

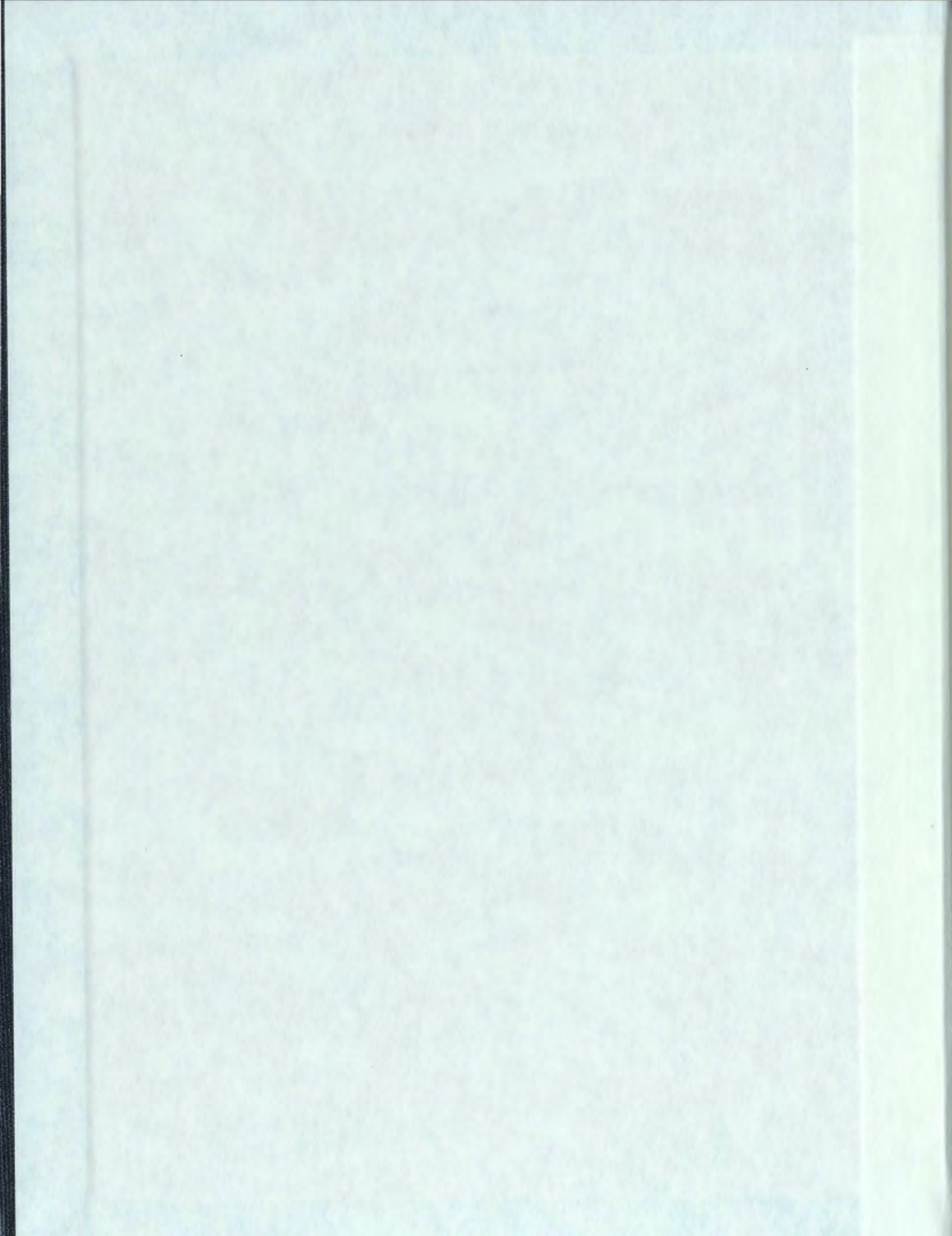
LISTENING TO THE VOICES OF THE FISHING PEOPLE:
HOW FISHERS MAKE SENSE OF THEIR LIVES
IN TODAY'S WORLD

CENTRE FOR NEWFOUNDLAND STUDIES

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**Listening to the Voices of the Fishing People:
How Fishers Make Sense of Their Lives in Today's World**

by

Lena Williams-Carawan

**A thesis submitted to the
School of Graduate Studies
in partial fulfillment of the
requirements for the degree of
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In memory of my father:

Captain E. Scott Williams

And

My grandson: Isaac Lee Carawan

To: Roy who supported me with love and patience every step of the way

To: Neda, Scott, and Kirk
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CHAPTER 1

Fishing Troubles

1.0 Introduction

In spite of increased government attempts during the past decade to regulate commercial fishing in the United States, the industry has progressively deteriorated. In fact, the industry is in trouble worldwide (Alden, 1999; Mederer, 1999). This study looks at the lives of and difficulties facing a particular group of fishers in coastal North Carolina and what these fishers have to say about the effects of changes that are occurring in their work life and culture.

1.1 Background of the Problem

In the past decade, there have been many changes in the commercial fishing industry, not only in North Carolina but also throughout the United States and the rest of the world. Unfortunately, many of these changes have been for the worse. In fact, some refer to today's international commercial fishing as a resource-based industry in deep trouble (Alden, 1999; Mederer, 1999). According to Mederer (1999), "it is generally agreed now that many world fisheries are in crisis, with the majority of world fish stocks over-exploited, or rebuilding from an over-exploited status" (p. 204). Elements of the crisis in the fisheries include but are not limited to sustainability issues (pollution, over fishing, climate changes, cheap overseas labor, and domestically raised seafood resulting

in low-priced imports), increased government fishery regulations, public concern regarding conservation, and the future of the industry itself.

This study focuses on fishers who own boats 50 feet or more in length and who often spend nights at sea. In the past all of the participants have been known as offshore fishers but recent changes in the industry have left some of the previous offshore fishers without a federal license to fish in the ocean. Therefore, their fishing habits have been changed from those of their past. For example, catching crab and shrimp are both warm weather fisheries and at best North Carolina fishers shrimp six months each year and then only if they are willing to travel further south for part of the season. If they do not own a fishing license for flounder, they are unable to fish for several months each year. The majority of these captains still stay away from home at night when fishing or shrimping.

Fishing, however, is more than an industry. To many fishing people, it is a way of life. From this study I have come to believe that cultural significance as well as economic concerns are involved (Brakel, 1999; Ellis, 1986; Mederer, 1999; Pálsson, 1991). According to Jentoft (1993), the cultural base of fishing communities is "connected to experience and tradition in the local community" (p. 91). From this study, I learned that the current crisis in the fishing industry puts the whole fishing community culture at risk.

1.2 Personal Connection

It is important to be forthcoming to the reader early about my place in this study. In the classic mode of ethnographies, the detached observer is said to be—objective—that is, neutral and impartial so distancing between the observed and the observer is

valued. Rosaldo (1993) “contests the equation of analytical distance and scientific objectivity by arguing that social analysts should explore their subjects from a number of positions, rather than being locked into any particular one” (p. 169).

I believe the detached observer is a scientific myth. As humans we bring our own personal set of values and beliefs to any situation we encounter—even research. As researchers, we have an obligation to participants in any study to be aware of our values and beliefs and how they might influence and/or bias our work with others. As the researcher in this study, I am in the unique position of being within the boundaries of both the insider and outsider role of research tradition. On the one hand, since this study is about a fishing community where I grew up, I have some prior knowledge and connection to the community, which by some could be judged as insider research. On the other hand, since I have not lived in the community for 30 years, I could also be viewed as an outsider. In either position the need to be aware of what I bring to the research process (previous knowledge or bias, for example) seems more important than my position inside or outside the research study.

My personal interest and connection come from growing up in a fishing family and also from my choice of social work as a profession. My father was a fisher until his death, and my three younger brothers also continue in the fishing tradition of our father and grandfathers. As the only daughter, I am the one member of our family who left the fishing community. As already mentioned, I have not lived in my home community for 30 years; nevertheless, I have stayed connected for several reasons. First, while not living in a fishing society, I continue to reside in a university town located in the mostly rural,

eastern region of North Carolina known as the coastal plains. I remain within one and one-half hours of the fishing community where my family still resides and visit the community often.

Second, the university where I teach has a commitment to the people of the region as a part of its mission. According to the university undergraduate catalog (2002/2003), the service mission of East Carolina University “as an institution with a tradition of strong regional ties and public outreach, is to provide leadership and to engage in partnerships supporting public education, health care and human services, cultural activities, and regional development” (p. 1) for the people of eastern North Carolina. My decision to conduct a study on a group, who, for the most part, are native to the region and are experiencing a work and culture crisis fits within the mission of the university. Third, as a social worker, I have an interest in individuals and populations that are in difficulty or crisis. Historically, social work is a profession that has worked with the most vulnerable populations in society (Reamer, 1995).

Fourth, and perhaps most importantly, on a personal level I hold a lifelong interest as well as a deep commitment and connection to this particular group. My early attachment to the sea and to fishing people has stayed with me throughout my life. My view of fishing is that there is both skill and art attached to the work. Skill is demonstrated in how the fishers perform their work. Art seems present in the rhythm of the work and how in many cases the fishers appreciate the beauty of nature that is a part of their every-day work life. It is also hard labor and not everyone understands that no matter how hard one works in a resource-based occupation there are times that can be

economically insecure with little or no pay for completed work. I had a suspicion early on that many fishers feel they have no voice in decision-making processes that control circumstances related to their work.

In addition, I have long held a professional interest and background in working with rural people, so the fishers fit into this general interest in rural people and communities as well. These connections and interests led to my conviction that there is a need to know more about what is happening in the lives of fishers. This study could have the potential to add to the knowledge base of this particular group as well as possibly adding to our knowledge base of rural settings/people in general. I also want to note here that I have chosen to use the first person "I" voice in this study because it is a way to show my personal connection to the population but at the same time keep my voice separate from the voices of the fishers.

1.3 Statement of the Problem

The net result of the current crisis is both an industry and a culture in the throes of a transition with a resulting sense of loss in the lives of those who fish as well as the likely loss of a regional subsistence-based profession and economy. Such is the case for the two small, eastern North Carolina fishing communities that are the focus of this study.

Overall, the problem for the fishers is that both their livelihood and culture are being threatened by loss of income because of limited work schedules and resources that are regulated by the government in response to depletion of stocks, problems with licensure, the variable factors of fuel costs and price of the catch, as well as stress and

worry regarding the uncertainty of the future of fishing. For example, each of the fishers who participated in this study catches shrimp in season. The shrimp fishery has been hard hit in the past year because of cheap shrimp imports, resulting in lower prices for the shrimp catch. In fact, the shrimpers have recently attracted the attention of the U.S. Congress, which in February 2003 passed a bill that would make \$17,500,000 available to the shrimp industries in the states of South Carolina, Georgia, North Carolina, and Florida in proportion to the percentage of the shrimp catch landed by each state. Although assistance has been common for farmers, it has historically been uncommon in the U.S. fishing industry. Getting the attention of members of Congress speaks to how critical the problems have become in the southeastern fisheries.

This work seeks to understand the lives of fishing people by listening to their stories. Many fishers possess years of experience in and knowledge of regional and local commercial fishing. They can be seen as experts. Therefore, listening to the voices of fishers is critical if there is to be an understanding of how they are making sense not only of their current, ever-changing world, but also how the fishers anticipate their futures.

Based on personal observations, this particular group of fishers who make up the participants in this study appears to have been especially hard hit because of the changes occurring in their industry. Because of their past offshore fishing they needed larger boats and therefore had greater start-up investments. These boats are also more expensive to maintain because of their size and equipment. In addition, generally the larger the vessel the larger the crew needed, fuel consumption is greater, and more electronic equipment is needed to travel farther offshore. The large economic investment may mean that these

fishers are unlikely to leave the industry even if the future of fishing looks bleak. An added factor that might influence the fishers to stay in the industry is potential difficulty in selling the larger boats if one cannot make a living being a fisher. Who would want to invest in a half-million-dollar-fishing trawler if the future of the industry is not promising?

As summarized in chapter two, much of the research literature is concerned with family relationships (especially between married couples), health issues, and accident and safety concerns (Brackel, 1999; Ellis, 1984; Mederer, 1999; Pálsson, 1991). In a review of the current literature, I found limited in-depth interviews with fishers from the southeastern United States focusing on *their* beliefs and thinking about what is happening regarding their work, culture, and futures. Before social work and other helping professions can assess and intervene in any helpful manner, they need to recognize and appreciate the issues from the fishers' perspectives.

1.4 Goals of the Study

The problems in the fishery dictate the goals of this research. The main goals of the study therefore are:

- to better understand how a particular group whose livelihood comes from the sea is adjusting to ongoing challenges,
- to increase society's understanding of the views of the fishers regarding the impact of outside forces on their lives and culture,
- to gain an understanding of what the fishers anticipate for their future.

The first and third goals of the study are designed to get at what the fishers believe to be important challenges in their work for now and the future. How do the fishers understand what is happening in their industry and culture? Do they believe they will have a future in commercial fishing? The second goal is designed to give others outside the industry an opportunity to hear and understand the voices of the fishers as they give their understanding of the impact of outside forces on their lives and culture.

More generally this study will inform or add to the body of rural social work literature. It is designed to draw from the research data information that could add to the body of knowledge on rural people and communities with an emphasis on resource based economies. Attending to the stories of a particular group of fishers and understanding what contributes to their overall sense of wellbeing may have implications for other fishing groups. Moreover, as not only the fishers of North Carolina are being affected by changes in the industry, there may well be parallels for fishers throughout the world (Alden, 1999; Baker, 1999). It also may have relevance to people engaged in different but similar occupations, such as farming.

It is critical that social work researchers add to the profession's knowledge of both rural social work and working with groups involved in resource-based economies in post-industrial America. Historically, as stated earlier, social work is a profession that has worked with the most vulnerable populations in society. The profession also stresses the importance of working with both individuals and their environment. Concern for both the welfare of individuals and groups as well as challenges related to change on every level are an integral part of the social work profession. Issues of poverty, special populations,

and special needs have all been concerns throughout the life of the profession. Fishers may well be considered to be a special population with a unique way of life. Working toward a better understanding of a group of rural fishing people who are experiencing dramatic change in their lives challenges social workers to both learn from and assist the group in their struggles.

According to Collier (1993), rural social workers need to both see and understand what is happening in rural communities in order to construct ways of dealing with issues. Learning how best to assist populations and cultures in the midst of change as well as adding to our knowledge base of rural social work continue to be challenging to the profession.

From an educational point of view, working with this group could add to the body of literature on rural social work in general and specifically to work with individuals employed in resource-based economies. Historically, social work was founded on an urban orientation/bias (Martinez-Brawley, 1990). Many agree that there is still much for social work educators and practitioners to learn about rural people and rural communities. Again, this study can help fill the gap in social work education and social work practice with rural people by acknowledging the voices of the fishers and listening to what they can teach us as they deal with all the changes in their lives.

1.5 Definitions of Key Words and Terms

Since there are key concepts found throughout this paper, it seems appropriate to define these terms at the beginning so that readers have an understanding of what the author means when using the terms. Some of the definitions are taken directly from federal public laws, while some derive from other sources. Although legal definitions are used in public laws, often less formal definitions better describe the social reality of a particular group of people and/or culture. I used both types of definitions to define key words and terms depending on what seemed appropriate for each.

1.5.1 Fishing

Fishing is the activity of catching and landing fish or shellfish for commercial sale, for recreational pleasure, or personal consumption. This thesis focuses on commercial fishing. Commercial fishing is often referred to as an industry. According to *Webster's College Dictionary* (2000), "industry" is defined in part as "any general business activity, systematic work or labor, the aggregate of work, scholarship, and ancillary activity in a particular field often named after its principal subject".

1.5.2 Fisheries

"A fishery is the composite of people who fish, their knowledge, technology, and skills, and the stocks of fish or shellfish that they depend upon" (McCay, personal communication, July, 2003).

1.5.3 Fishers/Captains

The term "fisher" refers to individuals who depend upon fishing for commerce. They usually refer to themselves as commercial fishermen/women. Captains both own

and run the boat and are ultimately responsible for all decisions regarding the boat. The term fisher/captain is used interchangeably when referring to participants in this research study since in a larger sense all the captains are fishers and specifically they are also captains. Either term applies.

1.5.4 Offshore Fisher/Captains

For purposes of this study I define inshore fisher/captains as fishers who usually fish from a smaller boat, sometimes alone or with one other crew member, may not have the ability to stay away from port overnight, and who fish close to shore. In contrast, the “offshore fisher/captain” in this study refers to the group of fishers who fulfill the following five criteria:

- they own commercial fishing boats 50 feet in length or longer,
- in the past they have had or presently have a license to fish past the three-mile limit to the shore line, putting them in federal territorial waters,
- they actively captain their boats and employ a working crew,
- they have the ability to stay out to sea at least overnight,
- they most often stay away from port three or more nights each fishing trip.

1.5.5 Fishing Community

A fishing community is a community that is defined by networks of association and mutual interest in fishing. PL 104–279 (1996) defines a fishing community as “a community, which is substantially engaged in the harvest or processing of fishery

resources to meet social and economic needs, and includes fishing vessel owners, operators, and crew and United States fish processors that are based in such community” (pp. 3561–3562). While the legal definition reflects many of the basic components that make up a fishing community it is not very reflective of the lived reality of a community of fishing people. For example the networks that make up the fishing community may include fishers, their families, fish house owners/processors, and ancillary businesses that provision fishing boats but the fishing community is also home to the fishers and their families and the center of their lives both individually and collectively. Fishing communities reflect both the work and way of life for fishing people.

1.6 The Questions

The research questions derive from the main goals of the work. All questions are framed from the perspective of the fishers. The study assumes the epistemological framework that there are many ways of knowing and many truths (Belenky et al., 1986; Hartman, 1994; hooks, 1994) and that the fishers’ perspective is crucial to understanding their work and lives.

From the first goal of “to better understand how a particular group whose livelihood depends on the sea is adjusting to ongoing challenges” comes the first question:

1. How are the past/present offshore fishers located in Scott County, on the coast of North Carolina, making sense of recent changes in the fisheries?

The term “recent changes” refers to the increase of rules and regulations since the mid-1980s by state and federal governments that have sought to regulate and manage marine resources. This term also refers to the status of fish stocks, often discussed as being over-exploited or in a state of rebuilding. Finally, “recent changes” also includes the constant uncertainty as to the future of the fisheries, economic instability, and ambiguity about job security.

From the second goal of “to improve society’s view of the fishers’ understanding and impact of outside forces on their lives and culture” comes the second question:

2. What external forces do these fishers believe have an impact on their way of life?

The phrase “external forces” means influences that the fishers believe could affect their work and way of life and those over which they have little or no control. In the past these external forces would likely have come up in an interview as conditions such as bad weather (any kind of weather that might have a seasonal or longer effect on the catch) or a season of fewer fish; these have historically been a part of their work and their life. Today because of policy changes, these external forces have broadened. This study looked at other factors such as too little participation on the part of fishers in decision-making processes concerning the present and future of the fisheries and media coverage that the fishers might perceive to be negative and unhelpful in their struggle in the fishing crisis.

The third question derives from the third goal “to gain a better understanding of what fishers anticipate for their future”:

3. What do these fishers anticipate for their future?

“Way of life” refers to the way in which one lives, a chosen pathway. The concept of “fishing as a way of life” is found throughout the literature on fishing (Brakel, 1999; Ellis, 1984; Mederer, 1999; Pálsson, 1991). According to Brakel (1999), “fishing as a life way involves a distinctive ecological relationship and has characteristic socio-cultural values and patterns” (p. 15). A unique culture develops within a fishing community around the work of fishing. Therefore, the future of fishing holds more importance than work in the fishers’ life because fishing is not only about work but also about life itself—the culture in which one exists.

