that is necessary for the long-term prosperity of the whole.

Another aspect of community is the relationship between the human community and the natural environment. How we developed an attitude of seeing ourselves as separate from our natural world will be addressed in more detail later in my paper, but it is important to note here that this perception plays an important role in our community dynamics. A willingness to adopt new ways of seeing our reality is key to moving towards a more sustainable society. As Paul Shepard says,

> [w]e are hidden from ourselves by our habits of perception...Ecological thinking...requires a kind of vision across boundaries. The epidermis of the skin is ecologically like a pond surface or a forest soil, not a shell so much as a delicate interpenetration. It reveals itself ennobled and extended rather than threatened as part of the landscape and the ecosystem, because the beauty and complexity of nature are continuous with ourselves (1995, p.132).

On an island, where our natural environment is so intricately connected with sustaining all aspects of our life and so vital in shaping our identity, acknowledging the importance of seeing ourselves and our environment as one integral community is necessary to any vision of sustainability.

The Integral Nature of Food Production on Islands

The network of food production, whether it be farming or fishing or the raising of livestock is integral everywhere. The amount of groundcover planted on one farm will influence the amount of soil carried to the neighbouring farm or into the creek used by local fishers. The wind conditions when a conventional farmer applies his/her pesticides will affect the viability of his organic farming neighbour. Overfishing one species could

lead to its collapse, and affect the survival of other species that depend on it. The empty shells from the shellfishery are waste to the fisher but a vital resource to the farmer who uses them to maintain healthy soil. Every aspect of food production is interconnected, "even as the human body in this world which is outwardly composed of different limbs and organs, is in reality a closely integrated coherent entity, similarly the structure of the physical world is like unto a single being whose limbs and members are inseparably linked together" ('Abdu'l-Bahá, in *Huqúqu'lláh, no. 61*, cited by Hanley, 2005, p.52). Often today the integral nature of food production is not acknowledged until problems arise. On larger landmasses a chemical spill upriver may only be noticed by fishers hundreds of kilometres down-river or out at sea. The loss of twenty small-scale farming families might be almost invisible in the larger scheme of industrial production and farming communities that number in the thousands. The effects of unsustainable practices go unnoticed for long periods of time, and those influenced by choices made at one end of the system may never know who was responsible.

On islands, the entire system is much more condensed. Rivers are much shorter, the majority of farms small, family run businesses. Chemical runoff into a stream could kill the fish that the neighbour depends upon to support his/her family. It could be the very same fish that the farmer himself might have bought to feed his family. Even a small number of farmers going out of business could mean the loss of an entire rural community. The effects of farming and fishing practices are immediately felt by the community. Unfortunately farming and fishing are often managed by separate government bodies and controlled by laws written without consideration for the integrity of the system as a functional unit. The health and survival of the whole therefore is

dependent upon a constant awareness that every action will reverberate throughout the web of community and will either weaken or strengthen the sustainability of the system.

An unspoken sense of responsibility to the community to conduct one's affairs in an ethical manner is therefore indispensable. It is how farmers and fishers define ethical behaviour; what underlying value system has informed this code of work ethics, and how it actually translates into action out on the fields or on the water that this paper explores. Recognition of the irrefutable integrity of island food systems is not enough to preserve these systems and the community that has been built upon them. Understanding what is involved in the various farming and fishing methods and why those who are producing our food choose one approach over another is necessary if we are going to find ways of ensuring that there is a future for locally grown and fished food on our islands.

Farming Methods: Working with Shades of Grey

There are many forms of farming methods being practiced in the world. Exploring all of these is beyond the scope of this paper and unnecessary given that all of the farmers who participated in my study are farming either organically or conventionally or using a combination of both of these methods. The following is a brief description of conventional and organic farming methods. My research is not concerned with making a value judgement on the farming methods being used by farmers as much as it is with whether the farmers are applying the values they verbally articulate as being their own in their farming practices. This will be explored in more detail in the section presenting the results of my thesis work.

Conventional Farming

Like their continental counterparts, islands welcomed the new labour-saving devices that the technological advancements of the green revolution in the 1960s and 1970s brought to the farming community. Many farmers invested wholeheartedly in the machinery and chemicals that promised to saved time and require less human effort—in short, to improve overall quality of life. Many farmers also bought into the idea that bigger is better and more efficient, expanding their farms far beyond what they had been able to manage when they had been reliant upon non-mechanised forms of power.

For islands, the shift over to mechanised production and the capitalist model of development and food production designed by and for large continental states necessitated the use of synthetic fertilizers and pesticides which often must be imported from abroad. Unfortunately, although promising to eliminate unwanted pests and increase soil fertility, these chemicals have in fact done exactly the opposite. Despite a ten-fold increase in the use of pesticides since 1945, for example, insect damage to crops has risen from seven percent to thirteen percent (Pimentel, 1989, cited by Orr, 1992, p.172), and monocrop fields have facilitated the spread of disease. The intensification of farming methods is exhausting the soil-base, promoting massive loss of topsoil to erosion, and polluting water resources. Synthetic pesticides threaten the health of both farmers and consumers, as well as poisoning wildlife for which islands are often so renowned. And although the average per farm output has increased, the growth in farm size that has accompanied this increased output has been shown to be inversely related to farm prosperity. Output might have increased, but net incomes on farms have declined (National Farmers Union, 2003).

Investing in conventional agriculture was not a cheap move, and many farmers went into debt that only deepened as their crops became less disease-resistant and the soil more impoverished, thus necessitating more and more synthetic fertilizers and pesticides to maintain yield. Over the years, the loss of skills and burden of debt become a vicious, self-perpetuating circle of stress that is difficult to get out of. For many, continuing to farm means continuing to farm conventionally. The long periods of financial, emotional and physical strain make getting out of the downward spiral seem impossible. Although there are some who still believe that conventional farming is the best option, many continue to farm conventionally simply because they cannot see any other option without risking financial ruin.

Organic Farming

Organic farming is an alternative farming method which is rapidly growing as public awareness of the connection between how our food is grown and the overall health of human communities and the environment increases. Organic farmers see food production from a holistic perspective, placing equal importance upon the interactions between their crops, the animals, insects and soil, and the health of the whole farm (Delate, 2003). They have developed ways of growing that provide for both present and future generations dependent upon a limited soil-base, while at the same time preserving the health of the local ecological systems. Organic farmers minimise the use of external inputs and avoid the use of synthetic pesticides or fertilisers on their crops (Scialabba & Hattam, 2002), but instead employ practices to promote the health of the natural system so that it can defend itself, thereby protecting their crops. Examples are the planting of a wide variety

of crops side-by-side in order to reduce the rapid spread of disease; the use of leguminous crops between maturing fruit trees to fix nitrogen in the soil, the application of compost to their fields before planting to increase soil fertility, and the use of crop rotations and fallow periods to allow the soil to rejuvenate itself. Organic farmers recognise the role that birds can play in helping them control pests and therefore often leave buffer zones—wild areas of natural vegetation—around their fields to attract them. Because they are committed to providing consumers with clean, healthy food, they are not only preserving the island's agricultural heritage for future generations; they are also decreasing society's long-term health costs by reducing the pollution of the island environment and the chemical contamination of our food.

Fishing Methods

There are two main forms of fishing being practiced globally that currently have a direct impact on the health of the marine environment off of both Prince Edward Island and Cyprus. While factory fishing is not being practiced by these islanders themselves, both islands have to contend with the issues raised by the presence of factory fishing vessels competing with small-scale commercial fishers for limited fish stocks whose spawning grounds are located in the coastal waters of PEI and Cyprus.

Factory Fishing

Factory fishing, for the purposes of this paper, is large-scale commercial fishing done on large vessels that are highly mechanized. There are no locally owned companies pursuing this type of fishing in PEI or Cyprus, however vessels do occasionally enter their waters

from Newfoundland or the mainland (in the case of PEI), or larger European countries (in the case of Cyprus). Each company usually owns many fishing vessels, and the fishers actually out working on the boats receive a salary for their labour, owning neither the gear nor the vessels on which they work. The primary purpose of such large fishing fleets is to catch as much fish as they can. While this method has (until now) provided a sufficient quantity of fish to meet consumer demand, there are unfortunately numerous side effects associated with it. Because the fishers' sole responsibility is to maximize catch, and many of them may work for the company for only a short period of time, very few can afford to ask their employers to think about the long-term effects of their practices on the fish stocks or health of the marine ecosystem upon which these fish depend. The use of sonar makes locating schools of fish much easier and thus fish-stocks can be rapidly depleted. The actual manner in which fish are caught by larger, more mechanized vessels often means that along with the target species, an enormous amount of bycatch is brought up in nets. Although most of this is thrown back into the sea, much of it is already dead. As well as being important to the health of the marine ecosystem, much of the bycatch includes species of fish that small-scale commercial fishers depend upon to make their livings. Factory fishing is carried out wherever fish can be found; the vessels traverse large expanses of water. This practice has also resulted in a lack of corporate responsibility for the state of fish stocks in any given area of water, and for a general absence of commitment to management schemes aimed at maintaining the health of the marine ecosystems.

In an island environment where fish stocks are small and capacity for enforcing fishing laws in territorial waters minimal (if the island has the jurisdictional powers to

define who fishes in its waters), factory fishing efforts often exceed the ability of the stocks to regenerate and thus are not at all well-suited to the preservation of healthy fishing communities and a healthy island marine ecosystem.

Small-Scale, Inshore Commercial Fishing

Small-scale commercial fishing is primarily done by local fishermen who own their own fishing boats. Many small-scale commercial fishers come from fishing families who have been fishing the same waters for generations. The majority of fishing being done on Prince Edward Island and in Cyprus is of this type. Because each fisher is responsible for his boat and his gear and his actions on the water, more care is taken to follow good fishing practices. The use of smaller gear types (primarily nets and hook-and-line in Cyprus, and tongs and rakes, nets, traps and scallop drags in PEI) and less manpower mean that the overall catch is much smaller. Despite this, small-scale commercial fishers have much less bycatch so the overall ratio of target species to non-target species is much higher, making this type of fishing more efficient overall. Although small-scale commercial fishers are known for their fierce independence of spirit, there is a sense of community among small-scale fishers that lays a foundation of respect for each fisher's gear and traditional fishing waters. As there is no such thing as property in the sea or ocean, small-scale commercial, in-shore fishers in PEI and Cyprus are free to fish wherever they like but most have established areas that they and their families have been fishing for generations and that they consider to be their waters. One of the recurring disputes in the inshore fishery today is the intrusion of large seiners, and vessels that use bottom dragging gears that destroy habitat, into water that has been traditionally fished by

local fishermen. Shell fishing is prominent in PEI, those doing this being divided into two groups: those who lease private fishing grounds, and those who take part in the public fishery. Those with grounds have the opportunity to gradually build up the health of their waters over many years and are thus better able to control the health of their marine environment and consequently the yield. Those in the open fishery have a harder time because they largely cannot control how the marine environment in any given area is managed. However, many do nevertheless have unofficial areas that they return to annually and although there are exceptions, most fishers respect each others' traditionally fished waters.

In-shore commercial fishing might appear more suitable to a small-island marine environment, but small-scale fishers also frequently overfish and are responsible for the mismanagement of their fish stocks. The general mistrust that small-scale commercial fishers have for local government and fisheries authorities (Janowicz, Novaczek, Tremblay & Wells, 2007) and these institutions' lack of respect for the concerns of the fishing community often exacerbate problems in the local fishery and frequently paralyse initiatives to develop management plans that would provide a sustainable yield and preserve the long-term health of local fish stocks.

Re-Defining Prosperity to Better Meet Our Needs

~Diversity, not efficiency, is the sine qua non
of a rich and creative human life~
(Rene Dubos, 1972)

How we define prosperity influences the state of our society and environment, and how we live our lives. In our increasingly interconnected world the distinction between what

individuals and communities value and what the media tells us we should value has become blurred. Many of us never stop to contemplate whether our goals in life actually reflect personal value systems, or if we are striving to attain goals simply because the media tells us that these reflect success. Current models of prosperity are measured predominantly in terms of material wealth. Having an attractive car, house, wardrobe; having the material resources to travel; earning a high salary are all indications of prosperity. One house is good; two is better. Having more is equated with happiness. Over the last ten years it has become increasingly evident, even in continental, urban centres that this materialistic notion of prosperity is generic and does not take into consideration the rich diversity of cultures, practices and individual and community ethics. As Rene Dubos says, "If there has been a fundamental flaw in technological societies, it has been to identify the concept of progress with the belief that abundance of goods makes for human happiness; whereas it is obvious that, beyond a certain point, affluence becomes meaningless" (1972, p.230).

The predominant notion of progress also does not take into account the reality that human beings are an integral part of a much larger natural system. As Thomas Berry says,

> We must...develop a way of thinking about "progress" that would include the entire earth community. If there is to be real and sustaining progress, it must be a continuing enhancement of life for the entire planetary community. It must be shared by all the living, from the plankton in the sea to the birds above the land. It must include the grasses, the trees, and the living creatures of the earth. True progress must sustain the purity and life-giving qualities of both the air and the water. The integrity of these systems must be normative for any progress worthy of the name (Berry, 1988, p.82).

On islands, where inferiority complexes and feelings of isolation and backwardness abound, there is an inclination to adopt western notions of prosperity simply to prove to the world that we are good enough. What this approach fails to recognize is not only that an alternative model of prosperity might make islanders happier, but that our island economies are fuelled by tourists from the large mainland metropolitan centres who come to our islands because they are attracted to the slower, simpler way of life and easily accessible natural areas. Taking a hint from the tremendous success of our tourism industry might help us to recognize what our visitors have already experienced; namely that our form of industrial civilization suffers from having allowed experts to make growth and efficiency, rather than the quality of life, the main criterion of success (Dubos, 1972). Turning our islands into replicas of models that do not even serve the needs of those who developed them serves nobody, it seems.

In PEI and Cyprus, it may not be necessary to construct a new model of prosperity – perhaps it is a matter of re-adopting one that has been (consciously or unconsciously) in place on islands for generations. Maybe one that is based upon "well-being," rather than "having," as the basis for human fulfilment (Kirschenmann, in Robb & Casebolt, 1991, p.89). Although many Cypriots and Prince Edward Islanders go off-island for studies or work, a large number eventually do return to settle on their island, and for the most part, they do not return because they want a higher salary or a larger house or a faster pace of life. In addition to having strong family ties, the reasons that islanders may want to return to their island may be similar to the factors that attract non-islanders. Some examples are the slower pace of life, a sense of community, more open undeveloped land and beaches for recreation, and more rural and quaint townscapes (Baldacchino, 2006). Since

emulating a concept of prosperity developed by large, continental, developed countries undermines many of the elements that define the island lifestyle, taking the time to define what we as islanders want prosperity to look like would ensure that we are pursuing goals that are consistent with the values we want to maintain in our communities and our vision of what constitutes a healthy social, economic and physical island environment.

THE INFLUENCE OF SPIRITUAL BELIEFS & VALUES ON FARMING AND FISHING PRACTICES: EXISTING LITERATURE

~The ultimate goal of farming is not the growing of crops, but the cultivation and perfection of human beings~
(Fukuoka, cited by Hanley, 2005, p. 24)

The attempt to place my research on spiritual values within a larger contextual framework has necessitated reading widely in diverse fields of scholarship. One of the reasons for this interdisciplinary approach is that the fixed nature of the geographic boundaries within which my research was done makes it starkly apparent that nothing exists independent of everything else. This fact is undoubtedly the same on a larger, continental landmass, but on a mainland the obvious impossibility of successfully grasping all the elements that influence spiritual values is more likely to keep us from even contemplating such a feat. The smallness of the island, and the fact that we can (at least visually) fully grasp it from tip to tip in one glance, led me to entertain the idea that perhaps it is possible to touch upon everything that influences beliefs, while trying to understand the values of islanders. I have, unsurprisingly, not succeeded. However, approaching my subject from such a wide range of perspectives has, I feel, helped me to understand more deeply, and appreciate more fully the connection between beliefs and practices within the unique island context. This insight could inform similar studies conducted in larger communities on continental landmasses.

The interdisciplinary nature of the literature that has informed this research is difficult to present comprehensively. The approach I have taken is to divide the material into six thematic groups, each of which I feel act as a support to the heart of my thesis. The first group consists of articles that have deepened my understanding of the practical,

physical elements of farming and fishing, as well as those that have helped me to better understand the terms that are the building blocks for the literature central to my thesis. I do not have a separate section outlining the work of authors who fall into this group, as I feel that the purpose which this literature serves is best understood in the context of supporting the main points throughout my paper. The second thematic grouping ('Why Some Do It Differently') addresses the question of whether there is a spiritual dimension to ecological problems on a broader level, and more specifically, whether studying the relationship between island farming and fishing communities and their island could be instructive in better understanding the spiritual belief-behaviour dynamic. The third group ('The Spiritual Nature of the Natural World') explores the essential spiritual nature of the natural world, and the deep spiritual experience that characterises interactions between human beings and the natural environment. The fourth group ('Defining Spiritual Beliefs and Values') consists of literature that looks at what we believe. The fifth group ('Shaping Beliefs: The Factors that Underlie Values') is literature that explores some of the ways in which place and community influence spiritual beliefs. And the sixth category ('Translating Spiritual Beliefs into Work Ethics: The Mechanics of a 'Work as Worship' Approach') is an overview of literature that looks at some theoretical elements that can affect the connection between what we believe and whether or not we translate these beliefs into action, as well as literature providing practical examples of communities that are consciously attempting to put their beliefs into practice. Just as the issues themselves overlap, there is considerable overlap in the literature, and many authors address all five of my themes. The factors that shape beliefs (category three), and those that affect the connection between beliefs and behaviour (category five) are

remarkably similar. They are treated separately because the elements that shape belief may have remained simply theoretical, if it were not for the inspiration or invigorating force that spiritual beliefs inject into the work process. Also important in contemplating the next few sections of this paper is the dialectic relationship among the themes. How we define things is constantly changing as a result of experiences. The elements that shape beliefs are also constantly in flux, and they do shape beliefs, but beliefs also influence the elements of life. How belief is translated into action is interesting, but the action and experience leads to the re-evaluation and re-shaping of belief. An appreciation for the dynamic complexity of the relationships among the factors at play is key to grasping a full understanding of the topic. I have not included the island studies literature in this section; however, it is the lens through which all of my thesis research has been filtered, and therefore informs my literature review as well as all other sections of this paper.

Why Some do it Differently

> *~When you are informed by your place, you become the voice of its spirit~*
> (Turner, 1995, p.45).

The reality that our dominant value system—in which economic value is given greater weight in our decision-making processes than biological, cultural and ecological integrity—is impoverishing our world, is becoming ever-more widely accepted. Although many are still looking to public policy and advances in technology to solve these problems, it is becoming increasingly evident that policy and science alone are not capable of finding effective, sustainable solutions. One of the reasons for this is that at

some point in our history we decided that in order for a decision to be scientifically sound, it had to be objective, and in order to be objective, it had to have disassociated itself from personal feelings and values (Anderson, 1996, p.172). As Dubos says, value systems have long been considered to be outside the range of science. This has led to a body of knowledge that has left out some of the modes of existence that are of the greatest importance in human life—love, hate, hope, despair...No reliable way of documenting these has been found but increasingly, these values are being re-integrated into science (1981, p.204). I would agree with Dubos that science has been fighting to remain objective, but I would doubt that our scientists, policy-makers and political leaders have ever succeeded at entirely blotting out their underlying values. As Anderson (1996) says, assuming that anyone can be objective overlooks the fundamental emotions that attract a person to their profession. A scientist is often involved with studying a particular subject or phenomenon because it is something that they love, or at least deeply value (p.172). It seems to me that we are finally starting to give ourselves permission to acknowledge that values are influencing our decisions, and that this influence may in fact be essential to developing and adopting practices that are truly effective. After all, our world is composed of individuals and communities whose choices and interactions with one another and the natural world are based on values. We may not always be conscious of what these values are, but I would agree with David Cadman in saying that "our dilemma is not primarily one of technology, nor even of government (important though both of these are), but rather it is a dilemma of values—at root, indeed, it has a spiritual dimension" (2002, p. x).

Looking inward in order to effect outward change represents a return to a traditional state of human consciousness (Nasr, 2002). Perhaps as a result of the deterioration of the conditions in the world, a growing portion of the general population is starting to seek out spiritual solutions. Looking back at influences that the major world religions have had on societies' cultural values and how people interact with each other and their environment, it is obvious that religions have been extremely influential in shaping human behaviour and our notion of justice (Anderson, 1996; Nasr, 2002). At a time when a shift in values requires a powerful will to change how we act, formal religious teachings, or other spiritual value systems could prove to be a key motivator.

Turning to the spiritual as an inspiration for our actions on the physical plane is being advocated by many international organizations and governmental bodies. Until the recent past, spiritual influences on human behaviour were generally not included in international dialogue in the field of development. Today however, many key documents outlining the direction of global development highlight the importance of spiritual values in establishing healthy, happy communities. The Bahá'í International Community's publication *Valuing Spirituality in Development* cites a number of global action plans from UN conferences that emphasize the spiritual dimension of development:

> In these action plans, the governments of the world have committed to "social, economic and *spiritual development*" [*Agenda 21*, 6.3. Emphasis added] and to "achieve a world of greater stability and peace, built on ethical and *spiritual vision*." [*Habitat Agenda*, 4. Emphasis added]. They have acknowledged that their "societies must respond more effectively to the material and *spiritual needs* of individuals, their families and the communities in which they live...not only as a matter of urgency but also as a manner of sustained and unshakable commitment through the years ahead." [*Copenhagen Declaration on Social Development*, 3]. Moreover, they have affirmed that "development is inseparable from the cultural, ecological, economic, political and *spiritual environment* in which it takes

> place"[*Programme of Action for the World Summit for Social Development*, 4. Emphasis added]. These same governments have also recognized that "individuals should be allowed to develop to their full potential, including healthy physical, mental and *spiritual development*," [*Agenda 21*, 6.23. Emphasis added] and that "*[r]eligion, spirituality and belief* play a central role in the lives of millions of women and men, in the way they live and in the aspirations they have for the future"[*Platform for Action of the Fourth World Conference on Women*, 24. Emphasis added]. (Bahá'í International Community, 1998, pp. 29-30).

A growing body of literature by well-known philosophers, ecologists, economics, activists, and other scholars also points to the spiritual realm for solutions to many of our development dilemmas. In the foreward of *Earth and Spirit: The Spiritual Dimension of the Environmental Crisis*, Hull (1993) says that "in order to understand our time of peril we need a depth of wisdom that exceeds our own. We are searching for something more. We are looking for something qualitatively different from what we have known that will provide a radical reshaping of the way we learn to value and make choices" (p.8). Hull's book, *Earth & Spirit* is based on the conviction that the spiritual dimension of life provides a relatively untapped reservoir of wisdom, imagination, and strength for meeting the challenge of a damaged Earth and for calling humanity into a new relationship with the natural order. The spiritual dimension offers the depth needed to understand the crisis, the courage to confront destructive patterns, the commitment and staying power to engage this crisis over the long haul, and a hopeful spirit from which a new and sustainable culture may be born (Hull, Ed., 1993, p. 8). This makes understanding the spiritual dimension of the environmental crisis a matter of great urgency. The health and quality of life on the planet are at stake.

The quest to reconnect with our true and balanced selves by acknowledging our essentially spiritual nature raises the question of where we are turning to find the spiritual

inspiration that will influence such major changes in culture and behaviour. Thomas Berry discusses the progressive alienation of the initial settlers to North America from the essential sacredness of the natural world that had, for the Native peoples, been an integral part of everyday life. The increasingly destructive practices and attitudes created a disconnect between human beings and the natural world upon which their society depended which in turn reinforced the illusion of separation from the environment. Berry says that we are finally beginning to recognize that one of the consequences of the destruction of our outer world is the loss of our inner world (T. Berry, in Hull, Ed., 1993, p. 17). Berry goes on to say that "neither the planet nor the human community can any longer endure the impasse brought about by the isolation of the Earth in its physical reality from the spirit presences that give both to the Earth and to its human community their true grandeur" (T. Berry, in Hull, Ed., 1993, p. 18). Thomas Berry's connection between the inner and outer world highlights the key connection between the natural world and the human spirit. What struck me as most important about this relationship was the seemingly simple idea that Soheil Bushrui, a poet, critic and translator, mentions in *A Sacred Trust: Ecology and Spiritual Vision*—that "a society's relationship with the environment manifests its values" (2002, p.87). Given how prominently "the island" figures in island identity, looking at islanders' relationships with their environment as possible indicators of the values that are motivating current cultural attitudes and development practices seemed like a logical next step.

The Spiritual Nature of the Natural World

The connection between the natural environment and spirituality is one that has been reflected upon and represented in art and literature for thousands of years by people all over the world. There have been thousands of articles written on the subject by environmental, philosophical and religious scholars, and the religious books of all of the world's major faiths mention the connection between nature and God, the Creator, or the world of the spirit. The various theories on the spiritual nature of the natural world are too numerous to elaborate on fully here. My reading has led me to the conclusion that there are just as many visions of why we should, or do, turn to nature in our search for connection with the divine as there are ways of experiencing spiritual reality. One of these, expressed by a number of the farmers and fishers that I interviewed, is that everything that exists was created by God, and as such is a manifestation of God's perfection and beauty on earth, and should therefore be respected. This school of thought holds that the natural world is an infinitesimal glimpse of the vast spiritual world (called God) that is unknowable in its essence. In this sense, the natural world is one channel through which the presence of God can be experienced, but is nevertheless distinct from God. This vision of the natural world is shared by diverse religions. I will look more deeply at some of the most globally prominent religious belief systems in the next section, 'Defining Beliefs and Values.'

Another vision of the natural world as spiritual is more grounded, seeing Divinity as actually embodied in the natural world. This approach shares characteristics of Celtic, pagan beliefs, in which the natural world is endowed with sanctity; rivers, springs, lakes, trees, mountains or simply a particular valley or habitat are all holy, often associated with

place-specific deities (Green, 1986, pp. 21–22). Life and the land are seen as a unified, harmonized whole, and the natural world is seen as having sacred sources of power, connecting the Underworld (all energy, life, power and death come from beneath the ground), the Land, and the Overworld of sky and stars together. In this approach to the spiritual experience, the natural world represents a cosmic vision of unity (Stewart, 1990, pp. 38–40).

A third view of nature expressed by participants is a magnetic draw to the natural world that is more mystical in nature. Followers of this vision of spirituality describe experiencing a sense of inner peace and tranquillity when they are interacting with the natural world – a sense of belonging, if you will. As will be evident in the ways in which the farmers and fishers describe their spiritual beliefs, not everyone's beliefs fall clearly into a particular school of spiritual thought. Given the global and culturally diverse environment that islanders on both PEI and Cyprus are living in, their beliefs are going to be shaped by a diversity of spiritual influences. I explore some of the literature that addresses various experiences of spirituality below.

Although the manifestation of the spiritual in the natural world has been explored by many writers, it is important to acknowledge that the approaches to this spiritual essence are perceived in a variety of different ways. Philip Sherrard in his article 'For Everything that Lives is Holy' says that "...[w]e have to learn to look on the world of natural forms as the apparent exterior expression of a hidden, interior world, a spiritual world: all the phenomena of the world of nature represent or symbolize things celestial and divine" (2002, p.6). He goes on to say that "[t]he spiritual world is not another world set apart from the natural world. It intermingles and co-exists with and constitutes the

invisible dimension of, the natural world. It is another world incorporated within the natural world" (Sherrard, 2002, p. 8). For Sherrard, the spiritual experience of the natural world lies beyond the physical, but enters into a relationship with the physical realm that infuses nature with spirit. Rene Dubos highlights the sacredness of the natural world in its when she points out that

> [t]he adjective "sacred" may be surprising in a description of the characteristics of this planet, and yet it expresses an attitude which has deep roots in the human past and still persists now. The very fact that the word "desecration" is commonly used to lament the damage men are causing to the environment indicates that many of us have a feeling that the earth has sanctity, that man's relation to it has a sacred quality (1972, p. 34).

The essential oneness of nature and the spiritual realm (often expressed as 'God' in many formal religious traditions) is the subject of many articles and books. Hildegard is one writer who explores this fundamental unity. She says that "nature and grace are of one accord. For grace is God, and unmade nature is God also. He is two in manner of working but one in love; and neither of these works without the other – they cannot be parted" (Cited by Bancroft, 1991, p. 35). The following poem by St. John of the Cross also looks at this oneness:

> My Beloved is the mountains,
> And lonely wooded valleys,
> Strange islands,
> And resounding rivers,
> The sighing of love-stirring breezes,
> The tranquil night
> At the time of rising dawn,
> Silent music,
> Sounding solitude,
> The supper that refreshes and deepens love
> (Cited by Bancroft,1991, pp. 37-38).

The *Gospel of Thomas* reflects the same unity of God with nature when Jesus said:

> I am the light
> which is over everything.
> I am the All;
> from me the All has gone forth,
> and to me the All has returned.
> Split wood: I am there.
> Lift up the stone, and you will find me there
> (Cited by Bancroft, 1991, p. 48).

Bahá'u'lláh, the founder of the Bahá'í faith, reflects on the presence of God in His creation in many of his writings. He says that:

> Nature in its essence is the embodiment of My Name, the Maker, the Creator. Its manifestations are diversified by varying causes, and in this diversity there are signs for men of discernment. Nature is God's Will and is its expression in and through the contingent world. It is a dispensation of Providence ordained by the Ordainer, the All-Wise (Bahá'í Publishing Trust, 1988, cited by Bushrui, 2002).

Bahá'u'lláh also says:

> ...every time I turn my gaze to Thine earth, I am made to recognize the evidences of Thy power and the tokens of Thy bounty. And when I behold the sea, I find that it speaketh to me of Thy majesty, and of the potency of Thy might, and of Thy sovereignty and Thy grandeur. And at whatever time I contemplate the mountains, I am led to discover the ensigns of Thy victory and the standards of Thine omnipotence (Bahá'u'lláh, 1962, p. 272).

Seyyed Hossein Nasr has written extensively on this topic. He asks:

> ...what is the religious view of nature? The religious view, as understood by the ordinary sense of the believer, is that this world is created and sustained by God; it is His creation; or one could in the non-Abrahamic context say that it is the manifestation of the Principle, let us say the Tao of the Far Eastern traditions. The Origin does not have to be identified in name as the Abrahamic God, but it is always the Divine Principle which is none other than God. On the deeper level the religions teach that there is something spiritual and ultimately meaningful in nature (2002, p. 133).

Nasr says that nature exists in a constant state of praise: "Everything sings the praise of God by virtue of its very existence. We might not understand the language, but the song

of praise is there" (2002, p. 135). All of these writers describe the association between the spiritual and the physical existence of the natural world as being an essential relationship, but still distinguish between the spiritual essence that is animating the natural world, and the natural world itself. Although in our experience of them the spiritual and physical realities are unified, there is a distinction.

Although I believe the above mentioned distinction to be important in order to fully understand this vision of the relationship between the spiritual and natural worlds, one outcome of making this distinction has been that some have taken this to mean that the physical can exist independently of the spiritual, or vice-versa. Wendell Berry addresses this when he says that "perhaps the great disaster of human history is one that happened to or within religion: that is, the conceptual division between the holy and the world, the excerpting of the Creator from the creation" (1970, p. 6).

Another writer, cited by Wendell Berry in *A Continuous Harmony* is John Stewart Collins, who, in his book *The Triumph of the Tree* pinpoints precisely the spiritual essence within all of nature:

> Having become aware of objects and begun to name them, this Earliest Man became aware of something else. It is a remarkable fact that no sooner had he looked closely at the phenomena of Nature then he began to concern himself with, not the visible object in front of him which he could clearly see, but with an invisible object which he could not see at all. He looked at the trees, the rocks, the rivers, the animals, and having looked at them he at once began to talk about something *in them* which he had never seen and never heard of. This thing inside the objective appearance was called a god. No one forced man at this time to think about gods, there was no tradition imposing it upon him—and yet his first thoughts seem to have turned toward a Thing behind the thing, a Force behind or within the appearance. Thus *worship* (Cited by Berry, 1972, pp. 5-6).

This vision seems to cross between the ideology of seeing God and spirituality as being infused into the natural world, and as being latent within it. Another author, Bailey, looks to Biblical scriptures to emphasize the holiness of the earth, and the presence of God within it: "If God created the earth, so is the earth hallowed...[w]e are to consider it religiously: Put off thy shoes from off thy feet, for the place whereon thou standest is holy ground...[t]he sacredness to us of the earth is intrinsic and inherent" (1915, pp. 14–15). He goes on to say: "In the wind and in the stars, in forest and by the shore, there is spiritual refreshment: And the spirit of God moved upon the face of the waters" (1915, p.15).

A more mystical vision of the natural world, held by many well-known ecologists, sense-of-place writers, and philosophers is described well by Lionel Rubinoff when he says that:

> ...the experience of wild nature is both mysterious and ennobling. What gives this experience, or adventure of humanity, its true depth of meaning is the experiencing of a nature that is not just for the taking and benefit of humanity, but exists somewhere beyond our reach. Once again we are made to understand that, fugitive though the instant may be in which this encounter with mystery occurs, the spirit of humanity is, during it, ennobled by a genuine moment of emotional dignity (2004, p. 24).

Here there is no sense of the spiritual being infused into the natural world; rather, nature, in its physical form, is both mysterious and holy. Thomas Berry's writings explore this further, as well as clearly identifying nature's fundamental role in maintaining a world that facilitates our reaching our fullest potential as spiritual beings:

> The ecological age fosters the deep awareness of the sacred presence within each reality of the universe. There is an awe and reverence due to the stars in the heavens, the sun, and all heavenly bodies; to the seas and the continent; to all living forms of trees and flowers; to the myriad expressions of life in the sea; to the animals of the forests and the birds of

> the air. To wantonly destroy a living species is to silence forever a divine voice. Our primary need for the various lifeforms of the planet is a psychic, rather than a physical, need (1988, p. 46).

Rachel Carson, well known for her landmark publication *Silent Spring*, reflects on the mystery that attracts one to the edge of land and sea in her book *The Edge of the Sea*:

> Contemplating the teeming life of the shore, we have an uneasy sense of the communication of some universal truth that lies just beyond our grasp. What is the message signaled by the hordes of diatoms, flashing their microscopic lights in the night sea? What truth is expressed by the legions of the barnacles, whitening the rocks with their habitations, each small creature within finding the necessities of its existence in the sweep of the surf? And what is the meaning of so tiny a being as the transparent wisp of protoplasm that is a sea lace, existing for some reason inscrutable to us—a reason that demands its presence by the trillion amid the rocks and weeds of the shore? The meaning haunts and ever eludes us, and in its very pursuit we approach the ultimate mystery of Life itself (1955, p. 250).

Sustaining Heart in the Heartland: Exploring Rural Spirituality was co-written by six authors, and explores the nature of rural spirituality. Although written about a Christian community attempting to apply Christian ethics to their farming practices, the following extract describes the sense of mystery or divinity in nature well:

> Family, work, and spirit are formed by the land. Its shape and seasons get into the bones and its creatures allow your friendship. The land says to those who listen with attention close to prayer, "You are part of me." Revelation of the land's mysteries demands a lifetime of faithful relationship—generations—to learn to work with the intricate interconnectedness of its soil, water, seasons. But in that relationship, the earth is indeed "swept into the people's being" and they are blessed (Brown et al., 2005, p. 29).

Nature poetry provides a vast source of literature on the spiritual nature of the environment. Although nature poetry can and does explore all spiritual schools of thought, I find it especially precise in its evocation of both the Celtic vision of the natural world, and the more mystical experience of nature, that I have explored briefly above. I

cannot go into this in great detail here, but the following quote, by William Blake, highlights this spiritual experience of natural phenomena captured by so many poets in their work: "To see a World in a Grain of Sand/ and a Heaven in a Wild Flower/ Hold Infinity in the palm of your hand/ and Eternity in an hour." The ability of nature poetry to capture the mystery of the natural world is articulated by Wendell Berry when he says:

> this poetry arises out of a state of mind that could very accurately be described as religious. I am probably giving that adjective a broader application than it usually has. My use of it might, I suppose, be defined as primitive. I would apply it, for instance, to the sense of the presence of mystery or divinity in the world, or even to the attitudes of wonder or awe or humility before the works of the creation. And I will not use the word here to refer to any of those revealed certainties that are so large a part of the lore of the various churches. A better term than religious might be worshipful, in the sense of *valuing* what one does not entirely understand, or aspiring beyond what might be known (1972, p. 5).

My goal in this section has been to identify some of the literature that explores the spiritual nature of the natural world, however this is experienced. I am not attempting to prove that one particular approach to spirituality is more effective in influencing the application of more environmentally sustainable farming and fishing practices. I do feel, however, that the distinction between the various approaches could potentially have important implications for the ways in which farmers and fishers interact with the natural environment. Although I do not explore this extensively in this paper, I will address it briefly within the context of my 'Discussion.' It is important to note here that there are many other reasons why people are drawn to advocate respect for the natural world, such as the attitude that nature has just as much right to exist as humans do, and that the natural world should therefore not be seen solely for its value to human well-being. Such

attitudes fall into the eco-centric school of thought, and are addressed briefly in the next section.

Irrespective of which vision is being advocated, acknowledgment that the spiritual connection felt by human beings when they are interacting with the natural world is real rather than imagined is a necessary foundation to my thesis. It is a perspective that was accepted as fact for millenia, but that was rejected as a result of the direction that science took in the seventeenth century, which excluded from its world-view the possibility of a legitimate religious or metaphysical form of knowledge of nature (Nasr, 2002, p. 130). Modern science has continued to promote this commonly accepted rule:

> There is no other knowledge of nature except what is called scientific knowledge. And if someone claims that there is a religious knowledge of nature then it is usually claimed that it is based on sentiment, on emotions, or in other words on subjective factors. If, for example, you see a dove flying and you think of the Holy Spirit, that is simply a subjective correlation between your perception of the dove and your own sentiments. There is no objectivity accorded to the reality of nature as perceived through religious knowledge. That is why even symbolism has become subjectivized—it is claimed to be 'merely' psychological, *à la* Jung. The symbols which traditional man saw in the world of nature as being objective and as being part of the ontological reality of nature, have been all cast aside by this type of mentality which no longer takes the religious knowledge of nature seriously (Nasr, 1995, pp. 130-131).

While I do not think that objectivity is the best word to describe acknowledging the true value of the spiritual perspective in looking at the human-nature relationship (because as I mention earlier, nothing is truly objective), I would agree with Nasr when he points out that spiritual insight and value should not be undermined as being less didactic than scientific reality. Allocating less value to the spiritual aspects of reality seems to be a rather presumptuous oversight based on the attitude that reality consists of only what we can concretely perceive or what we are conscious of. Given the uncertain nature of

human perception, basing our accepted notion of what is real on such an unstable foundation seems dangerous to me. Philip Sherrard explores this danger when he says that:

> ...how we perceive things depends crucially upon the state of our being. This does not mean that the reality of the things themselves varies according to the consciousness which perceives them, and still less that their existence is dependent upon their being perceived. It simply means that how they appear to us, the kind of reality we attribute to them, and whether we see them as they are or, as it were, through a distorting lens, have very little to do with the things themselves and very much to do with the quality of our own being, the purity of our soul and the level of our intelligence...And the fact that the great majority of mankind at a particular period may perceive things in a certain way does not in the least alter this: the mass of mankind may simply be enslaved to a particular set of delusions, and its perception will be conditioned accordingly (Sherrard, 2002, pp. 2-3).

Further, Sherrard notes that:

> ...what we perceive by means of the senses, and how we perceive it, as well as the manner in which we investigate it, are always conditioned to conform to the hidden systems of action and reaction, belief and thought, which at any particular time happen to dominate our consciousness. It is the prevailing conceptual paradigm of our consciousness, and the reality we attribute to it, that determine what we think is real and what we think is unreal (Sherrard, 2002, pp. 2-3).