These questions address the fact that there have been recent changes in the fisheries that have great significance to the lives of fishers and their families. At best, policy-makers and practitioners make assumptions about how the fishers make sense of these changes and how outside forces impinge on them. The research questions were directed at the fishers themselves, so that they could give their own answers regarding their worldview, culture, and work. Their answers have potential to provide a necessary component in guiding social development policy; they can also provide critical information for social workers and others involved with this population.

1.7 Organization of the Thesis

The remainder of the thesis is divided into four chapters. Chapter two provides a review of the literature related to the research questions. Chapter three describes and discusses the research methodology selected to respond to the problem. It includes the

sample, measures, data collection, and analytic procedures. Chapter four presents the analysis of the data collected. The final and fifth chapter discusses the findings, implications and recommendations for future research.

CHAPTER 2

Sustaining the Fisheries in Context and Theory

2.0 Introduction

The problem for most countries with fishing industries is how to meet the challenge of protecting natural resources, stay abreast of a new world market, coexist with other industries that use the sea, and still retain a culture and sense of place that has existed for centuries. Much of the research on fishers and fishing has centered on family relationships as well as on health, safety, and ecology issues. Despite the fact that fishing is one of the world's oldest occupations, there is limited research available, which "considers the psycho-social aspects of the job" (Sutherland & Flin, 1989, p. 286).

Generally speaking, current research on the stories of fishers living in the mid-Atlantic region of the United States is limited. It is particularly limited in the fishing communities where this study took place. Moreover, there is a particular shortage of qualitative data related to the stories fishers tell about their lives and ways of living. Griffith (1999) argues that the social science literature produced about this region is too often "merely technical reports that do not represent fishing families, the fishing industry, or coastal history, although there are notable exceptions" (p. xi-xii). Griffith's work *The Estuary's Gift: An Atlantic Coast Cultural Biography* stands as an important contribution to the limited amount of scholarly work on today's North Carolina coast and fisheries. A review of Griffith's references for his 1999 book revealed that only nine references were directly related to the current-day fisheries and five of those references were either

classificatory analysis or technical reports. The reference list included one historical review and the significant work of Garrity-Blake (1994) on the menhaden fisheries of this region. The lack of scholarly work points out the importance of obtaining the fishers' views and comments on what has happened in the past as well as what is happening presently to the coast and its fisheries. The North Carolina study on listening to the fishers will add to the limited amount of research on the region.

This chapter situates the study in its social, economic, and historical context as a way to help the reader understand why the research is both needed and timely. Research is presented that provides an overview of the work of commercial fishing. In order to learn more about the plight of fishers generally, the chapter is organized to look broadly at the complex challenges of the fisheries, focusing on regulatory and environmental concerns as well as market issues found within the industry. Work, stress, and wellbeing are discussed in the context of the current changes and transitions for fishers. Four themes—the commons theory on the fishery, the importance of place or community to fishers, fishing as a way of life, and the role of local knowledge for sustaining the fishery—serve as guiding frameworks for the chapter.

Although this work will focus on a group of fishers in North Carolina, there are similarities from country to country regarding what many consider to be a worldwide fishing crisis. Perhaps one of the most publicized examples is the fishing crisis in Canada, especially Newfoundland and Labrador. According to Canadian researcher Sinclair (1988), Newfoundland's fishing industry has been in deep crisis since 1980. Other research studies (Hutchings, 1999; Newell & Ommer, 1999; Sinclair, 1999) support this

claim. The crisis, according to Neis (1999) in her work on familial and social patriarchal dominance, may also negatively complicate the lives of women, who are connected to the fishery by job or by marriage. She concludes that this is especially the case for women who are already economically and socially marginalized. With the longest ocean shoreline of any continental country on earth (Newell & Ommer, 1999), Canada has been hard hit by the fishing crisis, so it is not surprising that a large number of studies on the changing fisheries are about this country and especially about the crisis in the province of Newfoundland and Labrador. These studies are significant because they not only present a comprehensive view of Canada's cold water fisheries but also provide significant history and information that assist in understanding fisheries along the eastern seaboard in general.

As mentioned previously, there are four themes in the guiding framework for this chapter. The commons theory, often referred to as the tragedy of the commons, is key to research about the fishery since the theory provides the basis for much of the foundation for today's resource management of the fish industry (McCay & Acheson, 1987). According to the theory the ultimate result of commonly held property will be overexploitation of resources possibly leading to their extinction. In fishing the commons argument, however, falls short (McCay & Acheson, 1987) because it makes an assumption that all commons situations are basically the same and end in tragedy. The theory does not consider individual community circumstances or strengths. The significance of fishing as a way of life (Brakel, 1999; Ellis, 1984; Merder, 1999, Pálsson, 1991), the value of place or community (Brakel, 1999; Pauly 1999, Pocius, 1991) and the

role of local knowledge are all key elements in how the tragedy of the commons plays out. Groups have their own individual characteristics and may, for example, interpret how to deal with and make sense of changes in the fisheries in a number of ways. Local knowledge, for example, could add an important component in sustaining the fisheries (Griffith, 1999; Neis et al., 1999; Pauly, 1999; Pinkerton, 1999) and is a vital factor to consider when taking into account sustainability issues.

2.1 Sustainability of the Fisheries

In a search of the literature it is difficult to find a study on the fisheries that is not directly or indirectly connected to sustainability issues. This section presents a discussion of recent studies on the results of overfishing and additional environmental and regulatory concerns in the industry. These concerns often overlap in the literature because they are so clearly and closely connected.

2.1.1 North Carolina Studies

It has become apparent in recent times that sustainability of the fisheries is greatly threatened by our present day environment (Griffith, 1999; NOAA, 1997). There is concern in the literature about overfishing (Pauly, 1999), but the research shows that overfishing is not the only issue that raises environmental concerns regarding the oceans and what lives in this complex ecosystem (Garrity-Blake, 1994; Griffith, 1999; NOAA, 1997)). Accounts regarding concerns about the environmental impact of pollution, overfishing (Alden, 1999), and more active hurricane seasons bringing increased nitrogen levels from hog-waste lagoons, auto emissions, and runoff from asphalt and roofs have

all added to the discussion of problems in the fisheries. Along the coast of North Carolina, for example, in the fall of 1999, grave newspaper accounts recorded the devastation of "Hurricane Floyd's record rainfall [which] flushed sewage, livestock waste, oils, fertilizers and dirt into waterways feeding sensitive nursery areas from the Cape Fear coast to the Pamlico Sound" (Carson, 1999, p. 1B, 4B). The environmental impact of pollution from Hurricane Floyd's rampage struck an area that covers most of North Carolina's coastline and thus its fisheries. In fall 2003, Hurricane Isabelle ravaged the North Carolina coast, and once again there were huge fish kills along the coast from the increased nitrogen content in the water, caused by runoff from rainfall and high tides from Hurricane Isabelle.

The 25th anniversary edition of *Coastal Zone Management* (1997), produced by The National Oceanic and Atmospheric Administration (NOAA), reported the significance of the coast where "50 percent of the U.S. population lives, on only about 10 percent on the Nation's land area, where the average American spends about 10 vacation days per year, and where over one-third of the U.S. Gross Domestic Product is generated" (p. 5). NOAA reports that tourism is the leading industry in the United States earning \$3 trillion in sales and approximately \$85 billion in annual tax revenues. The study puts into perspective the importance of and the stress on the coast by concluding that "coastal states earn about 85 percent of U.S. tourist revenues" (p. 13). Economically, coastal areas usually equal big business. According to this study the vast number of people who live in or visit coastal areas are facing shrinking public resources because "the finest and most accessible areas are rapidly being lost to private development and erosion" (p. 13). Like

the work of Griffith (1999) and Garrity-Blake (1994), the study from NOAA reported that America's coasts are under incredible pressure from population growth, overuse of inadequate coastal resources, erosion, storms, and other natural hazards from lost habitat, and from runoff pollution. The NOAA report stresses the "intense pressure to develop coastal resorts and single family vacation houses" (p. 19) with little regard to the devastation hurricanes can cause to these structures too close to the water's edge. The study reports that the 1995 hurricane season, for example, produced 11 hurricanes and 8 tropical storms resulting in "120 deaths and an estimated \$5.2 billion worth of damage" (p. 20).

Studies also show that there is a problem with runoff from livestock waste which affects the fisheries even when there are no hurricanes. This is especially important to coastal North Carolina because according to Griffith (1999), Duplin County is home to the largest turkey processing plant in the world, and Sampson County is home to the most hogs in the United States. Both of these counties are located in the eastern region of the state. The runoffs from turkey and hog farms feed into the rivers of eastern North Carolina and are no small problem when it comes to the health of the coastal estuaries where freshwater meets saltwater. According to Griffith's (1999) comprehensive work on the area, "decades of draining the runoffs of hog and turkey farms have contributed to the devastation of the oyster gardens of the southern region [in North Carolina], once a prosperous fishery" (p. 124). An important point in the NOAA (1997) study is that half of all water pollution in the U.S. occurs from "nonpoint sources, such as runoff from streets, farms, leaking septic systems, and untreated sewage from boats" (p. 31). The NOAA

report, based on 25 years of research, gives a good overview backed up with statistical data about the problems and health of the coast; it supports Griffith's assertion regarding the cause of dying oyster beds in North Carolina. In fact, the study reports that in 1966 polluted waters had caused the closure of 13 percent of the nation's shellfish beds. By 1990, harvesting in 37 percent of the shellfish beds was limited because of pollution (NOAA, 1997). The NOAA study (1997) reports on the chronic erosion of up to 70 percent of America's beaches and the loss of about 40,000 acres of coastal wetlands annually. This negatively affects the habitat and spawning grounds of fish and shellfish. The race to develop urban waterfronts often resulting in "inadequate space for ports, marinas, commercial fish landings, and boat repair yards" is also an issue (p. 8). The NOAA report (1997) also presents examples of completed and ongoing projects that State Coastal Programs have undertaken to address tough coastal issues. Many of these successful projects include grants that assist in the protection of wetlands.

2.1.2 Eastern Canada Studies

Although the literature about the North Carolina fishery points to distress among fishers, there is overall concern world wide (as stated in chapter one) about how to create a sustainable fishery in view of the fact that particular species of fish have dwindled or been driven almost to extinction. This situation has led to limits or moratoriums in certain locations, as in the moratorium on cod fish, for example, in Newfoundland (Hutchings, 1999; Newell & Ommer, 1999; Sinclair, 1999). No one is able to predict with any amount of certainty the impact of environmental pollution and overfishing on the future of the industry. Jentoft (1993) notes that the oceans provide a very complex ecosystem and

scientists have great difficulty predicting exactly what will happen regarding fish stock in any given area. Jentoft also stresses the importance of recognizing that fisheries management is both a complex and difficult job with much trial and error. Neis et al. (1999) agree that “enormous uncertainty exists about the extent of the long-term damage done to the stocks, their future resilience, and hence the ideal scale, technologies, and management structures for the fisheries of the future” (p. 225). One thing seems clear: there is uncertainty about the future of fishing in Newfoundland.

The numerous studies on the collapse of Newfoundland’s cod fishery provide an excellent example of the complexity of the fisheries and fisheries management. As editors of a comprehensive book *Fishing Places, Fishing People* (1999), a collection of nineteen chapters/studies on the Canadian fisheries, Newell and Ommer (1999) suggest that “experts who have joined [us] to produce this pioneering, multidisciplinary stocktaking for Canadian fisheries examine fisheries and communities in innovative ways” (p. 5). These “innovative ways” are of particular interest in today’s fisheries crisis where scientific advice fell short of the mark. This book brings together a group of twenty-five social science researchers who provide different historical perspectives on a variety of fisheries and offer suggestions for the future. Newell and Ommer (1999) make a strong case on the lack of success in predicting outcomes in the fisheries based on expert scientific advice.

The failure of experts either to agree on the causes or to predict the rebound of a major stock being driven into collapse by a fishery that followed mainstream scientific advice has raised the awareness across the nation and the world about

the uncertainty of science and the fragility of what was usually thought of as an inexhaustible resource (p. 5).

These works have implications for both scientists and the fisheries. The collapse of a fishery which had dominated much of Newfoundland's economy for over two-hundred years led to a temporary moratorium on commercial fishing for northern cod beginning on July 2, 1992 (Hutchings, 1999; Sinclair et al., 1999). In the spring of 1995, the temporary moratorium of 1992 became more permanent, closing indefinitely most of the commercial stocks to fishing around Newfoundland, including cod (Sinclair et al., 1999). Studies on the breadth and depth of the cod crisis are important because the crisis spurred interest and research in ecological issues that include both fish and people. For example, an important point in Pauly's (1999) work is about the importance of place in the sustainability of the fisheries. He argues that we have known at least since World War II that "excessive fishing reduces stocks and eventually causes them to collapse and that reducing fishing is sufficient, in most cases, for natural stocks to recover (given time)" (p. 359). Recently, according to a study by Hutchings (1999), even the Canadian government has acknowledged "that over fishing and poor fishing practices were the primary cause of the collapse of Atlantic cod throughout eastern Canada" (p. 269). Both Pauly (1999) and Pinkerton (1999) stress the need for co-management of the fisheries that would include the local knowledge of fishers. Finlayson (1999) speaks to the importance of being open-minded when working toward a sustainable fishery. Neis et al. (1999) discuss the use and place of using what they refer to as traditional ecological knowledge, which can at least supplement scientific understanding in resource management. These studies are all

discussed in more detail later in this chapter. This collection of works is key because the studies review at least some of Canada's fishing past as well as looking to the future and stressing the importance of including the knowledge of local fishers.

2.2 The Commons and Regulatory Concerns

Just as much of the literature on the fisheries includes sustainability issues, studies also often include discussions and debate on how the fisheries are managed. Fewer fish have led to more stringent and complex regulations about the size and amount of fish that can legally be caught as well as to who can and cannot receive a license to fish. It is difficult, however, to discuss the literature on regulatory concerns in the fisheries without first considering common property resources and the thinking that underpins how resources are managed.

Garret Hardin (1968) is often credited with the development of a theory called "tragedy of the commons," although he relied heavily on the original work of William Lloyd (1837). In terms of the fishery, essentially this is a theory stating that if everyone has access to a commons (the ocean, for example), then no one will take responsibility for it; and therefore, it will ultimately be overexploited and/or destroyed. References to the commons theory are mentioned often in fishery research (Berkes, 1987; Durrenberger & Pálsson, 1987; McCay, 1987; McCay & Acheson, 1987; McCay & Jentoft, 1996; Pinkerton, 1999). One of the most important and comprehensive works on the commons theory is McCay and Acheson's (1987) co-edited book entitled *The Question of the Commons*. The editors brought together nineteen social scientists to "review and evaluate

the theory of the tragedy of the commons” (p. xiv). Many researchers, including McCay and Acheson, argue that the commons theory is the prevailing methodology used by social scientists to depict environmental and resource issues. Based on the extensive work of McCay and Acheson (1987), the commons theory should be the starting point of any discussion of literature on how fisheries are regulated.

McCay and Acheson (1987) contend that common property has an old and troubled past in Western culture. They build a strong case that the current use of the tragedy of the commons theory “is fundamental to scientific resource management in fisheries, forestry, soil conservation, rangelands, and other fields, and plays a quiet but strong role in social policy” (p. 2). Early on there is a comprehensive critique, and the authors present different examples or versions of the argument underlying the commons theory. Although this theory can sound deceptively simple, outcomes based on this theory can be complex with differing results. McCay and Acheson (1987) describe both an environmental and economic tragedy that results from overcapitalization.

Overcapitalization occurs in an open-access system: “When there is any profit at all to be made, new entrants are likely to be attracted despite evidence of decline in the productivity of the resource” (p. 4). According to McCay and Acheson, overcapitalization complicates resource management because these excess producers, in trying to make a living, “interact with politicians and resource managers to protect their interests, often by trying to prevent drastic changes in the system” (p. 4). The commons theory interestingly enough appeals to both liberal and conservative political agendas. One could argue from the stance that the “government should take a stronger role in dealing with problems of

population, society, and the environment” or “that government should leave this role to individuals and the private sector by encouraging privatization,” which, as McCay and Acheson point out, appears contradictory.

The authors contend that the commons model falls short by not considering both the individual and community circumstances of particular commons situations. Every group is not the same, and therefore groups interpret how to respond to problems stemming from working within a common workspace differently. Throughout the literature on fishing, there are examples of how different groups who have different histories and cultures initiate dissimilar responses to commons issues. McCay and Acheson (1987) refer to this situation as “contextual factors” (p. 6). They assert: “Most [of the] authors in this volume [*The Question of the Commons*] assume property rights are thoroughly embedded in historically specific social contexts whose meanings vary” (p. 7). They offer and discuss in detail examples from many parts of the world of case studies of common property issues where context cannot be ignored. These case studies from such diverse places as Canada, United States, the Amazon, New Guinea, Botswana, Ethiopia, and Malaysia are credible examples of the conservation practices of common property attained by small community groups throughout the world.

Acheson (1987) offers an American example of conservation practices of lobstermen from Maine who are members of groups called “harbor gangs” (p. 42). These lobstermen define and lay claim to lobster territories in which, according to Acheson (1987), they “catch lobsters close to the mouth of the harbor where they anchor their boats and where mixed fishing occurs” (p. 42) or perimeter-defended areas where

“boundaries are sharply drawn and defended to a yard with little mixed fishing” (p. 42). They limit access by using criteria such as longtime residence in the community or being or having kinship ties to elder lobstermen. The lobstermen preserve territorial limits by direct confrontation and/or the deliberate cutting or sinking of the trespasser’s traps which, while illegal, is handled very quietly and rarely reported to legal authorities. These practices restrict the number of individuals who can lobster in certain areas as well as pressure lobstermen within each area to limit their number of traps. Acheson argues that for the lobstermen “ownership of land on an island is held to mean ownership of fishing rights in nearby waters, despite the fact that legally the ocean areas are part of the public domain” (p. 42). Acheson provides an important example of a folk conservation practice that works. The lobstermen of Maine developed their own informal method of conserving lobster stocks without the assistance of formal government regulations.

A deceptively simple but key idea presented by McCay and Acheson (1987) is their statement about the misuse of the commons model, which the authors report assumes “that because people are engaged in common-property activity, they are involved in a tragedy of the commons” (p. 7). As Peters (1987) posits, “The commons system is by its very nature a sociocultural system embedded in historically specific time and space; and second, that analytical modes are rooted in historical experience” (p. 172). Durrenberger and Pálsson (1987) further argue in their chapter, “As a socially meaningful category, common property must always enter into some *system* of property relationships” (p. 370).

Throughout the book the commons theory is explained in detail and effectively questions the model's effectiveness and what may be considered its simplistic view (for example, not including context) of commons issues. Perhaps even more importantly, this work helps the reader "to understand the commons and common-property institutions as part of the more general task of discovering, as Berkes (1987) in (chapter 2) of this volume writes, 'the conditions under which the 'tragedy' occurs and those under which it does not'" (p. 34). Berkes argues "despite its [commons theory] success in explaining the decline of resources that have been flung open to cut-throat exploitation, [it] is inadequate as the model for all fisheries" (p. 90). He makes the point that there are ten million small-scale fishers throughout the world who contribute "nearly half of the total world fish catch used for direct human consumption" (p. 88). These small-scale fishers use less fuel and contribute "more jobs per unit of investment" (p. 88) than do the large-scale fisheries. According to Berkes, many small-scale fisheries have developed management systems that "counter the assumptions of the common-property paradigm" (p. 88) and therefore provide examples of conditions under which the tragedy of the commons does not occur. Berkes' example and others found within *The Question of the Commons* deserve attention when considering current fisheries management practices.

2.3 Modern-Day Fisheries Management and the Importance of Local Knowledge

As seen throughout this study the literature reveals problems in the way modern-day fisheries are managed. Managing the fisheries includes criteria concerning the total amount of particular kinds of fish that can be caught and the stipulations about how one

purchases a permit or license and how the purchase or transfer of such license occurs.

There are concerns about how individual fishing quotas (IFQs), the total allowable catch (TAC), individual transferable quotas (ITQ), and ideological versus economic views play out in the real world of the fishers. In North Carolina, according to Jerry Schill, president of the North Carolina Fisheries Association, the state's entire fishery has "limited entry."

This means that the number of fishers who can hold a license has been capped by the North Carolina General Assembly (Jerry Schill, personal correspondence, September 9, 2003). According to the North Carolina Fisheries Rules for Coastal Waters (2003), the North Carolina Marine Fisheries Commission (NCMFC) has authority provided by the North Carolina General Assembly and stated in G.S. 143B.289.52 (pp. 283–286) to limit entry when a federal fisheries management plan has established a quota. The NCMFC also has authority under G.S. 113–182.1g (p. 254) to recommend limited entry to the General Assembly to implement a federal management plan after considering eight factors that are listed in the Act:

1. Current participation in and dependence on the fishery.
2. Past fishing practices in the fishery.
3. Economics of the fishery.
4. Capability of fishing vessels used in the fishery to engage in other fisheries.
5. Cultural and social factors relevant to the fishery and any affected fishing communities.
6. Capacity of the fishery to support biological parameters.
7. Equitable resolution of competing social and economic interests.

8. Any other relevant considerations. (p. 254)

The ability to transfer an individual quota is an emotionally charged topic among most fishers. Research by McCay (1999) of a Newfoundland crab fishery explores the use of an individual transferable quota (ITQ) system, which is a structure whereby fishers can buy the quota allotment of others, thus permitting some to carry on in the fishery and others to leave. This is not the case in North Carolina where the only way to get a fishing permit or license is to purchase a boat that has permits or licenses connected to the boat that allows certain species of fish to be caught. Individual species permits often have an allotted quota of fish that can be caught and/or have a certain time allotment in which to catch the fish. Although McCay's (1999) study shows that there was difficulty in the beginning for fishers seemingly to comprehend or accept the idea of ITQ, in 1996 the crab fishers reached an agreement to "allocate boat quotas to both the full-time and the supplementary fleets, based on a formula that recognized historical performance in the fishery in assigning boats to different classes, with equal allocation within the classes" (p. 317). McCay's work provides an example of the importance of different kinds of knowledge in sustaining the fisheries. Both scientific knowledge as well as local fishers' knowledge have a place when it comes to sustainability issues. Each group has a different place and carries with it certain limitations based on context and the learning that comes from experience and/or formal or informal education. Her study is significant because it shows some of the difficulty fishers had in moving from a way of thinking that is embedded in certain beliefs. For example, they had trouble moving away from the belief that everyone is entitled to fish as much and where he wants to. As one of the crab-fishers

in McCay's study stated, "There are enough crabs out there [for everyone], no need for that [quotas]" (p. 313). Another issue is the uncertainty of the fisheries. Even when fishers have choices they are often afraid to make decisions because they have no assurance that they are making decisions that will benefit them in the long run.

McCay notes that fishers often believe that area quotas belong to the people who reside in the adjoining community and that if a fisher owns a license to fish it would be morally wrong not to use it. McCay's (1999) moral interpretation is rooted in the "harsh reality of high unemployment, chronic poverty, and rural Newfoundland's cultural expectations that if jobs are scarce they should be spread around as broadly as possible" (p. 314). The community would look down on a fisher who held on to a license but did not use it to work. McCay's work on the crab fishery is important because it explains and discusses the ITQ system as a workable method to regulate the crab fishery on the northeast coast of Newfoundland. Her study is also significant because it gives a perspective that helps the reader understand the difficulty fishers must experience when considering making changes in an industry where they likely lament the changes of the recent past and view the future of the fisheries with uncertainty and apprehension.

As discussed earlier in this chapter, Newell and Ommer (1999) in *Fishing Places, Fishing People* argue that science does not have all the answers on how to create a well-run, sustainable fishery. According to Pauly (1999) in chapter 18 and Pinkerton (1999) in chapter 17, there is a growing need for co-management of the fisheries, a situation that could result in a shared process by government and community-based stakeholders. According to Pinkerton, "Growing problems in fisheries management have outstripped

the ability of our current institutions to manage matters effectively” (p. 351). Pinkerton points out that sharing the management process with the local community could assist government institutions in finding answers to better fishery management. In their works Pauly (1999) and Pinkerton (1999) argue that there are historical accounts of successful, community-based approaches in the fisheries. Pinkerton (1987) gives a key example in her work of a fishing community taking responsibility when a salmon fishery in British Columbia was threatened. It was the local community, which “confronted the state in a demand for proper management and put into effect its own emergency management regime” (p. 346). Pinkerton (1999) cites over fifty “well-documented cases of problem solving by local bodies in pre-industrial and post-industrial settings” (p. 340) as a basis for her argument that local communities have a place at the management table for the fisheries. Pinkerton makes a strong case for shared governance of the fisheries and for the need to explore methods that address the stress on “both the resource and the people who are sustained by it” (p. 351). Both Pauly and Pinkerton, in their very thorough work, present a compelling case for the need to include local people in the management of the fisheries.

Fishers are not alone in their dissatisfaction with the management of the fisheries. Scientists, according to the work of Newell and Ommer (1999), have experienced their own frustration because of political power plays. The scientists were caught in “the impossible demands in the past of government fisheries managers and their political bosses for a scientific consensus on fisheries matters” (p. 10), no matter how unrealistic the process or outcome. Finlayson (1994) analyzed the conflicted relationship between

Canada's political and scientific communities, who were supposed to be working hand in hand in the management of the country's fisheries. Both the works of Newell and Ommer and of Finlayson show the difficulty scientists had in performing their work while trying to please their politically motivated funding source and the real conflict of interest that was a part of the management of the fisheries. In his final analysis, Finlayson (1994) points out the importance of having an open mind by suggesting the possibility of "not a solution, but a path toward a coherent and cooperative outcome" (p. 154) with the shared goal of a sustainable fishery. Considering that the common theme present throughout the literature on fishing is how to create sustainable fisheries, a goal that seems fraught with complicated issues and many actors, Finlayson's work provides a strategy for how to begin the process.

The value of this view fits with the literature that stresses the necessity of adding to scientific knowledge by integrating local fishers' knowledge. Griffith (1999) develops this idea further with his thesis "that environmental degradation follows the loss of intimate understandings of coastal ecosystems that fishing families possess" (p. xii). The author makes this point by arguing that commercial fishing families of the mid-Atlantic "are symbols of social and economic diversity with ties to local history and local ecosystems that build upon self-sufficiency and independence" (p. xiv). They embody a stronghold against external forces like "the wearing away of local and regional history that results when national retail and restaurant chains convert local merchants into clerks and busboys, or the loss of biological diversity that follows the reconfiguration of countrysides to support mono-crop agriculture, industrial chicken production, hog

farming, forestry, and mining” (p. xii). Griffith further develops this thinking by pointing out that fishing families represent another option to the empty promises of companies that invade communities, use their formal and informal resources “and then leave at a moment’s notice with little more to show for their presence than contaminated lots and families of laid-off and injured workers with mortgages and medical bills” (p. xiv). Unlike the developers, according to Griffith, fishing people have long historical ties (often many generations) to the region generally and to fishing in particular. This depth of knowledge gives the fishers a kind of familiarity and awareness that could be helpful in sustaining the fisheries.

Neis et al. (1999) make a case for the use of what they term “traditional ecological knowledge” (TEK) in the fisheries. According to Neis et al. (1999) their working definition of TEK is based on the work of Mailhot (1993), “the sum of the data and ideas acquired by a human group on its environment as a result of the group’s use and occupation of a region over many generations” (p. 218). Neis et al. (1999) describe a study that took place in the Bonavista headland “to try to capture ecological differences between headlands and bays and a range of different types of fisheries and fishing technologies” (p. 225). By analyzing both the interviews of the fisher participants in the study and those of scientists, along with other records the end result is hopefully to “compare systematically the knowledge systems of fishers and scientists, possible changes in these over time and the impact of both scientific and fishers’ knowledge on management initiatives” (p. 230). Neis et al. argue that a variety of researchers from many disciplinary backgrounds believe that TEK “represents at least a critical

supplement to scientific understanding and perhaps an alternative foundation for sustainable resource management (p. 217). The work of Neis et al. (1999) adds to the argument of taking advantage of fishers' knowledge when attempting to create a sustainable fishery.

2.4 Fishing as a Way of Life: Work, Culture, and Place

2.4.1 *Work: Market Issues*

The impact of work on the fisher is multi-layered. Market issues, for example are not just regional or even national. They are international. Health and danger issues related to their work are common. In addition, class issues resulting from differing views of fishing as work and fishing as play – all affect the fishers and impact their way of life.

In addition to the environmental and regulatory issues that can have positive or negative effects on the fishery industry, this staple-based economy is also vulnerable in the marketplace. The economic base of fisheries has a long connection to international markets. Newell and Ommer (1999), in giving an overview of the traditions and issues found within the Canadian fisheries in the introduction of *Fishing Places, Fishing People*, state that “salmon canneries with links to world markets were the first factories when British Columbia became a province in 1871” (p. 4) which early on places the significance of fish to both the community and worldwide markets.

More recently, the articles of Loy and Ess (2003), in issues of *National Fisherman*, provide a good account of the history and progress of a current court case involving salmon fishers in Alaska. These fishers accused fish processors and Japanese

seafood importers of unlawful collusion in repressing the price of salmon. Although when the case was settled, the jury did not find in favor of the fishers; the latter had already been awarded multi-million dollar payoffs from several companies involved in the case. This case demonstrates the continuing international connection of the fisheries market and the power that fishers believe seafood processors and foreign seafood importers wield in manipulating the price of seafood and therefore the market. It also provides a compelling example of the importance of fishers banding together to challenge big business around market issues.

The book *Fish vs. Oil*, edited by J.D. House (1986), includes a collection of essays from 12 different authors providing varying perspectives on the “implications of petroleum development for the fishing industry and for long-term development and social change prospects for those coastal communities that have traditionally depended on the fisheries” (p. 1). According to House, fish is a low-value staple that does not yield the high returns that oil yields in the marketplace. Marchak (1986), in chapter 13 of this work, argues that fish “may have more multiple effects in local economies than, say, oil does, but it does not provide much surplus to national coffers” (p. 180). Filling national coffers may directly result from how much time and money a government is willing to invest in a particular industry either with economic incentives or the use of resources. Marchak also points out the issue of exploitation of resource peripheries. She argues that the wealth from resource peripheries is

diverted to more populous and politically powerful centers If central governments have decision-making rights about resources, they inevitably make

decisions which they perceive to be 'in the public interest,' but the public they respond to is the urban population. (p. 180)

Marchak's work speaks to power issues and political agendas/consequences and how they can and do directly affect the work of fishers. The works of House and others (Garrity-Blake, 1994; Griffith, 1999) speak to both the complexity of the market of seafood and the importance of resource use and who has power over resource usage and whom the political machine favors when it comes to benefits from resources and resource allocation. For instance, in the fall 2003 fishers in the state of Georgia were paid 95 cents per pound for fresh shrimp, a rate that would not pay their work expenses.

Jentoft (1993) argues that the livelihood of the fishing population has both an economic and a cultural base and that the "economic foundation is related to natural resources and international markets" (p. 91). According to Jentoft, the resource issue, falling prices, and future international market relationships all have important roles in the market of seafood. For example, the author speaks to the challenge and importance of fishers educating themselves about the export trade: "The firms [commercial fishers and fish farmers] must be able to cooperate in marketing to avoid harmful competition. The drop in prices in 1993 on the fresh, salt, and dried fish markets in Europe in the wake of the fisheries crisis indicated an acute need for this" (p. 141). Jentoft points out "when prices fall and the control of the catches is poor, the black market opens up and creates problems in keeping a proper overview of the harvest of the resources" (p. 136).

According to Jentoft, this situation occurred when Russia's regulatory system fell apart after the collapse of the Soviet Union in 1993 and fish became "hard currency for the

Russians, and Norwegians, along with other foreign fish producers, are more than willing to buy” (p. 136). Obviously, when the market is being glutted with black market fish, then the price goes down. Overall, the complexity of a highly perishable product (fish) from a resource based economy that has links to an international market present a particularly challenging situation.

2.4.2 Work: Stress and Wellbeing

The negative impact of stress related to work is well documented in the literature. According to Hooper-Brian and Seck’s (1995) study, the effects of economic change such as “unemployment, work role disturbances, and economic instability have a negative impact on individuals and families, on inter-group relations, on communities” (p. 141). As already discussed, fishers are experiencing economic instability and some have experienced unemployment as well. As noted in Goldberger and Breznitz’s (1993) classic work on stress, “It has long been known that little participation in decision-making, ambiguity about job security, and poor use of skills and abilities are correlated with such strains as job related tension and job dissatisfaction” (p. 348). Both decision-making and job security are problems present in the modern-day fishery. Although the work of these researchers is not specific to fishers, the implications of the findings about decision-making and ambiguity about job security seem especially relevant to the fishers’ situation given that the literature on fishing documents both dilemmas for this population.

2.4.3 Work: Danger and Stress at Sea

Given the inherent dangers of fishing (Binkley, 1994, 1995; Gersuny, 1974; Hasselbach & Neutel, 1990; Jaremin et al., 1997; Lummis, 1985; Meng, 1991; Norr &

Norr, 1974) health issues for fishers have long been a focus of researchers. Johnson, Thomas, and Riordan (1994), in a quantitative study on shrimp fishers in an Alabama fishing community, investigated the job stress, social support, and health of this particular group. The study was concerned with “the characteristics of work that may induce stress” (p. 344). Overall, the findings in this study confirmed that shrimp fishing is stressful. One surprising finding in their work related to social support. Contrary to expectations that social support serves as a buffer, they found no evidence of an “indirect effect of social support on health outcomes” (p. 353). The authors felt that their study left a major question unanswered: “Given the stressful work conditions faced by commercial fishermen, how is it that such workers cope and continue to meet the high demands of their occupation?” (p. 353). This is an important question because, if adverse health effects are to be prevented, it is important to identify the factors that mediate the stress-health connection. The question the authors were left with may be their most significant finding and deserves attention from other researchers especially since fishers (as discussed throughout this study) are coping with stress from areas in their work that were not present in the past.

In their study of stress at sea, Sutherland and Flin (1989) reviewed the working conditions in the offshore oil and fishing industries. Individuals who work in these industries so far offshore usually stay away from home for days and often weeks at the time. They argue that “deep sea fishing interferes with the needs for relaxation, sexual gratification and for emotional contact and security, and for personal interests and inclinations” (p. 281). In a questionnaire administered to 172 Polish seamen and 217

Polish fishermen, the watermen were asked to choose the three most important of nine listed stressors. In the sample, 84% of the fishermen reported that "separation from family and friends" was the major stressor they encountered (p. 281). According to Sutherland and Flin (1989), although offshore oil and fishing are different, workers in both industries appear to experience difficulty dealing with occupational stress: "The most apparent factor is the separation from family and normal social ties whilst at work" (p. 282). This study has implications for other fishers as well. For example, many North Carolina fishers, even if they no longer fish in the ocean, fish far enough from shore that they stay for up to a week or more on their boats and away from their homes and families.

2.4.4 Work: The Health Impact of Stress

In Jentoft's (1993) work on the Norwegian fishing crisis of 1989, he speaks of the public health establishment's comments on the effect of the crisis: "Collective depression is the most distinctive characteristic of the health conditions in Finnmark today" (p. 10). According to Jentoft's work, nearly 80 percent of the doctors in Finnmark (the northernmost county of Norway) saw as the most common illnesses among fishers during the crisis as "depression, pain, frequent back problems, sleep disorders, intoxication, sexual problems, ulcers and deterioration of the heart" (p. 11). Jentoft presents the work of a psychiatrist in Lofoten who suggests that fishers are more open to depression than individuals in other occupations because of having created their own place of work. The psychiatrist Guri Ingebrigtsen in a public meeting offered what Jentoft referred to as the "eight commandments for the preservation of mental health in a crisis period" (p. 12):

Don't be ashamed.

Don't isolate yourself.

Keep the family together.

Seek out others; agree to meet at the work place if possible.

Keep up the daily routine.

Be careful with alcohol.

Talk about your troubles – others have similar ones.

Look for help if the worries are getting too bad. (p. 12)

The very practical response of the regional psychiatrist shows her understanding of fishing people both in the wording and context of the “eight commandments,” making them seem a useful guide for the fishers. While the fishing communities have certainly felt the impact of change in the industry (Garrity-Blake, 1996, 2000; Griffith, 1999; Jentoft, 1993), limited in-depth qualitative research directly relates the psychological impact of loss and change to the way of life for fishers in eastern North Carolina.

2.4.5 Work: Recreation

Americans sometimes reject the idea of work and leisure activities occurring in the same place at the same time. The beginning of this thinking may have begun with the enveloping conversion of the southern United States into a region of technologically advanced businesses and service-related industries which began after World War II and gained momentum in the 1970s (Wright, 1986). According to Garrity-Blake (1994), the outcome of this trade and industry reorganization along the southern Atlantic Coast led to a movement toward “tourism and recreation and the gradual displacement of extractive

and manufacturing industries such as commercial fishing, fish processing, farming, and boat building” (p. 113) similar to what had happened earlier to much of New England and Florida. Garrity-Blake’s (1996) work dissects the American view of work and recreation. Her belief is that “by definition, a place of recreation is a place of non-work; in the sharp division Americans make between work and leisure, [and that] coastal resort towns are sanctuaries from the profane work of jobs, deadlines, and mundane responsibilities” (p. 117). Her description of the division Americans make between work and leisure is significant because this thinking has impact on the individuals who fish in coastal areas and their communities.

One example that Garrity-Blake (1996) uses in her book is about the village of Beaufort, North Carolina. For the past three decades, according to the author, there has been a push to attract tourists to the historic little port town. The waterfront is now home to gift shops, restaurants, antique shops, and quaint boutiques. The trawlers, menhaden steamers, and fish houses that made it a port town are nowhere in sight. Workboats are no longer allowed to tie up at the waterfront dock in downtown Beaufort because the smelly workboats are not the image the town is seeking to portray. The image of the fishing village has changed from one of work to one of leisure because, according to the author, Americans do not mix the two together very well.

Garrity-Blake’s interviews with former African American menhaden fishers and their family members shed light on their strong convictions about the importance of work and their disdain for leisure activities that take precedence over work and often displace workers. According to Garrity-Blake, a Beaufort native asserted at a public meeting in

1985 that vacationers hold a different set of values when it comes to the beach: "The people that own these beach houses—they're offended to see people making a living They've made their money in Raleigh or upstate or someplace else [and] want to put [fishermen] out of work just so [they] can have a pretty beach" (p. 122). The author's work went to the heart of the work/leisure issue. The next section discusses the troubled association of fishers who work with fishers who play.