In looking for possible spiritual solutions to the current problems facing island communities, one of the things that I immediately started searching for was individuals, families and communities whose behaviour directly reflected their spiritual values. As I have already elaborated, I realized that the natural environment wielded tremendous spiritual power, and for many is seen as one of the only true remaining sources of pure connection with the spiritual world not corrupted by human-made religious and/or spiritual institutions. This realization led me to reflect on the lives of those islanders whose livelihoods bring them into direct contact with the natural world, and whose

survival depends upon a recognition of humankind's dependence on nurturing, and sustaining a relationship with something beyond him/herself. The farming and fishing communities immediately came to mind due to their reliance on the health of their soil or water, and the year-round, intimate relationship that their profession fosters between human beings and the land or sea. As John E. Carroll states in his book *Sustainability and Spirituality*,

> ...[W]e might ask where we might find models of real sustainability. The location of such models should correlate to people who have put their faith in values other than those found within the dominant value system. They should be found among people who have developed a deep spirituality, a transcendent spirituality. They should be found among people who place their faith in something bigger than they are, in contrast to those who commonly place their faith in things smaller than they are (the latter including, for example, the mall, shopping, consumption, the car, science, technology, the "techno-fix," economic growth, "growthism," money, power, and so forth, any or all of which might readily become gods or idols in people's lives). In contrast, those who place their faith in things bigger than they are, things that transcend them, things that were there before them, things that will be there after them, things beyond their ability to encapsulate or comprehend, to know or de-limit, whether one God, multiple gods, mystery, nature, the cosmos, and so forth, might demonstrate a greater ability to recognize, to demonstrate, to practice, to truly know sustainability (2004, pp. 2-3).

Having identified the communities that I was going to focus on, I then began to look into the factors that shaped their belief systems, and what they believe. This raised questions of ethnicity, ecology, social and cultural geography, history, connection to place, formal religious upbringing, family, God, Spirit, Science, and Story. Before turning to my thesis questions, and the stories of the farmers and fishers who participated in this study, I will explore briefly some of the literature that identifies elements whose interactions and collision give birth to spiritual beliefs and values. In attempting to communicate the complexity of relationships and experiences, myth and story, and

connection that forms the substance of belief, I am in no way implying that all of these factors will influence everyone's belief systems, nor that factors that contribute to beliefs are limited to the few that I have managed to identify and elaborate on here. My intention is simply to bring to the forefront of the mind the larger context within which the beliefs and values of Cyprus' and PEI's farmers and fishers exist.

Defining Spiritual Beliefs and Values

As already articulated, an assumption necessary to the development and understanding of this paper is the existence of spiritual reality, and recognition of the important role it plays in conditioning how we behave. "At the heart of this conceptualization of reality is an understanding of human nature as fundamentally spiritual and that spiritual principles, which resonate with the human soul, provide an enormous motivational power for sacrifice and change" (Bahá'í International Community, 1998, p. 12). Having acknowledged the importance of the spiritual in motivating our every day actions, the next step is trying to define what is meant by spiritual beliefs. Trying to understand the elements that combine to form a person's or community's spiritual values has been one of the major challenges in my research. The process of reading existing literature and conducting interviews has made me come to realize that how people define their spirituality is deeply personal, unique and complex.

As will be seen in more detail in the 'Results' section of this paper, in answering my question as to how they would define their spiritual values, many of the participants interviewed responded tentatively, often struggling to clarify their beliefs for themselves in their heads, and then attempting to articulate these beliefs verbally. The result was that

the terms used, and what these terms meant, varied greatly from one participant to the next. One point that many participants expressed, often with a degree of surprise, was that they see the spiritual beliefs that they live by, and would define themselves by, as separate from the formal religion that they subscribe to being (for those who, in fact regard themselves as having a formal religion). Understanding a little about why the distinction between spiritual values and religious beliefs has emerged helps to explain the challenge that farmers and fishers are confronting in attempting to reconcile their professional decisions with their value systems. Seyyed Hossein Nasr clarifies how we arrived at this schism:

> ...the present usage of the word religion in many quarters often leaves out precisely the spiritual element. Those people who are looking for the inner dimension of religious experience and of religious truth, are seeking another word to supplement the word religion...the term spirituality as it is used today began to be employed by French Catholic theologians in the mid-nineteenth century and then crept into English...it denotes for many people precisely those elements of religion which have been forgotten in the West and which therefore have come to be identified wrongly with spirituality as distinct from religion. From my point of view which is always of course a traditional one, there is no spirituality without religion. There is no way of reaching the spirit without choosing a path which God has chosen for us, and that means religion (*religio*). Therefore... traditionally the term religion would suffice since in its full sense it includes all that is understood by spirituality today (2002, p.120).

Nasr makes it clear that for some, religion does clearly embody spiritual values that can have deep personal significance and practical application in every day life. For others however, spiritual values are articulated using terms that explain concepts and sentiments that people do not associate with their experience of formal religion. For the purpose of this paper I have used a number of terms to represent the sense of mystery—of something unknowable and yet present—that is experienced by the farmers and fishers that I

interviewed. These terms include "spiritual beliefs", "spiritual values", "religious beliefs", "religious values", and at times "morals", "ethics" and simply "values". While this might seem like a lot of words to describe a connection with the spiritual reality, in practice I did not meet any two people that had an experience of this connection that was even remotely similar. Even within the same faith background every individual's experience was unique, and his/her understanding of the above terms was also entirely different. Attempting to define these terms therefore is a task far beyond the scope of this paper. What I will do in this section however is to look at some of the literature that has analysed the elements that interact to shape our belief systems, and how many of these systems view the land and the sea, and in some cases, farming and fishing specifically.

In an effort to make it more digestible, I had initially divided the literature that looks at the factors that shape what we believe from the literature that addressed what our beliefs are. In the process of writing I began to realize that it was impossible to clearly separate beliefs from the factors that shape them because each is shaping and re-shaping the other continuously. Also, many of the factors that shape beliefs are themselves beliefs, or memories of beliefs, or internalized beliefs from childhood or ancestral stories.

The literature that has informed this thesis approaches beliefs from various perspectives. As both Prince Edward Island and Cyprus have been, and in many ways still are deeply religious societies, I felt that looking at literature that approached current environmental concerns from a theological perspective was important if I wanted to better understand the context within which these islanders are operating. Although I did not intentionally focus on Christian theological literature, I did come across more literature on Christian environmental ethics than any other faith-based belief system. The

most salient themes addressed by this literature was the role that Christian doctrine (or the interpretation of it) has played in shaping our current relationship and attitude to the natural world; and how Christian ethics (and the re-interpretation of Biblical scripture) could influence the re-imagining of a more sustainable relationship to the natural world.

Lynn White's (1967) well-known essay attributes the dominant western attitude of human dominion over nature to the Biblical scripture from Genesis 1:28 in which human beings are told to "fill the earth and subdue it, and have dominion over the fish of the sea, and over the birds of the air and over every other living thing" lies at the heart of the dialogue on how we got here. White claimed that the consequent attitude of dominion made possible the Industrial Revolution, as well as a general alienation of humankind from the natural world, the consequence of which has been the pursuit of unsustainable, short-term profit in exchange for long-term ecological impoverishment. Many of the authors that I have read who propose various alternative paradigms for the future cite White's theory. Some (such as Harold Coward and Scott Dunham) note that while White's argument oversimplifies a very complex historical development, there is an important element of truth to his analysis that needs to be taken into account when looking at how we have ended up in our current predicament (2000, p.52). Others argue that the detrimental treatment of the environment in non-Christian cultures is an indication that White's theory is wrong (Derr, cited by Dwivedi, 2004, p. 147; Dubos, 1972, p. 158). This argument is obviously based on faulty logic; the abuse of the environment in non-Christian cultures in no way proves that the above-mentioned interpretation of Genesis 1:28 did not influence the relationship between westerners and the natural environment. Whether or not scholars agree with White, his essay has been

the springboard for a dialogue on the role that faith-based ethics can or should play in our relationship to our natural environment, and has generated a flurry of literature on various ways of "greening" western religious ethics.

Dunham and Coward feel that despite, or perhaps precisely because if its history of scripturally justified environmentally detrimental practices, "contemporary Christianity is very concerned with developing an ecologically sensitive and responsible ethic" (2000, p. 52). Rosemary Ruether points out that there is support within the Bible for a new vision of the whole planet as a single living organism or unified system; however this guidance must be reinterpreted to make it useful in the face of scientific and technological advances (Ruether, cited by Coward & Dunham, 2000, p. 53).

Some alternative approaches to theological ethics being proposed in literature that I think are worth noting are: the idea of adapting the Christian duty of treating the poor and oppressed with compassion to our relationship with nature – much of which, as a result of our abuse, has become the new poor and oppressed; and replacing the current practice of seeing ourselves as subject, and everything outside of the self as an object, with a subject-subject model in which relations among all living things are inspired by a Christian appreciation for others in creation (McFague, cited in Coward & Dunham, 2000, pp. 56–57; American Baptist Churches, 2004, p. 210); seeing humans as persons-in-community—a community that includes all living things, based on the Christian doctrine that if we love God, we will not want to cause harm to anything that is of God, and on the reality that the dominion theory is based on God's order, in which the "ruler rules for the sake of the ruled" (Daly & Cobb, 1989, pp. 384–388); the practical application of Christian love in an ecological context—looking to serve the interests of

others, not insisting on our own way, behaving in a way that reflects the fact that if one suffers, all suffer (clearly anti-anthropocentric), receptivity and dependency, humility, understanding and communion (Nash, 1991, pp. 131–161); and the idea that the natural world can and should inspire our ethical relationship to it—both by suggesting that limits often make healthy growth and beauty possible, and by inspiring creativity and diversity in our approach to a solution. Therefore, religious approaches to environmental problems could use the natural world as instructor (Dubos, 1972). The Evangelical Lutheran church wrote an article in which they note that although human beings are a part of nature, we have been given the capacity for spiritual awareness and moral accountability. This is a sacred responsibility that should inform how we treat the natural world (Evangelical Lutheran Church, 2004, p. 218). Daniel M. Cowden builds on this vision of our relationship to the natural world. He says that Catholic theology acknowledges the essential goodness of nature, and that our identity as a species is dependent upon the processes out of which we have emerged and in response to which we have forged ourselves. Our goal therefore is not to re-build a certain aspect of our relationship to the natural world, but the relationship itself. We have forgotten how enmeshed we are with the natural world, and a new ethic based on Christian values needs to teach us how to be human within nature—human in every sense and in a way that fulfils the dignity of our spiritual, intellectual and physical capacity (Cowden, 1994). A statement released by the U.S. Catholic Bishops furthered the need for an ethic informed by our oneness with the natural world:

> The web of life is one. Our mistreatment of the natural world diminishes our own dignity and sacredness, not only because we are destroying resources that future generations of humans need, but because we are

> engaging in actions that contradict what it means to be human. Our tradition calls us to protect the life and dignity of the human person, and it is increasingly clear that this task cannot be separated from the care and defence of all of creation (U.S. Bishop's Statement, 1991, in U.S. Catholic Conference, 1994).

Lynn A. de Sylva builds a vision on re-evaluating the creation story. The significance of the creation story is not in whether it is true or false, scientifically proveable or not, but in what it means to believe that the world is God's creation. For De Silva, a new ethic based on Christian values would therefore see humans as part of nature and subject to the same laws. In this view, human beings do not exist in isolation, but only in an I-Thou relationship, and as we are transient beings, our relationship to the natural world should be infused with respect for God's creation (De Silva, 1979, p. 16).

In addition to looking at re-shaping western religious ethics, a number of scholars (e.g. Smith, in Barbour, 1972) have proposed that we might want to look outside of the scope of western philosophy, to eastern faith traditions for inspiration. Anne Bancroft says that "at the heart of eastern spirituality is the ...knowledge of one's own true being; the understanding that one's own consciousness is God" (1991, p. 57). The Eastern faith traditions reject the concept of subject and object. The name of God itself is often not used because for many, God is not a separate object. There are not two separate entities – the beholder is one with the beheld (Plotinus, cited by Bancroft, 1991, p. 73).

The Hindu God is often spoken of as "the self, the realization of one's own sacred beingness" (Bancroft, 1991, p. 58), and an important principle is the sacrificing of self or ego to the will of God—removing a sense of 'me' or 'mine,' so that the only self is God. This involves a total surrender of the part of one's self that is not God (Bancroft, 1991, p. 61). Letting go of selfish personal desires and adopting a conception of the self that exists

solely for the purpose of fulfilling God's will implies a degree of humility and detachment from worldly desires. Coward and Dunham explain that for Hindus, the essence of all things is God, and that because we are all manifestations of the same Divine, nature should be respected (2000, p. 50). The universe is also seen as God's body – the logic being that one part of God's body would not want to harm another part and that the world cannot be separated from the human body, nor can the human body be separated from the world (Chapple, 2004, p. 302). Human beings have no privilege or authority over the rest of creation; rather, we have obligations and duties. It is considered a sacred duty in the Hindu faith to plant a tree (Dwivedi, 2004, pp.149–150).

Another eastern faith is Buddhism. Buddhist philosophy says that humans must transcend feelings—which are in reality separate from our essential being and do not define who we are—in order to find our truth. Accomplishing such a deep level of self-awareness requires a heightened degree of attention to and consciousness of the world around us (Bancroft, 1991, pp. 63–64). Buddhists see existence through relationship. Nothing exists independently of anything else; we come into being only through relationships, and it is through interdependence with the rest of the cosmos that ethical reflection takes place. Thus, from a Buddhist perspective, fishing is only ethical if pursued in a non-selfish manner in which both fish and humans are respected and their interdependent nature creates a balance between human need and ecological health (Coward & Dunham, 2000, p. 50). Such perceptivity of the world and openness to understanding and being within it would promote a relationship to our natural world based, as in Hinduism, on observation, respect, and reverence. Because nature and humans are essentially one being, defilement of one leads to defilement of the other

(Kabilsingh, 2004, p. 130). For Buddhists, the purpose of work is the development of spiritual capacities, not the amassing of material possessions. The goal is not the multiplication of wants but the purification of the human character (Schumacher, 1973).

The Taoist perception of reality has a timelessness to it. The infinite and the immediate are merged into one so that the immediate experience in any moment is the heart of existence. Experiencing true wonder at the very fact of existence is what matters (Bancroft, 1991, p. 66). Huston Smith explains further: Tao "is a realm of interpenetration and interdependence...multiplicity is itself a unity. As nothing exists by itself, all things being in fact interdependent, no phenomenon can be understood by divorcing it from its surround. Indeed, it is the underlying unity that provides the possibility *for* distinctions" (1972, p. 75). Like Buddhism, therefore, Taoism highlights the intrinsic value of our natural resources and that we must see ourselves as interdependent with the fish and the oceans (Coward & Dunham, 2000, p. 51). Such a vision would make every interaction with the natural world a holy one. There is no possibility within this framework for not recognizing the spiritual nature of our interactions with our earth or water.

Judaism's vision of the natural world is as provider of sustenance and pleasure to humans who have the responsibility to be stewards of the earth (Coward & Dunham, 2000, p. 48; Schwartz, 2004). According to Dunham and Coward, humanity's role is to do God's will (seen as loving kindness in action) in the world (as set out in the Torah). The Sabbath is seen as a physical manifestation of balance between human beings and nature, and acknowledgment of the concept that everything needs rest to function healthily (Coward & Dunham 2000, pp. 48–49). Schwarz says that in Judaism nature is

seen as the essence of Deity. One of the most basic principles of the faith is the necessity of translating ideals into action (2004, p. 103). If people do not behave with integrity, our actions will come back to haunt us. Schwartz notes that Jewish scripture says that we should be protecting future generations with as much zeal as we protect our own. Individual rights are tempered by communal responsibility (Schwartz, 2004, pp. 104–107).

Islamic ecological ethics say that humans, as the custodians of the natural world, are free to satisfy our needs, but only if doing so does not undermine the welfare of the entire creation. The Islamic vision of nature is as a part of God's creation, and all are expected to join together in worshipping the one true God. The idea is that seeing God in all things would create an attitude of respect and reverence (in this case in the harvesting of fish) (Coward & Dunham, 2000, pp. 49–50). Islam sees nature as being in a constant state of praising God, and for Muslims, ethics and virtues are part of an integral way of life—not something separate. Maintaining a balance in all things is vital for a healthy physical and spiritual existence in Islam (Deen, 2004, pp. 159–160).

Like the other world faiths, the Bahá'í Faith, originating in the Middle East, shares the belief of the oneness of creation. Some of the most salient teachings of the faith are "the interconnection between humanity and the rest of creation; the sanctity of all creation; the duty of respect for the material creation; and the use of material creation as a medium for humanity's spiritual education and expression" (Bushrui, 2002, p. 79). The teachings of the faith say that humankind and the rest of the creation were created by the same creator and are therefore one. The result of the oneness of creation is the sanctity of its every part. Humans are seen as caretakers who must be committed to

protecting creation, which is a reflection of the nature of the Creator. The earth is seen as a source of all good, and humankind has a duty to respect the natural world. The importance of safeguarding our natural surroundings is expressed concisely in the following statement from the Bahá'í International Community in *Valuing Spirituality*:

> As trustees, or stewards, of the planet's vast resources and biological diversity, humanity must learn to make use of the earth's natural resources, both renewable and non-renewable, in a manner that ensures sustainability and equity into the distant reaches of time. This attitude of stewardship will require full consideration of the potential environmental consequences of all development activities. It will compel humanity to temper its actions with moderation and humility, realizing that the true value of nature cannot be expressed in economic terms. It will also require a deep understanding of the natural world and its role in humanity's collective development—both material and spiritual. Therefore, sustainable environmental management must come to be seen not as a discretionary commitment mankind can weigh against other competing interests, but rather as a fundamental responsibility that must be shouldered—a pre-requisite for spiritual development as well as the individual's physical survival (1998, pp. 21–22).

The natural world is seen as such a potent manifestation of the divine that natural imagery is frequently used as "a medium of spiritual instruction and expression" (Bushrui, 2002, p. 84) in Bahá'í literature.

Native spirituality is intimately connected to the natural world, and many of the stories, prayers and rituals indicate the importance of a balanced, mutually respectful relationship between human beings and nature (Jones & Williams-Davidson, 2000; Luther Standing Bear, 2004, pp. 39–40; McKay, 2004, pp. 175–178). Native beliefs have had no real influence on Cypriot cultural attitudes or spiritual beliefs, and until recently were largely ignored by westerners. In our search for an alternative paradigm we are slowly recognizing the wisdom in Native spirituality and beginning to use it to inform our choices and practices. I mention it here because I do believe that it is playing a role

(however small) in (non-Native) islanders' relationship to the land and sea on Prince Edward Island.

Native spirituality holds that nature has an intrinsic spiritual value, and that humans have a spiritual connection to, and dependence on, animals and the environment. Indeed, for some Native peoples humans, gods and nature were considered to be kin (Dudley, 2004, p. 124). The land is invested with spiritual powers, and cultural, spiritual and ecological values are derived from spiritual principles embedded in nature. Native spirituality is place-based, and the connection between people and their place plays an important role in shaping the culture and identity of any given clan (Jones & Williams-Davidson, 2000, p. 100). Native spirituality acknowledges the important sacrifice that other beings make to keep us alive (ibid, p. 103). Respect and reciprocity are important. Each individual or clan has a stewardship responsibility for the resources in their territory, and ensuring that there is a balance in all activities is taken very seriously (ibid, pp. 104–106).

Native spirituality also emphasizes communal concepts of property, which they believe better support the good of the whole over the good of the individual (Ommer, 2000, p. 119). In Malaysia and Indonesia, this communal notion of stewardship takes the form of Adat, a traditional legal system that extends a set of values and beliefs that governs relationships within both the physical world and the spiritual world. It is a moral and spiritual place within nature. Ritual and ceremony play an important role in connecting people to their place and natural resources, and work is seen as an activity that brings individuals into contact with spirit world. If there is conflict in the spirit world the effects will be felt in the entire community, so this is an incentive to work together and

share responsibility. In this value system, land ownership does not exist – the land belongs to those dead, those living, and those who are not yet born (Segundad, 2004, pp. 181–183).

I have briefly covered some of the main belief systems that influence spiritual values today. Although they may not be considered formal belief systems, I would like to mention a few other schools of thought that are influential in current spiritual beliefs and that for some may in fact be considered their primary spiritual belief system:

1. Aldo Leopold's Land Ethic: Much could be said here, but I believe the most important aspect of Leopold's Land Ethic was expressed by Leopold himself when he said that "a thing is right when it tends to preserve the integrity, stability and beauty of the biotic community. It is wrong when it tends otherwise" (Leopold, 1949, pp. 224–225). Aldo Leopold's Land Ethic has a framework that is holistic, allowing for the moral consideration of whole ecosystems (Warren, 2000, p. 83). It is also emphasizes the importance of using the head and the heart. He says that "obligations have no meaning without conscience, and the problem we face is the extension of the social conscience from people to the land. No important change in ethics was ever accomplished without an internal change in our intellectual emphasis, loyalties, affections, and convictions" (Leopold, 1977, cited by Warren, 2000, p. 83).

2. The Gaia Hypothesis: Formulated by Dr. James Lovelock in the 1960s, the Gaia Hypothesis advocates treating the world as a single organism in which every living and non-living thing is evolving as a unified whole. (Deanne-Drummond, 1993, p. 9). Lovelock's Gaia Hypothesis holds that the Earth has vital organs that must be protected.

It has been criticised however for holding that the Earth is very resilient and ultimately can withstand considerable abuse (Sessions, 1995, p. 300).

3. Deep Ecology: This ecological philosophy (ecosophical) school of thought is based on the vision that humans are an integral part of the natural world. The more that individuals, societies and other species and life forms are able to realize themselves—in other words, the more diversity being expressed in the world—the more each of us will realize our true selves (Naess, in Bodian, 1995, p. 30). Deep ecology depends upon an expansion of ecological thought to integrate wisdom into scientific understanding (Naess, in Bodian, 1995, p. 27). This wisdom is gained through deep questioning, and commitment to ideas such as that "the flourishing of human and non-human life on Earth has intrinsic value"; "the value of non-human life forms is independent of the usefulness these may have for narrow human purposes"; and that "humans have no right to reduce the richness and diversity" of other life forms (Naess & Sessions, 1984, cited in Naess, 1989, p. 29).

4. Ecofeminism: Ecofeminists believe that the only way to truly develop a new perception of, and relationship to the natural world is by taking the time to better understand the inner workings of the patriarchal society that all of our relationships and attitudes are consciously or unconsciously shaped by (Kheel, 1993, p. 244). Until this is done, all efforts to develop healthier relationships with each other and with the natural world will ultimately be fruitless because our interactions will still be influenced by the underlying patriarchal structures that promote a tendency toward aggression (Kheel, 1993, p. 251). There must be a movement away from focusing on the mere existence of relations, to an increased awareness of the quality of these relations (*ibid,* 1993, p. 261).

Women and the natural world must no longer be seen as the environment in which men accomplish their goals and objectives. In this vision, it is the responsibility of both men and women to "challenge the dualised conception of human identity and develop an alternative culture which fully recognizes human identity as continuous with, not alien from, nature" (Plumwood, 1993, p. 36).

One of the ways in which the formal religions described above differ from Native spirituality and the spiritual connection felt by deep ecologists and ecofeminists is that they advocate belief in a God. As mentioned earlier in describing the spiritual nature of the human—environment relationship, whether a person believes in a God or experiences spirituality directly through a personal relationship with the earth or sea undoubtedly influences their relationship to the natural world. I have not studied literature that looks at whether one or another approach to spirituality more effectively translates to ecologically sustainable practices. Every individual is going to interpret and respond to spirituality differently, and how he/she responds will inevitably be shaped by many factors, thus making it difficult to attribute a person's relationship to their natural environment solely to a particular spiritual path. Despite this, in my discussion I explore some preliminary thoughts on the relationship between individual value systems and practices that preserve, rather than undermine, the integrity of the ecological system.

Shaping Beliefs: The Factors that Underlie Values

I have come across many factors that seem important in understanding the dynamics at work both in the formation of spiritual values, and in how these values are translated into action. There are simply too many to mention them all here, so I have decided to focus on

the two closely related factors that seem to me most essential in the context of island farming and fishing: sense of place, and community.

Place can be defined and experienced in many ways. Places can be seen as geographic settings, distinct from their human inhabitants. They can also be seen as "socially constructed, spatialized experience" (Rodman, p. 642). It is place as defined through human-environment interactions that seem most relevant in exploring the experiences of PEI and Cypriot farmers and fishers. Margaret C. Rodman says that "places are not inert containers. They are politicized, culturally relative, historically specific, local and multiple constructions" (1992, p.641). This implies a dynamic relationship that is constantly changing and adjusting to new situations. Places are formed by the unique experiences of individuals, as well as by the collective experience of community. It is formed by internal forces as well as by external influences (Rodman, 1992). A place can also be phantasmagoric; that is, separated from the space in which it is located. This happens when places are penetrated and shaped by influences distant from them (Giddens, cited by Rodman, 1992, p. 645–646). There is a growing presence of foreign cultural and material forces on both PEI and Cyprus which could, in concert with an increasing tendency towards urban living and lack of contact with the natural world, lead to a situation where identity is being constructed in terms of a place one no longer lives in (Giddens, in Rodman, 1992, p. 646). In many ways I believe this is already the case on both of these islands. What is hopeful is the fact that island identity is still connected to a vision of place that reflects values that are not solely economic. The connection may not be uniformly strong in all islanders, but it is still evident.

Place is often described through individual or collective narrative, but places also "come into being through praxis" (Rodman, 1992, p. 642). The connection between island identity and place is built through active involvement with the elements of place. The interactions that build a strong place-based identity involve all of the senses. David Weale describes it well when he says "I know in my bones that when I am in direct, tactile contact with the elements of the earth I am in touch with the elements of my own nature" (Weale, 2007, p. 16). The importance of experiencing place through all the senses is epitomised in Weale's story *I am the Island*, in which he asks:

> When we say we are Islanders, what are we saying? It is more than a reference to the place we live, and entails much more than mere location. When we say we are Islanders we are acknowledging the mysterious infusion of landscape into the minds and hearts of those who live here, and of the deep bond that unites islanders with the Island itself: a union as intimate as seed in soil...this Island is more than our location; it is the colour of our thought, and the scent of our endeavour...I have rubbed up close against the Island, and much of what I know about the world, and my own heart, was born of that rubbing (Weale, 2007, pp. 17–19).

Sense of place is built over time through deep, meaningful interaction with the environment and community. Acquiring a sense of place starts with setting down roots, which is achieved through actively engaging with place so that it begins to shape individual and community, and human inhabitants begin to shape the place. The need for roots is explored in the literature of Simone Weil, who says that:

> To be rooted is perhaps the most important and least recognized need of the human soul. It is one of the hardest to define. A human being has roots by virtue of his real, active and natural participation in the life of a community which preserves in living shape certain particular treasures of the past and certain particular expectations for the future. This participation is a natural one, in the sense that it is automatically brought about by place, conditions of birth, profession and social surroundings. Every human being needs to have multiple roots. It is necessary for him to

> draw wellnigh the whole of his moral, intellectual and spiritual life by way of the environment of which he forms a natural part (1952, p. 41).

Relph builds on Weil's call for roots when he says that "[t]o have roots in a place is to have a secure point from which to look out on the world, a firm grasp of one's own position in the order of things, and a significant spiritual and psychological attachment to somewhere in particular" (1976, p. 38). Martin Heidegger's philosophy of living authentically also informs an understanding of sense of place. Heidegger believed that in order to truly be in a place it was essential to learn to 'dwell' in place. Heidegger saw the essential character of our modern civilization as homelessness, and a double homelessness because we are unaware of our estrangement from home (Heidegger, cited by Hay, 2002, p. 160). This vision of 'dwelling' implies a certain degree of care, and as Hay says, caring involves more than just holding a place in affectionate regard. It involves taking responsibility for that place (2002, p. 162).

A sense of place is important because it embodies the relationships that shape culture and beliefs, and therefore is intimately connected with identity and how people choose to act. It would seem that the longer the period of settlement, and the experience of interacting with place, the harder it would be to identify the subtle line between people and their place. What my research seems to suggest, however, is that the relationship between people and their place only deepens with time if those inhabiting the place find ways to directly engage with their place regularly in a meaningful way. It is possible to experience Relph's "placelessness" in a land inhabited by one's ancestors for generations if there is not some conscious effort made to engage with the local natural and human community. Barry Lopez, a well-known sense of place writer says of this connection:

"The key...is to become vulnerable to a place. If you open yourself up you can build intimacy. Out of such an intimacy will come a sense of belonging, a sense of not being isolated in the universe" (1996, p. 11).

The creation of place worth inhabiting involves relationship. Like Relph, I do not believe that place can realistically be seen today as separate from human beings. Place comes into being through a dialectic interaction between nature and humankind. As René Dubos says, "the word place...denotes an environment which has been emotionally transformed by feelings" (1981, p. 125). Developing a sense of place—a culture of relationship with place—requires that there is a conscious effort to create opportunities for community building activities among people, and between people and their environment. Indigenous people have managed to maintain an intimate connection between place and identity, and as such provide insight into what a strong sense of place implies. Lopez says that

> As a rule, indigenous people pay much closer attention to nuance in the physical world. They see more, and from a paucity of evidence, thoroughly observed, they can deduce more...their history in a place, both tribal and personal, is typically deep. These histories create a temporal dimension in what is otherwise only a spatial landscape. Third, indigenous people tend to occupy the same moral universe as the landscape they sense (1996, p. 11).

Lopez gathers from this, three essential qualities that Indigenous peoples can teach us about relationship to place: "intimate attention; a storied relationship to place rather than a solely sensory awareness of it; and living in some sort of ethical unity with a place" (1996, p11). Thomas Berry echoes the need for story in our communities of place:

> It's all a question of story. We are in trouble just now because we do not have a good story. We are in between stories. The only story, the account of how the world came to be and how we fit into it, is no longer effective.

> Yet we have not yet learned the new story...[i]f we are to achieve this...we must begin where everything begins in human affairs – with the basic story, our narrative of how things came to be, how they came to be as they are, and how the future can be given some satisfying direction. We need a story that will educate us, a story that will heal, guide, and discipline us (1988, pp. 123–124).

Creating a new story within ourselves, within our island communities was accomplished in the past through rituals and traditions, many of which were connected with food production, preparation and consumption. As these are let go of, and eventually lost, we lose the connection that in the past was necessary for survival. Although our new story may not look anything like our old story, I think that looking to the farming and fishing communities for a better understanding of place-value connection would be valuable in developing a sustainable vision for the future of our islands. Story is a practical tool for seeing ourselves within our place now, but it also reminds us that the values and practices of those who came before us have influenced the place we live in today, and that our values and practices will influence those who will inhabit our islands in the future. And perhaps some of the beliefs and practices of the past are in fact still applicable and useful today. "[W]e...have to overcome the vain glorious myth that all that is modern is good and has to be accepted and all that is old worthless and should be discarded" (Shenoy, Rao, Kumara & Anand, 1999, p. 63). Veronica Strang, in her book *Uncommon Ground: Cultural Landscapes and Environmental Values* points out how in traditional Aboriginal cultures, interactions with the natural world reinforce values and identity in place, and these values in turn reinforce life-sustaining practices:

> In traditional life, maintaining stable resources was a priority, not just in practical terms, but also because traditional Aboriginal cosmology was predicated on the assumption that, following the example of the ancestral beings, people would live in the same way for ever. Such cultural precepts

> had to mesh with a conservative and infinitely sustainable economic form, creating an environmental interaction that continually affirmed these values. The economic form has changed considerably, but the values persist (1997, p. 89).

Place and community can be mutually supportive if we learn how to 'dwell authentically' on our islands. It is however in the quality, and not in the length of 'dwelling' in space that the key lies. This fact became evident to me when I began comparing the connection of identity with place on Prince Edward Island and in Cyprus. I had assumed that given the fact that Cyprus has been settled for thousands of years, I would be able to identify clearly a strong sense of place in the island's inhabitants. What surprised me is that Prince Edward Islanders strike me as having a much stronger place-based identity than Cypriots do. I believe that one of the reasons for this is that although the interaction is undoubtedly not as intimate for most islanders as it was in the distant past when most of the population was actively involved with farming or fishing (or both), Prince Edward Islanders still manage to spend sufficient amounts of time interacting with their environment in meaningful ways. Another thing I have noticed on Prince Edward Island is the high level of community-building activities that occur year-round, many of which are still intimately connected to the season and to farming and/or fishing. Both of these things seem to create a pride in islanders of being a part of their place – a pride in the farming and fishing landscape, as well as in being members of the island community. I do not wish to imply that the situation on Prince Edward Island is by any means ideal, as there is a definite movement away from an intimate relationship with place, however "islandness" as an expression of being a part of the island—"a part as deep as marrow, and as natural and unselfconscious as breathing" (Weale, 1991)—seems more intact on

Prince Edward Island than it does in Cyprus. Cypriots do have a sense of place, but I would say this rests more heavily upon family, ethnicity, language and the common experience of division and loss, than on a broad feeling of connection with the land and sea. Opportunities for interacting with the environment on a regular basis are few. There is a definite, increased distancing between identity on the island and a geographic and cultural place of authentic belonging.

I think islanders are more aware of the need for an authentic connection to our place than many. But I do not think we recognize how essential our authentic interactions with our place and community are to maintaining this connection, or the degree to which spiritual belief systems inform our relationship to place. Hanley (2005) says:

> While various scriptures occasionally prescribe specific agricultural practices, their main contribution has been ethics and laws governing the use of food, the use and abuse of land, plants and animals, and the organization of agrarian societies. In turn, these have led to an ethos in each civilization that influenced its social and economic arrangements and helped shape attitudes to agriculture and agricultural practices (p. 24).

Consciously, deeply knowing our islands seems to me to be the only way we are going to be capable of balancing the desire for progress as active members within a globalized world with keeping alive the cultural practices and spiritual beliefs that are so essential to what we mean when we say that we are islanders.

I believe I have said enough about sense of place and community to convey how important they are in influencing identity, beliefs and behaviour, and why it is the farming and fishing communities to whom I turn in order to understand both the connection (and disconnection) between beliefs and practice. Before presenting the connection between spiritual values and beliefs, and farming and fishing practices on

Prince Edward Island and in Cyprus, I will briefly turn to the literature that I have come across that identifies some theoretical aspects of the belief-behaviour dynamic. I conclude with a few examples of communities who are consciously attempting to reflect their spiritual beliefs in their relationship to their environment and work.

(Consciously) Translating Spiritual Beliefs into Work Ethics: The Mechanics of a 'Work as Worship' Approach

~If we are to address the environmental and social issues of our time, it behoves us to recognize the foundational role of agriculture in mediating society-nature relations; the realm where issues of ecological sustainability and human well-being are inextricably interrelated~
(Timothy Vos, 2000)

There are two main questions I am asking in this thesis: What are some of the spiritual beliefs of farmers and fishers on Prince Edward Island and in Cyprus, and what role do these spiritual beliefs play in whether or not food production practices in the island fishing and farming communities reflect the values that sustain island cultural identity? I have already explored the literature addressing the context within which the belief systems of islanders are situated, and a few of the factors that interact with beliefs to shape behaviour. Before turning to the stories and experiences of the islanders who participated in this study I will look briefly at some of the literature that specifically addresses translating beliefs into action as well as introducing what these theoretical ideas look like in the island context.

When I first started considering this idea it seemed to me that islanders with a strong sense of place and connection with the land and sea necessarily would farm and fish in a responsible manner. By responsible, I mean sustainable, pursuing their livelihoods in such a way that what is taken out of the environment does not exceed the ability of the natural world to rejuvenate and persist. I also mean choosing to act in a way that reinforces their vision for the future of their island.

Despite, or perhaps because of the challenges that they are experiencing, the relationship that farmers and fishers have to their islands holds a story that I believe is

informative for all islanders. Exploring the dynamic interplay between beliefs and behaviour in these two communities is important because although they are struggling, the very fact of struggle to me signifies that they are still involved in an intimate, active relationship with their islands, and that they recognize the importance of maintaining this connection. They are some of the few islanders who are still intimately connected with the elements that sculpt island identity on a daily basis. As made obvious in the previous sections of this paper, spiritual beliefs (manifested as values) can play an important role in how we act, inspiring islanders to farm or fish in a manner consistent with sustaining these livelihoods on islands for the long-term. Extrapolating from the literature I have read and the interviews I have conducted, when this connection exists it is reflected in practices that reject the self-centred idea of individual progress in favour of communal progress and growth. The very nature of the work that farmers and fishers are involved in is a constant reminder that they are a part of something much larger that includes their communities, their country, the global population, and the natural world. Those who do put belief into action feel a very real moral obligation to make sure that their actions are responsibly contributing to a common good, or common future. The only term that I have come across that adequately describes such a sacred connection between work and faith is "work as worship"—which I have borrowed from the Bahá'í writings. While the idea of "work as worship" is a beautiful one, beliefs are not always evident in farming and fishing practices. It is the answer to the question "why?" that my research seeks to understand.

While the literature has been illuminating, in terms of better understanding the complexity of the factors that interact in the formation of belief systems and spiritual

values, very few of the authors that I have read have described specific individuals or communities where values are physically evident in farming and/or fishing practices. In fact the opposite seems to be pointed out more frequently: Robert De Haan (2002) noted that you can tell the age of a farming community by the cars or motorcycles in driveways, whether there are swing sets in their yards, etc., but you cannot distinguish a farm owned by a Christian farmer from a farm owned by a non-Christian farmer based on the appearance of their farms. One would assume that the farming practices of a farmer claiming to believe that the earth is the Lord's; that the purpose of creation is to give praise, honor, and glory to God; that human beings were created to care for His creation, and that ruling means serving all of creation, would reflect these beliefs. It is important to note that there are a number of notable exceptions in the farming community (such as small-scale, organic farms), and that the reason why many farms have expanded and adopted chemical intensive, monoculture farming methods is that they were advised to do so by their government in order to continue to be economically viable. I also do not cite De Haan in order to imply that the current state of agriculture is the fault of the farmers who are now locked into choices that they made based on insufficient information. I do feel, however, that De Haan's point has a certain truth to it, upon which communities (farming and the larger community) would do well to reflect.

Those who do succeed in pursuing a 'work as worship' attitude in their work practices are those who believe that they are essentially spiritual beings, and consciously make choices in their every day interactions with the soil and water to find ways of integrating their faith-based values into their work. These people recognize that if faith is to remain relevant to our modern lifestyles, we need to contemplate how the spiritual

teachings revealed for our own well-being can be applied in our every day lives. As Soheil Bushrui says, "[w]hen...material activities are carried out in accord with spiritual principles, the goals of a proper human relationship with the environment will be met" (2002, p. 88). John E. Carroll explores this very subject in his book entitled *Sustainability and Spirituality*. He says that our "values are in the way we behave, and behave daily," and that recognition of the "Creator in the Creation, the sacrality of all, is a lost philosophy and practice which must be resurrected if we are to have any hope of resolving our problems of sustainability" (2004, p. 165). Most of the literature that I have come across addresses the theoretical nature of how beliefs are translated into action. Anderson believes that the connection is strong emotion, which motivates people to action. He looks at the idea of religion as a carrier wave which invokes the emotional power and intellectual authority of faith to achieve resource management ends. For Anderson, religion is a good motivator because it involves emotion in moral codes that are strongly believed by people: "[t]he key point is not religion per se, but the use of emotionally powerful cultural symbols to sell particular moral codes" (1996, p. 166). While I do not agree with Anderson's perspective about the motivation not being religion per se, I do agree that a "strong social code will make people sacrifice self-interest to long-term, wide-ranging interests", and that "[w]ithout long experience or accumulated wisdom people do not know what their interests are" (p.176). A sense of place and a spiritual value system are paramount in influencing positive human behaviour.

Two other authors who have attempted to grasp this precise topic are Wendell Berry and Philip Sharrard. Berry (1970) says:

> The test of faith is consistency—not the fanatic consistency by which one repudiates the influence of knowledge, but rather a consistency between principle and behaviour. A man's behaviour should be the creature of his principles, not the creature of his circumstances. The point has great practical bearing, because belief and principles believed in, and whatever hope and promise are implied in them, are destroyed in contradictory behaviour (p. 157).