2.4.6 Fishing as Work Versus Fishing as Play: An Uneasy Connection

Commercial and recreational/sports fishers have a long if uneasy relationship stemming from the differences in fishing as work or play (Griffith, 1999; Thoms, 1999). Thoms (1999) identifies Izaak Walton's 1653 work promoting a love for the outdoors as helping advance the development of a more leisure oriented class. Thoms' work *An Ojibwa Community, American Sportmen, and the Ontario Government in the Early Management of the Nipigon River Fishery* sheds light on the classism and power issues found within the world of sports fishing by bringing to light the "sport fishers' lobby to monopolize the [Nipigon River] fishery" (p. 188). The author traces Izaak Walton's text, *The Compleat Angler: or Contemplative Man's [sic] Recreation: Being a Discourse of Rivers, Fish-Ponds, Fish, and Fishing* (1653) as the book that helped "foster the growth of a leisured, sporting class" (p. 178). This is an important point in Thoms' work because it helps provide a foundation for issues of elitism that some writers claim can still be found in sports fishing today. Thoms' important work begins with a detailed account of a native culture that revered the spirit world and did not believe in waste. Their reverence in using all offerings provided by the spirit world and

not wasting these gifts is evident in the methods used in catching fish from the Nipigon River. Their methods are a testament to the Ojibwa's process of creating a sustainable fisheries. According to Thoms (1999), their sustainable fisheries lasted even after the Ojibwa provided the Hudson Bay Company with fish: "Indeed, after centuries of intensive harvesting and use, in the 1870s the Opwaaganisining Ojibwa would bequeath to the new discoverers of the Nipigon fisheries, a rich and well-managed resource" (p. 177). The "new discoverers" included sports fishers from the United States, led by Charles Hallock. Hallock not only wrote a guide book for the fishing tourist but also created *Forest and Stream* magazine in 1873. His magazine contained numerous articles about the Nipigon River and the abundance of speckled trout. But according to Thoms, by the 1880s elite sports fishers wanted to "protect" the river for their own kind. They could attain this goal if their sports clubs could buy sections of the river bank. This practice of sports clubs' "purchasing river banks to control use and access to trout streams was already a popular strategy in the United States" (p. 181) at the time. According to the author, "privatization of shores by sport clubs could be used to establish exclusivity over the capture of the fish within the river" (p. 181). By the 1890s, Alex Starbuck, a *Field and Stream* writer, was challenging the magazine's readership to fight the exemption of aboriginal people and commercial fishers from fishery laws under the guise of fighting against fish harvesting using "small meshed nets" (p. 185), which of course were used by aboriginal people and commercial fishers.

Griffith's (1999) work on modern-day recreational fishers incorporated interviews with recreational fishers from Houston, Daytona Beach, Tampa, Raleigh, and eastern

North Carolina. His work revealed that “nearly every one of them [recreational fishers interviewed] pointed their fingers at commercial fishers [as the] most despicable enemy of fish and oceans” (p. 101). The author points out that the interviews were prefaced with comments about environmental protection and conservation and that at times he felt he had “strayed into the offices of Green Peace and the Sierra Club” (p. 100). The sports fishers gave examples of the economic benefits of sport fishing such as sports clubs sponsoring “the sinking of boxcars to create new artificial reefs, and [that] sportfishers themselves stimulated employment and revenues for coastal areas through what economists call multiplier effects” (p. 102). What the author’s research also uncovered, however, was that the “membership rosters of sportfishing clubs were crowded with the names of men who hunted endangered species, drained wetlands to build condominiums, and thought nothing of catching more bluefish and king mackerel than they could ever consume” (p. 101). Griffith’s work pointed to a disparity in what the sports fishers said they were concerned about and what they actually seemed to be doing. His comments on visiting fishing families from “Maine to Puerto Rico without once encountering the opulence and conspicuous consumption I encountered while interviewing recreational anglers in Texas, Florida, and North Carolina” leave little question about his sentiment regarding consumption in the fisheries. His work is important to this research because he gives the views of recreational fishers that fish in the same area where the commercial fishers who participated in this study catch fish. Both of the works mentioned in this section are noteworthy in gaining a perspective about the role of power and class in considering how common property resources are and will be used. The two works also

make an important point that for sports fishers, fishing is about play but for commercial fishers fishing is both a job and a way of life.

2.4.7 The Culture of Fishers

Culture is a system of meanings and values shared by a population and transmitted to future generations (Ashford & Lecroy, 2001). Culture “speaks itself” through an individual’s story. Every culture has its own way of making sense of the practices of everyday life. Rosaldo (1993) takes an “all-pervasive” view of culture and suggests that it “refers broadly to the forms through which people make sense of their lives” (p. 26). According to Jentoft (1993), the cultural base of a fishing population “is connected to experience and tradition in the local community” (p. 91). The concept of “fishing as a way of life” is found throughout the literature on fishing (Brakel, 1999; Ellis, 1984; Mederer, 1999; Pálsson, 1991). This is an important concept when one considers changes of almost any kind in the industry. Brakel (1999) in her thesis describes “fishing as a way of life” in the following way:

Based on the premise that commercial fishing as a life way involves a distinctive ecological relationship and has characteristic socio-cultural values and patterns, I propose that the way fishermen relate to and conceptualize the natural world in which they work and, to a certain extent, live is likely to be distinctive and in some ways different from that of their compatriots in the larger society. Fishing is a capitalist enterprise, even though it lacks one element of capitalism: the ownership of the basic productive resource (Faris, 1977) that uses modern equipment, but at the same time involves elements of hunting, and of moving

about over a wide area of undomesticated nature where there are no property rights. Further, those engaged in fishing must respond to the special demands and qualities of the sea. (pp. 15–16)

The fishers must also respond to the demands of government regulations, competition for resources, and an increasingly complex international market place. Almost everything in the fisher's life revolves around fishing. If they are not out on the water working, the fishers are often at the dock preparing for the next trip to sea. There are no regular hours or dependable schedules. The individuals who reside in fishing communities are usually connected somehow to fishing. If they do not go out on the boats, they work on the docks, in the fish houses, or depend on the fishers to buy food from their stores or purchase other fishing supplies. In a fishing community, fishing is a way of life.

2.4.8 The Importance of Place in the Lives of Fishers

Brakel's (1999) description of fishing as a way of life describes not just a job but also a culture—a way of both working and living with a strong connection to place. She exposes the conflict between Alaskan fishers who are allowed to fish in part of the Glacier Bay National Park and more mainstream environmentalists and the tourist industry who want the park closed to commercial fishers. Brakel argues that because fishers differ from mainstream Euro-American societies in the way they relate to their natural setting. This difference contributes to the lack of understanding and negative assessment of these fisheries. Brakel also contends that the Glacier Bay National Park issue is really an example of values in conflict that can be “best understood not as an environmental issue, but as an ideological, perhaps a religious ideological issue, that

carries an 'environmental' label" (p. 174). Brakel goes a long way in uncovering how the use of the 'environmental label' is employed to promote issues that have little if anything to do with the environment as in the case of Glacier Bay. Her work brings together much of the literature about the importance of a sense of place to fishers and the perspectives on the relationship to place that people gain through the fishing experience. Brakel also discusses interviews where the seascape is seen as "both homeplace and workplace. It is a place that imposes special conditions, provides unique rewards, and over time becomes a defining part of their [fishers] lives" (p. 142).

While Garrity-Blake's book *The Fish Factory* (1994) concentrated on the menhaden fishery with a focus on Virginia and North Carolina, one chapter, "The Smell of Pollution: Factory Processing and Contemporary Environmentalism," was devoted to the challenging aspects of "a trend toward tourism and recreation and the gradual displacement of extractive and manufacturing industries such as commercial fishing, fish processing, farming, and boat building" (p. 113) along the mid-Atlantic coastline. Garrity-Blake proposed that in "most cases, sportsmen align themselves with environmentalists and argue that commercial fishing methods are harmful to the marine ecosystem" (p. 123). Conversely, according to Garrity-Blake, "for those [menhaden fishers] who expressed the belief that hard work is good and no work is morally suspect, the trend in their communities toward leisure and recreation was a sign of moral and social decay" (p. 131). The sense of place that the fishers and their families had created in these communities was being challenged by a new group who was interested in the fishing communities for leisure—not work.

Griffith, in his (1999) book *The Estuary's Gift*, offered several chapters about fishing along North Carolina's coast and one chapter on "Rewriting the Coast", much of which was devoted to a discussion of the over development of the coast and its effect on the commercial fishing industry and coastal families. This work adds to the limited knowledge of current fishing ways of life in eastern North Carolina and also presents an overview of how coastal life is changing in this area and how some of the coastal families who have lived on the coast for generations are responding to these changes. Griffith (1999) points out that changes along North Carolina's coast are not inclusive of fishers and a way of life that has sustained fishing people for generations. The influx of vacationers and retirees have changed both the landscape and the tax base of the coastal areas—neither of which is seen as a benefit to fishing families.

Pauly (1999) presents another view of the importance of place; he stresses that if fisheries management is going to be successful, then the logic behind it will need to consider "PLACE" as in the places of people, places of small-scale fishing communities, places of other stakeholders, the places of fish, and "especially places where their populations [fish] can recover from fishing" (p. 360). Pauly argues that these aspects of place create context, which is essential for the successful management of the fisheries. If one does not understand or have knowledge of place—in this case the water and surrounding areas and the interdependence between fish, fishers, government agencies, and scientists—then how can the fisheries be successfully managed? All fishing communities are not the same and all fishing grounds and fishing species are not the

same. While there are similarities, there are also differences that have to be considered if fisheries management is to be successful.

Pocius' (1991) work about community order and everyday space in Calvert, Newfoundland is a study of the cultural space of a fishing community of less than 500 people. Pocius points out that in Calvert, and in Newfoundland generally, "you do not live in a town, you 'belong to' a place; you are not asked where you live, but rather, where you belong to" (p. 3). According to Pocius belonging is directly "tied both linguistically and experientially to place" (p. 3). Taylor's (2001) work on the social construction of meanings of community is also based on her research from a Newfoundland fishing community. Her participant group of 30 individuals came from a community of approximately 1000 members. At the time of her research the community was suffering from the closure of the province's northern cod fishery. According to Taylor (2001), "the fisheries crisis was informed by an ideology about the fishery that treated it as the domain of individuals separate from community and family life" (p. 3). Taylor, like Pocius and others, speaks of community members as 'belonging' to a community and sees "that meanings of community are deeply personal for other people as well [as herself]" (p. 10). The connection between work, culture, and place in fishing communities appears again and again in the literature about fishing people and holds great significance when one considers that if fishing is in crisis, then the future of the culture and community that surrounds the industry are also threatened.

2.5 Summary

Research studies referred to in this chapter support the idea that present-day fishers are part of an established industry with complex issues. The literature also highlights the commonalities in the industry across borders with the most significant overall issue being the need for a sustainable fishery. The review of studies for this chapter builds a strong case for the necessity of structuring fisheries that can be sustained over time for both the resource and for the fishers. Many of the studies also indicate that the theory of the commons is too simplistic to serve as the underpinning for important fisheries legislation. Much of the literature on fishing stresses the need to include the fishers and not to view them as wanting to catch every fish in the sea with little if any thought to the future. The commons theory suggests that access to a commons results in over-exploitation or destruction and no one taking responsibility for it. But the theory falls short by not considering context. Every fishing community is not the same just as every species of fish or even body of water is not the same. Context cannot be ignored in developing a sustainability plan that will improve the chances of a future in the fisheries.

For fishers in coastal North Carolina, Griffith (1999) and Garrity-Blake (1994) make a case that a number of external forces have created change and a sense of chaos along the coast and have threatened the way of life for fishing people. These forces include fewer fish, pollution on the estuaries, and the ongoing battle between recreational and commercial fishers for limited resources, more regulations around the kind of fish they can catch, when and where they can fish, and how many pounds they can catch. Griffith and Garrity-Blake's works illustrate a sensitive and critical understanding of the

people, the importance of place /community, local knowledge, and uncertainties about the future in fishing.

The literature also points out issues related to loss and well-being. With many fishers spending so much time away from family, the occupation historically often results in health issues such as stress and affects family life. Fishing remains one of the most dangerous occupations in the world. The changes in the fisheries have created a compelling need to better understand how these particular groups of workers are making sense of their lives. Because their work is not just a job but also a way of life, changes may affect the whole fabric of their culture, resulting in a sense of loss and isolation.

In a review of the current literature I found limited in-depth interviews with fishers from North Carolina focusing on their beliefs and thinking about what is presently occurring in their work, culture, and futures. Before helping professionals and policy makers can assess and intervene in the lives of fishing people, there is a need to recognize, include, and appreciate the issues from the fishers' perspectives. After all, *they* are the experts in their own lives. In the next chapter the methods employed in this research study will be explained along with the qualitative paradigm with a constructivist perspective used to explore the meaning that fishers accord the recent changes in their industry and their views on how these changes are affecting their lives.

CHAPTER 3

Naturalistic Methodology

3.0 Introduction

As explained in this chapter, the research study utilized a qualitative paradigm with a constructivist perspective and grounded theory method. Specifically, along with a qualitative approach a constructivist perspective was used to explore the meaning—according to the fishers themselves—of how recent changes in their industry have affected their lives and how they view the future. The belief that there are multiple truths and “many ways of knowing” is at the heart of this research study. As Hartman (1994) argues “each discovery contributes to our knowledge, and each way of knowing deepens our understanding and adds another dimension to our view of the world” (p. 13). The goal of this research was to increase overall understanding regarding change in the lives of fishers by drawing from their experiences, tapping their perceptions, and uncovering the meaning they made of the events. What meaning do they ascribe to their changing world? As discussed in chapter 1, the phrase “making sense” refers to the fact that the researcher attempted to understand how the fishers made sense of what was occurring in their lives as related to these changes in the fisheries. Were they reflecting on past and present experiences to piece together what their futures might hold? Important elements in the study’s approach were valuing the richness of data and depth of understanding, process and meaning, and believing in the importance of the relationship between the researcher and participants.

3.1 Qualitative Paradigm

Generally, deciding on whether to use qualitative or quantitative methods in a research study depends on the reasons for and circumstances of the inquiry and, therefore, which method best fits with the intent and context of the study. Quantitative research tends to be oriented to the creation of statistical generalization results to larger populations. Its methods typically produce results that can be quantified. In the quantitative approach to inquiry the belief is that the research is conducted within a value-free framework with the intent of predicting developments. Quantitative methods dominated social science research and have been considered by many researchers as more scientific or legitimate than qualitative methods (Denzin & Lincoln, 1994; Lincoln & Guba, 1985; Rodwell, 1987). This thinking has often led social work inquiry to a positivist paradigm, which in the past twenty-five years has been questioned by a number of social scientists (Heineman, 1981; Rabinow & Sullivan, 1979; Rodwell, 1990).

More than two decades ago, Rabinow and Sullivan (1979) produced a collection of ten papers from eight different authors on the subject of a promising interpretive approach to the study of human society. These papers addressed the emergence of an interpretive social science that was in direct contrast to the more positivist, structuralist positions that had dominated in the social sciences. The authors considered the deepest theme of the twentieth century to have been "the shattering of the triumphalist view of history bequeathed to us by the nineteenth century. What Comte saw as the inevitable achievement of man, positive reason, Weber saw as an iron cage" (Rabinow & Sullivan, 1979, p. 1). Heineman (1981) criticizes social work's misguided efforts to be scientific.

The author argues for social work's acceptance of diverse theories and methodologies and for research that will adapt to relevant problems rather than reduce them to fit within the accepted wisdom of good research. Heineman contends that the "desire to cling to logical empiricist theories and methodology can be understood psychologically as the wish for a certain, knowable world but should not be mistaken for proof that such a world exists" (p. 391).

Qualitative research is concerned with the richness of the data collected and stresses depth of understanding. Researchers using this approach emphasize the socially constructed nature of reality and focus on process and meaning. According to Rubin and Babbie (1997), qualitative research methods "attempt to tap the deeper meanings of particular human experiences and are intended to generate theoretically richer observations that are not easily reduced to numbers" (p. 26). The relationship between the researcher and the participants is believed to be an important component in that both parties work together to create the outcome of the research process. Finally, unlike quantitative research, this research approach emphasizes the value-laden nature of inquiry and may adopt a constructivist perspective.

3.2 Constructivist Perspective

According to Denzin and Lincoln (1994), the constructivist perspective is one that "assumes a relativist ontology (there are multiple realities), a subjectivist epistemology (knower and subject create understandings), and a naturalistic (in the natural world) set of methodological procedures" (pp. 13–14). The assumption of multiple realities, Mahoney

and Lyddon (1988) report, "is founded on the idea that humans actively create and construe their personal realities. The basic assertion of constructivism is that each individual creates his or her own representational model of the world" (p. 200).

Individuals have different ways of making sense of events and create their personal realities based on how they interpret what is going on around them. Members of the same family living in the same household will give dissimilar accounts of the same experience and incorporate the experience into their lives differently. In this study there was a desire to learn more about the personal realities of the participants regarding the recent changes in their work and the effect these changes were having on their lives and livelihoods.

An important element in the constructivist paradigm is the assumption that knower and subject create understandings. Denzin and Lincoln (1994) use the terms "knower" to refer to the researcher and "subject" to refer to the research participant when describing a subjectivist epistemology. The term knower implies that the knower has knowledge that the subject does not have, and this suggests a struggle for power between the two. The term subject indicates that something is being done to someone with the subject becoming an object. For these reasons this study instead uses the terms, "researcher" and "participant." When this research study was first conceived, the importance of hearing the fishers' voices was perhaps the most important underlying goal of the study. Early on I had a suspicion that the fishers might feel marginalized by their perceived lack of voice in policy decisions regarding the fishing industry. Because of this suspicion, I knew that the research design must attend to the participants' views.

The final element of the constructivist paradigm is applying a naturalistic set of procedures. As discussed further in the next section, the use of naturalistic procedures is based on the thinking that human actions are strongly influenced by the surroundings in which they occur, and therefore, one should study behavior in real-life circumstances to reach an in-depth understanding of the participants' reality (Marshall & Rossman, 1999). Phenomena should be understood in the time and context of their situation. For example, in this research study both their daily environment and the current crisis within the fishing industry shape the fishers' realities.

According to Payne (1997) one critique of many social work theories and perspectives is that they are "too technical and medical" and that some writers are "reasserting the importance of belief in the capacity of humanity to improve itself, which we often see as central to social work" (p. 177). Constructivist views may represent a significant shift in the way social work theories are considered (Franklin, 1995; Laird, 1995). According to Payne (1997), "the development and use of Saleebey's (1992) strengths perspective, personal construct theory, narrative psychology (White & Epston, 1990) including oral history (Martin, 1995) and various aspects of family therapy have been relevant" (p. 177) to this view. Whether the constructivist perspective supports the belief that humanity has the capacity to improve the "self" may be argued, but it at least supports the belief that humans have the capacity to create their own realities. Within these realities it is conceivable (believable) that there is the capacity for change. Assuming that individuals construct their own realities is a powerful claim since individuals have not only the capability of creating their reality but also the sole ability to

create their own reality within their contexts. No two realities are exactly the same since realism is generated from perceptions of experience and environment. This approach respects the participants by giving their views weight and also by recognizing each participant as the expert in his or her own life.