Philip Sherrard takes a more critical stance, pointing out that ultimately, our disconnect from our place is the result of divorcing values and feelings from our predominant scientific reality:

> It is this duplicity or double-think that lies at the root of what has now become our endemic state of schizophrenia. It is this that permits us to say that we are Christians, or Moslems, or Buddhists, or whatever, and yet to live according to values and standards and ideas that not only have nothing to do with any religion but are entirely contrary to every form of spiritual life and practice. It is this, finally, that allows us not simply to tolerate, but actively to promote, a type of science that inevitably desecrates every area of life on which it impinges because desecration is written into the very view of nature according to which it operates; for this view is itself the progeny of this same misbegotten concept of the double truth which would have us believe that nature is a self-subsistent reality, independent of God, with nothing holy or sacred about it, that it is quite possible to acquire a valid form of knowledge by investigating it as such (2002, pp.20–21).

There are numerous instances of communities attempting to consciously put their spiritual beliefs into practice around the world. I have come across more literature describing the practical experiences of rural farming communities applying their beliefs to their farming practices than I have about fishing communities; the practical examples of applying spiritual beliefs to fishing practices that seemed most relevant to my study describe Native or Indigenous farming and fishing practices. *Sustaining Heart in the Heartland* is an example of translating beliefs to farming practices. It documents the stories of rural farming communities in the Midwestern United States who have used the inspiration from their Christian values to continue farming in an ethical and sustainable

manner despite the difficulties that they have to confront on a daily basis. One woman interviewed is quoted as saying, in reference to deciding to make do with their small acreage:

> We have grown to see ourselves as stewards of the land, good-will ambassadors to the community, guides to the next generation, and advocates of the family farm...We will be happy, have a sense of place, a true sense of family, and we will preserve and protect God's gifts for those who are yet to come. I find honour in that duty (Brown et al., 2005, p. 8).

Even in these stories however, it is noted that: "not all rural people are alike. There is a wide range of experiences and points of view...there are a number of recurring conflicts, a basic one being choices in how to farm" (Brown et al., 2005, p. 12).

Given the innately spiritual nature of fishing, it has been surprising to me how much less has been documented about spiritual values and fishing practices. Many of the references to spirituality and fishing exist only under the surface within the context of a story. The few sources that describe the application of spiritual beliefs in fishing have been in reference to Native fishing attitudes and practices: Veronica Strang points out that even the manner of naming good fishing locations is connected to belief and spiritual connection:

> Landscape is never spoken of in purely functional terms: even the most prosaic place-name, such as Fish Hole, refers not only to the annual meeting and fish harvesting of previous generations, but also to a particular configuration of kin, to the ancestral activities at the site, and the rituals necessary to care for the place. Thus the individuality of each place arises from these factors – the kin connections, the ancestral presence, and historic uses and associations, and this highly specific view of each place colours the interaction, even on an economic level (1997, p. 93).

Winona LaDuke is another author who looks to Native peoples for examples of how spiritual values can be incorporated into relationship with the fishery. She explains the

practice of Native peoples of considering all living things to be humans' relatives. She says: "The relatives are a part of us. So it is that a community related to a fish by its history of lakes, habitat and continuous survival realizes that its recovery as a community is tied to the recovery of the sturgeon themselves" (2005, p. 229). She goes on to emphasize how important recognition of our essential oneness with all of creation must be in our fishing practices:

> We have told ourselves that we could live in isolation from other species, not perceiving our connections to the larger world, thinking that we do not have responsibilities, and that we are not connected to each other. In the end, time tells us that we cannot escape from our past, that indeed we must use our knowledge to reconcile ourselves with our history and with each other. We are not going anywhere. Generation after generation, we look at each other in the eyes—our ancestors in the past, we ourselves today, and tomorrow our descendants. Will we look to create isolation, or will we look to create relationship? (LaDuke, 2005, p. 227).

The literature on the connection between spiritual values and farming and fishing practices has provided me with a firm understanding of the relationship between belief and action, and a glimpse of what this can look like in various communities and contexts. I will now turn to the question of what spiritual belief systems are held by island farmers and fishers in Cyprus and on Prince Edward Island, and how these spiritual values manifest themselves in island farming and fishing practices.

LAND AND SEA: ESTABLISHING A SENSE OF PLACE

~...[t]he land retains an identity of its own, still deeper and more subtle than we can know. Our obligation toward it then becomes simple: to approach with an uncalculating mind, with an attitude of regard. To try to sense the range and variety of its expression – its weather and colours and animals. To intend from the beginning to preserve some of the mystery within it as a kind of wisdom to be experienced, not questioned~
(Barry Lopez, 1987)

Setting the Scene on Prince Edward Island

Geography and History of PEI

Prince Edward Island is the smallest province of Canada. It is situated along the southern shore of the Gulf of Saint Lawrence and has land area of 5,684 square kilometres. The island is primarily made of red sandstone, and is well known for the saturated contrast between its red agricultural fields and sandy beaches, the dark blue of the Atlantic and the bright green grasses that cover its contours in the spring, summer and fall months. The island is covered with a complex system of waterways which were historically used as roads when they froze over in the winter time, providing a fast way to travel from one place to another. The network of estuarine rivers and creeks means that there is no place on the island further than ten miles from salt water (Greenhill & Griffard, 1967, p.12).

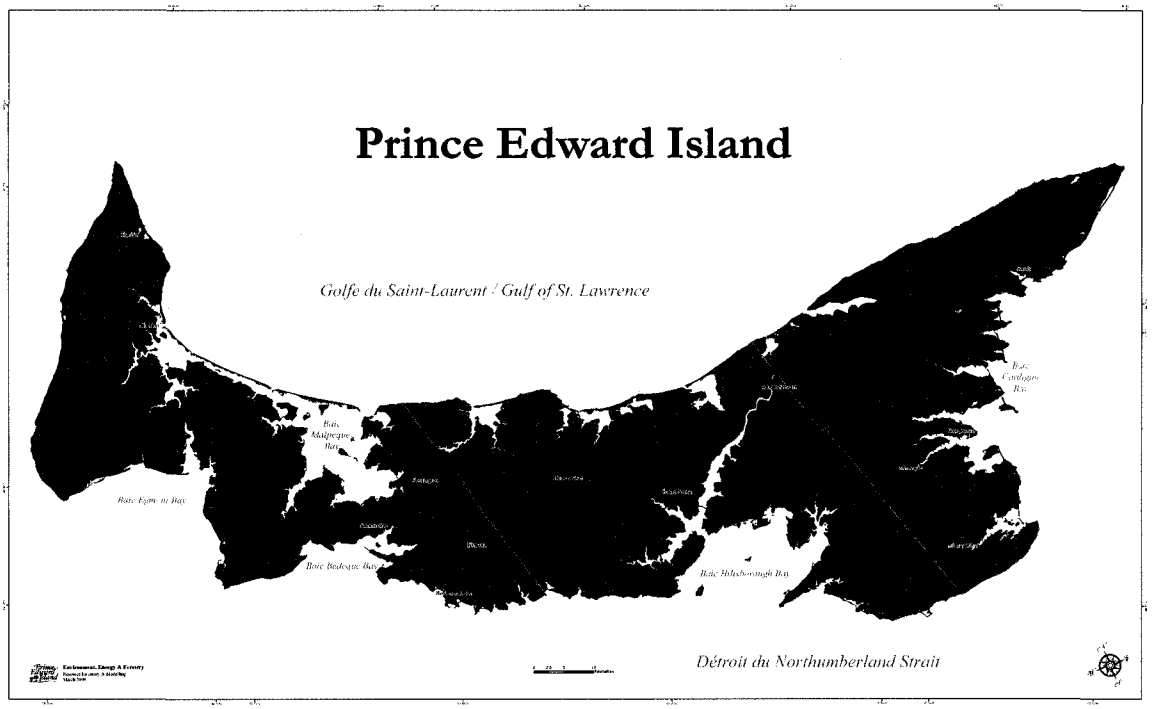
According to Statistics Canada's most recent census data, the island had a resident population of 135,851 in 2006 (Statistics Canada, 2006) living in a handful of larger towns scattered across PEI, and many more tiny rural villages. The three largest—Summerside, Georgetown and Charlottetown—are all coastal towns, the latter possessing a particularly well sheltered, deep water harbour used by cruise-liners, oil tankers as well as many fishing vessels and pleasure boats in the spring, summer and fall.

Historically, Prince Edward Island was covered in old-growth Acadian forest, but the first European settlers cleared most of the land for farming, fuelling the ship-building industry that was the main economic activity at the time. Today there is a combination of small stands of old-growth forest remaining and larger areas of newer growth, but the majority of the land that is not developed is a checkerboard of smaller and larger farms stretching across the province.

Prince Edward Island was originally settled by the Mi'kmaq, who have been living in the region for about ten thousand years (Lennox Island First Nation Web Site, 2005). Mi'kmaq culture developed over many generations, and was shaped by the harsh weather conditions and their seasonal migrations. The island was subsequently settled by French Acadians, followed by the British. A continual flow of immigrants from all over the world continues to increase the ethnic diversity on the island today.

The British divided the island into three counties, which were subdivided into fifteen parishes and sixty-six lots or townships. In 1767 all the townships were auctioned off to absentee owners who, for the next 108 years greatly neglected the needs of those residing on their land and did very little to promote the development of their lots (Greenhill & Giffard, 1967). Many feel that the historical phenomenon of absentee land ownership explains the attitude prevalent among islanders today that nobody has the right to tell them what to do on their land. As Carol Horne states in her Master's thesis, the "...growing resentment" and "fierce desire on the part of Islanders to become masters in their own domain" has meant that attempts by government "to impose controls or land use restrictions have met with resistance" (Horne, 2007, p. 35). Figure 1 is a map of Prince Edward Island:

Figure 1: Map of Prince Edward Island (Source: Province of Prince Edward Island, Department of Fisheries, Forestry and Agriculture).



Socio-Cultural, Political and Economic Foundation

The years between the late 1960s and the mid-1980s played, and continue to play a particularly important role in the socio-cultural, political and economic environment on Prince Edward Island. By the late 1960s the province carried the heaviest debt load of any Atlantic province (Macdonald, 2000, p. 295). Unable to climb out of debt independently, the province turned to the federal government for assistance. In response, the federal government designated the island as one of a number of special areas chosen for comprehensive development planning. The primary goal of the Comprehensive Development Plan was to "revitalize the island's moribund economy and reinvigorate its stagnant society" (MacKinnon, 2005, p. 97). In order to accomplish this, frameworks were developed (by a committee composed entirely of non-islanders) for all sectors of the

island's economy. Some of the prominent aims of the Plan were to modernize the island's education and health care systems, to improve transportation, fuel industry, increase the professionalism and efficiency of government, stimulate the tourism industry, and to dramatically increase incomes coming from the farming and fishing industries.

The plan for both the farming and fishing communities was to decrease the number of people involved in these activities, but make those that remained in these sectors more efficient (MacDonald, 2000; MacKinnon, 2005). In the farming communities, efficiency was to be accomplished through an increase in the size of farms. Many farmers, intent on improving their quality of life, took on considerable debt in order to expand their farms. Unfortunately for the farming community, profit margins for farmers shrunk, and by 1976 one in three farmers had to take on full-time jobs off the farm to support their families, and often farmwives also left the farm to supplement their partners' incomes (MacDonald, 2000, p. 312). Most of those who did remain on the farm specialized in high-income crops: dairy, hog and beef farmers became more widespread, as did the cultivation of tobacco and potatoes. As debt increased, so did potato acreage – it being a cash crop with the greatest earning potential for islanders. To maximize yield, the traditional four to seven year crop rotations were reduced to three years or less, and chemical fertilizers were substituted for fallow periods. Hedgerows, traditionally used to reduce soil erosion, were removed to maximize space and expand fields (*ibid.*, 357–359). The detrimental environmental impacts of these changes are discussed further in the section on 'Environmental Conditions.'

One way that the Comprehensive Development Plan influenced the fishery was through promoting diversification in catch. The emergence of the mussel aquaculture

industry is directly linked to the effort of the Plan. The Plan tried to convince a number of "marginal" fishermen to retire from the fishery, and authorities did manage to get several hundred lobster fishermen to sell their licenses; however, many refused to sell because landings and prices were both soaring. Another effort of the Plan was to close down most of the island's small port facilities and consolidate and upgrade those that remained in use. The fishing communities rejected this proposal, refusing to abandon harbours that their families had fished from for generations (MacKinnon, 2005, pp. 117–118).

The Comprehensive Development Plan is primarily cited for its failure to meet its objective of enabling the province to be financially independent. Instead, it fostered an attitude of dependence on federal funds that persists today (MacDonald, 2000, p.347). Despite this, the Plan's attempt to dismantle traditional island life succeeded (albeit briefly) in forcing upon islanders the realization that there are aspects of island culture and livelihoods that hold a value that is deeper than monetary. Indeed, as Edward MacDonald says in his book *If You're Stronghearted: Prince Edward Island in the Twentieth Century*, many thoughtful islanders "started to realize that the family farm was more important as a social unit than as an economic one" (2000, p. 310). Remembering is the challenge. Remembering that there needs to be a development plan based upon a collective vision for the future of the island. It seems that too frequently today, the vital experiences of this time in PEI's history are forgotten.

One of the results of the Comprehensive Development Plan that is still very present in the minds of islanders is out-migration. This contributes to the general trend of an ageing population, frequently pointed to as a barrier to local economic development (and the survival of the island's farming and fishing communities). Between 2001 and

2006 the population between the ages of 0 and 14 dropped by 10%, while the number of those over 65 rose by 8.7% (Statistics Canada, 2006 b.). One of the goals of the Plan was to educate the children of farmers and fishers out of the primary sector and into the tertiary sector as a way of fuelling the new, modern economy. Pursuing further education has helped to diversify the island economy, but it has also led to many islanders leaving to pursue higher education off-island and not returning. Farming and fishing communities are disappearing for lack of younger generations interested and willing to take over the family farm or fishing business.

As of 2008, the economy of Prince Edward Island is dominated by farming, fishing and tourism, all of which are seasonal activities. The main crop produced is still potatoes, which are both consumed locally and exported internationally. In the past the island had a lucrative seed potato business, but today table stock and potatoes that are processed into french fries or dehydrated to make potato powder dominate the market (I. Novaczek, personal communication, March 10, 2008). Most of the farm income is generated during the late spring, summer and fall months as the winter months bring sub-zero temperatures and large amounts of snow. Fishing enables many rural coastal communities to remain economically viable, and this island is well known for its shellfishery (lobster, clams, oysters and scallops), and aquaculture (primarily mussels). Various pelagic and groundfish are also caught locally on a smaller scale. In the winter months when the bays freeze over, some fishers set up shacks on the frozen water and catch smelt through holes in the ice.

Prince Edward Island has a seasonal tourism industry that operates between the months of June and September. As income from farming and fishing drops, some of those

managing to continue their professions are finding creative ways of supplementing their income with tourism-related activities. Those who have not been able to create alternative income generators are increasingly selling off their land to developers who are building summer cottages and hotels.

Education and government provide the bulk of the remaining employment on the island. The provincial government is probably the largest single employer, as all the same services need to be provided as for a larger jurisdiction despite the significantly smaller population. Like all of Canada, PEI is officially bilingual French and English, but the majority (just under 94 percent) of the population claims English as their first language. Four percent identify French as their mother tongue, and about two percent speak non-official languages (Statistics Canada, 2006 c.). While the level of education on the island among younger generations is quite high, apparently 30% of adults in PEI have low literacy skills, in comparison to the national average of 25% (Jurisdiction Project, 2005-2007).

There are two tertiary education institutions on the island: the University of Prince Edward Island and Holland College. Prior to 1968 there had been two institutions of higher learning on the island, Roman Catholic St. Dunstan's University, and Prince of Wales College, which was legally non-sectarian, but regarded as a de facto Protestant school (MacDonald, 2000). In 1968, the provincial Premier, in keeping with the modernizing goals of the Comprehensive Development Plan, announced that the government intended to create a single public institution, the University of Prince Edward Island (UPEI), which would be the sole recipient of provincial government financial support from then on. The result of this announcement was that St. Dunstan's University

became the new campus for UPEI and Prince of Wales College became a much-needed technical school, Holland College (Macdonald, 2000, p. 292). Over time however, Holland College has shifted its course offerings, becoming increasingly mainstream. The result of this shift, in combination with the complete lack of support for agriculture or fisheries training in either institution, has left a gap in the education system that is evident in the increasingly disdainful attitude with which younger generations of islanders view the trades and primary industries.

One identity-building activity that islanders do still actively support is community service. As Barbara Groome Wynne (2008) highlights in *Pulling Strings: Policy Insights for Prince Edward Island from other Sub-National Island Jurisdictions*, the island has the greatest number of volunteer organizations per capita in Atlantic Canada (Imagine Canada, 2006, p. 6). Wynne goes on to point out that "according to the Canada Survey of Giving, compared to other provinces, PEI's participation rates in associations are among the highest in Canada...charitable donor rates are higher than the national average...and rates of volunteer service are also slightly above the national average" (Canada Survey of Giving, 2006, cited by Wynne, 2008, p. 86). These statistics are visible in the year-round efforts of community groups actively organizing fundraisers and educational, social, and environmental initiatives that help build a strong sense of community and camaraderie.

Religious Affiliations

Prior to the arrival of European settlers on Prince Edward Island, the spiritual life of islanders was directed by Native spiritual teachings. The settler communities from Europe brought Catholicism and Protestantism, which established strong cultural and

social division lines in the island's community that are still evident, albeit to a lesser degree, today. Most Prince Edward Islanders currently ascribe formally or informally to a diverse mixture of Christian denominations. As of the last available census results for religious affiliation in the province, 47% of the population identified themselves as Roman Catholic, and 43% as Protestant. There are a number of Protestant denominations on Prince Edward Island. The United Church (20%) is the largest of these, followed by Presbyterian, Anglican, and Baptist (Statistics Canada, 2001). Prince Edward Island also has a small Orthodox community primarily comprised of members of the eastern Orthodox immigrant community as well as a handful of other faith communities including the Pentecostals, Jehovah's Witnesses, Muslims, Jews, Hindus, and Bahá'ís. In 2001, 6.5% of the population identified themselves as having no religion (*ibid*, 2001).

Environmental Conditions

Like most places in the world today, environmental conditions on Prince Edward Island have been deteriorating quickly over the past fifty years. One advantage of being on a small island is that the interconnectedness of human activities detrimental to the environment is obvious. On Prince Edward Island the primary concerns have been the result of farming, fishing, and development (often connected to tourism) practices that have not been pursued with a holistic vision of what would be best suited to long-term prosperity of an island jurisdiction.

The negative impacts of globalized shipping on the aquaculture industry has come into focus on the south shore of PEI where invasive species proliferate on mussel shells and the gear used to grow and harvest them (Liao, 2008, p.137). Failing inshore fisheries

have triggered intense scientific and public debate (Northumberland Strait Working Group, March 2007). The high nutrient levels in coastal areas, connected to agricultural runoff and other waste from human settlements also promotes the growth of many nuisance species, including non-indigenous ones (*ibid.*, pp. 138–139). Massive algal blooms smother the bottoms of estuaries and use up oxygen needed by shellfish and fish.

The declining health of PEI's waterways and fisheries not only reflect the health of the marine environment, but are also indicative of the choices being made in farming and development. Much of the island's groundwater has been cited for contamination (Benson et al., 2006 & 2007, cited by Liao, p. 143, 2008) and over the past decade the number of fish kills resulting from chemical fertilizers and pesticides being washed directly into waterways has been increasingly making the headlines (Liao, 2008, p. 144). Erosion, the direct result of the increasing size of fields, the lack of hedgerows and winter groundcover, and poor soil tilth turns the island's creeks and rivers the colour of blood on windy or rainy days and has decreased the depth of the inlets and waterways that used to be deep enough to accommodate large sailing ships. Excessive sedimentation from soil erosion and coastal erosion is not only clouding the water but smothering productive bottom habitat and physically interferes with fishing traps and nets, especially along the south shore (GTA, 2006, Northumberland Strait Working Group, 2007).

Water contamination is a symptom of the challenges being faced by the island's farming community. The increasing price of fuel and farm machinery, and globalization and the resulting consumer ignorance about the true cost of the food we eat, is blatantly obvious in the loss of the family farm on PEI. In the past, PEI was known as a farming province, the landscape defined by a patchwork of small family farms scattered across the

island (Horne, 2007). As an increasing amount of food products from away have become available at significantly lower prices than local produce, island farmers have been placed in the situation of having to compete with multinational companies, whose prices externalize many of the costs associated with food production, in order to sell their produce to local supermarkets (R. Loo, personal communication, December 4, 2006; E. Dykerman, December 6, 2006). For small family farms where costs are internalized, being able to sell their goods at a price that is competitive in a market where the lowest bidder wins is economically impossible. Over time, decreasing profits and the increasing costs associated with running a farm lead family after family to admit the inevitable – in a society where consumers expect to pay less and less for more and more, the only farm able to survive is the large-scale enterprise, often owned by foreign investors.

Prince Edward Island's landscape is changing. More and more small farms are going up for sale and the plots being sub-divided for cottages. The farms that remain are getting bigger and bigger. There is more rural sprawl and fewer areas untouched by development. In fishing communities that are still making a living, fishing families have had to adapt to more sophisticated gear and greater pressures. These changes have implications that are wide-reaching because they are all interconnected. Communities have to drink the water and breathe the air contaminated by agricultural chemicals. Conflicts arise between fishers and cottage owners who consider aquaculture buoys an eyesore. Coastal water contamination from septic tanks that are not up to standard influences the inshore fishery. The changes also affect islanders in ways that are not as obvious. Island identity is intimately connected to the island landscape, and therefore changes to the landscape will undoubtedly be influencing the people who are being

shaped by it (Horne, 2007). As the literature that I have cited supports, a visually beautiful landscape can play an important role in the spiritual experience that islanders are able to have with their island.

Having lived on the island for three years now, I am still surprised at how little energy is devoted to addressing the root of the environmental problems that are the cause of so much dissention; that are bringing about the loss of farming and fishing cultures and the concurrent loss of rural communities; the erosion of cherished landscape values; and that negatively impact the health of so many islanders. One of the farmers that I spoke to mentioned that on the road where she grew up, which was dotted with one small family farm after another, every single family has lost someone in their family to cancer over the last thirty years. I doubt it is only me who finds this fact deeply troubling.

The Current State of Island Farming and Fishing

As I have already described, the predominant farming model on PEI remains large-scale monoculture. Very few small-scale farmers continue to operate, and those who do are primarily growing potatoes. Dairy farming continues to provide a good income for local farmers and as such is frequently cited as one of the last remaining economically viable farming activities on the island (J. Rodd, February 16, 2006). A small number of farmers have recognized the niche market that organic produce can and does occupy on the island, and have combined their desire to provide healthy food and simultaneously support a healthy environment with entrepreneurial creativity to create an income for themselves. As will be elaborated upon in my results section, these individuals grow a wide diversity of vegetables, herbs, leafy greens and fruit, and supply the local market,

selling through Community Supported Agriculture structures and farmers' markets, as well as supplying a limited number of local restaurants.

Fishing on Prince Edward Island varies dramatically between the north and the south shores. The north shore lobster fishery is still relatively stable, and producing good incomes for those who remain in the fishery. The south shore, on the other hand, has been experiencing "declines in commercial fisheries across the board (lobsters, herring and scallops most notably)" (Northumberland Strait Working Group, 2007, p. 8) for a number of years, partially due to problems related to overfishing and invasive species, and partially due to habitat loss related to fishing technologies and effluent from farm activities, factories and sewage. Sediment movement and coastal erosion (and possible linkages to the construction of the Confederation Bridge and climate change) have also been raised as possible influences (Working Group, 2007, p. 6). The number of fluctuating factors that could be contributing to the collapse of the south-shore fisheries are so numerous that it has been stated that "possibly the only physical parameter that does not appear to be demonstrating a dramatic shift over time in the Northumberland Strait is salinity" (Scarratt, 2005, cited by Working Group, 2007, p. 5). The challenges of continuing to fish under the ever-increasing stress of fish stock collapses makes the atmosphere in the south shore fishery extremely tense, and the future of the fishery bleak and unpredictable.

While there is a small group of farmers and fishers attempting to restore the health of the soil and water upon which they depend, very few of these have children who are either interested in, or being encouraged to follow in their parents' footsteps, and the costs associated with trying to establish a farm, or acquire fishing gear and the necessary

license, are prohibitive for those not raised in farming or fishing families. Farming and fishing both seem to be headed towards extinction, or at the very least very bleak futures on PEI, unless the predominant practices and policies governing the use of land and sea change dramatically in the very near future.

My Divided Homeland Cyprus

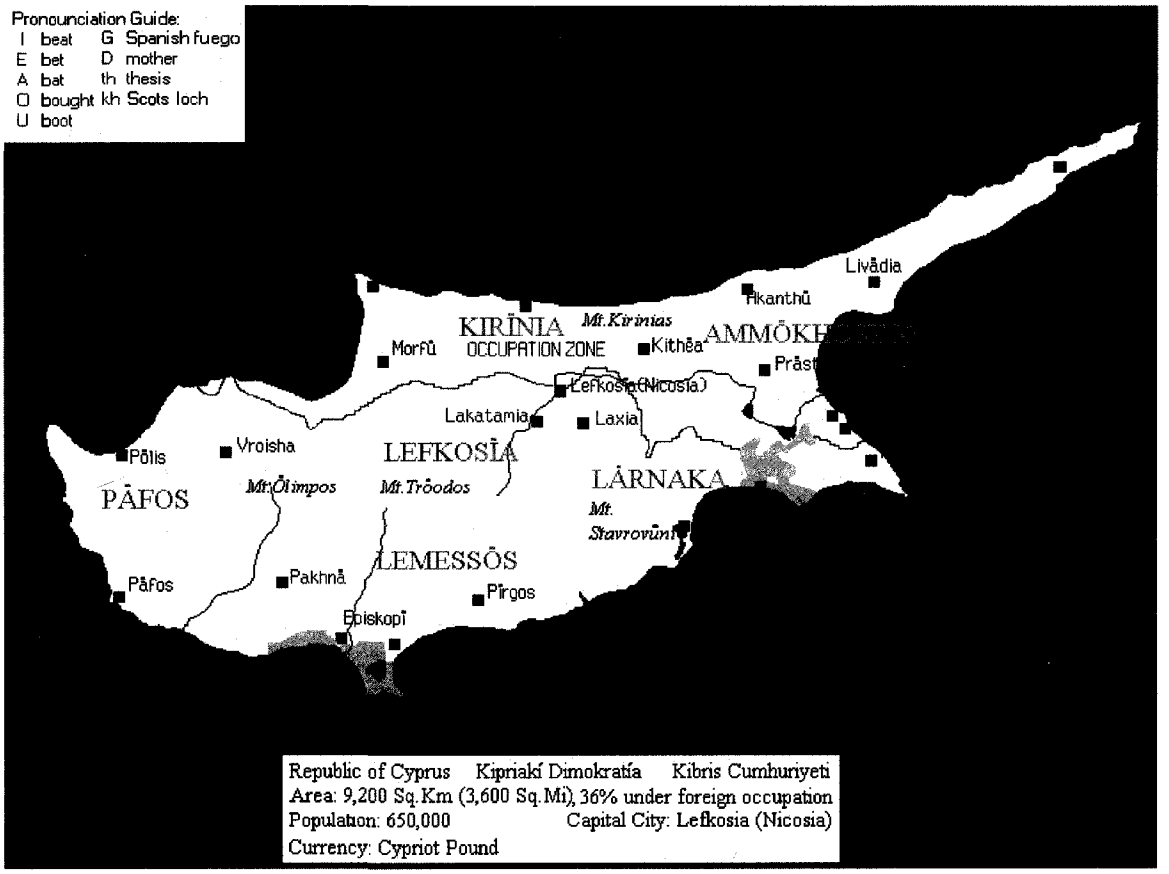
Geography and a Brief History of Cyprus

Cyprus' location, just south of Turkey in the eastern Mediterranean, has given it a split identity between Southern Europe and the Middle East. It is the third largest island in the Mediterranean, with an area of 9,250 sq km (almost twice the area of PEI), and a coastline that is 648km long. The climate is temperate, with very hot, dry summers and cool, wet winters. Cyprus' terrain is varied: the central plain of the Mesaoria is bordered on its northern and southern sides by mountains: the higher Troodos range, located in the south west of the island, and the smaller Kyrenia range, stretching along the northern coast. Hills slope from the mountains to the sea in most areas of the island, but along the southern coast there are plains that stretch to the coast. The lowest point of the island is at 0m, and the highest, Mount Olympus (in the Troodos range) is 1,952m. Figure 2 is a map of the island. The green line is the political border that currently divides the island into two.

Cyprus' history has been chaotic, passing from one conqueror to the next. It has been occupied by the Assyrians, Egyptians, Persians, the Ptolemies, Romans, Arabs, Lusignans, Venetians and the Ottoman Turks. In 1878 the Ottoman Turks ceded Cyprus

to Britain, and from 1914 until 1960 (when Cyprus declared its independence), the island was a British colony.

Figure 2: Map of Cyprus (Source: www.kypros.org)



The arrival of the British, and the establishment of a democracy in which government administrative positions were allocated to Greek-Cypriots and Turkish-Cypriots on a 70:30 ratio (proportionate to their percentage of the population) marked a huge exodus of Turkish Cypriots to Turkey, England and Australia. More migration occurred between 1950 and 1974 due to an increase in communal unrest. The political climate between the end of the 1950's and beginning of the 1960's and 1974 was increasingly turbulent. The Greek Cypriot community had wanted union with Greece

since before the island became a British colony, and the appointment of Archbishop Makarios III in 1950, and subsequent formation of EOKA (National Organization of Cypriot Fighters) led to a tense political climate which turned into an open campaign of violence against the British occupation in 1955. In 1958 intercommunal violence between the Greek and Turkish Cypriot communities escalated. Talks between the foreign ministers of Greece and Turkey that took place in 1959 yielded an agreement supporting the island's independence. In 1959 Makarios was elected president and the first general election for the House of Representatives took place on July 31, 1960. The constitution became effective August 16, 1960, making Cyprus a republic. Despite independence, the atmosphere on the island remained tense, and in 1963 violence once again erupted between the Greek and Turkish Cypriot communities, which eventually resulted in war.

In the summer of 1974 Turkey invaded Cyprus and occupied 37% of its territory. Today the island is divided into two, separated by a political border called the "Green Line". The south is the officially recognized Republic of Cyprus. The Turkish government has declared the north of the island an independent republic, the "Turkish Republic of Northern Cyprus"; however, its statehood has not been recognized by any nation other than Turkey. The capital of Cyprus, and the only non-coastal city, is Nicosia. Larnaca (the location of the main international airport) and Limassol (the main port city) are located along the southern coast. Paphos, the ancient capital of Cyprus, is on the southwestern coast. Famagusta, located on the southeastern coast, and Kyrenia, situated along the northern coast, are both located on the Turkish Cypriot side of the political border. The island has two British military bases, both in the Republic of Cyprus, one

along the southeastern section of the political border and the other on the southwestern coast of the island.

Although both sides depend upon water from shared aquifers, breathe the same air, and farm the same soils, the necessity for co-management of the island's resources has yet to be recognized. While refusing to recognize the north of Cyprus as a separate entity is a logical result of the anger and pain that were caused by the Turkish invasion, choosing to ignore the reality that the island is a single integrated system has had, and continues to have, severe ecological, socio-cultural/political and economic impacts.

The 1974 Turkish Invasion

In 1974 Turkey invaded Cyprus and occupied 37% of the island. Because the Turkish government has always maintained that its purpose in invading the island was to peacefully intervene in the interest of protecting the Turkish Cypriot community, there exists very little information on the losses suffered by the Turkish Cypriots as a result of the invasion. What have been focused on by the Turkish government are the losses suffered by the Turkish Cypriot community prior to the invasion as a result of inter-communal violence.

The truth is that both communities lost lives and forfeited land in the struggles that led up to the war, and as a result of the Turkish invasion. The result of the invasion was that a large percentage of both the Greek and Turkish Cypriot communities were rendered homeless, becoming refugees in their own country. Resettlement plans divided the island into two, the Greek Cypriots being sent to the south of the island and the Turkish Cypriots to the north. Although many of the refugees were originally from rural

areas, most of the post-war housing projects were located within five miles of town centres. This has since led to the increase in urbanization in all regions of the island.

The economic disruption caused by the fragmentation of the land was severe: most of the tourism industry development, an important contributor to the island's economy, was located in the north of the island; more than half of the mining and quarrying and manufacturing output came from the north; and almost fifty percent of agricultural exports were produced in the north. The agricultural industry had, prior to the invasion, represented seventy percent of commodity exports and employed one-third of the population. The soils and environmental conditions in various regions of the island were especially well suited to particular crops, meaning that the losses in certain products was much more devastating than it was for others. The north accounted for eighty percent of the citrus plantation and production, seventy-nine percent of all cereals, eighty-six percent of the carrots, twenty-five percent of the potatoes, all of the tobacco and two-thirds of the green fodder.

The social disruption was also devastating. Unemployment rates soared, exports crashed, and the tourism industry collapsed. The division of the island left the south with four hospitals and the north with two, and a large number of primary schools (which had largely been segregated by faith) had to be abandoned by both communities due to the geographic resettlement of the population. In addition, the main international airport in the capital, Nicosia, was closed to commercial traffic. In general, economic and social life were disrupted, and Cyprus was faced with the problem of mere survival.

Social, Cultural and Religious Background

In 1960, the last time that an official census was conducted for the whole island, 77% of the population was Greek Cypriot, 18% identified themselves as being Turkish Cypriot, and Armenians and "other" represented 4%. The last population census in the Republic of Cyprus was conducted in 2001. It identified 90.6% of the population as Cypriots, and 9.4% as non-Cypriots. The two single largest groups of foreign residents are Greek and British, composing 45% of the population. The remaining 55% come predominantly from Russia, Sri Lanka, India, Eastern Europe, and the Middle East (Republic of Cyprus Statistical Service, 2001).

Although the island had many bi-communal characteristics prior to 1974, the two communities always maintained their separate identities. Both communities have always been very conscious of their religious, cultural, and language differences (Thirgood, 1987). Turkish Cypriots have always considered themselves as members of the Turkish nation, living in Cyprus, and Greek Cypriots have always considered themselves mainland Greeks. This distinct separation is emphasized by the fact that outside of towns, of a total of 619 villages recorded in 1960, only 17% of them were ethnically mixed (*ibid.*, 1987). Urging by the British to establish a single education system for the two communities was rejected, and until the invasion, each community had its own schools, and often recruited teachers from the Greek and Turkish mainlands to instruct. This practice consolidated cultural differences, preventing the development of a common Cypriot identity. Despite their differences, both communities always had a strong attachment to their island, thus distinguishing themselves from foreigners, including mainland Greeks and Turks. Here the great irony of Cypriot self-identification becomes

obvious. On the one hand, the two communities are proud to identify themselves with their respective greater nations, but on the other had, both communities share the belief that they are socially more progressive and therefore quite distinct from the mainlanders (Doob, 1986).

The two main religions on the island are Greek Orthodox Christianity and Islam. The Turkish Cypriot community are primarily Islamic, and the Greek Cypriots Christian. Today there are also smaller Jewish, Protestant, Roman Catholic, Bahá'í, Maronite and Armenian Apostolic communities in Cyprus. Church attendance in the Greek Cypriot community is quite high and although for many young people their faith is a matter of tradition more than values, tradition is highly valued by everyone. Prior to division most social interactions at the community level were connected to either the Mosque or Church, especially for the women. The men socialized at ethnically segregated coffee houses, a tradition which continues today. The division between the communities even extended to a large degree into the work environment where certain professions were primarily done by one community and others by the other.

Cypriots are known for their strong and large families. Marriage is not simply an agreement between two individuals, it is the marriage of families. The tradition of dowry and arranged marriages, while disappearing in the larger cities, it still practiced in many of the smaller towns and villages. While many families have moved into the cities in search of higher paying jobs, they have retained property in their family villages, and return every weekend to work the land and enjoy the company of their extended family. Family owned businesses are common in the cities, and family members support each other emotionally as well as financially. As is the case on Prince Edward Island, what

family you are from is still more important than what town you are from, what qualifications you have, or what job you do. This is positive in the sense that it keeps everyone very connected to everyone else, which has kept beliefs strong, maintained traditions that might otherwise have been lost, and enabled Cyprus to remain relatively safe and crime-free for much longer than many countries in the world. The close-knit community has also meant that people act responsibly because they are related to everyone else in some way or another, and this keeps their behaviour in check. One detrimental effect of such a small community, is that favours are rampant, and a family name often replaces the need for qualifications, which has led to inefficiency and corruption within the civil service and political appointments. The patronage system present on Prince Edward Island reflects a similar placing of family name over ability in the workplace.

Education is very important in both the Greek and Turkish Cypriot communities. Although lack of education past elementary school is common in older generations, today education is considered by most Cypriots to be the single most important thing that you can give your children. The literacy rate in 2001 was 96.8% percent (Republic of Cyprus Statistical Service, 2001).

A principal challenge at the beginning of the 1990's was providing education more responsive to the needs of the economy. The first vocational-technical schools were established after independence from the British in an attempt to provide the rapidly expanding economy with technicians and skilled workers. Like Prince Edward Islanders, Cypriots have developed a tendency to choose academic rather than technical courses, for reasons of social prestige. Cyprus has thus been faced with a chronic shortage of skilled

workers and an increasingly high rate of unemployment for university graduates. Up until 1991, the government-controlled part of the island had no university of its own. The University of Cyprus opened in 1992, and many other private colleges have received government accreditation in the last few years, increasing the high rate of unemployment for university graduates educated both at home and abroad.

There are currently six universities in the north of Cyprus, bringing in about 25,000 students from over 35 different countries as well as educating a large proportion of the Turkish Cypriot community (O. Kamgoz, personal communication, 2000). The universities directly or indirectly supply an important income for the local population, and constitute an ever-growing section of the economy. Although more exaggerated than in the south, the main challenge being experienced in the north is also the limited availability of jobs. This is primarily the result of economic isolation due to lack of political recognition. The result is that like their Greek Cypriot counterparts, many seek out employment in other countries.

Politics and Economics of a New E.U. Member

The political division of the island (otherwise referred to as the 'Cyprus Problem') has been the primary focus of political parties and elected leaders in Cyprus since 1974. There have been many meetings, and much discussion aimed at finding a solution to the 'problem,' but most attempts end in stalemate. Intermittent provocation by both sides has caused inter-communal violence along the 'Green Line.'

The excessive amount of attention given to the division of the island has resulted in the neglect of many other critical issues. Accession to the European Union in 2004 has

meant that the island has had to start looking at its economic, social, and environmental issues, and start planning for a more sustainable future. Accession has also placed more focus on finding a solution to the political division of the island because according to European Union law, no member state can have a closed border which prevents people from moving freely. Just before the Republic of Cyprus joined the European Union a referendum was held to allow the population of the entire island to decide whether they wanted to enter the E.U. as a unified country. The result from the north was a resounding 'yes,' and that from the south a definitive 'no.' This vote was seen as a great disappointment by the Turkish Cypriot community, the international community, as well as many Greek Cypriots who were ready for a peaceful solution to the 'Cyprus Problem,' and meant that the island entered the European Union as a divided nation.

Joining the E.U. has meant compliance with E.U. directives, the first being that the government of the Republic of Cyprus had to open crossing points to the north. Doing this has enabled people to start establishing relationships across the border, but it has also meant that many living in the north have started crossing to the south to find work and go shopping – which further fuels the economy of the Republic of Cyprus – while an increasing number of Greek Cypriots and international tourists have started treating the north as a cheap holiday destination.

The economy of the Republic of Cyprus is fuelled by the service sector (tourism, transportation, banking, etc), industry (small scale manufacturing, cement making and mining), a growing off-shore sector (which offers tax incentives to potential investors), an increasing number of colleges and technical schools that attract students from all over the world, and a shrinking, but nevertheless vital farming industry. As on PEI, the

government also employs a large percentage of the population. Although Cypriots enjoy a high quality of life and have what looks like a thriving economy, many young people, unable to secure jobs at home, seek out employment abroad. The high level of emigration distorts unemployment rates, which are some of the lowest in the European Union. Like many island nations, Cyprus' diaspora is larger than its resident population.

The Economy of the north of Cyprus is stagnant and struggling. However, since the Republic of Cyprus joined the European Union, the situation has improved somewhat: the tourism industry has taken off, bringing in much-needed foreign exchange, and the service sector is now the largest contributor to economic growth. It is important to note however, that unlike the south—where Greek Cypriots own the majority of the tourism developments—many of the tourism developments in the north are being conducted by European firms. The development practices being utilized are environmentally destructive, and much of the income will be lining the pockets of European investors instead of being invested in improved local services and infrastructure. Another product of opening the border has been that many younger Turkish Cypriots, tired of being denied the opportunities for study and work that their Greek Cypriot counterparts enjoy, have been applying for (and obtaining) Republic of Cyprus passports, which effectively gives them all the rights of a European Union citizen.

While it is very possible that the Turkish Cypriot community will follow the development strategies employed by their Greek-Cypriot counterparts, they have a number of resources that the Greek Cypriot community did not have when they devised their post-war development strategies. The investment in local, regionally well-respected universities is one of these resources that will undoubtedly be key to stimulating the

revival of the community's economy over the next decade. Linkages to the outside, strengthened by European accession, could provide further support, if they are used to nurture and accentuate, rather than undermine, local capacity and resources.

There is still a reluctance to let go of the mentality that everything that is wrong is the fault of the Turkish invasion. European accession has provided Cypriots with a much-needed opportunity to confront the long-term planning that has been avoided for decades. While the deep feelings of loss are both valid and understandable, they promote a sense of being victims, and undermine individual and community responsibility for the present environmental, social, cultural, political, and economic conditions on the island.

Environmental Conditions and Attitudes

There are many environmental concerns in Cyprus, but three are more immediately pressing. These are a severe lack of water, inappropriate and excessive development, and dependence upon external sources of energy. Up until the late 1990s, the main sources of water on the island were ground water and surface water. Ground water was reliable and clean but more importantly, it was cheap in comparison to other water sources. The result is that today, all of the aquifers in Cyprus are exploited beyond their safe yield. The island's second main source of water has been surface waters. Depletion of the aquifers resulted in policies that, since the 1960s, have highlighted the necessity of tapping surface water that had, in the past, been "lost" to the sea (Thirgood, 1987). The construction of numerous reservoirs has supplied much-needed water, but as a result many streams and creeks have dried up. These streams traditionally carried nutrients and minerals key to the healthy growth of sea grasses that provide food and habitat for fish,

waterfowl and other fauna. The reservoirs also lose excessively large amounts of water through evaporation. According to the International Commission of Large Dams, Cyprus has the highest number of large dams per square kilometre in Europe. The yield of these dams has dropped in recent years because Cyprus has been experiencing a severe drought. Since the year 2000, a number of desalination plants have been constructed to make up the difference between water demand and availability. Unfortunately these are fuelled with oil imported from the Middle East, so the island is currently burning oil to make water—a highly unsustainable practice.

With sun throughout the year, Cyprus is a prime location for the development of solar power. Almost every house has solar panels on the roof, but the sole purpose of these is for heating water. The island's main source of energy is oil, a non-renewable resource that is not available locally.

As on Prince Edward Island, land-use planning is an issue that has still not been seriously addressed in Cyprus. After the war, the needs for economic development and the construction of housing were so great, and the amount of energy required to resuscitate the country so overwhelming, that development was ad-hoc and uncontrolled. This has led to massive sprawl in all of the island's urban centres; hotel and apartment construction along many of the island's coastal areas; and the loss of some of the most fertile and environmentally sensitive areas to tourism development. The government now has a land use and planning department, but corruption generally overrides zoning regulations and it takes so long to get an official building permit that many simply build without them.

Overcoming the environmental challenges being faced today is going to require a much more creative approach than is presently being used. Investing in alternative sources of energy would be the easiest and most obvious place to start. Land planning schemes could be implemented but it will require a degree of enforcement that will undoubtedly conflict with the accepted cultural practice of doing favours for family and friends. The lack of water is the result of unsustainable water use domestically, in the service industry and in agriculture, in combination with the forces of global climate change. Cyprus has a well-respected forestry department that has done remarkable work at rehabilitating the island's forested areas, which had been almost entirely devastated when the British arrived in 1878 (Thirgood, 1987). Their efforts have significantly improved watershed health; however, this can only do so much to increase precipitation and increase groundwater retention rates.

Cyprus has gone from being considered a developing country in the 1950s to having an economy that is on a par with some of the most developed nations in the world. This rapid development has meant that localities that were small towns twenty years ago are now enormous cities and vast areas of undeveloped natural areas have entirely disappeared. The movement away from farming and fishing towards a service economy and the lack of opportunity available to children and youth for meaningful interactions with their natural environment has meant that most people have little to no regular contact with the land or sea. The absence of personal connection translates into an inability to value or understand the need to preserve it. Younger generations of Cypriots have not been raised with any notion of limits. They expect to live the same quality of life that they see other developed countries living without stopping to contemplate what

attaining such a standard involves on the limited resource base of a small island. The changes that need to be made seem impossible without a shift in perception and cultural understanding at the most basic level. Perhaps incorporating island environmental education into the school curriculum would be a start, but it would very likely be many years before education alone could change the every day behaviours and choices of islanders.

Farming and Fishing Today

Farming in Cyprus is still characterized by small family plots that have been passed down from generation to generation. Unlike many places where conditions are favourable to farming, Cyprus has yet to see the take over of land by large corporate entities such as is evident on PEI. The people farming own the land they farm; they plant, irrigate, apply fertilizers and pesticides, harvest, burn and plough their fields themselves. Farming has always been a family activity and it is predominantly this, rather than any influx of new farmers, that has sustained the farming community over the last fifty years. Today it is the grandparents and some of the parents that maintain the fields. Most of the younger, tertiary educated generation has come to view trades involving physical labour such as farming and fishing as being distastefully below them. Over a period of three generations, Cypriots have gone from being full time farmers to farming in the hours after work to supplement their incomes, to a generation of city-dwellers who have almost no connection to the land at all.

The plots of land that are used for cultivation in Cyprus are not adjoining the family home. Most of them are within walking distance of the farmer's home, but to

reach some requires a donkey or pickup truck. It is primarily the grandparents that still reside in the rural family village home and maintain the fields. Their children come up a few times a week when they have time, and their grandchildren come on weekends. As the older generations pass away, many family plots are being let go simply because they are not profitable to maintain and no one in the family has the time (or often the interest) to do the necessary labour.

Those who continue to farm generally produce only enough to supply their own family with fresh fruit and vegetables; others have fields large enough that their production can be sold to supermarkets, wineries, olive oil producers or large fruit and juice companies. A number of elderly farmers still sell in the weekly farmers' markets, but it remains to be seen what will become of this practice when this generation is no longer around. Cyprus' production has never (since the government started collecting statistics) been sufficient to meet demand. The island has a growing resident population of 788,457 (in 2007), plus tourist arrivals, which increased from 353,375 in 1980 (Republic of Cyprus, Statistical Service, 2003) to 2,416,100 in 2007 (Republic of Cyprus Statistical Service, 2008). This is an increase of 684% in a period of 27 years. Feeding such large numbers on an island where the amount of land under cultivation drops annually has necessitated importing food. What is ironic is that the island exports many of the same products that they import, resulting in a great deal of inefficient energy use. In the past, the government subsidised local agricultural products; however, joining the European Union has necessitated the removal of any trade policies that give advantage to local farmers. More produce is now being imported from Europe and the Americas at a

lower price, which makes sustaining small-scale production (the majority of the farming done in Cyprus) economically unviable.

Organic farming has been emerging slowly over the last twenty years as an alternative to conventional farming methods, and this appears to be the only small-scale farming that is actually experiencing growth in the highly competitive market. Although consumer understanding and appreciation for organics is far behind that of other countries, the number of people willing to pay more for healthier food is growing steadily enough for the small number of farmers pursuing this avenue to continue marketing their goods and increasing their production. Currently olives, rather than any other fruit or vegetable, is the primary crop being cultivated, as the market for organic olive oil in Europe is a niche in which Cypriots are able to compete with larger countries.

A growing number of organic and conventional farmers are starting to recognize that future profits in farming are going to be dependent upon the cultivation of specialty items that are unique to Cyprus and as water efficient as possible. The drought conditions on the island are so severe at this point that many reservoirs are practically empty. Carob, olives and pomegranates are three such products which are gaining popularity. While in the past market prices for these crops have been relatively low in comparison to irrigated crops, their value is steadily rising, as is an awareness of their many uses. Crops such as these are already providing invaluable alternatives for sustainable agriculture.

The fishery in Cyprus comprises marine capture fisheries and aquaculture. The recreation fishery and processing and marketing are of minor importance. The marine capture sector consists of the inshore fishery, the trawl fishery, and the multipurpose fishery. The island also has one purse seiner operating in its waters (Food and Agriculture

Organization of the United Nations (FAO, n.d.). The inshore fishing gear is predominantly bottom nets, longlines, and fish traps. In 2003, there were 677 full time fishermen working 500 licensed boats on the island. The trawl fishery employs 144 fishermen on 22 vessels, only eight of which operate within the island's jurisdictional waters. The multipurpose fishery operates in Cypriot waters and in international waters in the eastern Mediterranean. In 2003, 105 fishermen and 38 boats were engaged in multipurpose fishing (*ibid.*, n.d.). The main catch are demersals, (fished primarily by the inshore and trawl fishery), and large pelagic species (targeted by the multipurpose fishery). Small pelagic species are also caught on a smaller scale. Cyprus also has a growing aquaculture sector which is primarily marine-based, utilising open sea cages. There are currently four land-based, private marine hatcheries and one shrimp hatchery, and six private offshore cage farms in operation. A farm used for the fattening of bluefin tuna opened in 2004 (*ibid.*, n.d.).

Fish landings dropped significantly in 1974, but management measures taken by the Department of Fisheries after the war, in 1981, and again in 1991 improved production significantly. Despite these efforts, there has been a steady decline in landings since 1994 (FAO, n.d.). Although the statistics show the number of full time fishermen as being 1,126 in 2003, in reality many of these fishermen have other jobs on the side to supplement their income. I say fishermen because I have yet to come across any women who actually fish on the island. Government subsidies for fuel have been dropped since joining the European Union, as has support for purchase and repairs of nets and boats. Although there are fisheries policies in place intended to enhance the economic contribution of the sector to the economy, safeguard income levels of fishers, and

encourage the rational and sustainable management of marine resources (*ibid.*, n.d.), the control measures in place are obviously not proving effective in maintaining fish stocks.

FIELD RESEARCH METHODOLOGY

I have chosen the islands of PEI and Cyprus as my case studies for a number of reasons. The first is that I have a personal connection to both islands, and a deep concern for the direction in which development is headed on them. The second reason that I chose these two islands as my research locations is because they are so very different from each other, and therefore highlight a diverse set of issues that could arise for farmers and fishers on islands. In addition to the cultural, geographic and political differences between these two islands, the forces of the global market are much more evident on PEI, in the extent to which corporate entities have taken over the agricultural sector. The third reason that I chose these two islands is that although there are differences, there are also many commonalities in the experiences of the farming and fishing communities on both of these islands as they confront the realities and challenges of continuing to farm and fish. I believe that the experiences of each island's farmers and fishers will be enlightening as well as encouraging for both islands in my study as well as for other islands where sustainable agricultural and fisheries movements are being established. I also believe that island government policy makers could find the results of this thesis useful for the development of a practical and effective policy framework—one that encourages the establishment of sustainable agriculture and fisheries by conscious attention to the factors that support and motivate individuals' efforts to effect positive change.

Phenomenological Ethnology and The Narrative Research Method

Placing my research within a theoretical framework has been a challenge. I wanted a structure that allowed me to stand within the communities that I am describing; that fit into my research like lining into a well-fit piece of clothing. One of my advisors, Dr. Pamela Courtenay-Hall, had recommended that I look at phenomenology as a framework for my study at the beginning of my research process, however at the time I had not been able to understand it well enough to incorporate it in this way. It was not until I was done writing my paper that I decided to take another look phenomenology, at the encouragement of one of my examiners, Dr. Pete Hay, who reiterated what my advisor had said over a year earlier—that using it as my theoretical approach would deepen the contextual experience of my work. Having a year's worth of experiences and understanding behind me, I would now have to agree with them both. It might seem odd to build the framework from within the paper, but I believe that in reality it was always there. Looking at my research through the phenomenological lens lets the reader better understand where I stand within my research, and helps to contextualize the way in which I approached the stories of the farmers and fishers of PEI and Cyprus.

The aim of phenomenology is to bring to evident consciousness the essence of what is being experienced (Farber, 1966, p. 44). It is a research method that advocates direct observation, or experiential engagement with whatever is being studied (Farber, 1966, p. 48). Phenomenological research observes its subject by simplifying it to its essential being, examining the consciousness that the researcher has of it, and searching for a solution or explanation within this essence rather than trying to extract an

explanation from it (Lauer, 1965). Heidegger (cited in Vycinas, 1961, p. 226) identifies 'essence' as a verb, "which expresses the mode of being by which whatever-is reflects the world, the whole, in which it becomes what it is. Essence necessarily indicates world—that which makes it possible for whatever is to be what it is." Instead of imposing a framework upon perception, phenomenology takes a respectful stand towards reality, allowing it to appear in its own way, undistorted by 'approaches' (Vycinas, 1961, p. 29).

The phenomenological researcher attempts to enter the places that he/she is experiencing in order to better understand them from within. Approaching the subject in this way encourages "empathetic looking and seeing", and "accurate qualitative descriptions" (Hay, 2002, p. 144). Because of the importance placed on experiential insideness, phenomenology "seeks to maintain the ties of meaning between the researcher and the phenomenon" (Seamon, 1982, p. 122, cited by Hay, 2002, p. 144). The personal idiosyncrasies of the researcher constitute 'an asset rather than a liability' because each individual's sensitivities to the phenomenon are unique, thus enrich understanding in a new way (Seamon, 1982, p. 122, cited by Hay, 2002, p.144).

The phenomenological approach provides a theoretical approach to my subject that helps to smooth the rough edges between me, and those that I interviewed. It is also well suited to the telling of personal stories about relationship with place, the heart of my research. I have always loved stories—writing them, listening to them, and telling them. Stories play an essential role in the creation of a sense of place. Although it is often something that islanders are unconscious of, and therefore do not always articulate, their sense of place is fundamental to how they relate to their natural and social environment. I realised early on that I could not write this thesis without telling a story, because it is not

possible to fully understand the islands I am writing about without acquiring a sense of place. What has drawn me to my subject are the stories of the land and the peoples' relationships to it and to one other. And although I have gained a great deal from existing literature, the bulk of this thesis is based on hours and hours of listening to islanders tell me about their relationships to their islands. While the idea to research the topic of spiritual values and farming and fishing practices is mine, I have attempted to preserve to the best of my ability the island voices that have given my research substance.

Within the larger context of phenomenological ethnology, I have chosen the narrative research method as a communicative framework through which to share the stories of island farmers and fishers. I chose this method because it situates the reader within the story. As Jean Clandinin and Michael Connelly explain,

> Narrative inquiry is a way of understanding experience. It is a collaboration between researcher and participants, over time, in a place or series of places, and in social interaction with milieus. An inquirer enters this matrix in the midst and progresses in this same spirit, concluding the inquiry still in the midst of living and telling, reliving and retelling, the stories of the experiences that make up people's lives, both individual and social. Simply stated...narrative inquiry is stories lived and told (2000, p. 20).

The narrative research method gives me a framework within which I can weave a tapestry of stories where many colours come together to create a coherent whole. It gives a certain degree of structure, but leaves space for creative expression. It also allows the reader to take wisdom from these stories and apply it to their own particular context and situation: "A narrative inquirer does not prescribe general applications and uses but creates text that, when well done, offers readers a place to imagine their own uses and applications" (*ibid.*, p. 42). It is my hope that the narrative method will complement the

larger phenomenological perspective within which I have placed it, allow the reader to gain further insight into my subject, and facilitate a deeper understanding of the importance of spirituality, place and community in shaping people, their beliefs and behaviours.

Learning to Trust Shifts in Direction

My interest in farming and fishing was spurred by my concern for the rapidly deteriorating health of the natural environment on both Prince Edward Island and Cyprus. I was concerned for a number of reasons: because the health and prosperity of these islands depend upon the availability of nutritious food and clean water; because the economies of both of these places depends on income from tourists willing to travel the extra distance to experience uniquely powerful island landscapes; because the rich culture present on both islands is founded upon a tradition of small-scale, family-run farming and fishing; and because I believe that the visual and written forms of art inspired by the island environment are essential to maintaining the rich cultural heritage in both places.

While there are many aspects of environmental degradation that I could have chosen to focus on, what interested me the most was the impacts of farming and fishing on the island environment. These two traditional professions were practiced sustainably for generations, and brought humans into direct contact with their environment on a daily basis. As already mentioned, policy shifts aimed at maintaining a footing in the competitive global economy have put a great deal of strain upon islanders dependent upon these livelihoods, any many have had to switch professions, often physically leaving their land and boats and migrating into urban centres to support their families. As

Gary Clausheide and Pamela Courtenay-Hall explain: "our economic system moves relentlessly in the direction of centralization, the process of ever-larger enterprises replacing smaller enterprises. It is a process of big fish eating smaller fish, and in turn being eaten by still bigger fish" (2008, p. 2).

When I first started my research, my main interest was the role that public policy was playing, or could play in preserving island landscape and sustaining traditional food production methods, livelihoods, and hence local culture. Interestingly, the first farmers that I interviewed were organic farmers. I was attracted to them because they were doing things differently, and they seemed to be some of the only farmers that were managing to maintain the traditionally small-scale, family-run farm in an economically viable manner. I initially thought that policy was encouraging them to pursue their goals of maintaining the family farm. The more I read however, the more evident it became to me that their choices and behaviour, although significantly influenced by government policies and incentive programmes, could not be explained or understood solely by researching local agricultural policies. A number of my interviews show that in many cases, the farmers and fishers that were still managing to make a good living pursuing their traditional professions were those who were doing exactly the opposite of what current policy was encouraging them to do.

The more interviews I conducted, the more I realized that what I was most interested in was why certain farmers and fishers were doing things differently than their neighbours who were having to abandon their professions and sell their land/fishing rights. After one particular interview with a farmer, I had the feeling that his choices seemed much more directed by some internal value system than by external policy. I

asked him about whether he felt that there was a connection between his spiritual values and his farming practices. His response, described in detail in my results section, reveals the key role that his values play in his farming choices.

The possibility that values and spiritual reality were influencing the farming and fishing communities was at first hard to digest. It seemed difficult to quantify, and even harder to analyze. The more I talked to farmers and fishers however, the more evident it became that values were at the heart of their lives and their work, and that even if I had no across-the-board conclusion at the end of this process, beginning to unravel the complex role that spiritual values play in choice-making around how to farm and fish would be an important contribution to this field of research.

During the initial phase of my research, when I was still focused on the effect of policy on behaviour, I applied for a United Nations grant to research the role that European Union farming policy was having on the development of organic farming in Cyprus. The processing of this proposal took much longer than expected, and as time passed I became increasingly interested in values and started moving away from policy-related questions. Just after I had decided to shift the focus of my research on to spiritual values, I received notice that I had been given the grant to spend five months interviewing organic farmers in Cyprus and writing an educational booklet to distribute to government and the public, documenting the results of the study. I decided to accept the grant and integrate questions about spirituality into my interviews. As I had to interview a total of thirteen organic farmers for the study, I ended up with more interviews with organic farmers than I have with either conventional farmers or with fishers. While it might seem lopsided in terms of data collection, many of those currently farming

organically were once conventional farmers, so they were able to shed light on both forms of farming as well as on the process of making the transition from one to the other. All of this is helpful in understanding how values are formed, and how they develop and change with experience.

It has been a struggle to gracefully accept the sudden changes in direction that my thesis has taken, but adjusting to new information and directions has taught me to be flexible and trusting of the learning process. Many of the bends in the road did not make much sense at the time, but looking back, I can now see that every seemingly illogical twist and turn has highlighted an aspect of this inquiry that has helped me bring all the pieces together to form a more coherent and holistic picture.

Representing Diversity: Locating Participants in PEI and Cyprus

The method used to identify participants for this study was purposeful. In both PEI and Cyprus I approached people with local knowledge and contacts in order to create an initial list of potential participants. Where necessary, this list was augmented using the snowball method within communities. As I did not personally know any farmers or fishers on PEI well enough, I asked my two advisors, Dr. Pamela Courtenay-Hall, and Dr. Irene Novaczek for the names of individuals that they would recommend speaking with in the farming and fishing communities, respectively. The method used by Dr. Pamela Courtenay-Hall to generate the list of farmers was described (by her) as 'indirect selective sampling.' The individuals that Dr. Pamela Courtenay-Hall recommended I speak to were mainstream and organic farmers that she had met and slowly developed relationships with over time for the purposes of getting to know likely candidates for an

action research project that she was working on at the time called 'Sustainable Rural Communities in Global and Historical Perspectives.' The criteria that she used for identifying both organic and mainstream farmers were some degree of success in farming (biological or monetary); interest in education and community outreach; interest in the social, economic, political and cultural issues of agriculture; and the ability to communicate these interests to others, especially to students both in the field and in the classroom. All of the farmers are people with whom Dr. Pamela Courtenay-Hall has ongoing relationships.

The fishers that I interviewed were people whose names had been given to me by Dr. Irene Novaczek. She identified these individuals as fishers whose practices reflected an awareness of, and concern for, the overall health of the fishery; were extremely articulate; and whose experiences represented the very different conditions in the north and south shore fisheries. She also identified these fishers as people who could connect me to more 'traditional' fishers from both shores.

As is evident from the selection criteria, the farming and fishing practices of the individuals from PEI whose names were given to me could be described as exemplary. It was not my intention to interview only those individuals whose names were provided to me by my advisors. My plan had been to interview an equal number of individuals engaged in mainstream farming practices, and more traditional fishing methods. The reasons that I did not end up doing this, and the implications of having interviewed mostly participants whose ideas and practices are less traditional will be discussed further in my 'Discussion.'

Although the overarching method for selecting all of the participants in Cyprus was the same, the manner in which I went about this process differed slightly from community to community. Shortly after my arrival on the island I made a formal request to the Department of Agriculture in the Greek Cypriot community for a list of those farmers in the south of the island that had been certified as organic farmers. I then met with the manager of the only certifying body in southern Cyprus, and he identified a few individuals who had been farming for long enough that they could reflect on years of experience and challenges. The first people that I interviewed were some of these farmers. I asked these farmers, in turn, to identify other farmers who they thought would represent a diversity of experiences and approaches. Although all of the farmers identified in this way grew organically, a number of them also had conventional fields. The farmers that I interviewed who farmed solely in a conventional manner were all individuals that I have known for many years. I chose them because I knew that they represented a more 'traditional' perspective to farming. The farmers that I interviewed in the Turkish Cypriot community were all introduced to me by one of the participants in my study, Serhat Usanmaz, an agricultural researcher whose job involved going out to the fields of recently certified organic growers to give them technical assistance.

All of the fishers that I interviewed were Greek Cypriot. The reason for this was that I had greater access to the Greek Cypriot fishing community, and could more easily communicate with them (without the need for a translator). In order to identify fishers that were willing to be interviewed, I visited one of the active fishing harbours, explained the details of my study to the fishers, and asked whether any of them would be willing to

participate. Three fishers volunteered, and were given information letters further detailing my research, as well as consent forms (which had been translated into Greek).

I had a number of criteria that I was looking for in participants. I wanted participants who represented a diversity of experiences and value systems present on Prince Edward Island and Cyprus. I wanted to hear from women as well as men, and I attempted to select individuals of a variety of ages, with diverse socio-economic backgrounds, and with varying levels of formal education. I interviewed farmers and fishers whose families had been in these professions for generations, as well as first generation farmers and fishers. I also interviewed some farmers who also fished, as well as fishers who farmed. Among the farmers interviewed, some grew conventionally in the past and now grow organically; some still grow conventionally; and some currently grow both organically and conventionally. Participants with very different religious and spiritual convictions were interviewed—some of them were recommended to me due to their strong belief systems, but most participants' spiritual values were not known to me when I asked them to take part in this study. Many of the participants from Cyprus were farmers and fishers who were identified by others in the farming or fishing community, as well as by members of the general public, as people who would have important knowledge. As mentioned above, a few of the participants were people I have known and farmed with since childhood, whose contributions would not have been possible had it not been for our life-long relationship of trust and mutual understanding.

The stories and conclusions that I have drawn from my interviews cannot be seen as being broadly representative of the larger population, but they do convey a number of diverse experiences within the farming and fishing communities on Prince Edward Island

and Cyprus. I believe that despite the necessarily small scope and qualitative nature of this study, and the differences in experiences on the two islands, there is nevertheless a common thread that emerges out of these stories which invites further study.

The Interview Process: Exploring Creative/Interactive Dialogue

All of the participants were initially sent or hand-delivered an introductory letter that provided general background information about my project, explaining what the interview would involve, and how the information collected during the interview would be used. The letters were followed up with a phone call to set up a time that would be convenient to meet for an interview. Once an interview had been set up I sent (or delivered) each participant a copy of my consent form which they were asked to complete prior to the interview. I brought a blank copy of the consent form with me to each meeting, as even those who had looked it over often had not found the time to complete it before the interview. The interview did not begin until the consent form had been completed and signed by the participants. For the respondents in Cyprus, the consent form was translated into Greek and Turkish.

All of the interviews that I conducted were recorded on audiotapes. I had initially considered creating a documentary from some of the stories of farmers and fishers on both islands, so I also filmed the first three interviews on PEI. I ended up deciding against pursuing this idea primarily because of the complexity of trying to take a video camera to Cyprus (or rent one once I was there), and the challenges that I would have had to confront in trying to create a documentary that used both European and North American video clips, which raised system compatibility issues. As I learned more about the

interview process, I began recording my interviews directly onto my computer (in addition to the audiotapes) so that I would have a backup in case of mechanical failures.

I have always been someone who has had to learn from her own experiences rather than taking the advice or following guidance given to me by others. My experiences with the interview process are an indication of this. Despite having been told by my advisor that a few simple questions would elicit a flood of reflections from participants, when I began interviewing farmers and fishers, I decided that the best way to approach the interview was to have a list of pre-determined questions on a sheet of paper that I asked every participant in a set order. I felt that this would ensure that I got a degree of consistency in my responses. I conducted the first interview in this manner, but the farmer being interviewed seemed uncomfortable, and his responses were brief and did not really get to the heart of the questions being posed. In the next interview, therefore, I tried to follow my list more loosely, allowing the interview to go where it seemed it needed to and only directing it at points where we seemed to be headed off in a completely unrelated direction. This seemed to go slightly better, but I still felt that the farmer being interviewed felt uncomfortable with the flow and structure of the interview.

As a result of my experiences from my first two interviews, I decided to change how I was approaching the interview process. This meant that I adopted more of a posture of learning, my interviews became more explorative and flexible, and I learned to listen without interrupting the participant mid-flow just because I felt they were not answering my question. I still had a set of general themes that I made sure were touched upon, but I allowed the farmer/fisher to tell me his/her story in a way that felt natural and comfortable to them. Doing this sometimes meant that the interview was shorter than I

had imagined it would be, and at other times it lasted much longer. Often, participants would call and ask me to return because there was something they had forgotten to tell me that they felt was important.

Opening myself to a more creative dialogue with participants helped me to see that what at the time seemed to me to be irrelevant to my thesis was often, upon reflection, extremely pertinent. I realized that the most important element in a successful interview is establishing trust with the participants. This involved taking the time to establish and develop relationships rooted in mutual understanding and respect. Most participants were visited more than once. I often helped farmers pick fruit or vegetables, hoe, and lay irrigation pipe. A number of my interviews with fishermen involved helping to untangle nets and sort hooks while we talked. I also spent many valuable hours walking through agricultural fields learning about what was being grown; how long the land had been used; the types of soils present; the abundance or lack of irrigation water; the availability of alternative pesticides; the presence of pests and how they were being controlled; nitrogen fixation; compost; hedgerows; the presence or lack of birds nesting on people's farms; lack of public support for local produce; lack of markets; transportation problems.

I was given tours of fishing boats and the docks where fish is sorted; introduced to the men who buy the fish from the fishers; and taken out to experience a smelt-shack. My relationships with all of the participants continued far beyond the interview – many would call me for information or the telephone number of government officials who might be able to help them with problems they were experiencing; some asked for help locating markets. I was invited to workshops organized by local unions, and invited into

people's homes for meals. Participants often loaded me up with fresh produce and fish before I left the interview. Taking the time to establish a relationship of trust and friendship created an atmosphere in which people could share the stories that are the roots of this thesis knowing that I would represent their lives and experiences with honesty and dignity.

Allowing the interview process to develop and become an opportunity for creative dialogue has taught me a great deal about humility, learning to listen, and really taking the time to get to know people and establish life-long relationships. Interviewing the farmers and fishers for this project has transformed my understanding of island culture and food production, and was the phase of my research that I found the most stimulating, joyful and fulfilling.

Anonymity and Confidentiality

I felt that being able to connect the names and faces of the farmers and fishers that I interviewed to their stories was vital to successfully communicating the connections between spiritual values and sense of place, and farming and fishing practices. Both the introductory letter that was sent to participants and the consent form clearly explained that their identity was integral to their story, and that agreeing to participate in this study meant being willing to have their names appear in my thesis. I feel that what makes the stories shared in this paper most tangible is that they are real stories, shared by people who one might meet at the local farmers' market on Prince Edward Island, or at an organic store in Cyprus. Their names place them within their communities and connect

them to generations of farmers and fishers who have worked the very same earth that they are cultivating today; the very same waters that they fish.

Most participants also agreed to having their photographs taken and reprinted in this paper. In the end, I decided not to use the photographs primarily because I did not want to exclude the faces of some farmers and fishers and include others. I have instead tried to paint my own pictures through the writing process.

Transcription and Translation

The process of transcribing, and in many cases, translating the interviews was a lengthy and challenging one. In total I conducted 24 interviews. Fourteen of these were conducted in Greek, and two in Turkish (with simultaneous translation into English). The interviews conducted in Greek were translated and transcribed simultaneously. Although I was advised to extract only the most pertinent information, I decided to transcribe each interview word-for-word from beginning to end. There were two reasons for this. The first was that I realized that much of the information that was not pertinent to my work might very well be useful to other researchers in the future. While I could have simply put the audio versions of the interviews conducted in English in the library, noting the topics touched upon that I had not transcribed, doing so for the Greek interviews would have made them inaccessible to the majority of researchers at the University of Prince Edward Island. In order to be consistent I therefore decided to transcribe all of every interview so that the collection could be placed in UPEI's library as a resource for other researchers.

The second reason for transcribing every word is that, as mentioned above, I am not always aware of what is pertinent and what is not. Often a piece of information that seemed unrelated early on became significant in understanding the larger picture, when seen in the context of the stories of all of the participants.

An unintended, but nevertheless very evident result is that some of the interviews conducted in Cyprus are, in places, rather disjointed. The reason for this is that a number of participants chose to begin in English, and then switched into their native tongue for ease of expression. Others jumped back and forth between English and Greek, or Turkish and Greek. In transcribing these interviews, I chose to preserve their manner of speech as precisely as possible, even when this meant that the language was not as fluent as it could have been had I attempted to adjust words and sentence structure.

Analysing Interviews

Flexibility and creativity in my interview process made the interviews richer and more well-rounded; however, the result of having less structure was 24 interviews that were very different from each other, reflecting the diversity of the storytellers. Every interview touches on many of the same topics, but some begin by describing the family's history on the land, while others start with statistics of fish catch. Some participants consolidated their thoughts on spirituality into a certain section of the interview while others mentioned it throughout the interview within the context of discussing family, farming methods, or their love of the sea. Extracting the relevant information from each interview for the purpose of comparing participants' responses has therefore been challenging and time-consuming.

In order to simplify the analysis process as much as possible I gave each interview a code that identified the geographic location of the interview (Prince Edward Island, Cyprus, or Northern Cyprus); whether the person/people being interviewed were farmers or fishers; in the case of farmers, whether they farmed organically or conventionally, and the sex of the individual(s). I then identified the main over-arching themes that I needed to explore in order to develop my thesis. I identified five main subjects: Background information on farming and fishing in PEI and Cyprus; Demographic information; Spirituality; Motivations; and Impact of Belief on Behaviour. I then went through each interview and put all content related to each of these five topics into separate files. Once I had done this, I created two sub-categories, one outlining what seemed to be the main issues touched upon by the participants, and the other breaking these main issues down to the actual elements that characterize them. Table 1 is a breakdown of the main subject areas and the first tier of sub-categories. The second tier is presented in my results.

Although the sub-categories of all five subjects are complex, the themes explored under the subject of Spirituality most warrant further explanation. The spiritual values of farmers and fishers are multi-faceted; in truth, I do not know—I will never know— what all these facets are. They are deeply personal and in many ways intangible. Related to all of these is the fact that many of us are not terribly in touch with what we believe. Even if we are, we do not have much opportunity to practice articulating our beliefs. So, even when we believe something very strongly, it may be difficult to articulate this to another person.

TABLE 1: CATEGORY BREAKDOWN FOR INTERVIEW ANALYSIS

	Farmers		Fishers	
Background Information	Cyprus: -History -Environment & health -Sustainability -Growing season -Education -Local and EU market competition -Connections -Advertising -Transition to organic -Certifying bodies -Government policy -Government support -Technical assistance -Subsidies -Lack of supply -Lack of market -Growth of market -Access/no to pesticides -Abandonment of farms -Unifying role of agriculture	PEI: -History -Environment & health -Sustainability -Growing season -Education -Local and N. America competitiveness -Advertising/marketing -Transition to organic -Certifying bodies -Government policy -Government support -Subsidies -Lack of market -Growth of market -Technical assistance -Farming unions -Part time vs. full time -Changes in practices -Abandonment of farms -Organic/conventional conflict -Island appropriate farming -Unifying role of agriculture	Cyprus: none	PEI: none
Demographics	-Name & Occupation -Age -Gender -Location -Farm description	-Ownership -Family -Education -Farming history -Employees	-Name & Occupation -Age -Gender -Location -Ownership -Family -Education -Fishing history	

Spirituality	-Awareness of God -Defining spirituality -Ethics -Interconnectedness	-Awareness of God -Defining spirituality -Ethics -Interconnectedness
Motivations	-Translating behaviour to beliefs -Community -Competition -Contact with natural world -Dependence -Education -Family -God -Health -Independence -Interconnectedness -Market -Opportunity -Ownership -Physical nature of work -Public policy -Spiritual values -Sustainability of resource -Work ethics	-Available resource -Competition -Contact with natural world -Education -Family -Freedom -God -Health -Ownership -Physical nature of work -Place -Public policy -Support -Work Ethic
Impact of Beliefs on Behaviour	-Attitude -Commitment -Community -Competition -Education -Family -Health -Interspecies equity -Physical methods -Scale of operation	-Community -Interspecies equity -Physical fishing methods

To simplify an extremely complex subject, I divide this section up into four distinct topics: First, I explore farmers' and fishers' awareness of God, Creator, Spirit, Goddess—the name attributed to this presence or feeling of connection is not important for the purpose of this research. My aim was to discern whether they feel some presence or power that is larger than themselves, and if this is a part of their spiritual belief system.

The second question that I look at is how farmers and fishers define spirituality. There are no pre-set guidelines or limitations; I am exploring how they see their spirituality within the context of their everyday lives. The third subject is the idea of interconnectedness—whether the participants see a connection between farming/fishing practices and their spiritual values, and how this connection manifests itself in their lives and work. Fourthly I look at whether the spiritual beliefs that they hold suggest particular ethics or values, which in turn direct how they relate to their land and community. The challenges with eliciting responses to these topics will be expanded upon in the section entitled 'Challenges Experienced' in my conclusion.

In an effort to ensure that key issues raised by only farmers or fishers were not overlooked, and in the interest of clarifying the similarities and differences between them, I analysed the farmer and fisher data separately for all of the five main subject areas. I will discuss the advantages and disadvantages of this choice in my 'Discussion'.

RESULTS

I have been extremely fortunate—the spirit with which my interviews with farmers and fishers was infused was both invigorating and inspiring. There was a tactile humanness in my interaction with a farmer in Cyprus as we stood in an arid, drip irrigated field where he and his wife were attempting to make an income growing vegetables in an extremely isolated community, with no identified market for their crop. A similar feeling saturated the profound combination of pride and sadness with which a fisher shared his love of the sea in which he had fished for fifty years, despite the fact that even with all his work he had not been able to give his family anything to live in but a simple shack on the docks where he fishes. The stories that have been shared with me are alive and exist at a particular time and in a particular place. They are island stories—they have hands and fingers that scoop up fistfuls of earth, untangle nets and hooks, gesticulate animatedly, or hold cigarettes that trail smoke into the air as the voice narrates a lifetime of experiences. Some interviews were conducted at kitchen tables, some out in the scorching midday sun of the Mediterranean, and some with the pungent smell of salt water filling my nostrils as the morning sun burned its presence into a new day's sky. The language being spoken, the tone of voice, the wrinkles of toil and lines of laughter, the light and shadow—all of this is vitally important. I cannot separate these stories from their living context because they would cease to exist. It is important to present my results—that is, the stories of island farmers and fishers—as a cohesive, unified whole. Fragmenting them into easily digestible pieces shatters the very essence underlying the connection between values and practices. Those who manage to continue farming and fishing are doing something differently. Their spiritual values are inseparable and indistinguishable from their place,

their island. The manner in which I present my results reflects my desire to preserve the integrity of lives in which people are striving to reflect, in their interactions with their natural environment and community, the spiritual recognition of something larger than themselves, and the values that this recognition implies.

Farmers Tell Their Stories

As already mentioned, one of my concerns was that the number of conventional farmers I interviewed was fewer than the number of organic farmers that participated. I discuss the implications of this in my 'Discussion.' Despite the limitations implicit in having fewer conventional farmers share their stories, I nevertheless think that much can be gleaned from the experiences of the farmers that I present below.

Deepening Roots: Case Studies in PEI

Meeting People, Knowing Place: Islanders and their Place on the Land

I first met James Rodd on a bright, but chilly February day in February, 2006. It was the third time we had scheduled a meeting—he had had to cancel twice due to unexpected situations arising on the farm that had to be taken care of, so I wondered whether he would actually be there as I crunched my way across snow and ice to knock on his front door. No answer. I tried again, and again got no reply. I peered around the corner of his old farmhouse wondering if he was out in the fields inspecting something under the snow, and my eyes led me down the slushy driveway to a cavernous, cobweb embroidered wooden barn. Inside I found James contentedly feeding horses—giant, beautiful creatures whose powerful, muscular bodies towered above me as they steamed at the nostrils and peered at me from their dark pens with black shining eyes. James

apologised for not being at the door, and proceeded to introduce me to each horse and tell me its story. As we walked across the straw-strewn floor lit only by a shaft of light silently falling in from the door I had entered, he proudly recited a poem he had written about farming, ending as we stepped back into the blinding light.

Back in James' kitchen, he made us strong mugs of island tea—brewed long, and well-doused with milk and sugar. We settled down at a thick wood-topped table by a window that looked out across his land. I asked James if he would tell me about his farm. He thanked me, and said: "It's not a hard topic for me to discuss. I'm fourth generation on this property. Heritage is something that you can't put a value on" (J. Rodd, personal communication, February 16, 2006). James said a lot during the course of the interview—about the roller coaster ride of conventional farming and the transition to organic methods; how his vision of farming had changed as a result of trial and error over the years; and how he used to see the soil as a medium, but had come to see it as a living organism. I am starting with James for two reasons: first, because he epitomizes for me an unquestionably firm dedication to and love for place—his natural surroundings, and the human community of which he is a part; and second, because of something he said to me five minutes before we finished our two-hour interview. I had noticed throughout our conversation that James had mentioned feelings and connections that seemed deeply spiritual. At the time my topic had been policy-focused, but despite the dry, practical nature of my questions, James' answers kept returning to an incentive and inspiration for his work that was much deeper than law or policy or economics. Curious and intrigued, I asked James whether he thought that spirituality, or connection to God was important to farming sustainably. He seemed surprised. He leaned on the table and looked across at

me intently, and perhaps it was my imagination, but I had the distinct impression that we were finally really connecting. He said "well that is the best question you have asked all day!" (personal communication, February 16, 2006).