3.3 Naturalistic Methodology

The methodology for this study is naturalistic research within a constructivist perspective. One of the main tenets of naturalistic methodology is that human actions are considerably influenced by the surroundings in which they occur; thus one should study behavior in real-life circumstances (Marshall & Rossman, 1999). In this study the participants are offshore fishers whose livelihood comes from the sea. Since their work situation has life-and-death implications, their circumstances influence their actions and therefore, are relevant to the research. Lincoln and Guba (1985) argue that “reality constructions cannot be separated from the world in which they are experienced and any observations that might be are inevitably time- and context-dependent. No phenomenon can be understood out of relationship to the time and context that spawned, harbored, and supported it” (p. 189). There are very few resource-based economies left in the United States, and certainly the participants in this study are greatly influenced by both their everyday environment and the current crisis in the industry. There is also the very practical issue in this research study of whether the fisher/participants would be a part of a study anywhere but in their own location. Because of the nature of their work, there are almost always availability issues to do with weather conditions, unexpected boat repairs,

problems with crewmembers, and so forth that occur in the lives of fishers. At most, the participants involved in this research study might have two nights and parts of two days at home with their families each week so it is difficult for fishers to schedule and meet with researchers. Appointments for interviews were typically set up at the last minute and often for the same or next day or evening based on the accessibility of the participant. It would be asking too much for the fishers to travel outside their environment to participate in a research study. This becomes an issue of flexibility for both the researcher and for the participants.

Another tenet of naturalistic research is using a variety of empirical materials that describe the meanings in individuals' lives and allows for researchers to deploy a broad range of interrelated methods to get at those meanings. Empirical materials can include interviews, artifacts, cultural records, visual images, and personal experience (Denzin & Lincoln, 1994). As later explained, in this study the fishers were interviewed three separate times, and these interviews were an integral part of gaining information about the meanings they ascribed to their lives. The use of photographs taken by the fishers provided a second means for the fishers to explain who they were and what was significant to them. The variety of empirical materials and interrelated methods, as in photography and interviews, strengthens the study because one method can enhance or build on the other. In this work, for example the pictures provided the impetus for the second interview so the two methods worked hand in hand.

Naturalistic research from a constructivist perspective provides a way to explore and understand the situation of a particular group of fishers and the meaning they ascribe

to what is happening in their lives. According to Marshall and Rossman (1999), this research perspective “assumes value of context and setting” (p. 60), both of which are important in this study. Because the participants are part of a resource economy, the setting is unusual in post-industrial America. Since the industry is in a crisis situation that is historically unlike any fishing crisis that these fishers can remember, this context is important to consider. Using a qualitative research methodology provides a framework in which to study the very human experience of the participant group in a way that really listens to their voices.

3.4 Grounded Theory Method

A grounded theory method was utilized to examine in-depth the views of a group of fishers at one period in time. According to Strauss and Corbin (1994), “grounded theory is a general methodology for developing theory that is grounded in data systematically gathered and analyzed. Theory evolves during actual research and it does this through continuous interplay between analysis and data collection” (p. 273). Glaser and Strauss (1967) refer to this interplay as a central feature of grounded theory, and they describe it as “a general method of [constant] comparative analysis” (p. viii). Because of the constant interplay between the analysis and data collection, this is also a dynamic and process-oriented perspective, rather than a static and structural viewpoint. This constant comparative analysis provides a means for the analysis to be directly grounded in the data (Glaser & Strauss, 1967).

Grounded theory supports the concept of fishers as knowers and regards their experience as a legitimate source of knowledge. It is an inductive method of analyzing the collected data (Glaser, 1992). Glaser (1992) noted, "A great need to stick to the data, be in the field, and generate theory that respects and reveals the perspectives of the subjects in the substantive area under study" (p. 17). Unlike quantitative research that applies an empirical and deductive approach to research questions, qualitative research stresses multiple truths and using an inductive method to respond to the research questions. Glaser and Strauss (1967) when first writing about grounded theory emphasized a commitment to theory as an evolving process of the research data. In this study, there was a deliberate attempt to ensure that observations were guided by the values of the observed; this approach often appears in the literature as an emic, idiographic approach to inquiry, that is, data that are from an insider perspective and are interpreted in terms of the particulars of a case rather than in terms of generalizable information (Rodwell, 1998).

In this method theory is developed in the realities of a specific context and should "closely approximate the reality it represents" (Strauss & Corbin, 1994, p. 57). According to Rodwell (1999), "through understanding comes knowledge" (p. 7) and the primary purpose of this research is to gain knowledge by understanding the reality of a particular group of offshore fishers.

3.5 Criteria for Naturalistic Research

The notion of rigor in constructivist/naturalistic research differs from that in a conventional quantitative design. Schwandt (1994) argues that a constructivist paradigm concerns itself with how "inquiry can be evaluated for 'fit' with the data and information they encompass; the extent to which they 'work,' that is, provide a credible level of understanding; and the extent to which they have relevance and are modifiable" (pp. 128–129). If realities are constructed and there is no one truth, then the more traditional criteria of internal validity, external validity, reliability, and objectivity, while appropriate for quantitative research, do not fit with a constructivist [or naturalistic] approach based on different axiomatic grounds (Guba & Lincoln, 1981, 1985). According to Guba and Lincoln (1989), "goodness criteria are themselves rooted in the assumptions of the paradigm for which they are designed" (p. 236). In a qualitative paradigm, trustworthiness is analogous to the positivist standards of validity and reliability rooted in the quantitative paradigm. One interpretation of trustworthiness in qualitative research is linked to four elements: credibility, transferability, dependability, and confirmability (Guba & Lincoln, 1989; Lincoln & Guba, 1985; Rodwell, 1999). This interpretation was used to guide the research study. Each of these elements is defined next.

3.6 Credibility

Credibility is fostered by activities that make it more likely that plausible interpretations in a research study will be produced. According to Guba and Lincoln (1989), "the credibility criterion [in naturalistic research] is parallel to internal validity [in

quantitative research]" (p. 236). But instead of focusing on one "real" reality, the spotlight has shifted so that credibility becomes establishing the match between the constructed realities of the participants and those realities as represented by the researcher (Guba & Lincoln, (1989). In this study, four techniques for meeting the credibility criterion were applied: prolonged engagement, persistent observation, member checks, and triangulation of findings (Guba & Lincoln 1985, 1989). These techniques are explained below.

Prolonged engagement involves learning the culture of the participant group, understanding context, recognizing personal perspectives, developing trust with the group, and not identifying with the participant group so strongly that in research terms the researcher would "go native." In this research study learning the culture and understanding context were facilitated by my growing up in a fishing community, staying in touch with what was going on in the fisheries through personal contacts, and receiving weekly email updates from the North Carolina Fishermen's Association. In addition, I attended Marine Fisheries meetings (about fishing regulations and other new information) in the region where the study took place for a period of three years prior to and during the study. Also, I am experienced in going out on fishing trawlers. In fact, this study was first conceived aboard a fishing boat on a commercial fishing trip that took me from Connecticut to Long Island, New York and back to the Outer Banks of North Carolina in the 1990s. Because of the researcher's past history regarding fishers and their communities, the study began with a certain amount of trust from the group. Although most of the participants did not know me personally, they knew that I had grown up in a

fishing family and community. I advised them of this connection in my first contact with them in the form of a letter (Appendix A) when asking them to be a part of the study. As is often the case in rural areas, following the first interview news traveled fast as to exactly, which fishing family and community I came from.

From the beginning of the research process, recognizing my personal perceptions was the aspect of prolonged engagement that concerned me. The fact that I did not fit within the accepted research model of outsider presented a more complicated position for me as the researcher. Because of past experience among fishing people and communities, I entered into the process holding certain beliefs. I had to continually question the basis of these beliefs and assumptions. The reflective journal played an important role in helping me recognize personal perspectives. “Going native” did not become an issue because I retained my identity in this study as a social work researcher.

According to Lincoln and Guba (1985), “the purpose of persistent observation is to identify those characteristics and elements in the situation that are most relevant to the problem or issue being pursued and focusing on them in detail” (p. 304). Persistent observation is about developing an in-depth understanding of the issue under study. Can the researcher, as Lincoln and Guba (1985) suggest, “describe in detail just how this process of tentative identification and detailed exploration was carried out” (p. 304)? Persistent observation calls for an air of doubt or skepticism surrounding the aim to come to whatever terms are called for by the circumstances (Lincoln & Guba, 1985). How does the researcher decide with what really counts or seems important in the research? The

details surrounding persistent observation in this study are addressed in chapter 4 of this work.

Another technique used to ensure credibility is member checks. According to Lincoln and Guba (1985) the member check is where “data, analytic categories, interpretations, and conclusions are tested with members of those stake holding groups from whom the data were originally collected, [and] is the most crucial technique for establishing credibility” (p. 314). Do the findings and interpretations of the research have credibility with the group who shared their personal insights and realities with the researcher?

The final technique utilized to ensure credibility is triangulation of data. This process is a research tactic that uses several techniques to disclose various facets of a single reality (Denzin, 1978). According to Miles and Huberman (1984, 1994), “triangulation is supposed to support a finding by showing that independent measures of it agree with it or, at least, don’t contradict it” (p. 234). The technique was used in this study to triangulate findings from the interviews with other data sources. Prolonged engagement, persistent observation, member checks, and triangulation of data were all used as a way to establish credibility in this study.

3.7 Transferability

Research studies should be carried out so that other researchers interested in transferability to another group or context have enough information to make such a decision. Transferability in qualitative research is defined as “only the thick description

necessary to enable someone interested in making a transfer to reach a conclusion about whether transfer can be contemplated as a possibility" (Lincoln & Guba, 1985, p. 316).

The intent of the researcher is that the features of this study are described with sufficient depth to enable another researcher to make a good decision about transferability.

Although, the research findings in this study are not generalizable to the wider population of fishers, they could tentatively have application to a similar group in a similar setting.

According to Lincoln and Guba, (1985), it is "not the naturalist's task to provide an index of transferability; it is his or her responsibility to provide the data base that makes transferability judgments possible on the part of potential appliers" (p. 316). Context is also a key element in making decisions about transferability, the context of the original study and the context of the proposed study. Lincoln and Guba (1985) refer to this as the "fittingness" of the two (p. 124). How similar are the two contexts? Transferring this study's findings is limited by the uniqueness of a particular group of offshore fishers in a particular place at a particular time. It is also limited by the experiences of the researcher and the participants along with whatever biases, assumptions, and values brought individually and collectively to the process.

3.8 Confirmability

Confirmability is based on a demonstration that the results of the research are grounded in the data. Through the use of an audit trail, discussed later in the section on data collection, a check for confirmability is provided. The audit trail makes available a record to document the logic of the process and methods/decisions used in this study. In a

qualitative research study there are often questions about why certain decisions were made in the research process. For this study the actions employed to gather, analyze, and interpret the data fall within the guidelines of constructivist research practices. An audit trail included in the work as well as the choice of grounded theory as the method used to analyze the data provides external evaluators with a way to examine and understand the procedures and decisions that inform the research findings.

3.9 Dependability

Dependability in naturalist research refers to the soundness of the research inquiry. According to Lincoln and Guba (1985) in order to demonstrate dependability “the naturalist seeks means for taking into account both factors of instability *and* factors of phenomenal or design induced change” (p. 299). The intent is to strengthen the research project. For example, I had a colleague experienced in qualitative research review and give feedback on the interview questions for this study. I also set up a pre-test and received input from fishers not involved in the research study on the questions to be used. I asked the same colleague as previously mentioned to read a section of two of the interviews and identify themes. We then compared the themes she identified with the themes that I had named earlier, checking to see if the same ones were identified. In the first interview we identified the same themes but in the second one I had identified one theme that did not emerge as a theme in the data for her. I also provided the participants with an opportunity to review the analysis of the data (member check). All of these methods were used to examine and strengthen the process of the inquiry.

3.10 Data Collection

In any research study it is important to choose a research design that best addresses the questions of the work. Additionally in this study, it was important to choose a research design that addressed the research questions and fostered among the participants' a certain level of comfort in the research process. A research design was selected that was in keeping with the participants having less than a high-school education.

This research study utilized the following methods of collecting data: an in-depth open-ended interview, a second interview based on questions that emerged after viewing a set of photographs taken by each of the participants to describe who he is, and finally, the last interview in the form of a follow-up telephone call. This series of data collection steps was used as a way of engaging the fishers in "making sense" of their lives. In addition, there was discussion about research participant protections as part of the engagement process. The use of multiple data collection steps was designed to reach for analytical and experiential ways of knowing to discover how the fishers make sense of their lives.

Both my training and experience as a social worker as well as my knowledge of fishing communities were helpful in knowing how to draw the participants out and encourage them to speak. Part of the social work educational curriculum involves training in interviewing. In addition, I teach the first practice course in a BSW curriculum which is often referred to as the "Interviewing Course" and have experience training practicing social workers in the skill/art of interviewing during three-day workshops for the State of

North Carolina. While these skills were useful in interviewing the fishers, I believe it was the accrued trust based on my connection to the fishing community and my still having family members in the fisheries that were most helpful in the interviewing process. Even though I am an outsider to the community by merit of a college education and moving away, I retained enough insider characteristics to earn a place of trust in the eyes of the fishers.

The nature of the work of fishers presented availability issues that demanded flexibility from the researcher since most fishers could not agree to a rigid interview date and time. Locations, dates, and times sometimes needed to be changed at the last minute based on weather, unexpected boat repairs, problems with the crew, or other related issues. Not only does their work depend on the weather and other unpredictable factors there are additional parameters bound by quota systems in which the fisher can work at particular times or on particular days or can catch certain amounts of fish.

Understandably, they were not willing to miss a day of work to be interviewed by a researcher. The researcher had to be available when the fisher was not at sea and to understand if the interview had to be canceled or changed with little or no advance notice. For example, one morning I received a call before seven in the morning asking if I could come early for a final interview. The fisher's son, who was also a fisher, needed his father's help with a boat problem that morning. I was able to leave immediately for the interview. Even though I had previous knowledge of the population it still took much longer to complete the interviewing process than I first anticipated. I spent almost one-year collecting data from ten participants each at three points in time. Notably, all ten

captains in the study participated and completed the first two stages. Eight captains completed the final stage, which consisted of a member-check telephone interview. One fisher was experiencing a reoccurrence of cancer, and because he was so ill, I decided it would be inappropriate to approach him regarding feedback about the summary document. Another fisher was fishing in another state and was unavailable for the final interview in the time frame the researcher needed to complete the research project.

3.11 University Ethics Review for Research

Permission to conduct this research study was granted by the Interdisciplinary Committee on Ethics in Human Research (ICEHR) from Memorial University of Newfoundland where the researcher is a PhD candidate. Permission to conduct the study was also granted by the University and Medical Center Institutional Review Board (UMCIRB) of East Carolina University where the researcher teaches full time in the School of Social Work. Applications to conduct the research were made in May of 2002 and granted in June of 2002 prior to recruitment of participants.

3.12 In-Depth, Open-Ended Interviews

The primary method of data collection was semi-structured interviews conducted with each of the ten participants. The first interviews lasted between 60 and 120 minutes (average time of 100 minutes) and were tape-recorded. Although the men were uncomfortable being tape-recorded in the beginning, their comfort level seemed to grow as the interview progressed.

The interview guide derived from a review of the existing literature on fishing and the researcher's historical knowledge and experience of living in a fishing family and community. In order to refine the interview questions, I interviewed two of my family members who are not a part of the sample but who are offshore fishers in the area where the study took place. This pre-test provided helpful consultation on the research questions and process. The interview guide included six questions along with a list of prompts (Appendix B). The questions were framed to gather the views of the participants about their lives as fishers including how they felt about being fishers, how their industry works, and how the industry has changed, and to explore their views of the future of the fisheries. Each interview question was connected directly or indirectly to the three research questions. In keeping with the constructivist perspective that research is an emergent, interpretive, interactive, and naturalistic process (Denzin & Lincoln, 1994), the interview guide consisted of open-ended questions to allow the respondents the freedom to "tell as they see it the way in which they organize their world" (Patton, 1980, p. 28). I purposefully kept the questions general. I introduced the fishers to a field but they chose the path. The interview guide was just that—a guide that was used as a way to begin the interview and from time to time further the interviewing process.

3.13 Photographs and Second Interview

In my research study, at the end of the first interview, each participant was given a disposable camera containing colored film with twenty-seven frames along with a stamped and addressed envelope. Participants were asked to take pictures that would help

someone who did not know them begin to have a sense of who they are. The researcher requested that the camera be mailed back to her after the pictures were taken. The film was developed with two sets of photographs. One set was given to the participant to keep and the second set was used to guide the second interview. Consent to use the photographs in possible future presentations and/or publications (Appendix C) was obtained from each participant. During the second interview I made it clear that the participants could have my copy of the photographs with the negatives if they were uncomfortable with them being used in the process that I described to them. I also let them know that photographs used in any public process (thesis, presentations, publications) will have identifying features masked. Interestingly, there were no photos removed, and consent was given for all photographs to be used.

My plan in the event that a fisher did not take the photographs before the second interview occurred was to ask the fisher to walk with me while we talked about what we saw and I would ask to snap photos of anything the fisher deemed important at this time. Fortunately, all the participants turned in their cameras so this plan was not used.

The photos served as a further stimulus for conversation about their lives in the second interview and generated discussion about how each participant saw himself. He reflected on the pictures he chose to take before our second interview began and these photographs became a focal part of the second interview. Again, I saw the pictures as a creative path to thoughtful reflection that added another dimension to the research. In chapter 4 the analysis of the photos is discussed in detail.

The photographs provided one more method of gaining insight into the lives and perspectives of the participants. According to Bodgan and Biklen (1992), "photographs provide strikingly descriptive data, are often used to understand the subjective, and are frequently analyzed inductively" (p. 137). Taking this one step further, the participants were asked to take their own photographs as another way to gain understanding about how they viewed their world. The fishers' reflections on and reactions to the photographs provided a means to gather good data in the second interview because the photographs gave the participants free reign to talk and enlighten me with their thinking and observations about their choices. One fisher took a photograph of an icebox that he had designed and constructed for keeping shrimp fresh until he returned to the dock with his catch. This was important because it saved him \$200 each week for the cost of ice and had implications regarding his decision to "do everything smaller" as a way of addressing the changes in the fisheries. Every decision he made about how he worked had taken on new importance so a photograph about an icebox led to a discussion that helped me understand how the fisher's view of his work had changed in the past few years and how he had adjusted to this change.

The following two photographs (3.1 and 3.2) are views of the icebox made by the fisher and discussed in the previous paragraph.