James proceeded to talk about farming in a way that was deeply reverent and alive, tactile and fresh. While his answer to my question only took him a few minutes to communicate, I felt more had been shared in those few minutes about what really matters than had been said in the two hours leading up to my having asked him that question. I will refer to parts of what he said throughout this section, but I want to share it here because it is why I changed the focus of my thesis. It is what made me realize that the answers to my questions were not hidden in policy documents or federal offices, but buried deep in the soil of people's hearts; and it lays the foundational context for all of the interviews with farmers and fishers, on Prince Edward Island and in Cyprus:

> Well, I think that if you don't have that connection to your Creator—whoever that may be—you don't have that connection with the living organism, the earth, the soil and the swelling pod. If you don't have that insight that this is not of my doing. I'm just an instrument. And if we can do the organics in a sustainable fashion that will maintain the integrity of the product produced and provide a stewardship to the land and give future generations the hope that production of food can be a joyful experience—can be fascinating and challenging. The world, yes, needs food. And I believe that my connection to a greater being—to a power beyond knowledge is working with it, and not against it. I farmed for a number of years working against that call of nature, and the funny thing is that I didn't realise it. I didn't comprehend it. I had a respect for the land, but I didn't think of it as being life-giving. And that's the beauty of spring. The re-birth of everything after a long winter. I believe it, yes. Short answer, absolutely. You have to be working in concert not only with your own being, but you're working in concert with other beings of like mind and philosophy. But you're dealing with nature and it's so fascinating. And I think that when you take the time to smell the roses. When you take the time to run the soil through your hands—smell it, taste it—you know, you are connecting yourself. And the conventional farmer, unfortunately, doesn't have the time to do that. That's where we've lost out as a society,

> as a community. One of the most beautiful smells that I can think of is the first crop of potatoes that comes into storage. It just fills you up with everything that is earthy and if you think that way and you act that way then surely our society can get a little better as a result (personal communication, February 16, 2006).

James Rodd is one of four farmers that I interviewed on Prince Edward Island. Raymond Loo and his sister, Margie Loo, I had bought vegetables from at Charlottetown's weekly farmer's market; however, I had never really stopped to talk to them. Margie, Raymond and their sister Joyce all own their own organic farms, but they work together, dividing up the crops they are going to grow for the year and sharing the profits. Like Jim's, Raymond's farm is west of Charlottetown, whereas Margie's farm is in the eastern part of the island. The fourth farmer I spoke with was Eddie Dykerman, a conventional farmer who was the only participant whose farm I did not personally visit because it was more convenient for him to meet in Charlottetown.

James Rodd, and Margie and Raymond Loo, all currently organic farmers, had either farmed conventionally prior to shifting to organic methods or were raised by farmers who farmed conventionally. Raymond Loo says:

> My father was very much into conventional thinking. He had a custom spray operation so we used to spray—I used to come home from school and jump on the tractor and go spray. We sprayed peas and corn and whatever was growing. We had grand arguments over whether herbicides were poisonous. Dad was a very big believer—he would just stick his arm in and mix the chemicals. He poisoned himself once to the point where he couldn't walk to the house. My mother found him crawling in the yard... and he had to go to the hospital and get his stomach pumped out many times. But...he started hanging out with some organic farmers and gradually he made the shift...the whole farm was certified by 2000. My dad died in 2000 from a tumour from cancer which the doctors said was environmentally induced. Having said that, we didn't switch necessarily because of the chemicals. It just felt like the right thing to do (personal communication, December 7, 2005).

The average age of the farmers is mid-forties, which is on the young side for the island farming community as a whole. Farmers in PEI are an ageing population, and very few young people are either embracing the profession or being encouraged to do so by their families. Raymond Loo expressed concern over this trend: "when I go to farm meetings these days I am the youngest fellow there. I should not be the youngest person there. That is concerning" (personal interview, December 7, 2005).

The four farms vary considerably in size and the farmers grow a variety of crops. Margie's farm is the smallest, a sixty-nine acre farm located on a long dirt road and bordered by a wall of trees. She has one neighbour who grows potatoes conventionally, and has left the trees up to protect her crop from drift, and perhaps to maintain the feeling of a place well inhabited—a sense you get as soon as you cross her property line. She tells me that forty-five acres is wooded, and thirteen acres planted with field crops. She also has three greenhouses in which she grows vegetables and herbs (personal interview, December 8, 2005).

Margie is well known for her greens, which she grows from February through November—supplying islanders with bright green bags of crispy salad ingredients in a season predominantly characterised by root vegetables. She also uses the greenhouses to grow bright red tomatoes, glossy peppers and bushy, deep green basil. On a summer's day in 2007 Margie let me wander through one of her humid, sun saturated greenhouses. The basil plants were tall, thick and full, and the aroma that filled the moist air took me back to a childhood memory of picking basil flowers and hanging them over my mother's bed to dry in the heat, the room heavy with the pungent, earthy smell. Outside of the greenhouses Margie has an enviably well-loved garden overflowing with squash, a

variety of vegetables, and lines of raspberry, blackberry and gooseberry bushes reminiscent of a vineyard. She also has an apple orchard interspersed with other types of trees, and is experimenting with the family's own variety of sweet potato. Interspersed with the crops are bursts of blossoms—lilies and other flowers that attract insects and beautify her space. Birds converse in trees and swoop down to perch on bird feeders under the eaves of her farmhouse.

Her brother Raymond's farm is situated in a patchwork quilt of gently sloping farmland. His neighbours are still farming (conventionally), and I get a distinct sense of community as he explains to me that he and the neighbouring farms intend to install enough windmills between them to power all of their needs collectively, perhaps with a bit left over to sell back to the grid. Raymond has 250 acres of land, the back edge of which is wooded. His fields stretch on and on, lettuces interspersed with rows of yellow and white blossoms that are there to deter insects from nibbling away at his crop. Raymond squats in one of the rows and pulls at a bouquet of leaves protruding from the soil. I watch as he unearths, and then shakes a jewelled constellation of purple potatoes free from a tangled cloud of earth and roots. Raymond mainly grows potatoes and cole crops, but as he says, "...of course I grow some carrots and beans and peas and everything else too" (personal interview, December 7, 2005). Raymond also has around sixty cattle, and between 20 and 25 pigs as well as 300 meat chickens, around 250 laying hens, ducks and geese, and two dogs! Reflecting a sentiment expressed by all four of the farmers from Prince Edward Island, Raymond expressed the importance of self-sufficiency: "...We grow our own feed for the cattle and feed weeds for the chickens and ducks and geese. It's a very self-contained system. We have our own meat to eat. We buy

some bread at the farmer's market, and some ketchup and things like that, but basically all of meat and vegetables are our own. We like to be self-sufficient" (personal interview, December 7, 2005). Raymond, like all of the farmers interviewed, is the main farmer of his land. In addition to his own hands, he has a Willing Workers on Organic Farms (WWOOF) student volunteer helping him most of the year, and hires an extra worker for brief periods to help with harvesting in the fall.

James Rodd's farm is 112 acres of seed potatoes and every kind of vegetable imaginable from beans to zucchini. James supplies a community-supported agriculture program, which helps support production of such a wide variety of vegetables. Jim also grows oats as feed for his Belgian work horses. He also has cattle, and at the time that I interviewed him, was thinking about building some new barns for goats and sheep in order to expand the scale of his livestock operation and explore dairy production (personal communication, February 16, 2006).

Eddie Dykerman is a slightly larger-scale conventional farmer, supplying the large grocery stores on the island. He grows 300 acres of vegetables of all different kinds, but unlike most larger scale farmers, his repertoire does not include potatoes or berries. Eddie was born and raised on a farm, but due to financial difficulties, his father sold the farm and went to work at Vessey Seeds, taking on the position of foreman for a division that was growing summer vegetables. His father was offered the opportunity to purchase the farm a few years later, and when Eddie was 19 his father asked him and his brother Gerald if they wanted to partner with him in the daily running of the business. The brothers eventually bought their father out of the business, and have since gone on to

expand it to where it is today. They employ 25 workers in the summer months, in addition to the eight full-time employees that work with them year-round.

As mentioned earlier by James, ownership and habitation on the land that spans multiple generations seems to be important. All of the participants own their farms, and James and Raymond are farming the same land farmed by four and six generations. Eddie is second generation on the land he currently farms. As Raymond shared,

> [t]he farm was settled originally in 1828. So it's been in the family for—I'm the sixth generation. It was probably farmed organically for about the first hundred years. Then it was farmed conventionally for a while and now it's farmed organically again. My father moved here in 1951 from Holland. He was an immigrant labourer. And he worked for a dollar a day—thirty dollars a month and he had to stay for a year at that. And in the end his three brothers came here and they all worked together and pooled the money and they bought the farm he came to work on. And my mother grew up on a farm adjacent to that—they got married and now the farm encompasses both farms. But the farm that my father came to work on was owned by my mother's cousins, so I'm a direct descendent of the people who that cleared the land. So when I'm walking over this land—I'm stepping—every time I put my foot down I'm stepping where one of my ancestors stepped. And every stone that is on both sides of the farm—I know they carried them stones off the farm and put them there. So you feel a really strong connection—at least I'm conscious of it (personal communication, December 7, 2005).

In response to my questions on farming education, only James Rodd referred to having attended agricultural college. All of the farmers identified family members, and having a relationship with the land since childhood, as being vital to their farming education. Eddie said:

> Dad had a farm, and we always worked on it, oh yes. We always had chores. So we learned from a very young age that we had to feed the animals, that we had to pick the crops. I can remember back when I was probably in grade four I had chores to do before school and after school, and on my Saturdays. So it was basically osmosis I guess. That's just what we did. Everybody in our family sort of did that (personal communication, December 6, 2006).

Raymond Loo had very little formal agricultural education—he took an agriculture class within the traditional education system. But he mentions the role that family has played in his education:

> I took agriculture in school. That was the only prize I ever got in school. Everybody else just wanted to get rid of me. But it was so easy for me. But it was conventional agriculture. It was conventional thinking. My grandfather, I think, influenced me more than any other person. Because when we were growing up—when I was growing up, when we were in the field, for an example—walking—I used to spend a lot of time with him riding on the tractor—dad was always working off the farm, and didn't have any patience anyway, so I was always with my grandfather, and he would—you know—if we saw a bird flying by, it wasn't a bird—you know you had to say it was a red-winged black bird, or a boblink or a—whatever it was. And you couldn't just pick up a weed, you know—what kind of weed is it? He was very much wanting us to understand, you know—this happens because of that, and that happens because of this, and so he knew much more about the life cycles of the environment he lived in—he grew up on the farm and his father was a farmer and his grandfather was a farmer, and he only went to grade six, but he had travelled—he went to Japan when he was 21 and stayed there for six months teaching them how to raise silver foxes, so you know—for 1921 that was a very big trip, and it broadened his kind of ideas about—you know, he had gotten his eye removed in Montreal...and he travelled by himself to Montreal which even from here then in his teens was quite a good trip...he had been to Boston, and Toronto. He had travelled a bit. He wasn't widely travelled, but he looked upon things quite different. And he always said never judge somebody—never judge somebody by their skin—never judge somebody by their colour, never judge somebody until you're wearing their boots. You don't judge why they do something. And that sounds simple, but very difficult to do (personal communication, December 4, 2006).

For Margie, personal investigation and responsibility have been essential in the process of education. She says that she grew up farming, but that she had never had to take responsibility for farming when she was growing up. She was just doing what she was told. So in becoming a farmer herself she says:

> I tend to spend a lot of time in the winter investigating and reading and then implementing my plan for the summer. And every year I have to make a new plan because every year I figure out something that didn't work...so I feel like I know a lot more than when I started, but I am still just barely down that road so there are many different possibilities and so many different things to try (personal communication, December 8, 2005).

She also mentions how important community has been in the process of self-education:

> Part of being organic farmers is that we certify together and we spend a lot of time discussing the standards and how to meet those standards, so I spend a lot of time on people's farms just watching how people do things and then talking to them about it. And then a whole long of reading...I get books from the Department of Agriculture (personal communication, December 8, 2005).

This section has introduced us to the farms and farmers whose stories my thesis is rooted in. The next two sections will look at the spiritual beliefs that James, Margie, Raymond and Eddie hold, and how these beliefs manifest themselves in their work ethics. I will then turn to the experiences and beliefs of a group of farmers on the island of Cyprus. In the section that follows this (Farming Motivations: Putting Together the Puzzle of Place-Based Beliefs), I will explore some of the factors that the farmers from both PEI and Cyprus have identified as shaping their spiritual values and motivating their farming practices. I am doing this collectively because I think this is the best way to identify the similarities and pick out those elements that are different in the two communities. This section will expand upon family, community, place and education, which have been described briefly in this section, as well as mentioning a number of other factors that contribute to the farming experience.

Spiritual Beliefs Rooted in Soil: What do we Believe?

I had no idea what types of responses I was going to get when I asked Eddie, Raymond, Margie and James about their spiritual beliefs. What I got were a lot of very deep, very moving and extremely intimate thoughts. Eddie was the last farmer that I interviewed, and perhaps precisely for this reason, his answers are well articulated and clear. Eddie considers himself Christian. When I asked him whether he felt an awareness of the presence of God or Creator, he said "I believe that God created the earth, and that has a big bearing on how I treat my land, and how I treat the people that I work with on the farm" (personal communication, December 6, 2006). Eddie's awareness of God is inseparable from the act of farming. As he says,

> When you put a little seed in the ground and the thing develops...and you're out in the open air and you watch the woods and everything change—there's got to be somebody controlling—there is a God controlling all this. I can't imagine that it all happens by itself. Ever since I was a kid...my thought was that somebody must be controlling these things because you just plant a little seed in the ground and it changes into this plant...I'm not in control of this stuff. I can put the seeds there, but then after that it's somebody else that looks after it (personal communication, December 6, 2006).

Eddie's spirituality is deeply embedded in his vision of himself as part of a larger process. He says that he believes we are only here on this earth for a short time, and that while God gave human beings the earth to use—to sustain ourselves—He did not say we should be robbing from future generations. Eddie firmly believes that the earth should be left in a condition that is liveable for the next generation. Humility is also very central to Eddie's vision of spirituality. He says: "It's a nurturing thing with me...I marvel a lot about how things grow and change. I know that it is way beyond my doing. I'm just there. I'm just part of the process—it's a bigger process than myself. I can feel that, or I

can see that, I sense that, or I know that just because of the way things grow" (personal communication, December 6, 2006).

Eddie described a number of situations that indicate the ethics that he feels are directly influenced by his Christian faith. He believes that honesty in his interactions with customers and employees is of the utmost importance. He also said that he never works on Sundays and would never ask his employees to, either—which suggests a degree of integrity. He also has developed a strong trust in God. He works hard and does his best to plant and tend his crops, but then he knows that he must "commit the rest to God" (personal communication, December 6, 2006). Respect for the future generations and for the natural world is another part of his ethics. Although he feels that God must have wanted humans to discover genetically modified organisms (GMOs) or we would not have developed the technology, he questions tampering with the natural order of things that were made by God. Eddie sees his life as a small part of a much larger process, and as such he sees the interconnectedness of nature, God and humankind, and the mutually supporting roles that each of these plays in the existence of the other two.

I included a good portion of James' thoughts earlier, so I will simply extract the elements vital to his belief system here. For James it is impossible to not acknowledge the presence of something larger, because for him the act of farming reverently and joyfully is synonymous with connecting to his creator. The recognition of this fact is what he feels defines his place as an instrument of stewardship acting in praise and respect of a system of which he is a very small and humble part. James believes that working in harmony with nature is also working in harmony with the will of a "power beyond knowledge"

(personal communication, February 16, 2006). For him, shifting over to organic growing is his way of bringing his practices into line with a greater spiritual wisdom.

Margie and Raymond Loo, despite being siblings, had very different approaches to spirituality. Margie feels she is still very much searching to understand what she believes, but her spiritual beliefs are rooted in the conception of herself as being a humble part of a larger integral system:

> I certainly have come to think of everything around me as alive and conscious, like a flow...like as a system... as part of a system, and that my goal is to find in some way how I can fit into that balance rather than how I can control the system—I want to find my position within that ecosystem and try to disturb the ecosystem as little as possible, and allow there to be a system rather than just try to be in control of everything...do as little harm as possible and only use as much of the bounty of the earth as I need in relation to all the other beings around me (personal communication, December 8, 2005).

Although she was raised Catholic, Margie does not see her beliefs as being part of any formal faith tradition. When asked about this, she says:

> Somebody wrote something; it's like a modern mysticism, that's what they called it, and that kinda fit with what I believe in as far as kinda reclaiming some of the things that I think my Celtic ancestors believed as far as our relationship to the land and the cosmos, but I don't really feel comfortable saying that I believe in Celtic tradition. I just feel like I'm stealing somebody else's system because I didn't grow up being taught that. But the idea of a nature-based spiritual system is what draws me. I have always tried to believe in Christianity but recently I just gave up because it just doesn't work for me. I just get mad—how simple and selfish it seems to me to be—I think Jesus for example was a very impressive teacher...and maybe if Christianity had more fully embraced all His ideas without all the other interests, then maybe it would be better. But I don't like the way that Christianity considers the natural world to be just a tool for human use (personal communication, December 8, 2005).

Margie's description of her spiritual beliefs, and the ethics that they manifested, sounded deeply reverent to me, so I asked her what she thought of the idea of "work as worship." In her response, she described the attitude with which she approaches the natural world:

> I feel like I'm doing physical work, but it's kind of a privilege and when I'm harvesting especially I try to focus my attention of being grateful—the whole time I'm harvesting, and whatever I'm doing I try to be open, respectful, and a channel of good energy and so in a way it is kind of what I'm trying to do actually—to honour and thank all the other beings whenever I'm in the presence of my crops. It just depends on what you think of as worship (personal communication, December 8, 2005).

Raymond's awareness of God and his spiritual values are inseparable from community – human and natural. The interconnectedness of all things is the foundation of all of his thoughts on the subject. His spiritual beliefs, and everything he says and does are articulated and lived in the past, the present, and the future, and in relationship to the earth, the air, his crops, his ancestors, his children, his neighbours, the fauna that have made his land home, and people and land beyond his immediate vision, simultaneously. Raymond describes his spiritual connection as being fairly broad. When I asked him whether he feels his beliefs are part of a formal religious tradition, he tells me that since he was a kid he has been attending the family Anglican Church, which was built by his great-great grandfather. He chuckles when he tells me that everyone in the cemetery is related to him, and describes the congregation as "very, very small. There were six people in church on Sunday, and everybody's related" (personal communication, December 4, 2006). He says that he has a great deal of affinity for the New Testament, but struggles with the Old Testament, and sometimes wonders how they got in the same book, they seem to be so diametrically opposed.

Although he attends church, Raymond says that his spirituality "to a large extent comes from just walking through the woods" (personal communication, December 4, 2006). He recalls one experience when he was sitting on the shore after digging clams that was a spiritually defining moment for him: "...There was an eagle came flying along, and for me it was, I sat there and just—there was a feeling that there was something there. So my spirituality is broader than just this narrow thing in church" (personal communication, December 4, 2006). Raymond experiences the presence of his creator largely through his interaction with the natural world. He says:

> Sometimes in a big storm, just the power of the storm you sit back and it just makes you feel small. It just makes you feel like there's a greater something. And when I plant a seed I tell people—you know I don't work. I mean I work, doing work, looking after stuff, but I'm in one of the unique positions as a farmer that everything grows by itself. I mean I plant the seed, and then God does the rest if you will. Or the earth does the rest. Or Mother Earth, or whatever you want to say, who provides the rain, who provides the sun, who provides the nutrients and everything grows and then I'm a reaper again. I go in and reap. Now certainly I have to look out and protect what I'm growing. But I never feel like I'm the one who's actually making anything. My cattle—you know when I say my cattle, I use that term loosely. I don't feel like I own the land. I can't get my head around the fact that anybody on a piece of paper can actually own a piece of land. I have a feeling of something, you know?" (personal communication, December 4, 2006).

Like Margie and Eddie, Raymond also feels that his work is not really work at all in the modern sense of the world, but an opportunity to commune with the natural world and learn from it. He says:

> When I get up in the morning it doesn't feel like work. I'm just goin' to do what I want to do...today I'm goin' to build a barn...you know? I don't feel like planting seeds and harvesting and looking after the farm—I don't feel like it's something I have to do as far as somebody being forced to, so I'm very, very lucky that I'm doing exactly what I'm happiest doing. I think that's rare. I think a lot of people are doing jobs that they don't really particularly care for. And if I'm walking through the field and the birds are

> singing all around, and sometimes you just go up to heaven when you see a wild pansy growing there, and it's just beautiful, and you gotta stop and say well gee, that's beautiful, and there's so many little things everywhere sitting in the trees and you say well holy – there was a warbler nesting there this summer and I never even knew because the leaves were green and you wonder how the heck did I miss that? Because it's so obvious when the leaves fall down (personal communication, December 4, 2006).

This section has brought some of the beliefs held by these four farmers to light. The next section will look at the choices that these farmers make in how they live their lives, interact with their community, and treat their land. In short, whether their spiritual values find practical application in their work and lives.

Impact of Belief on Behaviour: Shared Perspectives?

There are many ways that spiritual beliefs and values have found practical application in the lives of the four farmers that participated in this study. Many (but not, as will be shown, all) of the values held are common among the four farmers, but the manner in which they are expressed is diverse. It is interesting to note in the following description the role that individual strengths, capacities and interests play in how beliefs and values influence behaviour.

I will start with Margie because I think Margie's spiritual vision of all life as being an integral whole—a single, unified, constantly flowing system—is very evident in her holistic approach to her work. Margie's commitment to being part of a community and working in symphony with nature has led her to farm organically—an approach that respects the diversity latent in the natural world and attempts to reflect the natural balance of the local flora and fauna in deciding how to cultivate the land. Seeing herself as a nurturer of a larger system which supports her as she supports it, finds clear expression in

a number of ways. One is her unwillingness to introduce chemicals into her farming system. She says:

> It's completely against my nature at this point to think of using chemicals that would remain in the soil—using chemical products on the soil, because I think of the soil as a living thing, just like us. And it's really important to me that what I'm doing is improving soil structure; making food healthier and making the environment healthier by what I do rather than depleting it and causing long-term damage. And I can only go on what I hear from studies that show that the chemicals that are sprayed on food do remain in the food. Not all of them, but enough to be alarming. And it also has an impact on the other animals in the ecosystem and birds and insects that have been sprayed...(personal communication, December 8, 2005).

In order to build a healthy system, Margie rotates her crops to ensure that the nutrients taken out are being re-introduced into the soil. She also uses compost to enrich her soil. She says:

> I have a four-year rotation, and some things are longer than that. I have my market garden. I rotate what I grow in the market garden, each block so it ends up being a good rotation. I make compost, which I use for salad greens and herbs because that's a quick crop and I want it to be fed by compost. But for the potatoes and other things I have been using crab meal, which is available locally and is a by-product of processing so it seems like a good use of that resource. Now, I have different types of pest problems, so it depends on the crop how I look after them. But my main process is to make my plants as healthy as I can so that it can withstand insects. I started making compost heaps last year. There are different types of compost tea, but my compost tea is the idea of maximising the amount of beneficial fungi and bacteria that you can place onto the plant so that it's more healthy – more able to function and more resistant to diseases, so that's been interesting. I'm still exploring that. I guess I'm trying to get to know all of my plants and be able to identify when I look at them what they might need. I use a lot of rock powder to be able to increase the amount of nutrients available to the plants in the soil so that not only are they flavourful and healthy to eat them, but the plants themselves are stronger (personal communication, December 8, 2005).

In addition to planting a diversity of plants, Margie is employing measures to maximize diversity in the wildlife resident on her farm. She says:

> we're very conscious of having the most diversity...having hedgerows to provide food for birds and including woodland. Yeah, we don't have very big fields, but we're actually thinking of putting in more hedges because I know that birds are an important part of the ecosystem. They eat a lot of the insects that I don't want around, and it's warmer when there's less wind blowing, and I just enjoy being in the fields and hearing birds singing and knowing that we're not using more space than we need to (personal communication, December 8, 2005).

The result of her efforts is that although it is very, very hard work, every year her profits are increasing slightly, and this is not the result of raising her prices, but simply because as the organic content in the soil increases and her plants get stronger and more resistant to disease and attacks from insects, they are producing larger crops.

On the human side of things, Margie's value for family is evident in how she works with her siblings to build community and provide islanders with healthy, locally grown food. She feels that her practice of direct marketing—of making sure she is at the farmer's market every weekend to sell her produce—is an important part of the process. By seeing the faces of the people who are going to eat her food she feels a deeper connection to her consumers and the sense of responsibility for the quality of her produce is more tangible. She also mentioned that by being the one to hand the food to her customers, she is also present for feedback from them on things that she might want to change or improve, so it is simultaneously an opportunity to educate, and be educated. Her open farm day in the summertime, when Margie opens her farm for her customers to come see what she is doing and where their food is grown, is another example of her desire to connect community with food. When I think of Margie's practice, I think of a farmer who grows, nurtures and sells the fruits of her labour with love and joy. It is not possible to watch her farm or buy food from her at the market without being immediately

aware of the sacredness of her profession; of the sacredness of fresh, good tasting, healthy food.

Education is the first thing I think of when I think of Margie's brother, Raymond. While Margie teaches by example, Raymond's approach is to be everywhere at once informing and educating schoolchildren, government leaders and policy-makers, and tourists, both by going to them, and by creating opportunities for them to come to him. Raymond is frequently asked to go speak to teachers' groups, government, and classrooms about farming—especially organic farming, the method that he feels is best suited to the overall health of the island system. He also opens his farm to schoolchildren and tourists interested in gaining a better understanding of how our food is grown, or in the case of tourists, who want to have a farming experience on the island. With reference to the education of children, Raymond says:

> I just like to bring children and let them eat a pansy. You know they're astounded that you can eat a flower. And then I say "well broccoli is a flower...it just hasn't bloomed yet, and cauliflower is a flower too, you know"...and to describe that and to let people see that their food is coming directly out of the earth...And it's a powerful situation when you have someone walking through your field and saying "so, do you have carrots here?," and you lean down and pull one out of the ground and they say "oh, they grow in the ground!" you know—they don't know. And you have little moments of saying well maybe this is going to make a difference...when they go home, they're gonna feel different somehow about the earth, and that's one reason why I tell everybody I really, really don't like calling the earth "dirt"...You're never gonna hear me say goin' outside to play in the dirt. It's gonna be in the soil or in the earth or in the land or something. Because if you say dirt—you know what happens to dirt—you can do anything to dirt. You know, it's a small thing, but it's something that I try to very much tell people, you know. I tell people that a weed is probably just a beautiful plant growing out of place—just where we don't want it to grow and it becomes a weed. And all of the predator animals were vermin—rats and weasels and foxes and wolves, and we've been fighting against them forever as humans, and all of the insects that are predator insects that kill other insects are good – beneficial...So

> anything that people are in competition with is bad, you know from people's perspective. So you tell people this when they're walking through. You say well actually, a ladybug is just good because it kills aphids. From an aphid's perspective ladybugs aren't very good, so it really depends on which side you're sittin' on, so for me education is about just trying to get people become in tune with the earth; in tune with where their food's coming from; in tune with why that hawk flying through the field is important 'cause it's killing mice, but if you cut down all the hollow trees for example, kestrels nest in hollow trees. They nest actually in a woodpecker hole. So if you lose the woodpeckers—if they die off—then there's no place for the kestrel to nest, and the kestrel keeps the field mice in balance. So when you start making them kinds of connections and you see this hawk flying in the field, and you say to the people ah there's a hawk, there must be a hollow tree around. Most people don't see that when they're walking around. So if we can make them kind of connections, I'm hoping that these people will go home and just look at something a little different. So education is really, really important (personal communication, December 4, 2006).

In addition to educating his community, Raymond is extremely committed to educating himself, and finding new ways to diversify farming on Prince Edward Island that will help preserve island farmland, and a way of life of which he is fond. While he is committed first and foremost to supplying the local market, he believes that if we want to change many acres of agricultural land on PEI it will be necessary to find cost-effective ways to export local produce because the local population is simply not physically large enough to support the large-scale preservation of farmland otherwise. His own initiative towards this end is the production of jam, using symbols already associated with the island, such as Anne of Green Gables, as well as symbols he thinks will be associated with PEI in the future, such as windmills, on his labels. Instead of pricing backwards from the price that the buyer would want to pay to determine how much the farmer will make, Raymond has priced his jam forwards, and is using his unusual method of fair farmer compensation, in addition to environmentally sustainable power sources used to

produce and/or transport the product, as educational marketing tools. He is currently promoting the jam in Japan. He says:

> I explained...that the reason we're doing this is because if we have viable farmers—If farmers are making money—I don't care if we're getting rich, but we have to make enough money to pay the bills, otherwise we just can't be in business. So if we have farmers making money, then you're gonna have steady supply, so there's a benefit in it for you...And it's kind of like fair trade. It's not quite fair trade because it's a little bit different, but it's that kind of idea, where whoever is buying that jar of jam in Japan or anywhere—I mean I'm open to selling them in Halifax or Moncton or in Charlottetown – but Anne's gonna sell there...We're setting up a web site talking about the farmers, talking about the land...to get the profile of all the sustainable environmental things that are done in PEI, so I met with the Premier and Jamie Ballem and Mitch Murphy down town at the province house, and I said I need to know all of the stuff that you're planning on doing for PEI—for wind power, for bio-energy, and all that sort of stuff. I want to put a windmill of the bottle of jam...little icon. And I think we could use that for all sorts of different products, be it french fries or whatever, if they're done organically. They're only interested in organic over there right now, and I think that's the best for the land, so I'm not gonna promote conventional use of pesticides and all that stuff (personal communication, December 4, 2006).

Raymond's physical farming practices are also a reflection of his care for the land and the value he sees in inter-species equity. He says:

> I farm organically because I like to see little birds in the fields and I like to see...our goal is to provide a good livelihood for our family but in the process make as small an environmental footprint as possible. In other words, I want to have—we've planted about 4km of hedgerows on our farm in the last two years. I want to have nesting habitat. I cut my hay late, so after...most of the birds have fledged. And that's not necessarily organic versus conventional, but that's—it just feels right. I worked on a conventional farm for several years and I know how to do all of the spraying, and we did our own spraying for years and so I've seen both sides of the coin and I'll tell you that it feels much better to put a product on the field. I do use some insecticides that are accepted for use in organic systems. And I can put Entrust for example on the fields with a spinosa product to kill the Colorado potato beetles, but the lady bugs are still walking on the field, and the ground beetles are still there, and the butterflies are still flying, and there's no dead birds lying around. You know—because it's not the spraying that's the problem, it's what's in the

> spray, and I've told many people that (personal communication, December 4, 2006)

Raymond's sense of responsibility to the future and to the natural world as well as to his ancestors is an ethic that derives from his spiritual beliefs, and it is one that drives much of what he does in all areas of his work. He says,

> I have a very, very, very strong feeling of...it seems to me that we are all responsible for leaving this earth somehow as untouched commercially as we can. Obviously we are here, so we have to eat, and I want to provide a livelihood for my family. But my goal is to provide healthy, wholesome food while making as small an environmental footprint as possible. So when I go to the fields now, I mean there's even times some people would think I'm nuts, but I don't like driving across the field with the tractor running over the top of the earthworms and everything else. I feel that we need to try to live in a balance as much as possible. Now I do it because I think you have to kind of weigh the pros and the cons...[w]e have a hill in the back of our farm and I can go up and sit up there and look all over on top of the farm. And just sitting up there thinking what you're gonna grow in that field and what you're gonna grow in that field, and then how that's gonna provide habitat for birds to nest or how that's gonna provide, you know—so I'm trying to live with nature. And I think it's partly spirituality, and it's partly just a feeling of responsibility to do something (personal communication, December 4, 2006).

James Rodd's commitment to putting into practice his beliefs that he is part of something larger; that it is his responsibility to respect his land; and the balance of nature that is all around him; is obvious in his physical farming practices. He farms organically because he believes it to be the "best way not only for the environment, but also for the farm, for the soil and for the health of myself and others" (personal communication, February 16, 2006). Despite the challenges experienced in making the transition from conventional methods to organic, such as that his crop yield was cut by two-thirds the first years, James feels that his efforts to work in harmony instead of against nature are paying off in the long-run. He has been working for years to build up the organic content of the soil

through adding livestock manures and fish waste, and using natural pest control (through growing plant varieties that act as a host to insects that feed on the pests he is trying to combat). And he is noticing a difference in his crops as well as in himself:

> So last year I think we had as good a crop or yield as any conventional farmer on Prince Edward Island. I think the health of the potato is much better, and we didn't have a lot of disease and insect damage. So there's something going on. Now I can't put my finger on it; I can only surmise what's going on, and that is that the soil is starting to be enlivened, and the processes that are going on are working in my favour instead of me working against nature, working against the soil as a living organism (personal communication, February 16, 2006).

On a more personal note, he says:

> ...this whole idea of being in touch or in tune with your environment and with the crop you're growing and insect populations and what are good predators and the bad ones, and being able to live with a bit of damage as opposed to annihilating the whole populations of insects and so on. So it's been a learning curve and I can honestly say that it's been an interesting one—it's one that [makes you] feel like getting up in the morning and going out and seeing what nature can throw at you (personal communication, February 16, 2006).

Despite the enormous changes that James' farming practices have already undergone, he can see space for change and growth. At the moment his farm is almost completely barren of hedgerows, which he has a plan to change over the next fifteen years or so of farming that he figures he has left. For James, making changes like this is the result of a transition in philosophy from an old way of thinking, where "the fewer the trees, the bigger the field, the better off I was going to be from an efficiency point of view" to a vision that incorporates consideration for other life-forms on his farm: "I'll probably be looking for more nesting birds. And I'll be planting a mixed hedgerow that will incorporate not only a windbreak, but also berries and apples, and that kind of thing for the wildlife" (personal communication, February 16, 2006). James' commitment to

building a community of like-minded people goes along with his commitment to the natural environment around him. He intends on continuing to supply islanders with local produce through his community supported agriculture program, and he is even thinking of expanding it in the near future.

I have left Eddie's farming practices until last not because they are less impressive, but because I think Eddie is perhaps a better representative of the conflicts that arise for those who are trying to put very strong spiritual beliefs and ethics into practice in a society whose everyday choices undermine many of the values that would serve its best interest. In Eddie's ideal world he feels that "if we could probably even go back a little bit in time it would be better than it is now" (personal communication, December 6, 2006). He liked the model of the traditional family farm, and feels that there is "a huge disconnect...between the people that consume...and the people that produce the food...there has to be a trust between the consumers and the producers that's just not there now...But I don't know why... And I don't know how to fix it" (personal communication, December 6, 2006), but simultaneously he says he can see that:

> ...we have to compete...with the rest of the world and a bigger province. It's not where I want to go but it's where it's gonna go, is bigger and more efficient, because I guess that's the way society's goin'—values or loyalties are not there anymore so...I'm afraid that's not where I want to see it go, but that's where it's gonna go. And I don't know how you could really go against that. We have to do the best we can (personal communication, December 6, 2006).

There are many aspects of Eddie's practice that seem disconnected from his belief system and the ethics that he holds as important. Eddie expresses a great love for his profession, and articulates clearly that it is not about the money, or being large scale. He describes the monopoly that Loblaws and Sobeys have over the food market on the

island, and even says that he would rather stop in a local convenience store in Winslow or in a small co-op store (that he predicts will close in the next few years due to lack of business) on his way home to pick up eggs than have to walk the length of the Superstore. But at the same time he supplies both of these stores with produce. The contradictions are obvious in this description of his farm:

> I guess I'm not interested in large. I'm the largest vegetable farmer on PEI. In fact I'm probably one of the few that are still doin' it. And I'm probably considered large in Atlantic Canada, but I'm just tiny if you consider California, or places like that, right. But I'm not really interested in being large. I want to make a decent living. I want to be able to do what the rest of society does, and that I want the people who work on my farm to be able to make a good living off what they make (personal communication, December 6, 2006).

Given that Eddie supplies the local supermarket giants with food, I thought he would support them, but he says that "at some point these corporations are gonna have to crash. I don't know whether they will or not, but I'm hoping that they will" (personal communication, December 6, 2006). Eddie's farm is large, and it consists of what he thinks was originally about seven homesteads. While it might seem that this would contradict Eddie's belief in preserving the integrity of the community, he thinks this is an incorrect perception of the situation because at least ten people are making their livings on his farm.

Eddie points out that while he is not interested in going organic, he does believe in finding a middle ground. He has a professional company come onto his fields on a regular basis and do a cost-benefit analysis of whether it would be best to spray or not, given the number of pests found on his crops at any given time. If at all possible, he does not spray and when he does, he does so moderately. He says: "because of education and

because of technology changes I think we're less harmful to the environment than my father was. We're not organic by any means, but we're leaving less of a trail of destruction than my father did, and he was a smaller farmer." On issues such as genetically modified crops and the hiring of cheaper labour from off-island, Eddie is cautious. He does not like the idea of tampering with what God has given us, but he also feels that God did give us certain technologies and opportunities, so He must have done so for a reason. So far he has not invested in genetically modified crops, nor has he started bringing in help from Latin America. However he did say that most of his employees are from Newfoundland, so he does not see much of a difference between that and bringing in people from Latin America.

Eddie's relationship to his community seems more consistent with his beliefs. His unwillingness to ask his employees to work on Sunday is a reflection of his belief that if you have faith, God will provide the time and opportunity to get everything that needs to be done, done; his dedication to being flexible with his employees to make sure that they are happy is an indication of the value he places on group cohesion and communication; and his dislike of comparison between people, and emphasis on effort over result reflect his belief that everyone should try to do his best and not focus too much on what other people are doing. Serving as the president of the PEI Federation of Agriculture is another way in which he gives back to his community. He says:

> I'm president of the PEI Federation of Agriculture, which I felt was sort of a responsibility that I should do for a while for my fellow farmers. I certainly didn't do that for monetary gain or any other reasons but I felt it was my duty to give back. My forefathers or people who preceded me made sure that farm policies and things like that were in place so I could make a livin' off farming. Now I'm at an age where I think I should be—you know—be willin' to give my time back so that in ten years time

> people will still be able to farm and make a livin' farming. And it's not even necessary PEI based, but...of course PEI is closer so you're involved a little more in PEI issues, but certainly at a national level policies need to be put in place so that people can afford to farm and make a livin' farming and have the right to farm a few years down the road (personal communication, December 6, 2006).

I believe that Eddie's experience communicates that the dynamics at work in translating beliefs into action are far from simple, and that the choices that people make are sometimes the best ones available to them, given circumstances that are often far from ideal. It also suggests that the presence of inconsistencies between belief and behaviour does not mean that a person does not have values, or that their values are not exerting influence on their actions. Just as people are not always aware of their beliefs, the ways in which these beliefs are manifested is sometimes unconscious. Decisions are also influenced by emotion and circumstances, and the ways that spiritual beliefs interact and influence behaviour can end up seeming illogical, random or unethical to an outsider, when to the person involved it can make complete sense. The next section will look at the beliefs of a group of farmers in Cyprus, and how these are manifested in the act of farming on a Mediterranean island.

Tilling Parched Soil: Cypriot Farmers Share Their Stories

I have divided the stories of Cypriot farmers geographically because the social, economic and religious context within which each community is operating is very different. I also believe that presenting them separately allows the reader to experience the isolated reality that each of the communities feels—the almost complete disconnect between their world and that of farmers on the opposite side of the political border. Presenting the

communities in this way has highlighted for me the commonalities that they share, which I think might have become lost if I had presented them as a single group.

Although I draw on the stories of all thirteen farmers in the following sections on beliefs and behaviour, I have chosen two farmers from each community to situate the reader in place in more detail, and give the stories context. While not ideal, I hope that this enables the reader to get a sense of the environment that Cypriot farmers are shaping, and that is influencing them in their work and in their relationship to the earth, plants, birds, insects and the human communities in which they reside.

Greek Cypriot Voices

Giorgos and Chrystalla Papasavva are sitting around a table on their marble-floored balcony on a warm, muggy evening in September as the last light fades from the sky. The thick air is full with the vibration of cicadas, and laden with the smell of mint and basil from their recently watered garden. We have just finished a meal of roasted potatoes and lamb seasoned with oregano and washed down with homemade wine. The meal was shared with their two daughters, their sons in law, their four grandchildren, Chrystalla's sister and her daughter, and Chrystalla's sister-in-law. Their daughters have just finished clearing the table and wiping it down with a cool cloth, and I can hear the sound of dishes clattering in the sink, of children making a nuisance of themselves underfoot. We are served strong Greek coffee in tiny white porcelain cups whose rims are painted with flowers and ribbons. Giorgos has lit his post-dinner cigarette. All is as it should be.

Giorgos and Chrystalla are farmers. They are also parents and grandparents, sister and brother, aunt and uncle. Chrystalla has worked as a seamstress in a clothing factory

since her children were born, earning five cents per garment. She had to stop doing this recently because her eyesight is no longer good enough, so she took a job as a cleaning lady at one of the foreign schools on the island. Giorgos operates a welding business out of their garage. But when they finish work they come home, change their clothes, get in their pickup truck and weave their way back to their ancestral villages to tend to their fields.

Giorgos and Chrystalla are conventional farmers. They live in Paphos, a town located on the southwestern coast of the island. Their fields are located in the villages they were raised in: they own two vineyards in Kallepia (Chrystalla's village) which they started growing in 1976, and they also tend a family olive, lemon, orange and mandarin orchard that belongs to Giorgos' sister who lives in Australia (personal communication, September 12, 2006). They have recently installed an irrigation system in one of their grape vineyards, and intend to plant about twenty fruit trees along the edge of the field. They do all of the planting, tending and harvesting themselves, with help from family members. They keep enough grapes and other fruit for their family's needs, and sell the rest to a local winery and grocery store.

Family is very important to the Papasavvas. They inherited their grape vineyards from their parents, and have given one to each of their daughters. The fields were ancient vineyards, which, through a lifetime of work, they have renewed. When asked about the future, Giorgos says: "Yes, certainly. It is continuous [with the past]. Grandparents, parents, children, grand-children" (personal communication, September 12, 2006). When I asked Chrystalla about why she farms, she tells me:

> ...we learned this way of life when we were children—except for brief periods of absence from it—we learned how to do it, and we like it...it feels good to get out of the house and be in the fresh air in the fields. And of course I am not doing this only for myself. I am going to provide something for my family by doing this. If you make money from selling the produce then you can provide something to your family (personal communication, September 12, 2006).

Giorgos and Chrystalla have been farming using conventional methods since chemical fertilizers and pesticides became available on the island. Chrystalla tells me that she thinks growing their own fruit is "better than buying them at the supermarket and not knowing how they were grown – all covered in chemicals" (personal communication, September 12, 2006). When I ask them about the chemicals they use on their fields, Giorgos says: "...yes, some chemicals we use...but they are safe...You cannot grow fruit without chemicals. We use simple chemicals...We use fertilizers that we apply to the roots, and we use pesticides. We put exactly the dose that it says on the box." Chrystalla adds: "but they are harmless" (personal communication, September 12, 2006).

I have known Giorgos and Chrystalla since I was six years old and have both watched them drive off to their fields day after day, year after year, and return after dark, sometimes with a truck full of earth-covered tools, and sometimes with brightly coloured plastic crates filled with lemons or oranges. A few times over the years I have woken with them at dawn, packed into their truck with my friends, and spent the whole day bent over double, reaching under the vines to clip bunches of well-powdered grapes. I have helped fill basket after basket with fruit that we loaded onto a donkey to be carried down the steep hillside to a lorry piled high (with labour), juice running out in a sticky trail along the ground. At lunchtime they would spread a blanket on the ground. Huge round loaves of fresh bread, olives, capers, tomatoes, salami, onions and halloumi (a salty

Greek cheese) materialized out of nowhere. We filled our bellies and told stories under the shade of a lone tree. I have also helped to crush the grapes for wine—squishing the purple skins between my toes on huge sheets of plastic in their yard. They are images of hard-working people who know and love the earth. They are also the images that filled me with questions, as I watched them spray or simply grab fistfuls of pesticides with their bare hands and throw it in up in clouds onto their vines, no masks, no eye protection—emerging covered from head to toe in a thick layer of white powder.

Giorgos and Chrystalla are one story. They, like Eddie Dykerman, are people whose values and dedication I admire. Another, very different story is Andonis Tsiarras. I had never met Andonis when I went to interview him in the spring of 2006, but I had been told that he was one of the first farmers dedicated to promoting organic farming on the island—that he had strong ideals, and loved what he did.

When I pulled up at Andonis' fields in Latchia, a former village that has merged with the urban sprawl of the capital, Nicosia, he was standing at the side of the road waiting for me. He appeared to be in his mid-fifties, and was wearing tight, deep blue jeans held up with a cowboy belt, and a tight white t-shirt. His skin was dark golden from years of working in the sun, and thick wavy greying hair stuck out from under the edges of his dusty red Campino baseball cap which shaded his light blue eyes from the midday sun. His well-worn leather boots shuffled in the gravel as he introduced himself and smiled—a real post-hippie Romeo. With a tough edge. Andonis proceeded to walk me through his fields and started telling me about himself and his farming history. Andonis was the only farmer than I interviewed who rents his fields. At the time of the interview in 2006 he had been farming for seven years, the last four of which he had been certified

organic. He has three fields that he grows on, which total about 1.3 acres. Andonis grows a wide variety of fruits, vegetables, and herbs. The first field he shows me is primarily trees: orange, lemon, fig, pistachio, apples and apricots. The trees are old and produce a lot of fruit. Underneath them in neatly organized rows he grows vegetables which get plenty of light, but also benefit from the shade of the trees, something that is rare in Cyprus. Across the street he is growing vegetables and herbs. He is well known for his specialty items, from bok choy and lemongrass to numerous varieties of basil. He tells me proudly: "I look for the future and I am a specialist about many items. I am the only person in Cyprus that grows special items...And I try every year to import a new item into Cyprus. So I survive because of this. I don't survive because I grow organic. Nobody can live by growing organically" (personal communication, June 21, 2006).

Andonis is one of only a small handful of small-scale farmers who are still farming full-time. Most have full time jobs, and pursue farming for extra income. Andonis tells me that when he first started farming he did so for "romantic reasons." He says: "I started to help the people—to give the people clear products—to give to the sick people their health...when I started I thought this was right" (personal communication, June 21, 2006). But over time he has been taken advantage of by people who, he feels, assume that farmers have all the time and resources in the world to give out information, do farm tours, and give out produce to visitors without receiving any compensation. Recently he has started telling schools that want to come to his farm on fieldtrips that he expects to be paid one pound per person. It is not about the money, he says, it is about recognizing that he is offering a service which is valued. The result of his feeling undervalued is that he has become rather cynical about people and the reason that he is a

farmer. He says: "I am doing it [farming] for the money...I realised that being romantic is the opposite of any business or any job" (personal communication, June 21, 2006). Family means a lot to Andonis—as it does to all the farmers I interviewed. It is part of the reason that he struggles with economic viability. His son wants to start university soon, and Andonis tells me that unless he receives the research grant that he is applying for from the European Union, he will have to go out and get another job to help pay for his son's education.

Despite all of the difficulties, I could tell that Andonis does love the land, and the connection to something larger that farming gives him. This will be explored further in the next section on beliefs. As mentioned at the beginning of this section, I have focused on these two stories to give the reader a place from which to observe the larger community of farmers that I interviewed. As much as I would like, I cannot go into each farmer's story in any detail. But before I move on to look at beliefs, I will very briefly introduce the other farmers who participated in this study, and whose experiences with translating beliefs into action inform the rest of this paper.

I conducted seven other interviews in the south of Cyprus. Three of these were with women: Theognosia Neophytou, a conventional farmer who grows oranges, walnuts and bananas in the Paphos district in the west of the island; Ioanna Panayiotou, who owns organic grape vineyards and a winery (where she produces organic, as well as non-organic wine) in Ayios Amvrosios, a village in the foothills to the south of the Troodos mountains; and Rachael Pettus, a Hawaiian organic farmer who grows a wide variety of fruit trees and vegetables on her husband's ancestral land in the Paphos foothills to the south-west of the Troodos mountains, and who, at the time that I interviewed her, was

running a business delivering organic supplies to customers on a weekly basis in the Paphos district. The other four farmers were: Andonis Pentayitis, a chemist who acts as managing director for the Strakka Farms Ltd, a 150 acre estate, 70% of which is planted with organic olive groves, the remainder being planted with pistachio, pecan and citrus trees. The estate also has a church on it, a family home, and large flower gardens. The owner has designated it as a bird sanctuary. Lucas Solomou is an organic farmer who sells produce directly out of his fields as well as operating an organic foods store in the capital, which he stocks with his own and other local organic produce and goods imported from abroad. Pater Efthimios is an Orthodox Monk at Trooditissa Monastery, where he is in charge of the monastery's 2.5 acre organic farm. The Monks are famous for their multiple varieties of apples and cherries; however, they also grow figs, apricots, pears, peaches, walnuts, and many different vegetables and greens. The last farmer that I interviewed, Onisiforos Onisiforou, works with Ioanna Panayiotou, but is primarily involved with the production of wine, rather than the fieldwork.

Beliefs in the Greek Cypriot Community: Where Nature and Religion Talk

Theognosia cannot wait for her husband and daughter to get home from work. She loves caring for her grandchildren while everyone is at work, but she is thinking of her fields. She says:

> I wait all day...so that I can go to my fields for a couple of hours. I like it because it relaxes me. All you think about is what you are seeing in front of you—your trees. You leave the rest all behind...You do not relax physically, but you relax spiritually...(personal communication, September 9, 2006).

Theognosia's sense of self and her spiritual beliefs are intimately connected with her fields. She considers herself Greek Orthodox, but does not make a conscious connection between her formal religious affiliations and her connection to her land. The connection between spirituality and her land and family was made very clear when I asked her about selling it—a logical conclusion given that she had just told me that it was no longer profitable to sell their produce. She said: "Sell them? No. I do not want to sell my fields...they are a part of myself that I would be selling...my parents worked hard to buy them..." (personal communication, September 9, 2006).

For George and Chrystalla, God is very present in every moment of their work. George says:

> All work is prayer. All jobs are the same. Because God is everywhere and always. When you are sitting at your table eating, God is with you; when you are sitting at a social event, God is with you; when you are in the vineyards, God is with you (personal communication, September 12, 2006).

Chrystalla says: "God is with us always. It is He that helps us to do our work..." (personal communication, September 12, 2006). The unquestionable presence of God more specifically in the act of farming is expressed by Andonis Tsiarras, who says:

> What I believe about God is all my life, and this work comes from all my life—it is coming from what I believe. And when I make this work, it is sure that you have to believe to the God, because every morning when you get up you don't take your car and you go to a closed office and you take a fixed salary at the end of the month. You are under of the sky. Under of the sky, many things happen. There are miracles, there is many, many things. So when you come in the fields, every day you wait one miracle. You wait your plant—because if you find tomatoes on your plant there is a miracle. If you find peppers, there is a miracle. Because if you plant tomatoes here and peppers here, in the same soil, and you have a different product, this is a miracle. Is the same soil. So you have to believe sure in this to make this work, and come from your life. And you continue about this. You cannot take out of yourself. It is together with your life. It is your

> work and what you believe...You have to live this work to understand...to live it...to take the money or to lose the money (personal communication, June 21, 2006).

Ioanna Panayiotou, who grows organic grapes, says that farming is undoubtedly spiritual: "It is spiritual. You do not do it solely for economic reasons. You have to do it because you want to bring the circle to a close" (personal communication, June 26, 2006). Although she says that she does not consider herself religious, Ioanna does believe in God, and acknowledges that Orthodoxy teaches that the natural world should be respected. She says:

> I believe in God...Organic farming is about how you see yourself in the world. And how you see how nature functions. How it works. Sometimes it is related to religious beliefs. In the Orthodox Faith this concept exists: that man is not above everything else. That we are all created by God and we are all equal and we have to respect each other because there is, above all, one God...But when I started it was not related to religion. It was ideological I think...The spiritual exists and I understand that it is important, but I am not very religious (personal communication, June 26, 2006).

Pater Efthimios, the Greek Orthodox Monk in charge the organic gardens at the Monastery at Trooditissa clarifies the Orthodox perspective on the connection to God through nature, and on the farmer's role to respect the natural world. I asked him whether he sees the natural world as playing an important role in the development of the spirit. He says:

> Yes. Nature does play a role. It is important. Man is a part of nature, right? But man distinguishes himself from nature. Man is a spirit of nature, a natural being. But man has the ability to unite with God—to have a relationship with God which other creatures and life forms do not have the ability to do. We believe that nature was created to serve man. We don't say that I am a part of nature, or that I am a part of nature, and nature is a part of God. These details are very important. Man can reach God through nature, because it is a creation of God it has certain characteristics that can help man to reach God (personal communication, June 29, 2006).

He goes on to emphasize that this does not imply that humans have the right to disrespect the natural world: "In Orthodoxy...there is a respect for nature...One thing we can do to preserve the environment is to farm in such a way that we are protecting the natural world. We see the environment as a creation of God, and as such we should respect it" (personal communication, June 29, 2006). Pater Efthimios does point out however, that while the natural world assists mankind to connect with God, this connection does not replace belief in Jesus Christ. He tells me that if we did not need Jesus Christ—if we could connect to God directly through nature—why did God send Christ to us? The Church's attitude is therefore that Christ enables us to enter into communion with God (personal communication, July 29, 2006). He says:

> There are some people that think they are connecting directly with God—they do not think they need Christ. But although they feel good, this is not true union with God—but rather simply a good feeling that they experience in these moments of contemplation and prayer. It is not the same thing. A man can go out and interact with nature and feel good, but this is nothing in comparison to the spiritual connection through the Holy Spirit (personal communication, July 29, 2006).

Lucas Solomou emphasizes the importance of believing in organic as a way of life, and that if a farmer really believes, there is no chance that their actions will not be a reflection of respect for the natural world. He says: "...for whoever believes, there is no need to control. If you believe, you are never going to spray, there is no need to be checked..." (personal communication, June 2006). Rachael Pettus, being the only foreigner in the group, has a more liberal approach to spiritual beliefs. She doesn't believe in religion in a conventional sense. Her spirituality is expressed through doing yoga. But she does say that she "profoundly believes that it is not our place to spend the

earth, air and water that we have to pass on to everybody else..." and that her spirituality has to do with the idea that "we are stewards of the planet...it's our job to safeguard the air, water and earth for the future" (personal communication, June 2006).

Onisiforos Onisiforou's spirituality emphasizes the importance of presence, which was mentioned by Theognosia and Andonis. He says that the production of wine is something that you live:

> You watch the grapes harvested and crushed and the wine made...I get something from my work, of course...You receive and you give. You have to give a lot. It is something that you have to love. It has to worry you. It has to irritate you, anger you. It has to make you enthusiastic. It is like a marriage (personal communication, June 26, 2006).

The responses documented in this section indicate that while the Republic of Cyprus is an Orthodox country, and all but one of the Greek Cypriot farmers would identify themselves as Greek Orthodox, their spiritual beliefs, and the way that they connect to the spiritual through the act of farming is deeply personal. In the next section I will describe how the ethics resulting from these spiritual beliefs are put into practice in practical ways in the act of farming.

Translating Beliefs into Action: How are we Treating our Land and Communities?

The ways in which the Greek Cypriot farmers that I interviewed translate their beliefs into action reflect an ethic of respect, humility, patience, commitment, devotion, and a very deep love for their profession, the land, the act of cultivation, and their families and communities.

Theognosia's farming ethics reflect a lifelong dedication to tending for her fields, humbly receiving whatever they give her in return, and sharing whatever

she receives with her family. Her behaviour also reflects an attitude of heartfelt gratitude to her parents for having given her the land that she farms. She says:

> You have to be there always, be there to work to grow bananas. If you do not go, and you let them alone you do not get a good yield...We have had the same banana plants for 21 years because we took care of them. And every year we go to the fields in March and April and we use the hoe and restore the soil so that the plants keep rejuvenating themselves. We know how to work the fields so that they keep healthy (personal communication, September 9, 2006).

Her persistence in continuing to farm no matter how difficult it was and how little they received from their fields reflects her faith in God. No matter what, she and her husband kept farming. She says:

> ...there have been years when we had frost and we lost a crop. But we never say "oh I didn't make money off the crop this year so I'm going to get rid of the crop." It's expensive...the water and the spray, and the gas to get to the fields...but you say this too will pass. No—I go out there and I work in my fields and maybe next year it will be better. Maybe in two years it may be another bad year, but I will not lose my hopes and let the fields go dry—no. We will wait another year and see what happens (personal communication, September 9, 2006).

Theognosia's son has been trying to get his parents to stop watering their fields for years now, since they are not making any money, and keeping the trees green is a significant annual cost. But Theognosia says:

> I cannot let them dry up. Last year for example they gave us 600 pounds for all our oranges. That does not even cover the cost of water or fertilizers. I told my husband that we are not going to make any money off of them any more. But he still goes and waters them—you see—he wants to keep them green. He feels sorry for them. He pays from his own pocket just so that they don't die. Eventually, obviously over time this will have to be let go (personal communication, September 9, 2006).

Although she is concerned about the health of her family and environment, Theognosia uses synthetic pesticides and fertilizers on her crops on a regular basis. I asked her

whether the felt there were any risks associated with this practice. She responded by telling me that they have always applied fertilizers. Without them you cannot produce. She also said that it says that you should not eat the fruits immediately after spraying them, so they apply the sprays in the months when they are not picking and eating the fruit. She recalled the strong smell of the chemicals that they used to use, but said that they must have made them weaker now, because they no longer smell. Her faith is so strong that it extends to all of her fellow human beings, including the producers of the chemicals applied to her crops. She says: "And these sprays that we use—it says on the container that they are not harmful…if they are harmful to our health why do they make them? (personal communication, September 9, 2006).

Giorgos and Chrystalla's work ethics are also deeply reverent and respectful. Although they say that they are making very little money off of their produce now, they continue to tend their fields. Chrystalla says: "we cannot just let the fields be. We cannot let them die. We cannot let them be destroyed," and Giorgos says: "We like them. We just like to see them green. Environmentally, green is nice. We make no money, but at least they are green. Some people think about money. But our fields are small, so we do not make a lot of money off of them. It is just nice to see them alive. It makes us happy" (personal communication, September 12, 2006). Giorgos and Chrystalla also express gratitude for what they are given. Giorgos says: "Whatever God sends you, you accept. Whether that be 20,000kg of grapes or 2,000. That's how it is" (personal communication, September 12, 2006). They made a point of telling me that each generation has the responsibility to teach the next generation how to farm. The responsibility to educate their daughters in how to cultivate the soil is one that they have taken very seriously.

Although neither of their daughters is very interested in farming, they have been given the skills if they ever decide that they want to give it a try. Giorgos and Chrystalla also emphasized the importance of their own mental and spiritual growth. The connection between these and the cultivation of their plants was expressed beautifully by Giorgos when he said:

> You have to be constantly growing to build something. In order to cultivate a plant for it to give you something, you have to train yourself so that you know how to cultivate the plant. The plant does not cultivate itself. This is about the mind and the soul. How do I cultivate my crop? Do I take it to market? If I use this chemical, will it do good or bad? Is the plant growing new branches? The two must come together—physical and mental—with the spiritual (personal communication, September 12, 2006).

Like Theognosia, Giorgos and Chrystalla continue to apply chemicals to their fields, and they too tell me that the instructions say that the chemicals are harmless. I asked them if they would ever consider trying organic farming. They said that they wouldn't of their own initiative, because they know nothing about how to do it. Giorgos says: "If someone were to come and tell me, then yes. But in the foreseeable future I do not see this happening. Some day it may happen. But now, no..." (personal communication, September 12, 2006). He goes on to say: "Unfortunately there has been no push to change the situation. If someone says that we should change the way we farm then we will change... You cannot do something that you know nothing about. How would you do it?" (personal communication, September 12, 2006).

Andonis Tsiarras' spiritual ethics are reflected in his dedication to farming organically, and his concern and love for the natural world. He says that because his fields are chemical-free the birds are naturally attracted to it:

> ...everybody is spraying chemicals, so you see your field is full of birds – to eat, they sit on the trees....it is not necessary to do anything. This is about the history of organic growing—that you have to have birds in your fields...they make nests in the trees alone. I leave them. I talk with them. Maybe they are afraid of me when I am so near to them, but they know from the first time that they come and I don't shout or make something else. They understand that this place is for them and so they come free (personal communication, June 21, 2006).

Andonis' commitment is also reflected in his constant efforts to diversify the crops that he is growing so that he is constantly introducing new foods to the market. Although he feels his knowledge and value as a farmer have been taken advantage of, he is nevertheless committed to educating his community about organic farming, and is open to having school children visit his farm, and to going into schools to share ideas about farming with children.

Andreas Pentayitis tells me that Strakka Farm is not only a farm—it is a whole ecosystem. The idea of interspecies equity is built into the operation of the whole farm. He says:

> We have ponds with water in them for irrigating, but it is also a sanctuary for the birds. Hunting is not permitting at all in our estate. We also have some artificial nests in part of the farm to attract certain types of birds, for example barn owls. You will see them when we go out into the fields. We are also protecting black snakes here. Nobody is allowed to kill them, and for the control of rats (personal communication, June 28, 2006).

Although the farm exports all of its olive oil and marmalade to the U.K., the presence of the farm on the island and the quality of the research being done on organic products facilitates the promotion of more holistic farming methods and the dissemination of progressive ideas about farming and organic production.

Ioanna Panayiotou and Onisiforos Onisiforou highlight for me the commitment to public education. When Ioanna started farming organically, all of the farmers in the area thought she was crazy. But she stuck with it, and in the long run it has paid off. She says:

> Nobody could understand why I was not using chemicals if you could get a greater output using chemicals. And of course when we first stopped spraying our crops, our yield dropped significantly because the plants had gotten used to having the chemical input and we didn't know what to put on them as a substitute. And this seemed a little strange to the other producers. But now with time, applying fertilizers—because we use organic fertilizers—and as the overall production in the conventionally farmed vineyards has fallen, due to lack of rain and many other reasons, now it seems more logical to them (personal communication, June 26, 2006).

The dedication of the Winery to educating the public on organic wine is impressive also. Although she could be charging a much higher price for her wine, she has kept the price she charges for her organic wine the same as the price for her conventional wine. She says: "I prefer to have less of a profit and that the consumer can afford the product... I am not sure whether everyone is buying the wine because it is organic. Some people buy it because it is good wine and it has a good price. But I think this is a way for them to learn" (personal communication, June 26, 2006). Ioanna would like to be producing only organic wine, but she cannot convince enough grape farmers (in the regions where white grapes are produced) to go organic, and she cannot produce a large enough quantity of grapes on her land to be able to make wine solely from her own crops.

Ioanna is also deeply concerned about the environment and health, and is an active member of the Green Party. She says that health is probably the most important aspect for her:

> Many illnesses originate in the environment. And I do not like to see sick people. You try to do something where it starts. I mean you can say "you

> are sick, go to the doctor." But this is not the solution. You have to solve the problem where it starts. So if you want to do something for health, you would not tell someone to just go take his/her medicine. You are going to do something to improve the problems that cause the illness. And the environment is important. And if you want the children, and the children's children to be healthier you have to solve the problems that exist now (personal communication, June 26, 2006).

Lucas Solomou, like Ioanna, is committed to farming in a way that is environmentally sound. He believes that the best way to be successful is to farm in a way that mimics the diversity and scale of the natural world in which you are farming, and he thinks it is very possible to earn a decent income and contribute to the health of the environment simultaneously. His vision is small. He says that it is not necessary to have large numbers of chickens or large quantities of vegetables in order to live well. His desire to encourage diversity on his farm is reflected in a number of ways. He says:

> I put water out for birds...Many birds eat the insects that are bad for my crops, so I want the birds. I have left wild vegetation around the edges of the fields as well as trees, etc. It was all there; the ecosystem was working fine by itself. All I do is not fight it, and I put water so that the birds can drink. And more come to my fields because there are no chemicals (personal communication, June 2006).

Maintaining a healthy ecosystem is a key ethic for Lucas. And doing so requires less, not more work. It means letting nature provide the services that it provides naturally. His farming practices are more passive, providing the framework within which nature can thrive with minimal human intervention. He says his goals are:

> not using chemicals, and providing products that were healthy and slowly, slowly allowing the earth to provide, without having to make special effort. And if you have that tree there and you make everything around it a healthy environment, the ecosystem will operate by itself. You won't have high numbers of harmful insects or fungi. And if you do this you will eat, as will the birds and everything else. There is that school of thought that says "do nothing—and others will eat, and you will eat too." The soil produces something—if you plant a tomato for example and do not do

> anything in particular to the tomato other than water it, and it manages to grow, then you have gotten something without destroying anything. The only thing that you are using then is water which if you manage to use rain water then it is all over. I want to provide things that are healthy and that are self-supporting (without need for outside inputs). I am an idealist! (personal communication, June 2006).

In addition to protecting the environment, Lucas is dedicated to providing healthy, chemical free food to his community. His commitment to the promise he has made to his customers gives him the energy to live in one city, farm in a second city, and operate an organic store in the capital which not only provides the public with organic foods, but provides the organic producers with a market outside of the large-scale, mainstream supermarkets.

Pater Efthimios and his fellow Brothers at the monastery are also interested in maintaining the natural balance that exists in their mountain ecosystem. They are farming organically in order to honour this balance, and to provide healthy fruits and vegetables for their community as well as the public. Pater Efthimios says that they farm organically

> ...because with organic farming we have fewer negative influences on man and on his environment. We are not bothering the environment, nor are we bothering man. And we are letting nature work by herself. This is important. We need to respect the natural balance and not upset it. And of course with regards to human health, no one can deny the fact that conventional farming has many negative impacts on human health (personal communication, July 29, 2006).

The monastic community also wants to preserve local fauna. They have put birdhouses up in a number of the trees to attract nesting birds. Being nestled in the forest they are surrounded by pines and have sought, as much as possible, to integrate the surrounding ecosystem into the operation of the farm. Some birds have caused damage to their crops, bur for the most part integrating their farm into its surroundings works well:

> ...we have many birds. And we want to have birds, because they help us fight the insects. But we do have some types of birds that are really damaging for the fruit trees. This is a problem. But we have left trees interspersed with other things, and of course we have left the wild trees both in fields as well as all around the fields. We see what was there as the natural environment and we do not want to destroy the natural environment. (Pater Efthimios, personal communication, July 29, 2006).

Pater Efthimios is an avid researcher, and the monks employ many different methods to enrich the soil and fight pests and diseases. They have an open compost pile that they cover with leaves and branches, and plant squash around—which helps the compost remain humid under the intense Mediterranean sun. They also bring in compostable waste from olive and grape factories, as well as using the juice from seaweed to strengthen the fruit trees. In order to fix nitrogen and reduce soil erosion, the monks have planted various varieties of beans and clover in the fruit groves. They have created a number of insect traps using plastic bottles and a mixture of sugar, yeast, and water. Sometimes they add fish powder to attract the flies. When necessary, they apply lime, bentonite, sulphur and copper to the leaves of the trees.

Rachael Pettus' beliefs are put into practice in her holistic farming methods. Her home, next to her fields, has a grey water system and uses solar voltaics. Rachael tries to make sure that everything she uses is available locally. She does not like the idea of importing organics from other countries, which she sees as defeating the whole point. When I interviewed her, she was operating a business with another female farmer, supplying fresh local produce to about twenty people in her community. Not everything was organic, but it was all local. Her feeling that food should be affordable, healthy, and local was what inspired her to start her business:

> I just find that there's no point in buying organic apples from New Zealand. How organic is flying them 6,000 miles around the globe? You'll see in England in the health food markets: certified organic plums from South Africa. I mean its nonsense...people are going "oh, I'm right on. I only eat organic food and I only do this", but yes, if it's trucked all over the place or flown all over the place then you're not being very ethical, are you? ...part of the reason that Elena and I decided to go into business together and make a go of it is because the health food shop in Chloraka was importing organic tomatoes in the summer time from Italy. And they were 8 times the price of what they were in the supermarket. And we looked at each other and said "this is ridiculous—I have a certified organic field sitting up there and I'm not doing anything with it." So we thought this is daft. Why are we importing things from Italy and Greece...so that's why we did this (personal communication, June 2006).

The boxes of food that Rachael was delivering were the result of a family, and community effort:

> So they've got a kilo of tomatoes, a kilo of cucumbers, three kilos of potatoes. We also work with health food shops, so if people want bulgur or pasta or something like that then it's all in the box...We get eggs from my mother-in-law. They're not certified, but they are free range. We get free-range chickens from a guy in the Nicosia district...and my husband's aunt does yoghurt which is not organic at all, and we tell everybody it is not organic at all, but it is homemade, and it's nice. So that's also on the price list. Then I do baking bread and biscuits and that sort of thing. And when there's fresh fruit I'll make jam. So I'll use conventional sugar, but organic fruit. You know—things like that. So it all helps in a way, in that we don't end up taking home much money at the end of the day, but we get our supplies from that. It's good quality stuff, and I know where it came from (personal communication, June 2006).

Rachel's farm is fairly self-sufficient. Compost is used on her fields, and she plants nitrogen fixers to further enrich her soil. Unlike most farmers, the close proximity of her home to her fields reduces her energy footprint.

This section has focused on the farming practices and work ethics of Greek Cypriot farmers in order to show in which ways, and to what degree farmers are

translating spiritual principles into practice in their fields. I will now turn to the Turkish Cypriot farmers to see how their experience compares to their neighbours to the south.

Turkish Cypriot Voices

I conducted four interviews in the north of Cyprus. One of these was with a couple that farm together, and the other three were individuals. Nursel Eckici was one of these. She is an organic farmer whose farmland is located in Lefke, in the northwest—a hilly region that falls steeply down to the sea. Nursel's husband Erson helps her with her work, but she is the primary farmer. Nursel lives in a small village nestled into the bottom of a lush valley. Her fields are a 15-minute drive away, along steep, winding dirt roads. She is currently growing strawberries, apricots, oranges, lemons, mandarins, and kolokassi (a white root vegetable quite similar in consistency to the potato). She also grows cucumbers, tomatoes, peppers, onions and oregano in the winter time, and plans on planting beans between her fruit trees to fix nitrogen. She started preparing the land four years ago, and planting two years ago. She had just received her organic certificate the week that I interviewed her. Nursel did not know what organic was until she took a trip to Canada and visited an organic farm. She was so impressed that she returned home and immediate enrolled in a course on organic farming and began the process of certification. When I ask her why she is farming organically, she says: "Because we should not be doing things that are bad for people. We know the chemicals harm people's health and we do not want to harm them. Also, we do not want to damage the environment" (personal communication, June 30, 2006).

Nursel has a great attachment to her fields. Before I left she got a pallet out of her truck, handed me two baskets and indicated that I follow her into her strawberry patch. The plants were lush and each one bursting with bright red berries. She patiently showed me how to pick the berries without damaging the fruit, and we proceeded to fill the entire pallet with strawberries. Watching the joy with which she tended each plant, and the pride in her eyes as she looked over her fields and described the birdsong that fills the air in the early mornings I knew that her sense of place, and feeling a part of her community, are vital influences on her farming practices and goals for the future.

Serhat Usanmaz is a farmer from Morphou. Given his experience, I expected someone older, but in fact Serhat, in his late twenties, turned out to be the youngest farmer that I interviewed, and the only one whose work had taken him across the political border. He met me for the first time on the main shopping street on the Greek side of the border. He was built short and strong, tanned skin like well-worn leather, and eyes the colour of sun-drenched honey. His hands were square and strong, and he had long head of thick, sun-streaked, corkscrew curls that were pulled back in a ponytail. We walked across the border together that scorching day, and he spent two long days driving me all over the north of the island introducing me to farmers and helping with translations, where necessary. At the time that I interviewed him he was working as a research assistant at an agricultural university in the north of Cyprus, and working part time for the United Nations Development Program (out of an office in the south of the island), as an agricultural advisor to farmers in northern Cyprus who were trying to make the shift to organic farming. He also had, and still has, two plots of land next to his home, which he is farming organically, as well as other land in another location which he continues to

farm in a conventional manner. It was the organic fields that Serhat took me to visit. They are small – in total, less than one acre. One field is lined with pomegranate trees. In between the rows of trees the ground is covered with melon and squash vines. The other field is planted with plum trees, again interspersed with the deep purple swell of eggplant, green peppers, bright red tomatoes, dusty yellow squash and beans. Serhat keeps hares, of which he is especially proud.

Finding acceptable, allowable pesticides and fertilizers to use in organic farming is one of the major challenges that all of the farmers in the north are experiencing. Serhat, like most of the farmers, combines various locally available materials to enrich his soil and fight pests. He makes compost from a mixture of manure from his wife's grandfather's sheep and chickens with weeds and other garden waste. To combat pests he is experimenting with creating a tincture using local plants, which he sprays onto his crops. Another challenge is finding a market, given the lack of public understanding about organic produce, and the limited number of places where it can be sold. There is currently one supermarket in the capital with an organic section, and Serhat is one of the fortunate farmers who has managed to find a way to transport his produce that distance, and sell his goods there.

The other two interviews that I conducted were with Osman Kas, an organic olive-oil producer; and Koul Ahmet Yasasin and his wife Soeude Yasasin, recent converts to organic farming who grow grapes, olives, melons, okra, cucumbers, tomatoes and pomegranates. Osman's olive grove is set in a valley, and is a portion of what used to be an ancient Greek monastery grove that is thousands of years old. The grove is getting an increasing number of visitors who are attracted to the feeling of standing on land that

has been a part of many stories over the centuries. Apart from birdcall it is absolutely silent, standing under the trees whose trunks are thick, strong, marbled, and gnarled. The pale green leaves of the trees form an almost continuous canopy above. Osman was allocated this land by the Turkish Cypriot authorities as compensation for land lost during the relocations resulting from the 1974 war. Osman's land is an acre, but only slightly over half of this has olive trees on it. In total he has 125 olive trees. As it is only part of an enormous olive grove, he is surrounded by olive groves owned by conventional growers. This has not been a problem in the past because the groves have been left untended, but recently his neighbours have started to return to farming as a means of making extra income, so he expressed concerns about the problem of pesticide drift.

Koul Ahmet and Soeude Yasasin's fields are located on the outskirts of the village of Buyukkonuk on the Karpasia Peninsula. They are a couple of hours drive from the capital, and very remote from any commercial centre. Their fields back up on a spine of mountains rising above them, and they are surrounded by conventional farmland. They farm together with assistance from family – a very important part of what they are doing and why they are farming organically. Koul Ahmet says: "I work with my wife, with my kids. My son and bride. His bride runs through the fields. She likes them" (personal communication, July 11, 2006). The Yasasin's biggest challenges have been associated with lack of support. They had been farming conventionally for 40 years before making this transition to organic—a change they say is spurred by concern for their health, and the environment. Making the shift to organic involves many processes they are not familiar with, and they expressed frustration over the complete lack of technical support from the government. They are also struggling with the fact that they have nowhere to

sell their produce. At the time that I interviewed them they had fields heavily laden with fruit and vegetables with no market. Remoteness, lack of a market, and lack of information and technical assistance are issues raised by all four of the farmers in the north.

What do We Believe? Becoming Conscious of Unconscious Beliefs

The Turkish Cypriot community is unofficially Muslim, and the call to prayer punctuates the day all across the north of the island. Many do call themselves Muslim, but just as many do not seem very religious at all. Unlike the south of the island, where the Church's power pervades every sector of society and economy and all areas of life, in the north, formal religion seems to be much less omnipresent.

None of the four farmers that I interviewed identified themselves as Muslim when asked about their spiritual beliefs. In fact, Koul Ahmet Yasasin and Soeude Yasasin are the only two participants that even mentioned God in describing their spiritual beliefs. Soeude Yasasin says: "I believe in God. Whatever God wants to happen, that is what is going to happen. If it doesn't rain, nothing happens. If it rains, things grow. That is what we say...Nothing is in our hands, you know?" (personal communication, July 11, 2006). Her husband's spirituality is based on having faith and believing that God will support you in your endeavours—whatever those may be. He says: "I believe in God and in the earth, and that one day I am going to die. Whatever work I do I believe in. I believe I am going to succeed. I am going to succeed at this too. I believe that in order for our work to progress, that God helps us. We have to work, and God will help us" (personal communication, July 11, 2006).

Osman Kas is at the other end of the spectrum. He does not believe in God. His spiritual beliefs are based on an ethic that all life has equal value and that the natural world should be treated with respect and care. He sees nature and human beings as being part of a single system which it is our responsibility to support and nurture in order to maintain a healthy balance. He says: "I believe in honesty, trust and living together in peace. I also believe that you should not take things from other people" (personal communication, July 3, 2006). His desire to preserve health—in nature and in humans—is what inspires his work as an organic farmer.

Nursel Eckici and Serhat Usanmaz hold spiritual beliefs that are midway between Osman and the Yasasin's. Nursel does not mention religion or God, but instead, an ethic based on the desire to do good in the world. For her, connection and spirituality are based on good intentions; wanting to act in a manner that promotes a healthy environment and the health and happiness of her family and community. She believes that if she puts her intention to do good in the world into practice, that she will be supported in her efforts:

> I think that when I am doing something good for myself and for the rest of the people, that I will succeed. I do this work because I like it. Because I am doing something good for society and for my children. But of course I also want to make enough money to be able to...continue doing this work. If this were not good for society, I would not be doing it. If I do not succeed, then I will continue to do this for my family, I will just not sell it. But if I make a little bit of money doing this then I can continue to sell to other people as well, as it will be good for more than me (personal communication, June 30, 2006).

Nursel likens the process of growing plants to raising children. Good farming practice is like instilling good values and ethics into children. She says: "I feel very good because I love what I do. I plant a tree and I watch it grow. It is like watching a child grow and become a good person. When people come here to spend the day I feel good and

relaxed...I am happy that I am able to give something" (personal communication, June 30, 2006). Her spirituality is founded on generosity of spirit; heartfelt commitment to connecting with the soil and her crops, and connecting her community to a healthier way of eating. She even mentioned that she would like to connect to farmers on the Greek side of the island:

> I would like to find a way forward for us all; for the organic farmers in the south and in the north. I would like to find a way to communicate and share ideas with them. I want to do this work for the good of everyone—on both sides of the island. There are certain things that they know better than us. There are certain things that we might know better than them. If we work together then we will find the right way forward (personal communication, June 30, 2006).

Serhat Usanmaz believes in preserving the overall health of his island ecosystem. His spiritual beliefs are based on the interconnectedness of humankind and the natural world. He feels a deep responsibility to act as a steward for the earth, and to maintain the health of the land that his ancestors left to him. He explains:

> We [farmers] can give the people the opportunity to do something for their own children and people. We can protect our land and our environment because it belongs to us, and our children will survive on our land, and we should do something for them...if 20-25 years ago my grandfather, my grandmother could do this job without the pesticides, then I can do it now. In 20-25 years we have destroyed many things. I think we should stop it (personal communication, June 30, 2006).

He struggled to articulate how he felt about his beliefs, but did communicate a feeling of mystery or connection when he is in nature that he does not feel when he is elsewhere, and that he cannot live without: "When I go to nature, when I sit between the trees and watch nature, I am feeling completely different than when I am with people. I like this...if I cannot do this then I cannot survive, because I am feeling better than anywhere when I am have been alone in nature...it is an unexplainable thing" (personal

communication, June 30, 2006). His desire to farm organically stems from this connection, which translates into a deep desire to protect the world. He says: "I don't have a religion...but my spiritual things is my heart—my responsibility, my heart. I want to protect these things because I believe in nature. I want to keep it wild...because of this I want to do organic" (personal communication, June 30, 2006).

Although they vary in where they are coming from, all four of the Turkish Cypriot farmers express a strong connection between their spiritual values and an ethic of respect and stewardship for their earth. Whether they translate this ethic into practice, and how, is addressed in the next section.

Are we Nurturing Our Land? Real Signs of Love in Toil

All five of the farmers from northern Cyprus are farming organically on at least some of their land, and this shift over to organic production has been a recent change for all of them. There are many more challenges associated with organic farming in the north. One is that the authorities have yet to pass an organics law and they are not very supportive of the organic movement. As Seyit Yorgancioglu, a policy-maker in the 'Department of Agriculture' who is involved in writing an organics law, says:

> You cannot see the 'government' supporting organic farming. We started preparing the law in 2005. Politicians have priorities however, and organic laws are not one of these...The 'Department of Agriculture' is developing policies, but they are not talking to the growers. The 'Department of Agriculture' says it is supporting organic farming, but only in words (personal communication, June 21, 2006).