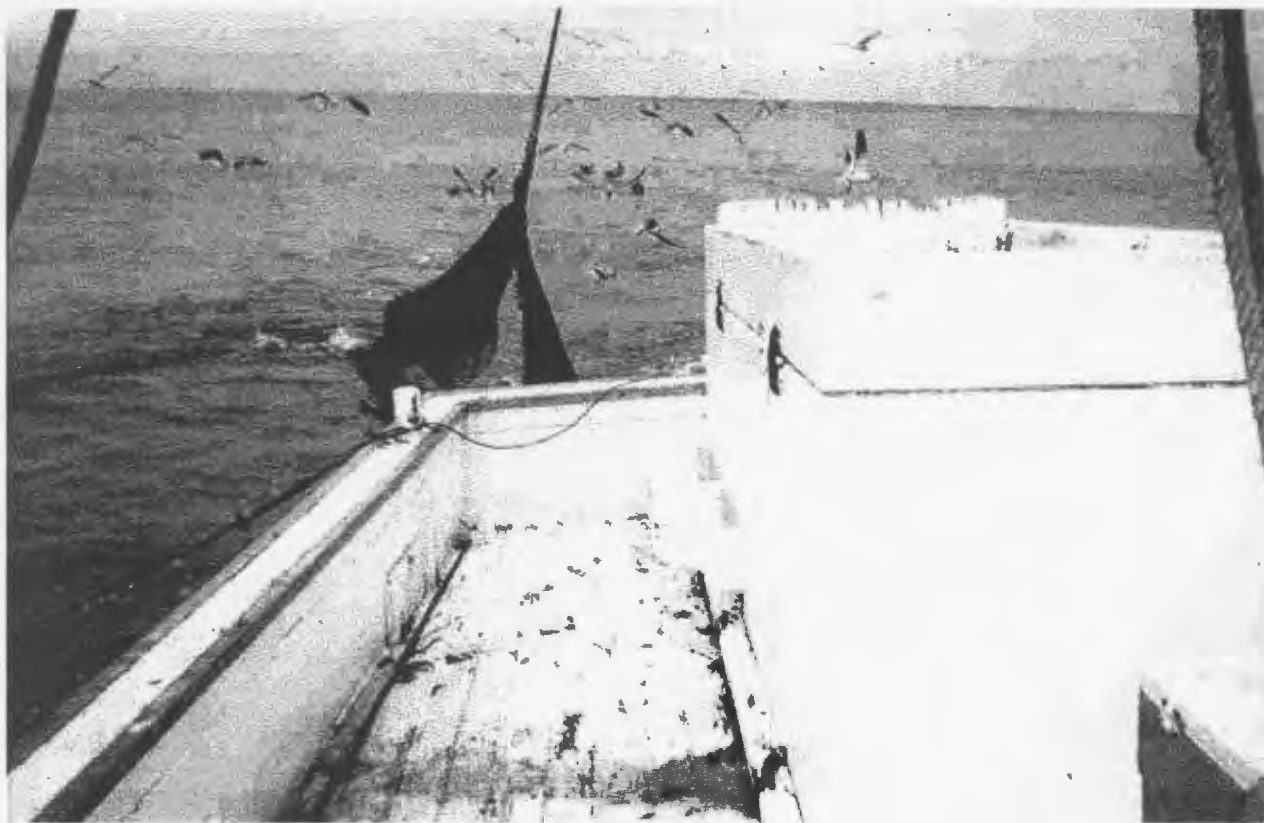


Photo Caption 3.1: View I of Homemade Ice Box

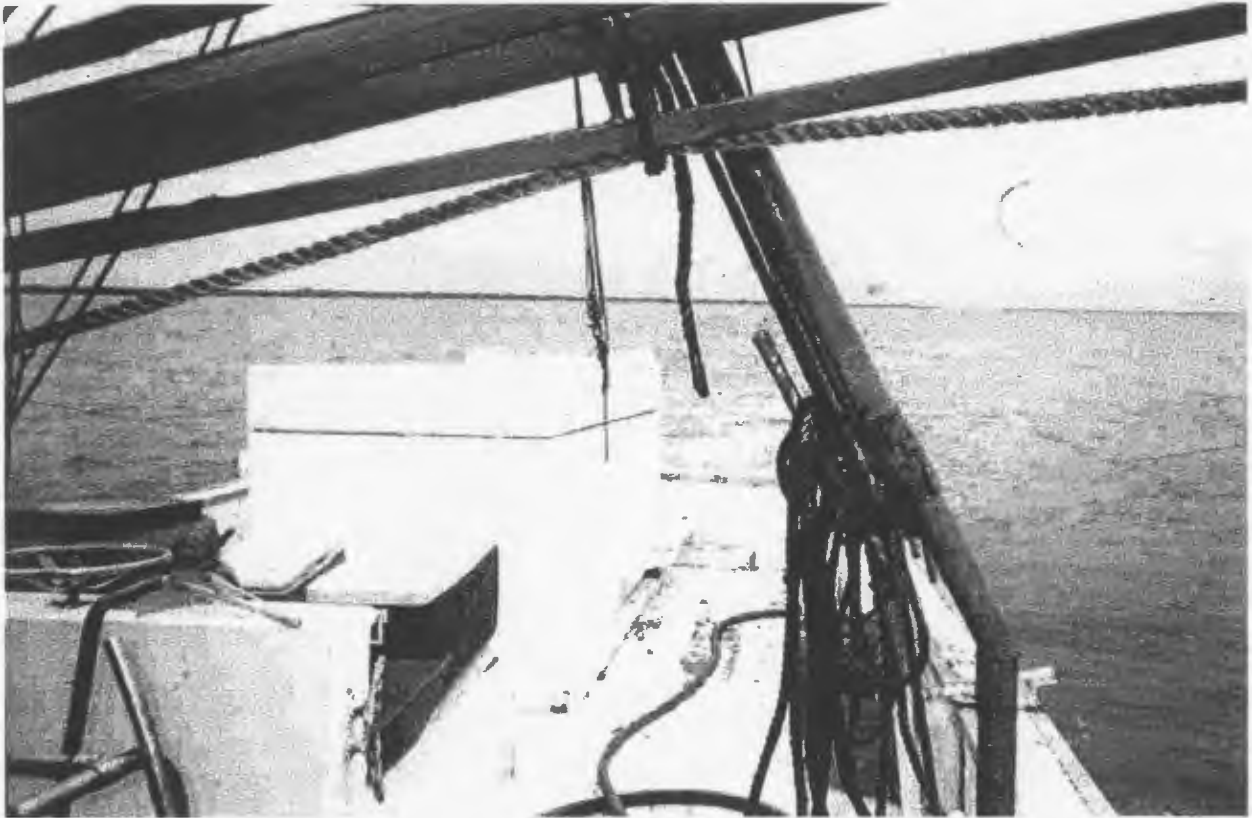


Photo Caption 3.2: View II of Homemade Ice Box

Fishers were asked to mail the disposable camera back to the researcher within two weeks of the first interview. Not one fisher mailed the camera back within the two-week time frame. I later realized that the time frame was in researcher time and not in participant time, and I never thought to ask for their input about what they considered a realistic length of time to take the photographs and get the camera back to me. Taking photographs while out working was simply not a part of their usual routine, and they reported later that often they “simply forgot”. The quickest time that a camera was returned was in six weeks and the longest time was five months. All but one fisher received a reminder telephone call from the researcher about the camera. They all said

essentially the same thing "I just keep forgetting to take them". Most of the cameras were returned within three months. The second interview was conducted in order to seek and clarify information and to offer the fishers an opportunity to talk about the photographs they had taken. The interview times ranged from ninety minutes to two hours and averaged 105 minutes. This was a method to elicit their views on the photographs describing who they are and how they see themselves. The use of a grand tour question, which is a general open-ended question, was used to begin the second interview (Appendix D). This provided an opportunity for the fishers to discuss why they chose to take certain pictures. Discussing the pictures often led to deeper discussions than what the particular picture showed. The grand tour question gave the fishers the flexibility to explain in detail or not as to why they took certain pictures. For example, some photographs led to stories that helped me understand the fishers' feelings about urban encroachment. One group of photographs led to a fisher sharing a story about the end of an era for a family that planned on getting out of the business of owning and operating a fish-house. In two years the plan is to close the fish house, and the waterfront property will be sold for millions of dollars. The owners have already received offers. This business has been the family's economic mainstay for decades. Closing the business will have a negative impact on the fishers who have sold their catch to this family and used their dock for years. The fishers will need to find another fish house where they can sell their catch and the new location may not be as convenient as the previous site. There will also be a need to form relationships with the owners and workers of the new business.

Other photographs did not stimulate discussion that provided particular insight but collectively they added to my understanding of the lives of these men.

There are quite a few examples of visual data being used as a research tool. Johnson and Griffith (1999) in their study on the use of visual data speak to its value as an interviewing method with non-literate participants and also as a way to “promote comparisons and discussions about topics and domains often difficult to explore in purely verbal terms” (p. 211). Although the authors give examples of several studies using visual data, one study seems especially relevant to my research. The study involved 65 boat captains from six ethnic groups in an Alaskan fish camp. A sample of five participants was selected from each of the two largest groups. Each of the ten participants were given cameras with two rolls of film and asked to take photographs of whatever they wanted. They were instructed that the cameras and photographs were theirs to keep although the researcher was to have a copy of the photographs. Independent researchers/observers were then asked to view the pictures to determine categories of themes most commonly found. Four primary themes were identified and compared. The themes that emerged were posed groups, posed individuals, work or daily living themes, and aesthetic nature involving sunsets, landscapes, local animals, and nature themes.

Johnson and Griffith (1998) point out in this work, “Visual Data: Collection, Analysis, and Representation,” that there could be problems in analyzing this type of data [using a quantitative design] because of the small non-random sample. The method chosen for the statistical analysis was the Fisher Exact Test, which fit with the quantitative design. As mentioned previously, my qualitative study was an in-depth work

using the same size sample ($n = 10$) but from a smaller group (32 versus 65) than Johnson's sample. Although the studies were different in design (quantitative versus qualitative), both studies consisted of small samples using photographs to glean varied insights into particular groups.

The authors also suggest that with the introduction of speedy film processing, this factor could make it easier to go back to the participants to gain their reasoning behind the photographs they chose to take. This added step could "lead to richer and deeper qualitative understandings reminiscent of Collier's (1997) discussion of how the use of photographs in interviews often leads to 'emotional revelations' (p. 220). Although I did not locate this study until after I had carried out my research plan, the same "added step" as mentioned by the authors was included in my research design. It was affirming to read that Johnson and Griffith (1998) proposed this as a logical next step in the use of photographs, especially in a qualitative study.

In another article about the use of photographs in research, Donaldson (2001) argues that although there is a long tradition of using photographs in studying diverse populations, the tradition seems to be almost lost today. He further argues the reason for avoiding both photographs and narratives in research may be connected to appearing "more scientific" (p. 176). Donaldson gives examples of both rural and international studies that have used photographs as a way to illustrate reports by illuminating information gathered from interviews and surveys.

Donaldson (2001) also makes a strong case for the use of photographs as "part of a multiple-method research strategy" (p. 177). Donaldson suggests "images need to be

interpreted in their social and historical context by analysts who are able to use other data or their personal knowledge to describe that context” (p. 177). This thinking was certainly a part of my research study from a personal knowledge standpoint, the use of other interview data, and the interpretations of the photographs by the fishers/photographers who acted as their own analysts in terms of social and historical context.

Donaldson (2001) reviews Dowdall and Golden’s approach termed “layered analysis” (p. 178) as a strategy to interpret photographs in research, which consists of three levels. Basically the three levels include an appraisal of the images, inquiry, and interpretation, which the author compares with Geertz’s “thick description” (p. 178). Dowdall and Golden’s method fits well with a qualitative research design and was used in my work, which is discussed in more detail later in this chapter. The author lists and discusses confidentiality issues, informed consent, sampling, documentation problems, costs, etc. as some of the potential problems in using photographs in research. From my own experience I am not sure that beyond obvious confidentiality issues from photographs such as recognition of boats even with the name blotted out that the other “potential problems” are much different from those of research methods that do not use photographs.

All of the fishers in this study participated in taking photographs of their world but produced different numbers of pictures. A few of the photographs did not turn out and some of the participants did not use all the film provided. From a possible of 240 photographs the fishers took a total of 229 photographs. Seven of the fishers took twenty-

four frames, one fisher took eighteen frames, one fisher took twenty-two frames, and the remaining fisher took twenty-one frames. The participants were offered the option of not including a particular photograph or the whole packet of photographs if they did not want them included in a publication and/or presentation.

One thing that I noticed at the beginning of the second interview, which included the photographs, was that the fishers seemed more relaxed. At the beginning of the first interview the fishers mentioned the tape recorder and kept glancing at it for the first few minutes of the session. Having the photographs in hand may have added to their comfort level since this meant that the fishers helped guide the second interview because it was about the subject matter that they had photographed. At the beginning of the second interview not one fisher mentioned the tape recorder. Their comfort level with both the tape recorder and the researcher seemed greater. They seemed to know what to expect the second time around.

3.14 Follow-up Telephone Calls

At the conclusion of the second interview, I reminded the participants that they would receive a draft summary of the findings to ensure that it reflected their intent and that they were comfortable with what has been written. The participants were given the choice of having an audiotape or written draft summary of the findings mailed to each individual participant. I asked each participant at the second interview about availability of a tape player and which method they preferred. All participants preferred the written draft. The draft was mailed to the fishers after I had sufficient time to analyze and write

up the data. A third interview in the form of a telephone call to each participant inviting verbal feedback and reflection took place after all participants had received the draft summary and had time to process it. The draft was mailed on a Monday, and calls were made three days later to make sure the drafts had been received. I spoke to either the individual fishers or their wives and set up tentative times to call back (after the fisher had read the draft) beginning the following Saturday. I telephoned all the fishers and as noted previously, was able to interview 8 of the 10 fishers involved in the study. The only remarkable conclusion of the telephone interviews is that they were unremarkable. All participating fishers, with one exception, believed that the document they received was a good summary of what was occurring in the fishery from their perspective. The one exception was that several fishers believed that they had emphasized greater concern about the recreational/sports fishery than I had reported. Although the sports fishers had emerged as one of the original themes, I had obviously not given it the same weight as the fishers. I went back over the interview data and spent time looking at the comments from the fishers' data under the theme "sports fishers". I then entered more of the quotations on this subject in chapter four and gave it greater prominence in the final chapter. The summary the fishers received was an earlier version of chapter four. I agree with Patton's (1980) statement, "evaluators can learn a great deal about the accuracy, fairness, and validity of their data analysis by having the people described in that data analysis react to what is described" (pp. 338–339). In this type of research it is essential for participants to have the opportunity to view the results of the study since the whole object of the research is to hear and understand the participants' views. This review is not

only important for the participants but also for the researcher. In the case of this study I wanted to know that the fishers agreed that I as the researcher had analyzed the data and reported fairly what they had told me. The trustworthiness and integrity of the study resulting in part from the third interview with the fishers is discussed in the final chapter.

3.15 Confidentiality and Participant Protection

Because I had no way of knowing in advance the education and reading level of the participants, consent to participate in the research project was obtained both in writing and orally. I read aloud and explained the consent form (Appendix A) and afterwards asked each participant to sign or make a mark on the form. All of the fishers signed the documents. I also obtained the participants' permission to audiotape all interviews (Appendix D). I explained that I might employ someone to transcribe the audio-tapes and that I would have the individual sign a confidentiality form (Appendix E). I used one individual to transcribe the tapes, and she signed a confidentiality form. In addition, I obtained the informants' permission to use the photographs (Appendix C) in future presentations and/or publications. I explained that photographs of individuals or groups would have identifying features masked. During the consent process, I asked participants for permission to record their names and phone numbers on a master list, which would be seen only by me. This list was kept in a locked file, separate from the research data, and will be destroyed after five years or when writing based on the research study is completed. The list was used only to contact participants for clarification of research findings and to inform them of any scheduling changes. All other contacts with the

informants and records associated with the research study, including the consent documents, used an identifying number since the participants chose not to use a predetermined pseudonym as a means of identification. None of the participants were identified by their real names in the study. The individual chosen to transcribe interviews signed a document agreeing to keep confidential any information learned from the work. Nevertheless, I worked in a sparsely populated rural area made up of even smaller communities, so it was difficult to ensure total anonymity. I took steps to ensure that participants realized that, despite my best efforts, some of the readers might be able to identify participants. I included a clause to this effect on the consent form. The fishers did not believe there was a need for a pseudonym, but in my role as researcher I determined that using their real names might put them at some unknown risk.

Each participant was informed of the purpose and goals of the study, including why the information and the research were important and how I planned to use the information, including for possible publication and presentation. I also let each participant know that the report would be available, and I fully explained his role as well as my own in the research process. I gave an estimate of the time involved for each interview, and we discussed confidentiality and anonymity issues. The research was conducted in the privacy of each participant's home at the choice of the participant. I explained the strictly voluntary nature of participation in all phases of the study and stressed that the participants would have the opportunity to request clarification about any part of the study, to address any concerns, and to withdraw from the research process at any time without negative repercussions. Again, at the conclusion of the second

interview, I informed the participants that they would receive a draft summary of the findings to ensure that it reflected their intent and that they were comfortable with what had been written.

Originally, I strongly considered using a focus group or even a formal consultation group comprised of members of the fishing population to gain their expertise for the study. It was because of confidentiality issues that I chose not to do so. I believe that even using offshore fishers from other counties for a focus group would have compromised confidentiality because there is such a small group of offshore fishers (90 active) along North Carolina's total coastline. Since many of these fishers migrate up and down the coast, they are often known to each other. While the participants come from two counties located in eastern North Carolina, the two counties are treated as one area in this report in order to add to the anonymity of place and confidentiality of the participants.

3.16 Sample

The North Carolina Department of Marine Resources (NCDMR) provided the names of the fishers used for this research study by merit of my being a university faculty member conducting research and by my providing information about the proposed research project. I also signed NCDMR forms explaining the reason for my request. Personnel from the NCDMR indicated that they thought the study could be beneficial to the fishers since it gave the group an opportunity to both speak and be heard.

The study sample was comprised of fishers who are either presently or have been in the past considered offshore fishers. The subset of offshore fishers in this study lived and worked, at least part of the year, in one area of North Carolina. The study may be viewed as biased toward fishers who continue to fish since being actively involved in fishing was one of the criteria for inclusion in this study. In order to safeguard identities, this area is called by a fictitious name "Scott County." Subjects were drawn from the population of fishers who have active commercial fishing vessels of at least 50 feet in length. As noted previously, because of the size of their boats, members of this group typically have greater expenses than do inshore fishers, both in terms of initial and ongoing investments as well as their day-to-day operating expenses. The larger the vessel the more expenses will be incurred for upkeep and operation. This group was chosen because of its members' relative permanence to the area, economic investment, and resulting substantial economic loss if they left the fishing industry. Overall, this group would seem to be greatly affected by changes in the industry.

In North Carolina, in 2002 there were approximately 120 offshore fishers in the entire state who owned boats that are 50 feet and larger. According to the state office of Marine Resources, there were only 90 of the 120 who are actively engaged in fishing. Of the 90 fishers making up this total group, approximately 32 were found in Scott County. The sample came from these 32 offshore fishers. Participants were selected based on the following criteria:

1. The fisher owned and was actively working on a boat 50 feet or more in length. The owner was not retired or leasing his boat but was working on the boat on a regular basis.
2. The fisher's main residence was in Scott County, North Carolina.
3. The fisher was not a part of researcher's close kinship group. Close kinship group is defined as brothers and/or uncles.
4. On an average, the fisher spends one or more nights away from port (on the boat) during each fishing trip.

Six of the fishers did not meet the criteria for the study; excluded were those of close kinship (3), one who was only a sports fisher (1), one who was retired (1), and one who, although a fisher, did not work on a boat but owned/operated a fish house (1). Two "no" responses were received. There was no response received from 13 of the participant group from the original letter and follow-up letters. Eleven participants responded with "yes" but the researcher was unable to reach one of these participants by phone to set up the first interview. In addition, the fisher was mailed several letters to set up an appointment to meet; the researcher did not receive a reply.

Thus, ten participants completed the research process. The small size of the sample was partially a function of studying a rural and shrinking industry. While ten participants would not make sense for a quantitative study, according to Patton (1990), "there are no rules for sample size in qualitative inquiry (p. 184). Patton (1990) also argues, "Qualitative inquiry typically focuses in-depth on relatively small samples, even single cases ($n=1$), selected purposefully" (p. 169). Data were collected at three points

with both interview and photography formats included in the data collection. In addition to the interviews conducted for this study the depth of the work was also enhanced by the length and extent of the immersion of the researcher (attending fishery meetings and going out on the fishing trawlers) in the fishing community as discussed earlier in this chapter. Findings were also checked with the president of the North Carolina Fisheries Association and with two seafood dealers who own fish houses in the area of the study that purchase the fishers' catch.