Serhat Usanmaz elaborates on the fact that he feels the problem is not limited to organic farming. He thinks that the government needs to change its attitude to all agriculture. He says; "They don't believe in organic. They are making this job for politics, and I hate

this. Somebody should take this task, which is to believe in agriculture, not only organic. They should make a good program for managing agriculture on the island" (personal communication, June 30, 2006). The challenges that he feels organic farmers are having to grapple with are evident in the changes that he strongly feels need to be made at the policy-making level:

> ...they should urgently make a small consultancy group on organic farming. They should open an organic farming department in the government. Then they urgently need to make a law on organic farming. Then, urgently they need to register the allowable organic pesticides and fungicides, and import them, because we do not have the resources to get this type of things. They should do this urgently. Then the government gives subsidies to conventional farmers; they should give subsidies also to organic farmers to attract them to pass over to organic. Right now only tree farmers are getting subsidies. Vegetable farmers are not getting any subsidies—conventional or organic (personal communication, June 30, 2006).

I include the challenges associated with policy to highlight the fact that in the north, simply making the choice to farm organically is putting beliefs into action because surviving as an organic farmer involves so much struggle and so many more risks than it does in the south. If a pest or disease destroys their crops, there is often no remedy given the lack of allowable organic pest control products, and there are no assurances that anyone will be able to find a market for their goods. So, going organic necessitates a level of faith that has no conditions. These farmers choose to do what they perceive to be right, without knowing whether they will bring home any income at the end of the year.

Koul Ahmet and Soeude Yasasin have only recently made the shift over to organic farming. They want their farming to be in line with their concern for the environment and the health of their family and community. Soeude says: "The neighbour died. My father died. It was six months ago—he just went. There are many in the area

that have died from the chemicals" (personal communication, July 11, 2006). Soeude goes on to comment on the decrease in yield: "Now that we are growing organically we don't get a lot. When we were spraying our crops we got more. I realised with the cucumbers I planted—they don't grow now many—few. They died quickly. If I had put spray they would have grown better" (personal communication, July 11, 2006).

Despite the decrease in yield, Soeude still is happy that they have made the switch to organic: "Well we are still doing the same work. But I feel better. When you use chemicals you are going to die. You are poisoning yourself" (personal communication, July 11, 2006). Koul Ahmet reiterates his wife's concern for the health of his community, saying that they are growing organically "for our good, so that we do not get sick and die of cancer" (personal communication, July 11, 2006). He adds that he wants to restore the land to the image he has of its former state of health—to "how it was 1,000 years ago—I want it to be that way again. I want it to all be beautiful…I want the fields to be virgin. As if nobody had every touched the fields. That is my image… I love the green" (personal communication, July 11, 2006). He also mentions that not using chemicals simply makes him feel better, lighter inside: "There are no chemicals. I am happy. Very peaceful. Like the cucumbers: I can pick them and eat them. I don't have to wash them, I eat them. The grapes are the same. I feel much lighter [farming organically]. When I go to bed I sleep well. I believe in this work, and that I will succeed" (personal communication, July 11, 2006).

The Yasasins use manure on their fields, however when I asked whether they use compost they told me that they do not know how to make it. Instead, Koul Ahmet said that he is planning on planting beans in his grape vineyard the next year to fix nitrogen.

They have had problems with worms that eat into the trunks of their trees. His solution has been to cut them out of the bark with a knife. He has bought an allowable pesticide, but it is so expensive that he cannot afford to use it often. Despite the challenges facing them, the Yasasins were planning on continuing to grow organically as long as they are able to farm. They feel that by pursuing a healthier farming practice they are promoting the continuance of a way of life that they love, as well as showing their community that farming can be done in a way that is life-building rather than harmful.

Nursel Eckici is interested in protecting the environment and providing healthy food to her community. Her care is evident in her choice to go organic. She says: "...we should not be doing things that are bad for people. We know that chemicals harm people's health and we do not want to harm them. Also, we do not want to damage the environment. I do not want to spray pesticides and destroy the environment" (personal communication, June 30, 2006). In addition to protecting the environment herself, Nursel wants to contribute to the education of her wider community and tourists that visit her region. To these ends, she would like to develop an agro-tourism operation on her land. Her vision is this: "I want to build a little house down there on that plot of land and have goats and chicken, and open it to tourists who come for the day, enjoy the surroundings, and enjoy a Cypriot meal and Cypriot drinks" (personal communication, June 30, 2006). In addition to the agro-tourism centre, Nursel hopes that by growing organically she will influence consumers to make healthier choices about their food. Like Ioanna Panayiotou in the south, Nursel has chosen to keep her prices down until the public has a better understanding of organics. She says:

> We sell [the produce] at a price that is about the same as the conventional crops because people still don't know much about organic—they need to learn first. We only started recently, so we are keeping our prices low so that people start to understand what organic is, so that their eyes open. Now people look at the produce and they see similar things that are half the price and they say "why would I buy this instead of the cheaper one?" They don't know the difference (personal communication, June 30, 2006).

Like all of the farmers in the north, Nursel has been creative when it comes to finding alternative ways to fertilize the soil. She uses sheep manure and compost made from waste from her daughter's mushroom production business. In an effort to find a market for her goods, she is trying to find out if it would be possible to send her strawberries across the border to be sold in Lucas' shop. Being open to work with the Greek Cypriot community in this way is another indication of her commitment to the values and ideals that she holds as important.

Osman Kas has kept the price of his olive oil relatively low also, in the interests of educating consumers and building up his market. He says that by going slowly, he is also educating himself as he goes, which enables him to integrate more organic practices as he learns. He says: "It is getting easier, but I am spending more time. The first year I didn't have much knowledge so I didn't do very much. As I learn, I do more. I spend more time and give more care" (personal communication, July 3, 2006). Taking his time and slowly building up the health of the soil is strengthening the health of his trees. He says that as the trees get stronger and healthier he is getting a better yield and can produce more olive oil. To enrich the soil and fight pests he uses the very product that he is making from his trees—oil. He sprays the leaves with it to prevent the spread of disease. He also uses chloride salts and copper. He has not been using any fertilizer, but intended on trying manure the year that I interviewed him. His orchard has bean tendrils

weaving over the soil between the trees. He ploughs them into the soil to increase the nitrogen available to his grove.

Of all four farmers in the north, Serhat is the most actively involved in testing out new ideas, educating the public and assisting other farmers when they need help. He is also constantly educating himself. He uses compost, animal manure, and compost tea on his fields. He had not used any pesticides on his farm at the time that I interviewed him; however, he plans on using sulphur and copper if he does get damage from fungus or mice. He was investigating the use of a biological predator that he was going to have sent to him from Turkey. He was also going to try distilling the oil of a local plant that has a potent smell to fight pests. If is doesn't work, he intends on searching for other options. His agricultural background, and access to the university facilities makes him a pivotal resource in the Turkish Cypriot farming community.

The Turkish Cypriot farmers are making a lot of effort to push the future of agriculture in a more sustainable direction. Their beliefs appear to be strongly rooted in their connection to place and the natural environment. Through commitment and determined efforts, the motor of change is in motion and when I returned to Cyprus in 2007 many more farmers had been certified, so the movement is growing.

The past few sections have been focused on farming in Cyprus and on Prince Edward Island. The next few will look at fishing on these islands, and the beliefs and practices of the fishing community.

Fishers Speak Out

The following stories are based on five interviews with island fishers: two in PEI, and three in Cyprus. All of them are small-scale, commercial fishers, who work for themselves. The fishers in PEI harvest lobster and shellfish, whereas the Cypriot fishermen target coastal pelagic fish. All of the fishers interviewed in Cyprus come from a single fishing community whereas in PEI, I conducted one interview on the north shore, and one on the south. There is only one female fisher represented in the group.

Fishers in the Saturated Blues of the North Atlantic: A Sense of Things on PEI

Manny and Judy Gallant live in a small wooden cottage that is right on the shore, off a narrow rural road in St. Nicholas, along the southwestern coast of Prince Edward Island. I went to visit them on a bitterly cold day in November, 2006. Manny and Judy ushered me in, sat me down at their kitchen table and gave me a hot cup of black tea to warm me up while we talked. Their cottage was flooded with light, the walls decorated with landscape paintings done by Judy. The space was cosy, but I got the feeling that most of their living happened beyond the four walls of their home.

Manny and Judy make a living from a 16 acre oyster lease that Manny and his brother have been building up for the last fifteen years. In addition to oysters, Manny fishes clams and quahogs. He has been fishing professionally for the last nine years, but he says he remembers going out fishing for the first time when he was thirteen. His father was a sports fisherman, and started taking Manny out with him when he was still a child. Manny says: "...that's how I think I probably fell in love with fishing and the water—being on the water at a very young age" (personal communication, November 21, 2006).

Judy started fishing when she was thirty-five. She had heard about people who were fishing and she liked being on the shore. She started digging clams to make some money on a part time basis and then met Manny, who started taking her out in his boat and teaching her to fish quahogs and clean oysters (personal communication, November 21, 2006). Judy fished with Manny for many years as well as holding down a part time job. However, since the catch went down she took on more and more hours at her other job and eventually stopped fishing altogether. She says:

> Manny and I used to go out together in mid-season to get piss clams but we completely stopped that—there just wasn't any. And then I kept on going with him to get the quahogs, same thing, but then we had to keep travelling to new spots. It just wasn't worth it, and I always did work part time besides the fishin', so I just started working full time in the summer in tourism. And I love it. I helped him clean out his oyster bed. I am allowed to help him clean out his oyster bed without an oyster license, and I did that this fall with him, and I just like it just as much. There's something different about it. You are tired and you complain, but you still like it (personal communication, November 21, 2006).

Both Manny and Judy believe that big is not the answer, and are deeply concerned by the large draggers that are being let into PEI waters to drag for bar clams. Manny explained that if all the bar clams on the outside sand bars are cleaned out, it will have an effect on the inshore fishery also. They do not understand how those making the policies cannot see that the health of the deep water and inshore fisheries are interdependent. Manny points out that PEI has between 800 and 1,000 oyster fishermen out on the water in their little boats, just like they were one hundred years ago, apart from the slightly more modern equipment. He says that when you put a mechanical harvester in the water it is not only wiping out the stock, it is eliminating the PEI fishers. They are unable to compete (personal communication, November 21, 2006). They also dislike the fact that

the authorities are allowing individuals to come in and purchase leases for 250 acres of water, which, in their eyes, is unnecessarily large. Another concern is the smothering of the shellfishery from algal blooms resulting from farm effluent. Manny says that when there is a fish kill everyone treats it as a natural part of life. But if it were a problem with the potatoes, he says, it would be news everywhere. He feels that there is not sufficient recognition given to the fact that there are two primary sector communities on PEI, farmers and fishers.

Manny and Judy have a deep love for their community and their fishery. Manny says:

> I love being on the water. Well, it's just like anything else—gets in your blood after a while. Got in my blood very young, and stayed there, eh. Matter of fact I dreamed of having an oyster lease when I was twelve or thirteen years old. And it was always in my head to work at this and make a livin' at it. I always love the water. It's hard work. There's days out there when you're cursing, and you put your fist up to the sky and curse at the wind, but you don't want to come in. You tough it out. And there's other days when it's just so beautiful. That makes up for the bad days, eh. You're so much in peace in nature. It seems like everything is just one. It's all one. Nothing else. It just seems to be so much a part of ya out there. It just makes you feel really good. The spiritual part of it, anyway, is just beautiful. I could work like a dog one day and be so tired that night that I'm draggin' my tail comin' in the house, and the next morning I'll wake up 5 o'clock in the mornin' without an alarm clock. I do that every mornin'. Five thirty, maybe. And I'm excited again. I'm drivin' to the shore and I'm excited to get out there again. And just the day before I was draggin' my arse to get out. Every day I'm excited to be out on the water (personal communication, November 21, 2006).

The degree to which their sense of place inspires them becomes even more obvious when Manny takes me out to a small art studio next to their home filled with jewellery that he has made out of shells; some of Judy's paintings; and sculptures made from driftwood, string and stones found on the shore. Before I leave Manny takes me out

to his workshop to show me the smelt-shack that he is building. Inside, despite the tight quarters, there are two paddle seats. He informs me that one is for him and one for a visitor!

Barry Murray is a north-shore lobster fisher. He is 48, and tells me that he is on the young side of the fishery. He lives on George Adams Road, near Kensington in a wooden framed home with enormous windows looking out over the rural PEI countryside. We settle ourselves at a long wooden table next to the windows. He tells me that he has been fishing on his own since 1985—22 seasons—and grew cultured mussels for twenty years as well. He no longer grows mussels. I asked Barry whether he comes from a fishing family, and he said that he does not. I asked him why he chose to be a fisherman. He replied:

> Well, a person's life is probably half planned and half by chance at the best of times, and I had been working with agriculture and did not see a very bright future for me in agriculture. For the price of a used tractor I was able to enter the fishery, and I did, and was fortunate that I hit it at the beginning of a good cycle. And I also started mussels as one of the early mussel growers, and benefited from that growth of that sector as well, so I have been fortunate in the fishery (personal communication, November 20, 2006).

Barry's license legally permits him to fish anywhere on the north side of PEI. However, in reality there is a great deal of territorialism in the fishery. Each fisher has adopted areas that they establish as their traditional fishing grounds, and from which they do not often stray. The territory that Barry fishes (and shares with ten to twelve other fishers) is a stretch of bottom about four to five miles wide (personal communication, November 20, 2006).

Although Barry says that "every fisherman will tell you there's too many other fishermen out there," he feels that the number fishing in his territory is about right (personal communication, November 20, 2006). Some of the factors that he did identify as increasing the pressure on the lobster fishery are faster, more technologically advanced boats and an increase in activity as the area has been opened to Aboriginal fishing. Barry has two sons. One is pursuing his studies with the goal of an academic career. The younger son is a "natural fisherman," but he is living in Ireland studying boat building. Barry says that despite the challenges, he would not discourage his sons from fishing if either of them ever felt so inclined.

This section has introduced the three individuals whose beliefs and fishing practices I will now explore. More of their stories will be brought to light as I unravel their spiritual relationship to their profession, their communities, and the natural world that surrounds them every hour of the day.

Believing in Cold Waters: Spiritual Connections and Illuminations

Manny and Judy Gallant are deeply spiritual people. Their spirituality is rooted in a belief in God, and in God's presence in every aspect of their lives. Spirituality is also about connection. Both of them feel a deep, almost mystical connection when they are out in the natural world, especially out on the water. This connection requires complete presence in place and in time, and as Manny says, it is an extremely prayerful state of mind to be in:

> I believe in God. Yeah. I use prayer. Yeah. Especially when I'm out on the water, eh. That's where I get my spiritual connection. Out in the water. It's like everything is so calm...peace of mind, eh. I can get hung up in the working part of it too—too much, and not stop and be grateful for what's

> around me, eh, but there is times when I will stop and I'll get down on my knees, believe it or not, right in the boat, and I'll thank God for what's happening to me today. Just for today. Because that's all I have, is today. I will do that. And it feels like a stronger connection when I'm out in the water, for some reason (personal communication, November 21, 2006).

Judy considers herself a Born-Again Christian, and her connection to the world is essentially a spiritual one. She believes that God has a plan, and that if she has faith and hope, and acts in a way that reflects her spiritual values, she and her family and community will be taken care of. She says:

> I guess some would call me dramatic, or some would call me overboard, but I don't believe it. I'm a born again Christian, and next to my home and my family, it's the most important to me. The God of my understanding is first and foremost in my life. I really believe in...the sovereign creation. I don't think anything happens by chance. I don't believe that Neanderthal man is our ancestor or monkeys or anything like that. I do a lot of reading—scientific stuff—and a lot of the stuff that I've read is hypocrisy; they've gone to great length to prove there is no God. They went to more great length—scientists and other people—to say there is no God than they do to prove there is one. And I really believe that...I really put my hope in God. It's my believe that God is gonna intervene, and I don't think He's gonna put up with us much longer destroying his creation. The paradise that He promised us is going to be. I don't believe that the flowers and the trees and all that – that plan of creation is going to be thrown out, you know? It was a good plan. I believe the earth is gonna come back to the way it was and there's gonna be people here enjoying it the way it was supposed to be. That's my hope, because if I didn't believe that it would get too discouraging to live here...Mankind is really leaning towards...without a spiritual change within the psychic of a man—mankind, we really live for ourselves, really selfish—self-care. Without an intervention of some kind of spiritual belief, whether it be Buddha, whether it be Muslim, whether it be anything. I'm Christian; I believe in Christianity and Christ. And I really believe that the world at large needs an intervention of spirituality (personal communication, November 21, 2006).

Both Manny and Judy seemed to have an ethic about work that reflected the idea of "work as worship." As will be elaborated on in the next section, the way in which they fish; the way they treat their resource and their fishing community—is imbued with a

deep respect and strong sense of integrity. Manny points out that you can do a job and have it be "just a job". But you can also stop and look around you and actually connect with what is happening. He says:

> ...if a person opens their eyes and looks around...it can be just "I gotta get another box and make more money"...or it can be "look up once in a while and see where you're at"...especially when you stop for tea, ya know, and you look around, how can you not be grateful? Gives you another boost, you know—keep on going. And a person has to discipline himself to do that. To actually look up. There were times when I didn't look up, you know. I just gotta get that done, and home. It was rainy and windy, and boat's goin' every way, and you're tired...(personal communication, November 21, 2006).

Barry Murray does not believe in God. He tells me that he likes to believe that he fishes under a kind of Golden Rule ethic, which gives other fishermen the kind of respect and space that he would like to be given. He says:

> I'm not a member of any church or I'm not affiliated with any religion in particular. I'm probably agnostic, leaning towards atheistic... I tend to be influenced more by reason and science than by religion or faith. I have difficulty believing something without a certain amount of proof or fact. I am suspicious of old religions and moderns (personal communication, November 20, 2006).

Barry is particularly concerned about the way that we are treating our planet, and his beliefs underline the value he places both on maintaining a healthy marine and land ecosystem in which humans can live, but also on the responsibility he feels in assisting in the preservation of a healthy, balanced system. His care is also intimately connected to concern for the type of future that his boys will have in this world. He says:

> I feel bad for the planet earth as a human. I think we're really pushing our capacity. Really taking more than our share. We're cutting down...deforesting land. You hear of recent studies that say that there's only a few more decades of commercial fishing. The growth that politicians and economists are so excited about is based on oil sands and carbon consumption, pollution, paving more and more of the countryside.

> It's quite unsettling, and as a parent you wonder where does the future lie for my two boys. I think about this a lot (personal communication, November 20, 2006).

This concern is what motivates his value system and his desire to be a good steward of the fishery. Barry explains that for him, being a good steward means not taking more than can be sustained (personal communication, November 20, 2006). When he is fishing he tries to act in a way that reflects his values, in the hope that others will do the same.

Although Barry does not see it as a spiritual experience per se, he can appreciate that there is something happening that connects a person to the rest of creation when you are out in a boat for hours on end. He describes it as a "hypnotic attraction":

> I think there's something in human nature that the open water draws people, fascinates people. I know myself and almost anybody else that I've ever been out in a boat with for an extended period of time, is that there's a certain thing about looking out as far as you can on the horizon that people will almost naturally instinctively do when you're out on a boat...for hours you gaze out as far as you can. You're not really looking to see anything, but there's something almost hypnotic about being out on the water...I am almost positive that there is some hypnotic attraction...it is where the water meets the sky. It's easy to see how stories and myths develop over the years...over the centuries. And it's easy to see how people can become spiritual and fall in awe of the vastness...the mystery of the sheer size of large bodies of water (personal communication, November 20, 2006).

Barry's connection to place and desire to protect his resource is evident in the preceding thoughts, but both his and Judy and Manny Gallant's beliefs take on value within the context of their work. The next section looks at how these three fishers apply their spiritual beliefs and ethics to the practice of fishing.

Beliefs into Practice: Work as Worship on PEI's Waters

There are a lot of formal laws in the PEI fishery, but it is the unspoken laws, the ethics of the Golden Rule as Barry put it, that seem to hold the most weight among fishers. In the farming community, beliefs seemed to be most evident in the ways that farmers farmed. While the physical fishing practice is one way that fishers express their spiritual or ethical values, the situations and experiences that the fishers that I interviewed used the most to articulate values are those that involve interactions among fishers.

Manny and Judy Gallant tell me that fishing is not an individual activity. It is larger than a group of individuals out on the water doing their own thing. Being aware of this means that those fishers who act with integrity are well respected. Judy recounts a story about Manny's integrity:

> Manny has had a feud goin' on with a certain person in the fishery, and he's been a real taker—he's not a very environmentally friendly person, to put it that way. But his boat got untied, the anchor let go...and [Manny] went and tied his boat so it wouldn't go adrift...as a fisherman to a fisherman, he tied his boat (personal communication, November 21, 2006).

Fishers are frequently known for their fierce level of independence and, as Barry said, their territoriality. There is a general feeling of distrust for authority. Disputes, even among the fishers themselves, occur quite frequently, perhaps because of the limited resource and the fact that most are working in the public fishery where competition is intense and stocks are collapsing. Despite this, Manny says that there is a community ethic or understanding that is acknowledged and respected by most fishers, which ensures that if something goes wrong with anyone, the other fishers will come together to help. Manny says:

> You learn that over the years, to help each other. Like if you're out on the shore with 100 fisherman, as soon as somebody gets in trouble they're all there helping ya. If you get stuck on the shore, they're there to pull you out. Whatever happens, they're there. And I'll do the same thing. I mean I've had the occasional time to rescue a few people that had run out of gas or where something had happened to them quite a ways out (personal communication, November 21, 2006).

Being just and respectful of each other is a challenge out on the water. When you have been working hard all day and have very little to show for it, it is hard to appreciate your neighbour's success. As Judy says, it is important in the fishery to be able to recognize everyone's humanity and the fact that you are all there just trying do the same thing. She says that when she was still fishing,

> ...sometimes there were 25 of us all in the same little spot, all trying to get quahogs, you know. Like you don't just go and see somebody get some, and if they find something just go over there and try to horn up what they got. You have to respect other people; they have a right to make a living just as much as me. It's nice to hear some people got three or four boxes and you only got that one little box, and you have that tinge of envy, but then you go, yeah...that's good for them. We don't know what's going on in their home; they have three kids, you know? So it's always good to know that everybody's just looking for the same thing that I'm lookin' for—they're lookin' just to make a living (personal communication, November 21, 2006).

Recognizing the interconnectedness of her community, and being aware of the shared challenges that everyone is experiencing has allowed her to not only have respect for her fellow fishers, but to feel compassion for them.

One way that Manny Gallant's spiritual values and ethics are evident is in his attitude to the size and health of his leased grounds. He feels fortunate that he has his lease, and points out that you can make a good living from a reasonably sized lease. It is not necessary to take more than you need. He pointed out that many people are getting leases that are simply too large and this is not fair to anyone, especially those who are

still having to fish in the public fishery. Judy points out that Manny had the opportunity to get a loan from the government and go big, but he chose not to. He chose "to just take care of what you can take care of" (personal communication, November 21, 2006). Manny's choice reflects his dedication to hard work and sacrifice in the short-term for long term gain. It also reflects a commitment to financial independence, which is plaguing many fishers today, as they struggle with survival. Manny says:

> No, I wouldn't take a penny from the government. I'm sure I could have got—they were allowing the lease owners to have x amount of dollars too...but of course you have to pay it back, but maybe no interest or whatever. I could'a got 150, 200 thousand dollars from them. But I choose not to. I chose to start from scratch and if I can't do it then it's too bad, I'll just take my loss. I'll do it a little at a time. And like I say it took me thirteen, fourteen, fifteen years, a little bit at a time. A couple of thousand dollars a year, you know, I take out of my money—me and my brother—and we'd both do a little bit. And it's payin' off. Made a lot of mistakes. But I mean if you just take 200,000 dollars and just go here, and do it, and if you made a mistake, all that money, or a lot of that money is gone. But if you take a little bit of money and start there and you make a mistake, you lose a little bit of money. But you learn from it, eh. So you don't do that again...That's why it took us so long, eh. We made too many mistakes! We know what our mistakes are now, you know. You learn. So, you try not to make them same mistakes again. We got it pretty well down pat now. Now both of us can pretty well make a good. We worked hard to do this, without taxpayers money, and in another three years I think we could both make a livin' at it without fishin' public. So that's a pretty good accomplishment. It won't be a big livin', but I'm satisfied (personal communication, November 21, 2006).

Giving themselves the space to make mistakes and learn from them took discipline and diligence. It also took years of patience and the willingness to believe that they would succeed. Judy and Manny's ethics are also evident in the amount of time and energy they are willing to put into joining fellow islanders in fighting for clean waters and supporting cleaner farming practices. The two have been very active in advocating the cleanup of the island's streams and rivers, and they try to buy organically grown food. They helped form

a group who are trying to convince farmers in their area to stop spraying their crops. Judy says that their efforts are gaining ground: "...we're gonna put our foot down. No, you're not spraying next to my house. And I think it takes that. I'm a peacemaker at heart—I really love peace—but I think a person has to get away from that in one sense and be more passive-aggressive in changing things" (personal communication, November 21, 2006).

Manny is committed to changing policy so that it better supports healthy fishing practices. When I interviewed him, he had recently gone to court to fight for a change in the ways that shellfishers are allowed to clean oysters, because he knew it would be an assistance to all fishers, not just himself. It is a deep love for the ocean and fishing that gives both Manny and Judy the inspiration to continue. As Judy says, Manny is a "...whole different person when I'm out on the water with him" (personal communication, November 21, 2006). Manny's response is: "It's just a beautiful place to be. Hard work, but it's nothing really for the price" (personal communication, November 21, 2006).

Barry Murray tells me that there are a lot of aggressive fishers on the water these days. He thinks that this is a reflection of the increasing pressures being put on fishers, especially those just entering the fishery:

> It's making it very hard for even sons of fishermen to enter the fisheries. It's much harder now that it ever was. I don't know if there was ever a time in history where I saw the fishermen put under such difficulty to enter the fishery. And also, it's funny when you think of years ago when we were fishing with wooden boats and gas engines—junk really—it seemed that the pace was a little easier. It seemed like there was less squabbles. There's definitely an increase of tension...(personal communication, November 20, 2006).

The north shore fishery, in which Barry fishes, is considered quite strong. But he says that it is important even in his territory to realize that things are changing. Despite the fact that lobsters are fairly easy to regulate, very little is known about "the way that they live and come and go and breed and die, and what causes them to flourish and fail", so although he feels confident, he is aware of how quickly the situation can change (personal communication, November 21, 2006). There have been many changes in regulations over the years to try to conserve lobster stocks. Examples include increasing the size of the hole in the trap that allows small lobsters to escape and the introduction of a bio-degradable mechanism on traps that releases lobsters if the trap is lost, so that it doesn't continue to ghost fish (personal communication, November 20, 2006). Unfortunately, Barry says, these measures are not increasing as quickly as the increase in fishing effort. Not only are more fishers on the water, but increasingly specialized technology such as GPS "allows you to leave the harbour in a dead fog where visibility is a couple of feet" and echo locators give fishers a good idea of where the rocky bottom is—a good location for fishing lobsters (personal communication, November 20, 2006). Barry thinks that conservation efforts have not kept pace with the more intensive effort, and that it is "largely good fortune that [their] fishery is not in trouble" (personal communication, November 20, 2006).

Barry feels that it is important to respect other fishers. If you give them the space that you yourself would like, you can generally not run into too much conflict: "I'd like to be able to fish without having somebody set their gear on top of me, and I'd like to not do that myself. I like to be given a certain polite distance around my gear and I like to respect someone else's gear" (B. Murray, personal communication, November 20, 2006).

Still, he knows that there are fishers out there who are going to be aggressive, who will "take advantage of fishing alongside an old fellow and give him a little squeeze 'cause they're pretty sure that he won't retaliate back, or plop a bunch of traps down beside somebody that he doesn't think will retaliate back" (B. Murray, personal communication, November 20, 2006). Barry tells me that even when you do not intend to offend other fishers, the level of competitiveness often leads fishers to misconstrue each others' intentions at times and assume that something is intentional rather than an honest mistake (personal communication, November 20, 2006). He feels that when you are being pressed a little bit too much by other fishers, you have to stand up to them or you will never have any peace, even if doing so seems aggressive in itself: "You can't allow yourself to be bullied by fishermen that...want to put traps where you are fishing. So you end up...just by standing your ground you can sometimes appear aggressive" (personal communication, November, 2006).

I ask Barry whether he has made any attempt to put his ethics into practice in the actual manner in which he fishes. His response was one that reminded me of the conflict of belief with the practical reality of making a good living that had come across in Eddie Dykerman's interview. Like all lobster fishers, Barry puts out the maximum allowed number of traps—200. He fishes within the current regulations, tries not to pollute, and to run as environmentally friendly business as he can, but even so, he tells me that this is not enough:

> I have a filthy diesel engine in my boat. It's a terrible engine. But I can't compete if I switch to something that was much more ecologically friendly. It'd be great if we all would switch, but we're not all about to. In fact the movement is still going the opposite way, towards bigger and bigger engines to go faster and faster. The competitive edge is still more

> important than being sustainable. Earning more money still outweighs any concern about the environment or sustainability. So I guess to answer your question about whether I would rather make sustainable choices or economic-based choices, it's not that easy. If I ran my business as ecologically pure as I possibly could, I'd be run out of business. And that's just the way the world is goin' (personal communication, November 20, 2006).

Barry's sentiments on the changes in the fishery mirror his contradictory statement above. As mentioned earlier, he recalls that when fishers used slower boats and had fewer technological devices assisting their efforts, the pace of life was slower, the fish stocks healthier and there was less conflict. But he says that he has made some very good money over the years, and real change is not up to the individual. "[T]here's no will on the part of industry or government. There's no movement of support towards really having sustainable fisheries" (personal communication, November 20, 2006). When I asked him if the benefits from increased effort and financial success outweighed the negative changes that they had brought, his reply was less of an answer and more of a statement on the conflicts that many fishers are living, in trying to bring their fishing practices in line with their personal ethics: "Probably not. We would probably be better off if we earned less and were more content with what we got...but the price we get is relatively good" (personal communication, November 20, 2006).

This section has outlined the ways in which personal beliefs and ethics are reflected in the fishery from two very different perspectives. It is obvious that the challenges of balancing the desire to do the right thing with the realities of living a quality of life that is on a par with people working in other professions, tends to lead to behaviour that does not really reflect deeply held personal ethics. I have only looked at two fishers in this section. The next section will look at the experiences of three more

fishers living on the island of Cyprus, in an attempt to get a deeper understanding of the belief-behaviour dynamic and the factors that seem to influence it.

Mediterranean Nights on Starry Water

When I arrived in the Akamas harbour at Latchi, the sun had just risen. Its fiery face was already scorching the cement pier, reflecting off the white and turquoise boats and turning the tired but happy, weathered faces of the fishermen a shade darker – if that is possible. There was considerable commotion on the docks as around twenty-five fishermen, just in from a night on the water, unloaded fresh fish in buckets and chests and tossed salty, wet nets into piles for untangling. The sea was calm, boats bobbing, breeze still cool and refreshing as the men worked. A lorry pulled up and I watched as the men wrangled over prices and then handed fish over to a buyer to be loaded into cases and packed with ice. Once the fish were taken care of, the men settled down in clusters to carefully untangle their nets. I am soon to learn that nets are preciously expensive and to be treated with the utmost respect and care.

I am the only woman around and it takes some time for the chatter over my presence to diminish. Petros Pavlou, a fifty-year-old fisherman who appears to be the dominant leader, takes charge and informs his younger peers, Michalis Stylianou (thirty-three) and Filios Rossides (thirty-two)—who have agreed to be interviewed—that they can sit and talk with me when he is done. More jeering and nervous laughter rises from the group as Petros points towards a chair near where he is squatting next to his nets, an indication that I am to sit.

Petros is a full-time fisherman. His father and grandfather were fishermen, and he likes fishing because he is continuing a family tradition. He turns around and points to a simple house just behind the dock: "And it just happens that my house is right here on the docks" (personal communication, September 25, 2006). He has three children and he unequivocally tells me that he does not want any of them to fish. I ask him why, and he looks up at me in disbelief and says: "Because look at me. I have been working as a fisherman for so many years [and] I have not managed to do anything, to build a house or buy some land—something" (personal communication, September 25, 2006).

Petros describes a fishery in decline. Every year, he says, there are fewer fish and some types have disappeared altogether. He says the collapse is due to pollution from boats and an increase in water sports for tourists. He then complains that the problems are all the fault of inappropriate government policies. He says:

> Years ago we started telling the Department of Fisheries that they should forbid certain types of nets and other things, but as you know in Cyprus the big fish eats the little fish, they were not interested. They were only interested in how to make money. Like now, the EU sends a lot of money and they say that the money is going to marine research, as they call it. Nobody listens to us. Like when we told them that the size of the mesh in the nets should be increased so that the small fish is released. Because some fishermen tell the government that they are making their livelihood off the small "parounaki", they do not increase the size of the mesh, because there are more of them than there are of us. And slowly, slowly more fishermen quit there and by 2008 all of them will have stopped, because this is one of the things that is destroying everything. It catches the parent and the young fish and this is terribly destructive. If they pass this measure, maybe the fish could return to how they were in the past (personal communication, September 25, 2006).

In addition to not taking action to regulate the mesh size of the nets, Petros feels the government has been reducing its support for the fishing community by reducing or eliminating subsidy assistance. In the past the government gave local fishermen funds to

help maintain their nets, which are frequently damaged. This support is no longer given. He attributes the lack of help to the island having joined the European Union. Whatever the reason, the amount that the fishermen are getting paid for their fish is not keeping up with the increasing costs of maintaining their fishing boats and gear. Although there are thirty licenses in their gulf, only five fishermen are still fishing professionally. The rest go out "to get a few fish to eat and they have other work elsewhere" (personal communication, September 25, 2006). Petros still manages to get enough to survive because he knows the bay so well, but most of his friends are getting jobs driving buses or working construction. I asked him how he feels about this. He says: "Look, this is not good...in ten years there will no longer be the profession of fisherman. There will only be recreational fishermen...[T]his will end and the people will eat fish from other countries or from fish farms where they are fed special food and there are chemicals that they put in" (personal communication, September 25, 2006).

Michalis Stylianou is one of the fishermen who has a second job. He runs a business taking tourists out on his boat in addition to fishing. He tells me that it is not possible to fish full time in Cyprus. He also comes from a fishing family—his father and his father's sister fished. He has twins and like Petros, is adamant that his children not be involved in fishing as a profession. "Fishing is a difficult profession, very tiring" (personal communication, September 25, 2006) he tells me. If he had the knowledge for a land job, he would not be fishing. He feels that his lack of education has limited his options: "our knowledge will not allow this. Our education. We didn't study. We grew up here, we stayed here. And slowly, slowly, slowly, we got involved with the sea" (personal communication, September 25, 2006). Although sad, Michalis' manner of

expressing that he does not want his children to get involved with fishing is also an indication of his love and attachment to his profession: "...I do not want my kids to love the sea. I want to give them an education that is based on dry land rather than the sea" (personal communication, September 25, 2006).

Michalis deepens the contextual picture within which he and his fellow fishermen are operating, as well as the difficulties associated with fishing in Cyprus. The gulf that he fishes is nine nautical miles in one direction and ten nautical miles in the other, "[a]bout eighteen nautical miles altogether" (personal communication, September 25, 2006). Similar to the situation on Prince Edward Island, the Cypriot fishermen also legally permitted to fish anywhere in Cyprus, but none of them actually do leave their gulf to fish. The difficulties experienced by the fishermen are many. As Michalis shares:

> The gulf that we fish in is so small and there are many fishermen. It is a very difficult job. In order to make about 20, 30, 40 pounds you have to leave at about 1 in the morning until eight, nine, ten in the morning. And usually the north coast of Cyprus is rough. You cannot fish the whole month. The costs are enormous. The price of petrol is high, but the government currently is subsidising it for us. We get it at half price. It is 45 cents a litre; they will give it to you at 30 cents or something like that. And if we fix our boats or gear, if we go over 1,000 pounds the government will give us back 30 to 35% of that. But we have to go over 1,000 pounds. The other problem that we are encountering is the damage to our nets caused by the dolphins. They are a big problem. You might put 2,000 pounds worth of nets in your boat and in a few minutes they can be destroyed. This happened to me last year (personal communication, September 25, 2006).

Michalis says that the older fishermen tell them stories about when they used to go fishing in the old days:

> They went out and would put four or five nets in the water and would get 50kg of fish. Now in order to get that much fish you have to put 100 nets in the water...this was 30 years ago. Then these were virgin waters. There was no life here. Only three or four fishermen lived in Latchi, you

> understand? After the 1974 war, many people came as refugees, the population increased, there was no work...some went to farm, some went and got boats and started fishing. You understand? Then there was a lot of fish, but it was fish. It wasn't expensive. Now the prices we are getting for the fish are good, but there is very little fish (personal communication, September 25, 2006).

Filios Rossides is the youngest fisherman in the gulf. He has been fishing for almost ten years. He started fishing as a hobby, but as he says, "the sea attracted me so much; when I am out on the sea it makes you always want to be near her" (personal communication, September 26, 2006). Filios has one son, who loves fishing. But like the other fishermen, he also does not want his son to fish. He says that is it not work that will provide a good salary for his future: "In the past you could have said that fishing had a future, but now there are too many costs—the cost of fuel, there is more work, the salary you earn is the same, and the fish are dwindling. There is no future for building a family" (personal communication, September 26, 2006). Filios is especially concerned about the fish stocks, which appear to be getting smaller every year. He says:

> I feel that there is gonna be one day where we are gonna go out and we're not gonna catch nothing at all. So slowly, slowly, we will see this. We will wait to see what the government is gonna do to protect this. If they give more licenses for fishing and diving, which destroys everything. It is not legal, but here in Cyprus the things that are not legal, are legal. So we wait to see what the government gonna do about that. If it's finished, what we gonna do? We have to make a new life. And so now, ok, we are young, but we only know how to do this, so what are we gonna do? Start a new life like a child? It is not gonna be very easy for us (personal communication, September 26, 2006).

All three fishermen that I spoke with had a strong connection to place, family, and the larger community. Despite the difficulties, all three love fishing and the sea and cannot imagine themselves doing anything else. The following section explores the beliefs that influence and are influenced by this love. Unlike the PEI fishers, the Cypriots

were far less articulate when it came to their beliefs and values. Despite their brief answers however, I think their beliefs, and the spiritual nature of their connection to the sea, is obvious in their responses.

Believing in the Sea: A Cypriot Dialogue

The three fishermen that I interviewed all consider themselves Greek Orthodox Christian, and all believe in the presence of God. All three also have a very spiritual connection to the sea and the act of fishing, founded upon a deep love for the sea. Although this connection was very evident when they spoke about their work and the sea, the amount that they said about it was limited. I will share the few things that they did say here, and expand upon them, as well as exploring why they say so little, in my discussion.

Petros Pavlou's spiritual relationship to the sea is based on a strong awareness of his smallness, or humility. The dangerous nature of fishing brings his relationship to God and the connection between his work and his family, to the forefront of every day. He expresses a strong faith in God and acknowledges that his catch, and whether he returns home with food for his family every day, is entirely dependent upon the will of God. He says: "Before we start work we always do our cross—we believe. In the sea it is only you in your boat. Sometimes fortune hits you—sun and sea you see. Everywhere is God. The most important things for us are God and our families because we are working outside. It is dangerous work" (personal communication, September 25, 2006).

In addition to a sense of humility and faith in a larger power, Petros has a great attachment to the sea. He says that he likes it very much and that "without the sea I do not do [life]" (personal communication, September 25, 2006). He also expressed a deep

visual and tactile love for the sea: "I love to swim and see the water and the fish below me" (personal communication, September 25, 2006). Above all, however, Petros respects the sea. I will go into this further when I describe how he translates his beliefs into action on the water.