3.17 Overview of Participant Sample

The ages of the fishers ranged from 40 through 69 years. Four fishers were between ages 41 and 48, three fishers were ages 54 through 59, and the remaining three fishers were in their sixties. The entire sample was male and all participants were Caucasian. Approximately one half of the participants in this study graduated from high school and the other half had middle-school educations. The educational backgrounds of the fishers fit with the findings of Johnson and Orbach's (1996) fisheries research report to the North Carolina Fisheries Moratorium Steering Committee. Although the participants in their report included both captains and crew, these fishers were from the same geographic area included in this study. They found that 75% of full-time fishers from the area had a high school education or less. The remaining 25% had more than a high school education. Based on Johnson and Orbach's work the sample in this study fits with their findings and was unlikely to have been biased by having only the most educated and literate captains responding to the call for participants. In this study, as

noted previously, approximately 50 percent of the captains graduated from high school with the remaining 50 percent having a middle school education. None of the captains had a higher than high school education. Income was not discussed because for an insider in the southern United States it would have been culturally inappropriate to ask questions about money. All participants were married with children and living with their spouses. Some had children living at home and others had grown children not living in the home. All of the participants held or had held in the past a federal license to fish in the ocean. Although a captain and crew work fishing vessels, in this study only the captain/owner was interviewed for two main reasons. First there is an acknowledged power differential between the two groups since in this study the captain owns the vessel and essentially controls and is responsible for what occurs in the work place. A limitation of the study is that issues regarding power relationships on the boats were not explored and views of the crew were not heard. An important reason for looking only at the captains is the issue of confidentiality and safety. It would be difficult for the individuals to read the analysis and not know with some degree of certainty who provided certain information and comments. This situation is likely to put the crewmember at a disadvantage as the captain could take exception to something that was reported to the interviewer. Second, economic investment is different for captain and crew and contributes to keeping captains/owners in the industry. Thus focusing on captain/owners permitted analysis of the effect of fishing changes on a group inhibited from leaving this livelihood for another.

3.18 Research Sites

The research site was chosen for a number of reasons. With few formal resources and the extent of persistent poverty, the impact of any decline in the fishing industry affects not only the fishers and their families but also the entire community. Essentially, three fishing communities situated near the water in two eastern North Carolina counties with connecting borders were the sites of the study. As noted previously, to address confidentiality issues, the counties where the participants live are treated as one county and given a fictitious (Scott County) name. This area has some of the oldest incorporated counties in North Carolina. Perhaps worth mentioning is that this area is also home to some of the oldest fishing families in the United States and home of the distinctive Tidewater English accent (Griffith, 1999).

Traveling down the two lane section of Highway 264 going east toward the coast one encounters marsh lands and canals with pine forests and farm land dotted along the road way. The soil is almost black and quite loamy—very rich looking. Although North Carolina is known for its tobacco, no tobacco is grown here, but there is a long history of food crops (corn and soybeans, mostly with wheat and truck crops mixed in) grown in the area. Most of the hardwoods are long gone, and many of the current forests consist of young and spindly pine trees while other previously forested areas are bare leaving a raped look to some sections of the landscape. Over the years many of the felled trees have made their way to one of the Weyerhaeuser Pulp Plants located in eastern North Carolina. Traveling down 264 on the way to the fishing docks one encounters sparsely

spaced houses with an increase in mobile homes in the past few years. There is little traffic. More and more mobile homes are becoming the answer to the housing crisis found within the rural communities. Satellite dishes to bring in all those television channels are commonplace. Churches dot the landscape and each village is usually represented by several different religions, at least one Methodist, Baptist, Christian, Pentecostal, and the occasional Episcopal Church is present in the smallest of communities. These churches are conspicuous only in their total Protestant representation.

The small commercial fishing docks or "the landing" as many locals refer to the docks dot the area but are many fewer in number than in past years. Often, several fish houses that buy the fisher's catch line the perimeter of an area of water that leads out to a larger mass of water (the creek, bay, river, sound, ocean). Nets, boat equipment, workers, the public, trucks, seafood, ice and so on are all present and make up the world of the fishing dock. Depending on certain times of the day and season the docks move from being quiet to a hotbed of activity. Always, there is the smell of salt water, seafood, and work. Depending on the day and season the fishing boats, of various sizes and in varying conditions line the docks.

The fishing communities of this study are in one of the least populated areas in the state. The population of the area is more than 60% White, more than 30% Black, less than 4% Hispanic, and less than 1% other races, which is consistent with much of eastern North Carolina. The growth pattern is slow compared to North Carolina as a whole. Scott County has changed little in the past 30 years.

The problems fishers are currently experiencing in this location affect more than the fishers themselves. Their occupation is also central to their families and their community. Scott County, for example, is a poor, sparsely populated county. Economically, the county depends heavily on the commerce of fishers and farmers. Other than jobs from fishing and farming, the county has few economic resources and therefore has a fragile economic infrastructure. Over 15% of the residents of Scott County have neither private nor public (Medicaid) medical insurance. From the 100 counties that make up the state it has the unfortunate distinction of being included in the 26 North Carolina counties that report a poverty rate above 18%, with 30% of its children living in persistent poverty (North Carolina Rural Economic Development Center, 1999). With so few resources, any changes in the fishing industry have a direct impact on the whole county.

Davenport and Davenport (1995) define a rural area as one which has no town with a population over 50,000 and which has towns averaging 2,500 residents. If one looks at rural areas on a continuum, with some areas being more rural than others, these three fishing communities fit at the far end toward "remote communities." The population density of the fishing communities is approximately 9.51 per square mile compared to the population density for North Carolina as a whole, which is 165.2 per square mile (U.S. Census Bureau, 2000).

When one considers both availability of and accessibility to resources, the low-density population, the lack of any incorporated towns where the fishing communities are located, the coastal geographic location, and the fragile infrastructure, there is an even

stronger case for referring to the area as a "remote". Obviously, in a county such as Scott with a fragile infrastructure and a major portion of its economic base dependent on the commercial fishing industry, any fishing industry changes can have enormous impact.

As discussed in chapter four the fishers in this study brought up the increased regulations in the industry as having great economic impact on their lives. In the 1990s North Carolina began using a fisheries management regime that restricts entry into commercial fishing by limiting permits to fish. Permits came up as an issue for the fishers again and again in the interviews. According to North Carolina Fisheries Rules for Coastal Waters (2003) eligibility criteria to be considered for the Standard Commercial Fishing License Eligibility Pool include the following:

- (a) Significant involvement in the commercial fishing industry for three of the last five years; or
- (b) Significant involvement in commercial fishing or in the commercial fishing industry prior to the last five years; or
- (c) Greater than 50 percent of the applicant's total annual income per year for at least three years derived from commercial fishing; or
- (d) Greater than 75 percent of the applicant's total annual income for three of the last five years being derived from commercial fishing; or
- (e) In the case of an applicant who has turned 16 in the year prior to application, significant involvement in commercial fishing for two out of the last five years prior to reaching the age of 16 with a parent, guardian, grandparent or other adult family member; or

- (f) Significant family involvement of the applicant's family in commercial fishing for the last five years. For the purpose of this Sub-item, family shall include mother, father, brother, sister, spouse, children, grandparents or legal guardian. (pp. 107–108)

There are also criteria regarding past compliance with laws and regulations concerning the fisheries. For example, "A record of habitual violations evidenced by eight or more convictions in the last ten years result in the application being denied" (p. 108). Although there are too many to list here, there are other laws and regulations that result in denial of permits or licenses as well. With changes in regulations a number of fishers who live in Scott County can only shrimp and crab because they do not meet requirements for a fishing permit. Not being able to legally fish limits their income. As mentioned earlier, Scott County was chosen as a research site because with few formal resources and persistent poverty the impact of changes in the fishing industry affects not only the fishers and their families but also their entire community.

3.19 Data Management

Documentation of the data collection process for this study provides an "audit trail" for external evaluators to examine and understand the procedures and decisions that informed the research findings. According to Taylor and Bodgan (1984), the research audit trail should enable the researcher to "demonstrate plausible support for conclusions and interpretations" (p. 140). Following is a description of the protocols and procedures used in the research study.

3.20 Research Log

The research log served as a chronological account of the research study. It was used to catalog all contacts with informants as well as the methods used to obtain these contacts. Additionally, the research log described the rationale for decisions made throughout the course of the research. A daily calendar listing the dates and times of interviews and other contacts with informants was an important part of the log.

3.21 Reflective Journal

A reflective journal was used to detail my feelings, reactions, perceptions, and preconceptions before and after events occurred in the research process. It served as one of my primary research instruments. I felt it was important for me to reflect upon and record any biases or personal issues that might have compromised the trustworthiness of the research findings. Given my background in the fishing culture, this step seemed especially important. Kirby and McKenna (1988) refer to this process as taking care of "my conceptual baggage . . . my experiences and reflections that relate to the focus of the research" (p. 49). This journal provided a place for me to reflect over and over again on both the process I was in as well as a place to separate my own assumptions from what I was actually hearing from the fishers. When the researcher finds she is teetering on the edge of both the insider and outsider positions in research, the reflective journal may have an even more important place in the data collection phase. I had to question myself continually to make sure that I was not injecting my assumptions into what the

participants were saying. For me, the reflective journal provided an essential piece in the research process.

3.22 Field Notes

Field notes added another component to the audit trail. These notes provided a condensed, written account of verbal data and observations from each interview session. Subsequent to each interview, I recorded comments, observations, and any difficulties that I encountered during the interview process. These comments were incorporated into my field notes. Field notes provided one more method of gathering information and ensuring documentation of interviews in the event of a tape recorder failure

3.23 Analytic Memos

Analytic memos served an important function in the data management plan and began the data analysis. They contained my insights and preliminary analyses of the collected data. Themes began to emerge early in the process. Because qualitative research is an evolving process, there was a need to constantly revisit and review these memos throughout the study in order to clarify issues and generate findings that were grounded in the data. The second interview provided an opportunity to go back and ask clarifying questions after I had begun to analyze the first interview data. In addition, most of the fishers invited me to call them or come back to talk with them further if I had questions during the last stages of the research. Because the research sites were one to two hours away from my home, I could choose to listen to the audiotapes on my car tape player on

the drive home. Most often I found that I only wanted to reflect on what had been said and was not ready to listen to them immediately after the interview had ended. I found I needed the time and silence to just think about what had been said. On those days I listened to the tapes after I returned home.

3.24 Recorded Data

I retained all recorded data as a means of checking the findings. In this study, recorded data included raw and transcribed notes and transcriptions of all audiotapes. The data sheet for each interview included demographic information, and the date and time of each interview was noted in this file. I recorded both "descriptive" and "reflective" notes on the data sheet during the individual interviews as a means of facilitating and enhancing data collection and analysis. Descriptive notes provided an opportunity for me to identify key points, events, and observations about the interviews. Reflective notes, on the other hand, provided a record of my personal "speculations, feelings, problems, ideas, hunches, impressions, and prejudices" during the interview (Bogdan & Biklen, as cited in Creswell, 1994, p. 152). Using both descriptive and reflective notes provided a guide to the unfolding research project that enabled the interview to be reconstructed.

3.25 Data Analysis

The data for this research were processed using an inductive analysis approach consisting of two sub-processes, unitizing and categorizing. Unitizing is a coding procedure that identifies information components isolated from the text. Categorizing is

taking the information components obtained from the unitizing stage and organizing them into categories on the basis of likeness in meaning. As the original number of 24 categories (Appendix J) reached a saturation point, which is the point at which I was not learning any new information (Glaser & Strauss, 1967), I wrote rules that defined which components of information should be included or excluded from the category. The resulting components used for each category are included in matrix form for each of the following sections. Thus, the 24 categories were reduced to 8 more encompassing categories. This process is known as the constant comparative method (Glaser & Strauss, 1967).

Photographs were also used in this study as part of a multiple-method research strategy. There were two purposes in using the photographs. One purpose was to see what emerged from the fishers' photography as a way to determine what was important to them. Another purpose was to use selected photographs to illustrate narratives taken directly from the interview data. As noted previously, Dowdall and Golden's (1989) layered analysis approach guided the analysis of the photographs. This is a process that uses three levels of analysis for interpretation of photographic images. First, the subject matter in each photograph was identified with a code written on the back of individual photographs connecting them to specific fishers. The photographs were grouped according to theme with ten themes (which are listed in chapter four) emerging from the photographic data. The photographic data were compared with the interview data and often used in chapter four to illustrate quotes from the interviews. A second level of analysis focuses on assembling images from a particular place and examines the

frequency of certain themes and patterns. The themes from these data were based on the frequency with which the subject matter was depicted in the photographs. The themes of work, safety and danger, and regulations (official observers) appeared in both the photographs and interview themes. It was difficult to separate which information was from photographs and which information came from interviews since the photos stimulated all of the dialogue that occurred in the second interviews and added a story to most of the images. The fishers' explanations of the photographs added information that would otherwise not have been obtained. It is important to note that the dialogue from the second interviews is based directly on the photographs. The third phase of the layered analysis is what Dowdall and Golden (1989) refer to as interpretation. Interpretation is comparable to Clifford Geertz's (1973) thick description, where attention is centered on individual images and endeavors to understand how the participants involved in the study perceive the situation and meaning of the scenes portrayed. In this study the participants not only took the photographs, but they also explained individual images to the researcher during the second interview.

The method of constant comparisons as explicated by Glaser and Strauss (1967) was used to derive (ground) theory and also used as a way to process the collected data for this research study. This method is a continually developing process where the researcher looks for emerging categories where incidents can be placed. According to Glaser and Strauss (1967) naming the categories is based on the researcher's tacit knowledge. Rodwell (1998) notes, "The tacit/intuitive/felt knowledge [that] is legitimate to understand[ing] nuances. It should be used in addition to prepositional knowledge for

communication of meaning” (p. 35). For example, I knew the importance of certain topics before I began to formally analyze the data because these topics came up in every single interview or a particular topic stood out even though it only came up in one interview. The categories emerged for different reasons and not always for reasons that I could explain using words, but I knew the category needed to be named.

Glaser and Strauss (1967) describe in four phases the constant comparative method: “(1) comparing incidents applicable to each category, (2) integrating categories and their properties, (3) delimiting the theory, (4) writing the theory” (p. 105). In this method concepts and working hypothesis are developed based on the emerging patterns in the data. Constant comparative analysis is an interactive and unremitting endeavor in which the researcher moves from one level of inquiry to another in response to how the data unfold. To assist in the data analysis, a computer software package, HyperRESEARCH was used from the initial stages of coding and retrieval to the final phases of theory building. Miles and Huberman’s (1984, 1994) three-phase model of data analysis (data reduction, data display, and conclusion/verification) was also used to investigate, discover, and refine the perspectives and processes that shaped how the fishers made sense of their lives. The data were analyzed and compared to locate any and all recurring themes, categories, and patterns that defined the participants’ descriptions and interpretations of their world. Matrices (advocated by Miles and Huberman) were used as a means of showing relationships between emerging data. Strauss and Corbin (1990) suggest that there are three merits to using a matrix: “It helps you to be theoretically sensitive to the range of conditions that might bear upon the phenomenon

under study (as well as to) the range of potential consequences that results from action/interaction (and) assists you to systematically relate conditions, actions/interactions and consequences to a phenomenon” (p. 161). The matrices were reformatted as tables to fit within standard APA guidelines in chapter four. In the next chapter there will be more elaboration on the data analysis for this research and the findings for the research questions are conveyed.

CHAPTER 4

Listening To The Voices

4.0 Introduction

In spite of changes that have greatly increased the complexity of fishing—fishers continue to fish. While fishing is viewed as a highly dangerous occupation and not the choice of work for everyone, the fishers in this study can trace multiple generations of fishers in their family genealogy. Although according to the fishers the future of fishing is uncertain, all of the participants involved in this research study hope and plan to fish until they retire. As discussed earlier, this study has three research questions derived from its main goals. In this chapter each of the research questions is addressed individually, with the results of the study organized around these questions. A set of matrices (Miles & Huberman, 1984) summarizes the accounts of the fishers. Relevant quotations from the fishers' narratives and photographs are used to gain insight into their world/reality.

Throughout the paper the themed findings related to each research question are explained through researcher comments and quotations taken from the fishers' interview data and photographs selected from the photography of the fishers. A matrix (Miles & Huberman, 1984) follows the comments and quotations at the end of each section. The use of tables is another method employed to help the reader make sense of the data. Each table reflects a theme that emerged in the research and provides the reader with a succinct overview of the components included in each theme. Under each component are either comments taken from the text of the fishers' interviews or the results of comments from

the interview text. The themes that emerged from the photographs were birds, boats, the catch, the crew, docks and dock activity, equipment, safety/danger, scenic views of nature, towing or dragging, and the images of Marine Fisheries observers from the state office. Of the ten themes, boats were the most photographed image, second was scenic views of nature, and third were images of the docks (that sometimes included dock workers and crew members but with masked faces) where the fishers put off their catches and moored their boats. The comments and photographs used in the study assist in learning about the plight of this group of fishers and the difficulty they are having in making sense of a changing industry.

4.1 How Are Fishers Making Sense of Recent Changes in the Fisheries?

The first research question was: "How are the past/present offshore fishers located in Scott County, on the coast of North Carolina, making sense of recent changes in the fisheries?" According to their interviews, all of the fishers believe that to continue to fish they have to fish differently from the way they have fished in the past. They use several different strategies. The following summarizes their choices:

- selling their larger boat/s and buying smaller boat/s,
- keeping their large boat/s but also buying smaller boats with attached licenses to fish for certain species, and/or
- keeping one boat but working other jobs either in or out of the fishery during the time of the year the fishers do not have a permit to catch the species in season.

One half of the participants said that they were “downsizing” as way to continue fishing and several fishers stated that they were working other jobs during the off-season when they had no permits to catch whatever fish were legally allowed to be caught.

As the interviews took place it became clear that the term “downsizing” had different meanings for different fishers. Sometimes downsizing meant that they were buying more boats but that these boats were smaller ones that fished closer to shore. Only one of the fishers worked outside the fishing industry in order to help meet financial obligations. Two of the captains either worked as captains on other boats or worked with the owner of a fish house. This work only occurred when the fishers could not work their own boats because of not owning permits for whatever seafood was in season. Generally this lasted for several months of the year. Sometimes downsizing meant selling the one big boat for a smaller boat as the fisher below indicates in his statement:

Right now, I have a 65' boat. I've had a 90' steel hull for about 20 years. After the regulations, the fishing regulations got so tight with the big boat, you got so you couldn't make a lot of money with it and we sold that and went to a smaller boat.

I could see and I wanted to have something to back me up if I couldn't make it with a big boat. I mean I ain't got nobody else. It's got where the banks won't give [lend] you money on boats, I wanted to have something I could fall back on and try to make a living with.

The reason given most often for buying smaller boats was that they came with licenses that can no longer be purchased apart from a boat. The smaller boats add some economic diversity because they may have a species license attached to them that the fisher does not have with his other boat/s. They are also less expensive to operate and can bring in just as much income as a larger boat. The investment has potential to add to the cash flow and income for the fisher.

Now a little boat don't burn much fuel so - if my little boat catches \$10,000 worth, I paid \$18,000 for the littlest boat I got and I probably got about \$27,000 in it now. When I bought it I paid \$18,000 for it. It can catch the same amount of fish that I can catch with a \$400,000 boat.

It costs so much to run a big boat and you don't have production, you can't run a boat with no production. You have to have volume. Even with those low prices, you still have to have volume to make any money. We made more money on cheap fish with volume than we did on expensive fish and catching a few.