When I asked him about his spiritual relationship to the sea and to fishing, Michalis Sylianou told me that his profession necessitates a complete reliance upon God. He said:

> When you get in your boat, first you say "help me, God." You do your cross before going to sea. This is what helps me. You say "come and help me God." The moment that you are out there and holding your nets in your hands you say "God, help me." At the moment of starting and at the moment that you finish. Both so that I catch fish to take to my family as well as for my own safety. Because many times we go out and the sea gets rough. Tragic things. You know that when you go out you may or may not go home. And so you stay constantly "God, help me" (personal communication, September 25, 2006).

Like Petros, he recognizes the danger inherent in putting himself at the mercy of the sea every day of his working life. He has turned to prayer and faith as a way to overcome his fears and do the best job possible so that he can bring enough money home to support his family. Conscious recognition that he is at the mercy of God gives him inner strength and the conviction to go on the water all night, day after day.

Filios Rossides believes in God, and that it is by the will of God that he is able to do his job and support himself. This is not limited to fishing. To Filios, all jobs are done by the grace of God. When I asked him whether he thought he would continue fishing, he laughed and said: "As long as we are good with God" (personal communication, September 25, 2006). Although God is a very present part of his beliefs and his formal faith tradition, Filios expressed a connection to the sea that the other two fishermen either

did not feel or did not know how to articulate. It is a connection based on a deep attraction and union with the natural world. He says:

> The sea attracted me so much. When I am out on the sea it makes you always want to be near her. In other words, I was married. I broke up with my wife for this sea because I like to be outside everyday, whatever the weather may be. Somehow it relaxes me; the hours that I spend on the sea are more calming than being elsewhere. It is something that enchants you. I like it. There is something nice about watching the sunrise. All of this—trying to catch the fish—it is something that charms you and fascinates you constantly (personal communication, September 26, 2006).

Filios has given up a lot for his profession; perhaps it is this loss that has made him more aware of what it is that draws him to fishing. Although Filios, Michalis and Petros all communicated a sense of self that is almost inseparable from the sea, how they treat their resource and each other is influenced by the harsh realities of trying to provide for their families. Below I look at how feelings of love, respect and humility are manifested in the fishermen's practices on the water.

Loving the Sea, and Living off It: The Connection Between Personal Responsibility and the Long Term Sustainability of a Local Fishery

The ways in which the Cypriot fishermen fish and view their resource is rampant with contradictions. The two subjects that the fishermen referred to the most were physical fishing methods and community. All three fishermen said that when you go out fishing it is just you and the fish. There is no consideration for others, you think only of yourself. Nevertheless, I was also told: "[y]ou sort of work with your brothers so that there are no misunderstandings. With the radio, we tell each other where our nets are" (M. Stylianou, personal communication, September 25, 2006). This would indicate that there is, as

seemed evident when I interacted with the fishermen on the docks, a good deal of camaraderie and cooperation among them.

Territoriality does not appear to pertain in Cyprus, but fishermen do seem to prefer to fish in the same areas rather than venturing off into distant bays and coastal waters. Michalis says that any fisherman can fish anywhere in Cyprus. He can go elsewhere and fishermen that do not have any fish in their waters can come to his bay. He says "we would not have a problem" (personal communication, September 25, 2006). Filios is not so keen on the idea of anyone entering his bay. He thinks there are too many fishermen and too many nets. He says "Now anyone who wants can go and buy a boat and a few nets, and the department of fisheries is not on their back watching them... They are disrupting our bread, our work" (personal Communication, September 26, 2006).

The fishermen talk fondly of the past, when there were "virgin waters' and a plentiful supply of fish, and express a deep respect for their resource. Filios talks of needing "to have respect for the earth that is giving you life" (personal communication, September 26, 2006), and Petros says "I respect the sea. I like it. I protect the sea because it is she that gives me my livelihood. If I catch a small fish which I know will grow large I throw it back" (personal communication, September 25, 2006). All three fishermen noted the visible drop in amounts fish that they were catching and the change in the composition of fish they were bringing up in their nets. Despite this, when I asked Filios whether he thought that adopting different fishing practices might help preserve healthy fish stocks, he said:

> No, there is no relationship. It has to do with the day, the way you catch them—the fish are there. It just needs the right bait to catch them. If you stop fishing for a year for example to let the fish increase, when you go out a year later don't you think you will be catching the same fish again? No, this is how we learned to do it. You cannot change the way you work (personal communication, September 26, 2006).

Michalis agreed. When I asked him whether there was a maximum quota that he can catch, he said "yes, as much as we can catch. The stock is constant...everyone gets as much as he can" (personal communication, September 25, 2006). Michalis thinks that the fluctuating fish stocks are based on the weather. He says: "I don't think it has anything to do with how we catch" (personal communication, September 25, 2006).

Although Petros repeatedly said that he and his father had been telling the department of fisheries to change their policies on mesh size of the fishing nets and that he thinks that the law preventing the catching of certain species of fish under a certain size to be very good, he also said that he catches as much as he can, "as much as the fish buyers want to purchase. We put our nets in the water and as much as will come out..."(personal communication, September 25, 2006).

The fishermen appear to be willing to make gestures that they feel are supporting the overall health of the fishery. Petros throws back the small fish that he catches, and Filios says that doing his work right is important to him. For example he tries not to lose his nets because rogue nets destroy the bottom and catch fish that will not be available for him to harvest. But none of the fishermen seems to be making a logical connection between their own personal fishing practices and the state of their fishery. They blame government for not taking more steps to implement change, but they do not appear to be taking any pro-active personal responsibility for effecting change within their bay to

preserve the long-term sustainability of their fishery. When I asked Michalis how he envisioned the future of the fishery in his region of the island, he said: "Very few fishermen will remain. Very few. If a few fishermen are left then the amount of fish will increase, so it will be good for the few that remain" (personal communication, September 25, 2006).

The blatant contradictions between what the fishermen say, the trends that they have been experiencing and how they are responding to the challenges posed by a collapsing fishery are the result the interaction of many factors. Elaborating on all of these fully is not possible. However, many of the factors that influence the belief-behaviour dynamic are common to the farmers and fishers; I will mention them in my discussion.

DISCUSSION: COMMON THREADS

Putting Together the Puzzle of Place-Based Beliefs

The phenomenological nature of my research, evident in the ways in which I engaged with the participants and places upon which this study rests, not only influenced my experiences in the field in important ways, but has also influenced the ways that I have made connections and drawn conclusions from my research. I used the narrative approach to share the experiences of the farmers and fishers in the previous section in order to convey the degree to which I attempted to situate myself within the places and communities that I was researching in order to understand them (to the greatest degree possible) from the inside. Using the narrative approach has also helped to place the experiences of those that I interviewed within a story, thus encouraging a more empathetic way of looking at, and seeing their experiences (Hay, 2002).

The fact that the personal idiosyncrasies of the phenomenological researcher are seen as being "an asset rather than a liability" (Seamon, 1982, p. 122, cited by Hay, 2002, p. 144) to understanding the subject gave me permission to be an active participant in my research, and to use my personal connections to both PEI and Cyprus to enrich my study. Some of the ways that I did this were through describing the atmosphere of the places where I conducted interviews; using my knowledge of Greek, and my connections to the Greek and Turkish Cypriot communities to explore the experiences of individuals whose stories would otherwise remain undocumented; and being able to integrate my own personal insights and love for both of these islands into my research. The emphasis that phenomenology places on experiential engagement has made both my relationship to my subject, and the ways in which I have documented it, much more tactile than would

otherwise have been possible. Given the importance of experiencing place through all of the senses that is so vital to both farming and fishing, taking the time to directly observe the farmers and fishers in the location where they farm or fish, and in many cases, to actually be able to experientially engage in the activities of tending the land or unloading fish and untangling nets helped me to better appreciate the realities of those that I interviewed and deepened my appreciation for the role that the senses play in the relationship between spiritual values and the elements of place. Spiritual beliefs seemed to hold great importance in theory, but seeing how beliefs shape and are shaped by the daily experiences of living enabled me to better grasp the complexity of the beliefs to behaviour dynamics and the importance of being able to identify some practical factors that influence how beliefs are translated into action.

Employing a phenomenological approach also enabled me to effectively reflect the subtleties of the emotional connection between my participants and their natural environments (and myself and the islands and communities that I was studying) that a less subjective approach might not have been able to capture in such detail. Given the important role that emotions and emotional connections play in shaping values and influencing how these values are reflected in practices, using this framework has been invaluable to better understanding my subject.

Having outlined some of the ways that my theoretical framework has influenced my relationship to my research subject I will now turn to some of the ways that phenomenology has enabled me to extract factors that influence the formation of beliefs, and the ways in which these beliefs are evident in farming and fishing practices. I have made a considerable effort to focus on being conscious of the essence of what is being

experienced (Farber, 1966, p. 44). I have also tried to avoid imposing a framework upon my own perception of the beliefs, experiences, and practices of the farmers and fishers that I interviewed, in order to allow the stories shared to appear in their own way, undistorted by 'approaches' (Heidegger, cited in Vycinas, 1961, p. 29). There is a constant tension between attempting to not allow my own beliefs, understanding or perceptions influence the essence of what participants are telling me, and still manage to use my personal sensitivities to the phenomenon that I am studying to enrich my description of it in a new way. This is one of the interesting aspects of phenomenology that I have not entirely made peace with, a fact that may be evident in my discussion. In the remainder of this chapter, I explore some of the fundamental elements that seem to be influencing the belief-behaviour dynamic in the lives of the farmers and fishers that I interviewed. I do this by identifying the essential factors that participants have identified as being key to how they experience spirituality and relate to their natural environment, as well as further exploring some of the characteristics and complexities of the factors that influence the belief-behaviour dynamic.

In analyzing my interviews with farmers and fishers, I came across a number of recurring themes that influence their lives and work. Some of them directly shape spiritual beliefs, while others more directly influence the ways and degree to which spiritual beliefs are manifested in their lives. As is evident from the amount of overlap in the literature, it is difficult to distinguish between the factors that shape beliefs, and the factors that influence how belief is translated into behaviour because the ways in which these factors influence each other is not linear, but form a complex web of feedback loops. Below I will mention some of the main factors that influence the process of belief

formation and the translation of belief to action. Irrespective of how these factors fit into the puzzle, they are essential to understanding the dynamics involved.

The results of my field research indicate that the primary factors influencing the belief-behaviour dynamic on PEI and Cyprus are connected to community and place: family, wider community relations, health (of the individual, family, human community and the natural environment), education and relationship to place. All of these factors are related; however, they all have their own distinctive characteristics. Family came up in all of the interviews I did with farmers and fishers. Some of the aspects of family life that motivate actions and shape beliefs were: the importance of maximising time with family; pursing a career that promotes family unity and an opportunity to work together to achieve a common goal; the importance of continuing family tradition, or of creating new traditions; the challenge of making choices that are at odds with traditional farming and/or fishing practices; the ways that farming provides an experiential form of education for those who grow up on a farm; how important family members have been as teachers and mentors both in the physical act of farming or fishing as well as in the moral and ethical aspects of these two professions; how farming and fishing can either promote or hinder the pursuit of formal education; the desire to have family members follow in one's footsteps as a farmer or fisher, or the hope that they will not do so; the financial challenges of operating a successful farm or fishing operation that can support the needs of a family; and, conversely, the breakdown and disintegration of family under the financial and social pressures of modern life.

The nature of community relationships plays an important role because this sets the tone and affects the work environment within which choices are being made.

Community factors that influence belief-behaviour dynamics include interactions at both the macro and micro levels of social interaction (Rodman, 1992). At the micro level this includes the degree to which farmers/fishers support one another; at a slightly more macro level is the degree of support and appreciation that the larger community communicates for local farmers and fishers. Conflict among farmers over farming methods (i.e. conventional vs. organic), or between fishers over fishing territories or compliance to allowable catch limits, can be constructive in that it can stimulate discussion and negotiation between community members, which can lead to behaviour that better reflects spiritual values and builds community; it can also undermine the integrity of the community structure, leading to a greater degree of discrepancy between beliefs and behaviour. In short, the process whereby farmers and fishers try to reconcile their work practices with the expectations and opinions of their friends and neighbours can encourage creativity and dialogue in the formation of beliefs, and how these are reflected in practices. But it can also create situations where aggression or pressure results in individuals making choices about how they farm or fish that do not reflect the values that they feel would be best for the sustainability of their resource or the unity of their communities.

Health seems to be a major deciding factor for many in actively demonstrating their spiritual beliefs and ethics. Many of those that I interviewed expressed that having children awoke in them an awareness of their responsibility for the health of those buying and eating their products. A personal experience with relatives or friends having cancer has been a strong motivating force for many of the farmers in deciding how to farm. Especially in the organic farming community, there is a desire to educate the larger

community on the connection between healthy eating and physical and mental wellbeing. The experience of and feedback from contributing to the education of the community influence not only a shift in beliefs and values but also serve as a powerful source of encouragement. I was especially impressed by the priority given to community education over personal economic benefit in the case of farmers who decided to sell their produce at conventional prices until such time as the public had the chance to experience the difference in the quality and flavour of the foods and to appreciate how organics could influence their health. It could be said that these farmers have to sell at a lower price if they want to sell at all. I do not deny that there is undoubtedly a practical element to their choice, however they did express a strong desire to educate the public rather than simply making their living selling to the expatriate community who are willing to pay higher prices for organic produce.

Most of the farmers and fishers that I interviewed expressed the importance of maintaining the health of the soil, the water, and the overall environment and integrity of local terrestrial and marine ecosystems. Many of the farmers and fishers did clearly express a spiritual connection to the natural world, but even those who did not (or could not) articulate why they felt that the natural world should be preserved, nevertheless seemed to feel a connection to the land and sea that is deeply personal and operates at an emotional level. The connection that the farmers and fishers shared seems to reflect the idea presented in the literature that communing with nature is one way of connecting to an underlying spiritual reality and fostering an awareness of a sacred presence (T. Berry, 1988; Dubos, 1972; Nasr, 2002; Sherrard, 2002).

I have mentioned education in the context of impacts of farming on health and the recognition of the importance of reconnecting islanders to the source of their food. Education, which influences every aspect of farming and fishing, has links to family and community. For example, whether the farmer or fisher has received formal or informal education influences how they perceive themselves in their environment and how they communicate with their larger community. As many of the farmers' and fishers' stories have described, often it is experiential education that has had the most influence on their beliefs and practices. Farming and fishing brings those involved with these professions into direct contact with their natural and human communities on a daily basis. These interactions mean that farmers and fishers are constantly being confronted with questions about how what they do in their field or on the water relates to their larger community, to the island, and to the world beyond the island. This confrontation may not result in definitive solutions to the many ethical challenges that they face, but the necessity of having to continually contemplate how their choices are connected to and influence the world around them can, and in many cases does influence the degree of personal responsibility that individuals feel for the management of their resources. This type of education enables islanders to experience their place daily through all of their senses, as described by Weale (2007), thus deepening the connection and appreciation for their islands. The depth of interaction with the sea, the earth, and the human community, seems to have the capacity to instil a greater awareness of the difference that each individual makes to the well being of the whole. In these ways, and many others, education that comes from a direct experience of the natural world is a powerful tool in effecting change in the minds and hearts of islanders.

Connection to, or sense of place is influenced by family, community, health and education. The length of time that a family has been farming a particular plot of land or fishing a particular bay influences a person's understanding of the particularities of their place. Based on the experiences of the farmers and fishers who have been working in their professions over many years (or in some cases, many generations), long-term investment in a place provides the space and incentives for long-term vision. As is epitomised by the stories of Raymond Loo and Jim Rodd, dwelling in a place creates a story or identity that is inseparable from the place in which it has been formed and resides (Relph, 1976, p. 34). Such a strong relationship to place is reflected in the deepening of respect that the island fishers and farmers express for their natural and human communities. Although it does not always, this relationship can (and as my interviews show, often does) also increase the desire to protect those aspects of the island for which people feel a strong personal affection (such as the birds, in the case of farmers, or clean, unpolluted coastal waters in the fishing communities. A sense of place for island farmers and fishers can also create an awareness that place-adapted practices might be more appropriate for the unique conditions on an island than those simply adapted from elsewhere. As John Todd says, "elegant solutions will be predicated upon the uniqueness of place" (cited by W. Berry, 1990, p. 109). This recognition requires a depth of knowledge about one's surroundings that is learned from experience, trials and mistakes. As reflected in the experiences of Manny and Judy, or of many of the farmers who are the first in their families to be involved with their profession, a sense of place need not take generations. The key is becoming vulnerable to place—opening oneself up in order to build intimacy (Lopez, 1996). Such intimacy involves a spiritual connection. The

experience of living in a place and interacting with its elements on a daily basis constantly erodes and reshapes beliefs to better suit the environment, if people are open to this relationship. A willingness to dwell is essential for a sense of place to develop in the inhabitants of that place, and as Heidegger says, dwelling is "the essence of human existence and the basic character of Being" (1971, in Relph, 1976, p. 39).

It is challenging to identify the distinct ways in which insularity influences the spiritual values of islanders, and how these are manifested in behaviour. The reasons for this are that there is very little literature about the connection between PEI and Cyprus (as islands) and the spiritual values of their inhabitants specifically as islanders; spiritual values are, as already mentioned, so personal, and therefore the ways in which islanders' beliefs are translated into actions is very different from person to person; and, as I discovered in my interviews, islanders may not be able to see how their being islanders influences their beliefs and/or behaviour—both because they have no other (personal) experience to compare their beliefs and actions to, and simply because it is not something to which many islanders have given much thought.

Existing island studies literature, my interviews with islanders, and personal experience has shown me that being islanders does shape how farmers and fishers perceive themselves and outsiders, as well as how they perceive their resources. The distinct geographic boundaries, the interconnectedness of people, and the feeling of being (at least mentally) separated from the outside world are going to influence beliefs. A number of the farmers that I interviewed discussed the opportunities that their island has by virtue of its small size; the niche markets that it could take advantage of; the flexibility inherent in a small population. These, among many other characteristics mentioned at the

beginning of my paper, are going to mould the beliefs and practices of island farmers and fishers. The fact that family names can be traced back generations on both PEI and Cyprus connects farmers and fishers to their professions and their human and natural communities in a way that places responsibilities on these islanders. A number of farmers in particular expressed a desire that almost seemed like a sense of duty to preserve island farming and fishing traditions that have helped define cultural identity on PEI and Cyprus for generations. Although I cannot prove that this differs from the experience of non-island farmers, it struck me that the sense of responsibility to preserve these professions and continue to be a source of locally available food may weigh heavier upon the few island farmers and fishers still pursuing these professions than it would on a mainland where the farming community is larger, and the feeling of geographic separation less acute. Identifying aspects of the spiritual beliefs and practices of PEI and Cypriot farmers and fishers that can be described as being distinct island characteristics is beyond the scope of this paper. I do believe, however, that the literature that I have reviewed, and the results of my interviews suggest that the geographical, emotional, social, cultural, psychological, historical and economic characteristics that both PEI and Cyprus possess influence islander's spiritual value systems as distinctly as they influence island identity.

I have covered the core factors whose influences on beliefs and work ethics have been emphasized by the stories shared with me by island farmers and fishers. Two other major factors are market competition and public policy. Their influence on the formation and support of beliefs is predominantly indirect; however this impact is not limited to how belief is manifested in action, because actions in turn inform and affect beliefs.

There are other reasons that the farmers and fishers mention as contributing to their choice of profession, such as the desire for independence and enjoying the physical nature of their work. However, it is important to distinguish between the factors that draw people to a given profession and the elements that lead a person to pursue that profession in a particular manner. The literature that I have reviewed documents a deeply spiritual dimension to the relationship between human beings and the natural world. My interviews reveal that the spiritual connection that the farmers and fishers sensed when they were out in their fields or on their boats is both rewarding and joyful. The opportunity to experience this spiritual connection is definitely a draw for those involved in these two activities. The act of offering a service to the community—that of providing food—can also be felt as deeply spiritual. My respondents, who are pursuing these two professions despite the many challenges associated with their work, demonstrate that they do take the responsibility of providing food to their family and community seriously. But there is another dimension of spirituality that is integral to farming and fishing, and this is the ethical—how spiritual beliefs and connections are articulated.

The farmers and fishers of Prince Edward Island and Cyprus whose stories I had the opportunity to hear come from very different cultural backgrounds and are working in two very different geographic environments. Even within each island the experiences vary considerably from region to region and from coast to coast. Nevertheless, as noted above, my interviews revealed some fundamental elements that shape belief systems and influence the ways and degrees to which these beliefs find practical application in fields and on the water.

Before I go further, I would like to make note of two things that have been constraints on my results and conclusions. The first is that, as noted earlier in my thesis, the farmers and fishers that I interviewed predominantly (with the exception of a number of Cypriot farmers and fishers) represent examples of exemplary farming and fishing practices. The reason for this was that when I began this study, the focus had been on organic farming, and the research grant that funded my time in Cyprus was also focused on organic farming. After my thesis changed directions, the fishers that it was recommended that I speak with were, as outlined in my methodology section, individuals that my advisor thought would be articulate and well-connected enough to give me the names of more traditional fishers. The one conventional farmer on PEI that I interviewed was also selected because of his commitment to farming and education, and his connections within the farming community. The fact that I did not obtain the names of individuals whose farming and fishing practices represented less exemplary cases from those that I did interview was a product of circumstance and time. Doing justice to the interviews that I did conduct, and the time that I spent travelling to Cyprus, and having to interview such a large number of organic farmers for the purpose of my United Nations project, meant that I ended up having less time to interview more mainstream farmers and traditional fishers in PEI.

In retrospect, if I had it to do again, I think that balancing out the numbers would have strengthened my thesis. Even the few interviews that I did conduct with more mainstream farmers and traditional fishers highlight potential factors that impede translating spiritual beliefs into farming and fishing practices in ways that my interviews with organic farmers and less traditional fishers do not. Nevertheless, I do think that the

exceptional cases are also vital in understanding the full picture. They indicate how spiritual beliefs can positively influence farming and fishing practices in the lives of individuals who have managed to overcome the debilitating effects of financial debt, and many other forces that undermine the efforts of these communities to pursue their livelihoods in a more sustainable manner.

The second point that I would like to mention is that although I do feel that all of those interviewed have very definite belief systems, a number of them obviously struggled to articulate what these are. Given that those that seemed to have the hardest time articulating their beliefs were those with the least (formal or informal) education, I have concluded that their relative lack of vocabulary to fully express their feelings and beliefs was a limiting factor. I have tried, to the best of my ability, to communicate the depth of spiritual connection that I sensed from those who used fewer words, by describing the atmosphere or the manner in which they shared their stories. However, I recognize that the fact that they said less has made my thesis rather lacking in what are, to me, some of the most important voices. I hope that my manner of handling this problem has succeeded, at least to some small degree, in balancing the picture out and that the reader will keep this in mind when attempting to draw conclusions from the stories of these participants.

As stated above, all of the islanders that I interviewed have spiritual belief systems. For some it is less religious and more rooted in scientific fact; some described it as a Golden Rule; others expressed it as an experience of the Divine through nature. For many it is deeply rooted in belief in God, or Spirit, or a mysterious power of being whose existence is larger, further reaching, or at a deeper dimension than the physical or

biological experience of life. For some it is grounded in the physical experience of feeling the soil in their hands, smelling the first crop out of the ground, or the sensations associated with being out in a boat on a vast body of water. These belief systems are shaped by the sum total of a person's experiences and environmental elements – human and natural. Spiritual beliefs thus situate a person within a community to which they feel they belong and to which they feel a responsibility. This in itself is a great deal. But beliefs go beyond this; they instil in those who follow them stated or implied codes of ethics, which guide behaviour and relationships and influence the choices that individuals and communities make (Gottlieb, 2004, pp. 8–14; Nasr, 2002). Spiritual beliefs have a third dimension to them, which is important to my thesis because I believe it is this that completes the emotional connection to belief. Although an entire community may claim to follow the same religious or spiritual teachings, the way in which each individual interprets and internalizes these beliefs is deeply personal and thus unique.

In the past, spiritual values were much more integrated into all aspects of life, including human beings' relationship with the natural world (Nasr, 2002, pp. 132–133). Today however there is a great deal of fragmentation that makes it difficult to reconcile personal beliefs and ethics with the practical realities of the world. The literature shows that many western societies are increasingly turning to the traditions of Aboriginal Peoples for wisdom on how to interact with our natural world (i.e. Novaczek & Angus, 2007; Novaczek, 2008). I hold that one reason for this is simply that Aboriginal faith traditions espouse spiritual beliefs in which humans are entirely integrated with the natural world. There is no fragmentation or conflict. The traditional code of ethics is developed based on a spiritual relationship to the natural world. The practical articulation

of spiritual beliefs in work practices is evident in the lives of a number of farmers on Prince Edward Island and Cyprus. However, not all of the farmers and fishers manage to carry their personal ethics over into their work practices. The question, then, is why?

Before exploring some of the factors that I have been able to identify as influencing the belief-behaviour dynamic, I would like to mention one important aspect of this dynamic that has generated more questions (and possible directions for future research) than concrete conclusions. As mentioned earlier in my paper, the farmers and fishers that I interviewed come from different spiritual backgrounds, and have diverse approaches to spirituality and the connection between spirituality and their relationship to the natural world. During the course of my research I have come to realize that the distinct ways in which farmers and fishers perceive spiritual reality—i.e. whether their spiritual connection is made through belief in a God, through a more mystical experience of the world, or directly through physical interactions with the natural world—may very well influence how they relate to the natural world. Determining the precise nature of these differences would have required that I ask very specific questions of my participants, and even then, given the small number of participants representing various belief systems, I would not have been able to make any broad-sweeping, definitive conclusions. Even with a much larger sample of responses on this subject, as mentioned above, the ways in which any spiritual tradition is interpreted is going to vary from person to person. Nevertheless, the spirituality-behaviour dynamic is a topic that I feel warrants further probing and could uncover some very interesting and perhaps instructive details about how spirituality influences behaviour.

Because I did not ask more probing questions, I can only offer a few brief preliminary thoughts on this relationship. Drawing from my interviews, it does seem to me that there was a greater degree of tension in the relationship between individuals whose spirituality involves a belief in God and the natural environment than there was for those individuals who define their spirituality solely through the physical experience of communing with nature. As I did not explore this further with the farmers and fishers when I was interviewing them, I cannot draw any conclusions from this other than the fact that this tension exists.

Based on the results of my interviews, there were a number of participants in both the farming and fishing communities who professed a belief in God and whose farming and fishing practices were slightly disjointed from their spiritual values. But there were just as many who believed in God and were treating the natural resources that they depend upon with a great degree of respect and reverence. Almost all of the farmers and fishers that I interviewed who described their spiritual connection as coming directly through the experience of communing with the natural world are employing quite sustainable farming and fishing methods. However, given the small number of participants, I do not feel that any firm conclusions can be drawn solely from the experiences of these individuals. Holding up a magnifying glass to the more intricate details of the dynamics involved in this translation of beliefs into behaviours would be a worthwhile endeavour for future research. Doing so could very well bring any patterns that do exist into greater relief, and provide information that might permit more substantial conclusions to be drawn.

As noted above, there are many factors that could influence the ways in which personal spiritual beliefs and ethics are integrated (or not integrated) into work practices. Two stand out from my interviews and the literature that I have read: firstly, a willingness to develop or recognise a personal spirituality that involves an acceptance of, and adherence to the teachings of a belief system, which is then internalized and reflected on within the context of daily life; and secondly, the ability to overcome the pressures of the predominant value system of western society, which bombards us with the idea that material wealth is the primary indicator of success and prosperity (Dubos, 1972, p. 230). The first of these—the willingness to actively investigate and construct a belief system that is a reflection of deep searching—implies that the individual has actually thought about how their spirituality is integrated into their life, and therefore contemplated the ethical implications of every aspect of their life, including their work practices. The second, if not confronted, impedes the first, and seems to be one of the only explanations I have been able to come up with for the seemingly contradictory behaviour of some of the participants in my study. Observation of the current ecological problems on Cyprus and PEI shows that allowing the quality of life we have been taught to expect temper the degree to which we are willing to farm or fish in a way that reflects our ethics, leads us to the point where we are willing to degrade the earth and sea beyond the point where they are able to sustain us. Doing things differently, as seen from the research data, involves commitment and a willingness to sacrifice material wealth, which is rare in modern society.

Conflict or discrepancy felt between beliefs and behaviour is commonly called 'cognitive dissonance.' This is a social psychology theory developed by Leo Festinger in

1957. The theory states that an individual's beliefs are called 'cognitions,' and that two or more cognitions are either relevant or irrelevant to one another. If they are relevant, they can be either consonant (one following from the other), or dissonant (contradicting one another). Festinger said that dissonance is psychologically uncomfortable, and therefore a person experiencing dissonance will take steps to reduce the dissonance, often leading to an avoidance of information or situations that would be likely to increase dissonance (Harmon-Jones & Mills, Eds., 1999, p. 3). While this theory may be relevant for the discrepancy between beliefs and behaviour of some of the farmers and fishers that I interviewed, a related concept that I came across in the literature is of even more interest to me. Festinger did state that commitment was necessary for dissonance reduction processes to ensue (Brehm & Wicklund, 1976, p. 6), however more recent research has shown that a feeling of personal responsibility is necessary for an individual to naturally attempt to reconcile dissonant elements. Brehm and Wicklund (1976) assert that generally a person feels responsible when they have an inkling of the future outcome of a situation, and when they feel that they personally chose the course of action that has resulted in the dissonance. If the person or people involved do not feel personally responsible for the consistent or inconsistent relationships between the consequences and their commitment, then any indication of dissonance may, in fact, be evident only to an observer. Those involved may in fact feel no psychological connection to the consequence of the dissonance (p.8). This idea resonates with the inconsistencies in the stories of island fishers who do not see a connection between their fishing practices and the collapse of fish stocks in Cyprus for example; or the practice of applying synthetic pesticides to agricultural fields while at the same time expressing the desire to preserve

the health of the natural and human community. Perhaps the island farmers and fishers do feel the tension of cognitive dissonance, but I do feel that a number of those who participated in my study may in fact not feel any personal responsibility for the current situations that they are facing, and that this theory warrants further exploration.

Whether or not an individual investigates and personalizes his/her faith, and whether he/she gives material prosperity priority over other forms of well being when making life choices, is going to be shaped by family, community, health, a sense of place and education. The role of education in the belief-behaviour dynamic cannot be underestimated in my opinion. By education I mean a system of opening oneself to new ways of seeing and understanding the world—a world that is constantly changing as the individual gains new experiences that inform their perception of reality. All of these factors act as pebbles tumbling over each other. Just as each stone is varying in its degree of hardness or softness, eroding in different ways and at various speeds, so will the way each individual responds to the elements he/she comes into contact with be distinct. I must mention here that I do not see the individual as being passive in this process. Acts of individual choice and responsibility are, in turn, going to alter the degree to which life shapes one's understanding and experience of the world.

This study provides only preliminary illuminations into the relationship that beliefs have on farming and fishing practices. The number of individuals that I interviewed is far too small to make any broad, sweeping claims; however, the results do suggest the need for further investigation into this relationship. I make more specific suggestions for the ways in which this relationship might be investigated on islands in the section 'Opportunities for Further Research.'

I have focused on the ways that spiritual beliefs influence behaviour because, as explained above, they seem to be a powerful animating force for island farmers and fishers (whether or not there is evidence for specific behavioural impacts). What makes spiritual beliefs unique to me is that they do not serve only to animate people's relationship to their natural environment and human community. They also have the potential to help islanders distinguish right from wrong, ethical from unethical, and sustainable from unsustainable. It is the union of these elements within spiritual belief systems that I feel makes spirituality such a potentially potent influence on how farmers and fishers behave. I believe that attempting to understand the internal mechanics of spiritual beliefs, their formation and how they influence our relationship to our place, could help us to make more conscious choices about the direction that our islands are headed. Such understanding will also assist us to reflect on whether the values that are directing our course are ones that actually represent and reinforce island identity and culture. In short, being conscious of what we believe and of how these beliefs shape our islands gives us the opportunity to make changes in how we are doing things and how we are educating those who will shape our islands in the future. In so doing, it might help us create an island way of life that reflects a story that we will be happy is shaping island identity for generations to come.

My Assumptions Revealed

I was under the naïve assumption, quite far into this research, that I did not have any preconceived notions of work ethics that best represented a healthy vision of island farming and fishing. I did not realize that I was approaching my subject with a lack of

humility until I started the interview process. I was interviewing an organic farmer when I first noticed it. I asked her if she thought education played a role in whether a person made the connections between farming conventionally and the ill effects that it seems chemical pesticides are having on human health. In other words, did she think that lack of education was a determining factor in whether a person farmed organically or not. At the time, it did not occur to me that my question was putting her in the awkward position of judging whether or not her conventional friends and colleagues were suffering from a lack of education. Kindly and gently, she explained that she knew many uneducated organic farmers and many very well educated conventional farmers and that she therefore did not see any connection.

My first experience with being brought face to face with my assumptions was humbling. But it was my second that reminded me that I needed to let go of thinking that the right way to farm and/or fish was my way. I was interviewing a conventional farmer who at the time had been diagnosed with cancer. I entered the interview thinking that I was just as interested in his story as I was in the stories of those who were farming organically. He proceeded to tell me his story—a story of connection with his place, his community and his ancestors. It was a story of deep love for the natural world and commitment to the profession of island farming. He expressed sorrow over the changes that were happening in the farming community and said that he was going to continue trying to reconnect people to the source of their food until he could not farm anymore. His story was so touching that when he left I had tears in my eyes. His openness to me had made me realize that I had interviewed him with the assumption that he must not have strong spiritual values or ethics; that he must not value his land or health; and that

he must not see that he was producing food by means that were unhealthy for his community. These were only a few of the ignorant and deeply disrespectful notions that I had carried into that interview.

The conviction that organic farming is the only way that a deeply spiritual person would farm is not one I hold today. I do feel that smaller and cleaner farms are better for the island environment. But as has been made obvious in my discussion, listening to stories of farmers and fishers alike has made me realize that spiritual beliefs are manifested in many ways and affected by many factors that are not initially obvious. Listening has also made me realize that what seem to be contradictions between beliefs and practices are rarely indications of a lack of ethics. Revealing such contradictions is frequently the key to unravelling the challenges that all islanders face every day, when they have to make choices that are not really choices at all.

Recognizing my own prejudices has been one of the lessons I have learned from this process. Listening to the farmers and fishers with an open mind and heart has taught me that understanding does not come until I let go of what I want to hear and actually hear what the speaker wants to share with me. The farmers and fishers of PEI and Cyprus have taught me many lessons over the last two years. The most vital of these have been humility and a posture of learning.

CONCLUSIONS AND RECOMMENDATIONS: CHALLENGES, CONNECTIONS AND ILLUMINATIONS

Writing this thesis has not been a comfortable experience. Simply recording these stories does not offer solutions to a farmer who is having to sell the land that his/her family has been farming for generations. It does not give a fisherman who has worked his entire life in order to barely provide for his family a quick and easy fix for collapsing fish stocks and declining incomes.

I wanted this thesis to unearth a practical solution to the trials facing the brave individuals who continue to provide our island communities with fresh, healthy, local food. I wanted to be able to thank them for the precious time they spent sharing their stories with me in a practical manner that helped to ensure the sustainability of our farming and fishing communities, and the culture and identity that had developed around these professions. The realization that I would not be able to do all of this with my thesis paper made me feel that this project had been both a waste of time and a failure.

It has taken me two years of not being able to write about this work because I could not see how it would have any effect on the practical reality of the lives of those I was writing about, to realize that I needed to refocus my lens. I was pointing the camera in the right direction, but I was not focusing on the key elements that would make the composition feel right. First I realized that I was trying to draw a picture that felt complete. I wanted a nice rounded ending that would make me, and any who read my study, feel good. Second, I became aware that I had unconsciously assumed that it was I that would come up with a solution. And third, I had rather rigidly constructed a

timeframe for developing and putting into practice a solution that was to fit nicely within the one year devoted to researching and writing my Master's thesis.

My assumptions were naive and in retrospect presumptuous. When I refocused my lens, what immediately struck me was that I was not interviewing the farming and fishing communities in order to use what they shared to come up with a solution. I had gone to them because I believed that they already had the solution to the problems being faced. By listening to their life stories and experiences I could understand what the key was and become an active participant in promoting whatever it was that enabled these people to keep going when others would or could not. The "participants" were in reality not participants at all. If anything, I was the participant in their quest to build, or maintain, community.

When I say that the farmers and fishers have the answers, I do not mean to undermine the usefulness of my thesis to them. I think that many of the problems that these two communities are facing could be at least diminished if all farmers and fishers were more conscious of whether their work practices reflect their personal spirituality and codes of ethics. It is obvious from my results that not all farmers and fishers have reconciled these differences yet. Their experiences have taught me about the real challenges of putting beliefs into action and the ways in which connection with and love for our islands must be the basis for any solution. My reflecting the problem back to them from a different perspective might help them to become more conscious of what their spiritual values are, and how these values could more effectively be put into practice. Re-arranging the pieces of the puzzle could lead to a clearer understanding of how to more effectively use island values in the building of a future for our islands that reflects island

culture and identity. It is a process of give and give. Denying my contribution to the process is not my intention – what I am trying to do is place my research within the larger context.

In recognizing that the farmers and fishers are pointing to the importance of spirituality and values to shape how we act in our relationship to our islands' natural resources, I am in no way implying that they can or should be single-handedly shouldering the responsibility for making the changes needed to redirect development on our islands. The responsibility rests just as much with the larger society that supports or undermines these two livelihoods through our consumer choices and the policies that we put in place to govern how our natural resources should be treated. The experiences and insights of the island farmers and fishers have helped me to see that this thesis is a cradle or springboard for the practical work that needs to be done at the grassroots, community-building level by all islanders, not just those directly involved with the primary sectors. The practical application that I, and perhaps others, are looking for only begins to sprout where this thesis ends. The incompleteness tells me that there is something not quite right; there are still many connections that need to be made. In this case, there is a great deal of work to be done to rebuild people's respect for the spiritual connection that is immanent in nature, and the values and places that connect us to this; and to find ways to mend our splintered spiritual identity so that it serves us better in building sustainable futures for our island communities.

I am quite certain that given time, farming and fishing practices that reflect the values and culture that islanders identify with home—practices that employ less intensive, more sustainable methods—will emerge out of necessity. But if PEI and

Cyprus could adopt food production methods better suited to our unique environments before necessity forces change upon us, we might be able to make this transition gradually instead of having to make it overnight. I believe that we have the knowledge, the experience, and the tools to make the connections now. All we need is to be open to learning with each other and from each other. Our island communities are constantly evolving and changing. The choices that we need to make are not a one-time thing. Bringing together beliefs and practice is a choice that is made every day—every time we put our hands in the soil; every time we throw our nets out over the deep blue water; and every time we all exercise our power as consumers. We need to be aware of what we believe in every minute, through every season. We need to keep listening to one another. We need to keep learning without the fear that we will lose who we are—who our ancestors were—by adapting and changing. We need to keep telling stories. But we also need to start making new stories that reflect a vision that is not fragmented by uncertainty of who we are, or by questions about whether we can afford to put our beliefs into practice.

My goal in writing this thesis is to act as a directional arrow pointing towards our farmers and fishers. We are wondering what is wrong. They have a great deal of experience and wisdom to share with us that could inspire our stories and vision for the future of our islands. Perhaps we should sit down at a farm kitchen table or pause on the fishing docks for a moment to listen. What we hear might answer some of the questions that have eluded our policy-makers and political leaders for decades. It might sound like an invitation.

Opportunities for Future Research

This thesis is a preliminary inquiry into the topic of spiritual beliefs and farming and fishing practices on two islands. Further research into the relationship between the spiritual beliefs held by islanders and their farming and fishing practices is merited. Most of the literature on the subject of natural resource management on islands has approached the subject from the perspective of public policy, or the pure sciences. Given the amount of literature that exists on the connection between island identity and islanders' relationship to their place, it would make sense to look at the ways in which farming and fishing, the heart of most island civilizations, have influenced and been influenced by, islanders' spiritual beliefs and values.

In addition to expanding on the research that I have already done, a closely related subject that I did not find any literature on, but would be very interested in learning more about, is how the distinct socio-cultural and historical elements that make up island histories influence the construction of islanders' spiritual beliefs. Understanding more about this might help islanders to make conscious choices about the preservation of particular cultural or social characteristics that are especially important in the construction of values that define our relationship to our islands and the natural resources that support island life.

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