The following fisher—in trying to make sense of what was happening in the industry and shape a good future for his family—made a decision he later regretted. Larger boats do not make as much economic sense as they once did in the fishery, but it is not always possible to foresee the best way to downsize. According to the next fisher,

the way it's set up now, even someone like me or anybody, we can't go scalloping. We can do this little do deal like we did this spring where we catch 400 pounds of meat a day or land 400 pounds of meat . . . but to get into a full time scallop permit now would cost about \$400,000 just for the permit. And a part time permit now would cost \$150,000. What happened, I had two boats, I had a 93' boat and a 90' boat and from 1995 until 1998 things were real slow in the scalloping and everything else too, and then I wound up selling the two boats [which had scalloping permits] and the year after that scalloping got very, very good. If I had kept the two boats, just tied them to the dock and painted them, a year after I sold the boats they were worth a quarter of a million dollars more than what I sold them for. You just don't know, that's the way the fishing is and always been, you don't know from one year to the next.

As the previous example demonstrates it has been difficult for fishers to make informed decisions about their participation in the fishery because they cannot tell what the future holds. At best they are making choices based on prior experience, but none have expertise in the current industry. Another fisher sold his 85' fishing boat while he and his sons rebuilt another boat. This rebuilding took place during the year that regulations and licensure changed dramatically and when the fisher finished rebuilding his boat he was in for a big surprise.

We started rebuilding the 75' boat. It took me a year and a half to do that, and that's when the regulations started coming on real strong. And I didn't realize it, that the regulations were coming on so strong and when I got it done, I didn't have some licenses for that thing that I should have had.

The 85' boat that he sold had the licenses he needed and he could not purchase new ones. He later sold the 75' boat, as well and bought a smaller boat that he could work by himself or with only one crewmember. This fisher was the only participant who worked a job outside the fishing industry in addition to his shrimp fishing. He now only shrimps in North Carolina and South Carolina during the season which lasts approximately six months each year. In 2001, for the first time since becoming a full-time fisher, he drove a truck for a few months of the winter to help support his family in the off-season. For more than three decades he had fished full time.

The following photograph (4.1) gives a peaceful view of shrimp boats at the dock "resting" after their work at sea. The photograph was taken by a fisher who had his boat up the railways "across the way" for repair from an accident that occurred at sea. He took the picture because "it was just a pretty scene with different boats".

The portrayal of the peaceful scene of the shrimp boats (4.1) is in direct contrast to the hardships of a changing industry. However, as seen throughout the study the photographs taken by the fishers portray the influence and significance of their surroundings. Every fisher took photographs of beautiful scenes. Although their interpretation of beauty can be seen in the peaceful scenes of boats at rest, sunrises,

sunsets, it can also be seen in the photographs of a deck loaded with their catch and active dock scenes. The captains often referred to pictures of their catch as “pretty” which usually meant an abundant catch or large size fish or shrimp.



Photo Caption 4.1: Big Boats, Little Boats

More than the size of his boat, whether a fisher has a license or permit to fish most directly affects him. Although they can shrimp offshore during warm weather, three of the fishers have boats that do not have a license or permit to fish in the offshore fishery (flounder fishing, for example) in the winter. One of these fishers works in a fish house

owned by a family member in the off-season. The other two fishers work on boats owned by others as deck hands or captains during this time. This work usually occurs from January through March. The frustration the fishers feel at not having permits that will allow them to work all year is illustrated in the following quotations:

Well, January 'til the first of March for my boat now I just tie it to the dock unless the Lord's willing and it warms up, as long as it's cold weather I can't make a dime with my boat. I use to could until they stopped [me] from going in the ocean [because of no license or permit].

The regulations that's in it now, plus the fact that you can't get licenses to do what you need to do to make a year's work. Like it is for me, I got about four to five months a year I can shrimp and then if I go fishing, I have to go run someone else's boat. When I bought this boat, it didn't have a flounder permit on it. Now I can't go flounder fishing anymore, but I've done it all my life.

Difficulty experienced by the fishers around regulations may not only stem from the economic implications of a restricted industry but also from a reality constructed from years in their life time of working in a much less confining work situation. In addition they carry with them the knowledge of generations of their family working under the old ways, which, were much less restrictive.

The following photograph (4.2) taken by a fisher who related: "It's just what fishing boats look like at the dock." It is interesting that the picture includes boats, water, sky, and sea birds . . . no people. But, the majority of the photographs taken by the fishers did not include people. Perhaps this is because fishers spend most of their time in small groups while at work and much of their life is constructed in a natural environment that includes much space, air, water, and sky.



Photo Caption 4.2: Boats at the Dock

As Table 4.1 below points out, all of the captains have changed their way of fishing by whatever system makes sense to them. Only one fisher does any kind of work

outside the industry. Although he has fished for more than 30 years, in 2002 he drove a truck for a few winter months when he could not shrimp. Two other fishers had fishery-related jobs in the winter months when they have no license to fish. Again, some of the fishers have traded in their large boats for smaller craft that are less expensive to operate. Other fishers kept their large boats and bought a smaller boat or sometimes two smaller boats to create a small fleet. As the interviews and photographs of different size boats indicate, all of the captains made sense of fishing in the current industry in various ways. Obviously, their old reality created at least in part by fishing with few regulations has shifted with the changes that have occurred in the industry.

Table 4.1

Making Sense of Fishing These Days

Fishers	Down sizing	Purchase More Boats With Licenses	Work Other Jobs	Fishery Jobs
F1	Yes		No	
F2	No	No	No	
F3	No	Would like to	No	
F4	Yes	Yes	No	
F5	No	Yes	No	
F6			Yes	Yes
F7	Yes	Yes	Yes	No
F8			No	

F9	Yes	Yes	Yes	Yes
F10	Yes	Yes	No	

4.2 What External Forces and Aspects of Fishing Work

Do These Fishers Believe Have an Impact on their Way of Life?

The second question of the study—"What external forces do these fishers believe have an impact on their way of life?"—reaches for the fishers' thoughts on the results of changes in the industry. The fishers' focus was on those changes that created difficulties over which they believed they had no control. The high costs of licenses and permits, the cost of health and boat insurance, the difficulty in earning a living wage all were issues that they judged adversely affected their lives. Speaking of boat insurance, one fisher explained:

I had to cancel. I've had insurance ever since I had a boat, which has been since 1978 when we had [our first] a boat.

Only one fisher presently has insurance on his boat, but most had had insurance in the past. Although they believe boat insurance is important and that they should have it, generally the fishers could no longer afford it. The following captains explained their decision to drop their boat insurance:

Last year I just canceled it. I said I can't afford to pay it no more. After they had that 911, my insurance went up from I think \$9,800.00 to \$13,000.00 [per year for one boat]. I just said I can't afford to pay this no more; I'm just dropping it. That's what I had to do, I didn't have the money to pay it, couldn't pay it. I'm tired of paying it; it's good if you need it but ... If you're making good money it ain't nothing to pay but when you ain't making a lot of money it's hard to pay.

We just couldn't afford it. And I kept it for years, I kept it probably for 18 years, I probably kept insurance on it and then now when you really need it, boats getting a little older, things just got too expensive.

The following photograph (4.3) illustrates a boat with no insurance that caught fire. Unless the fisher has enough money for repairs, the boat will likely sit at the dock until it is unusable or someone will purchase it for a fraction of its worth either to fix up or use for parts. Boat insurance is viewed as good to have but not necessary to work. If the fisher has to make a choice between a new engine and boat insurance there is no choice. A fisher can work without insurance but not without an engine. Still, if the boat burns or goes down at sea, the loss is total and usually devastating. No boat insurance adds another element of risk to leaving the dock every day or week. For most of the fishers in this study this is an element that they did not have to deal with in the past.

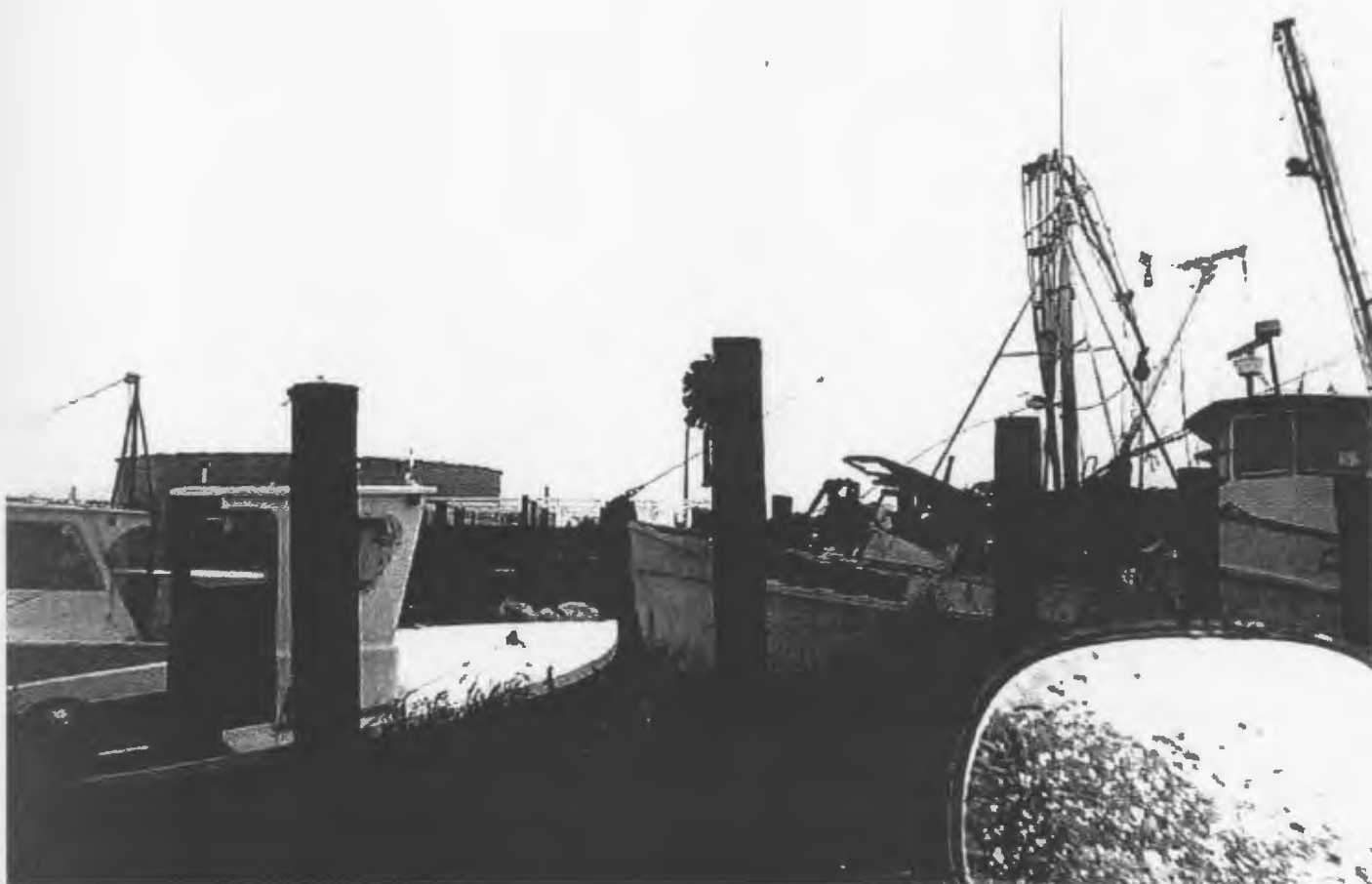


Photo Caption 4.3: Damaged Boat at The Dock That Caught Fire

Only four of the ten could afford health insurance, although most had maintained health insurance in the past. As one fisher explained:

It's been hard to keep. We've talked about dropping it but like I say we're at the age right now where you need to drop anything but that, sounds like to me. (This fisher was in his early 50s).

While all the fishers felt that they had earned good livings in the past, they all agreed that in today's market there is difficulty in earning a living wage.

As far as me since I have run a boat, I caught the most [shrimp this season] I have ever caught in my life and probably one of the worst years averaged out [because of low prices for the catch] that I have had. Well, this is the honest truth. I couldn't make it right now if it wasn't for the fish houses [owners of the fish houses who buy the fishers' catch sometimes make loans to fishers when times are bad] helping me and that is the honest truth.

The following photograph (4.4) of shrimp on the deck after the net is emptied is "just as pretty a sight as you want to see." As mentioned earlier in this chapter for most fishers "pretty sights" include more than sunsets and sunrises. As discussed in chapter three, individuals have different ways of making sense of events and create their personal realities based on how they interpret what is going on around them. Not everyone would view a deck full of shrimp in the same way as a fisher.



Photo Caption 4.4: The Catch

We ain't making no money like we used too. I've made house payments, sent my young'ns to college and do this that and the other and now I got it [the boat] paid for, can't hardly make a living. Now they [government] got me where I can't hardly make a living. They take everything from us, you know.

I think you are going to see a lot of shrimp fishermen going out of business, going bankrupt. Of course, you can't make it with a boat on a \$1.25- \$1.50 shrimp [per pound]. If you can't make enough money to keep your boat up then . . . the only

way that we are surviving right now is because this has been an exceptionally good year for shrimping. There is probably more shrimp now in this last week in North Carolina than any week in history. It should have been a fantastic week for all shrimpers, but with the price like it was it's no better than it was during a normal season.

People just don't realize how much you spend on them boats and how much you get railway bill Anytime I rebuild one of those motors, it's as much as \$18,000 or \$20,000 and you try to get \$4,000 or \$5,000 a trip sometime clear to get home. That sounds like a little money, but when something major happens you ain't got the money, you've got to go borrow it from the bank. Used to [before the onset of regulations] I didn't have to do that. Used to I made enough money where if something happened to me I could just write a check for it. But since they cut all this stuff down and made me fish the way they want to, it's a lot different.

The following photograph (4.5) is of a steel hull fishing trawler on the railways for repairs. This particular fisher had put off taking his boat to the railways for repair as long as possible. Although the fisher was not sure what the final repair bill would end up costing him, he knew it would be at least 30,000 dollars and maybe a good deal more. The fishers spoke of not having the money to take good care of their boats. Obviously, not keeping boats in good repair can result in dangerous outcomes. But, as one fisher

pointed out, “when money is tight you make do the best you can, you just patch things up and keep going.” Some of the most important decisions the fishers make may be about how they take care of their boats.



Photo Caption 4.5: Boat on the Railways for Repairs

It would be hard if you had to start out from scratch now in the fishing business. I don't believe you could make it. You know if you had to start off, it would be real hard to make it. Buy a boat, pay for your house; you know you had to start a family. They have quotas and all now, it's kind of a racket when a quota comes in like for say flounder. The dealers and the processors know you are going to catch

them, they just give you what they want to. Flounders are cheaper now than they were 15 years ago.

As the following matrix (Table 4.2) indicates all of the captains interviewed were having difficulty making a living by fishing. Less money is exhibited by having problems paying insurance premiums. Only one fisher has boat insurance on the boat he now owns and interestingly he is making payments to the bank on a boat he previously owned with no insurance coverage that sank because of an accident at sea. Because the previously owned boat was not paid for and was not covered by insurance, he is still paying for it. Only four fishers had health insurance including one whose insurance came through his wife's job. The majority of the captains in this study have homes and boats that they own. The fishers who do not own their boats believe that once the boats are paid for they will have a better chance of surviving in the industry because they will no longer need to worry about making the large payments. They all indicated that if you did not already have a start in the business (house, boat, etc.) it would be difficult if not impossible to become a successful fisher in today's fishery. All indicated they currently have difficulty earning a living wage.

According to the participants the economics of fishing are affected by many factors. The comments listed in Table 4.2 were taken directly from the interviews. The high price of permits, the low price of seafood, high cost of boat expenses, and the required sea turtle protection devices for nets all create financial hardships for the fishers

and were mentioned by every fisher interviewed. Other comments were chosen because they reflected views of the fishers that were pervasive throughout the interviews.

Table 4.2

Regulations and the Economics of Fishing

Fishers	Economics of Fishing	Health Insurance	Boat Insurance	Difficulty in Earning Living Wage
F1	The price of permits is too high for new fishers'	Yes	No	Yes
F2	Very low seafood prices the past several years	No	No	Yes
F3	Great return on investment from selling of boats in past	Yes	No	Yes
F4	75% of the county's economy comes from the fishing industry	Yes	No	Yes
F5	Difficult to find labor due to poor compensation from fishing	No	No	Yes

F6	Licenses are difficult to find and very expensive when found	No	No	Yes
F7	Smaller boats are often more profitable because of quotas and gas prices	No	No	Yes
F8	Selling price of shrimp barely covers expenses	Yes	Yes	Yes
F9	Too many resellers in the market for the fishers' to generate desired profits	No	No	Yes
F10	Government required nets create a loss of \$30,000 per year due to the protection of sea turtles	No	No	Yes

4.2.1 Increased Regulations

As noted throughout the interviews and in the following matrix (Table 4.3), fishing regulations were mentioned more than any other topic during interviews with the fishers. Overall there was a decidedly negative view of regulations because the fishers believed the regulations often do not make sense. As the following quotations indicate the fishers have strong feelings about how the regulations affect them:

As far as I am concerned, it's still the government trying to put us out of business. The regulations and all have took a lot of the fun out of it.

It's got to be the regulations, I mean. I mean they just ruined us. They making new laws every day on us. I think they want us out and they are going to get us out, and that is all.

With all the regulations and the government and the state involved in it like they are... They are always cutting but they never introduce anything new in the fishing business.

One captain in particular remembered and described poignantly the final incident that drastically changed forever both his view of fishing and the way he fished. The incident occurred because of a change in fishing regulations that required an adjustment he was unable to make:

We were dog fishing and we happened to get into a big school of striped bass, beautiful striped bass, one tow we had 500 big striped bass and I called the dock and they said you have to throw them all overboard. It broke my heart. I said my father didn't do this, my grandfather never did this and I never do it, my great-grandfather never did it. And I said I am not going to do this for a living. So I turned to my son and said, "Do you want to buy this boat?" I am not going to do this. I can't throw fish overboard that I catch. I couldn't handle the regulations; I'll put it that way. Maybe if they came on slower, I probably could deal with them a little bit more. I just couldn't deal with them. They just came on too hard, too fast. I sold the boat and I took a year off from fishing. I bought a smaller boat just to go shrimping. I make out a lot better. I don't make as much money, but my headaches are so less. If I kept my big boats I think I would be dead by now. Just by worrying and stress, would have killed me.

Although the previous fisher can trace fishers in his family for at least the past five generations, as it turned out his son left the business and now this fisher will be the last in his family to fish. The following photograph (4.6) is of the neat and orderly equipment on the smaller shrimp boat the previous fisher bought when he invested in a simpler kind of fishing (shrimping) as a way to combat some of the more difficult regulations and thereby stay in the fishery. By focusing on one species he only needs to stay abreast of regulations and changes in the one area.



Photo Caption 4.6: Equipment

On the other hand, 7 of the 10 fishers interviewed believed that there was a need for some regulations. For example, the majority of the fishers were in favor of not catching small fish and having nets constructed with larger size mesh so that small fish could swim through. In general they appreciated methods that they believed were sensible ways to help sustain the fishery.

I can see how it helped us some. I think the fish stock will keep on building up too. I think they've helped that some too.

Some of the regulations you know I can see have some good points why we need them.

There needs to be some regulations.

In addition to the need for regulations, the following fisher spoke of the importance of including individuals with diverse knowledge and backgrounds in creating these regulations to sustain the fisheries. The captain said:

I think you need regulations but I think you really need somebody that knows what they are doing. I have been on several advisory boards with the state, you know, to help make regulations and all. And what we would come up with when they would go draw up the plan would be completely different. And I quit messing with them. We would come up, the group would come up with a plan, a set of plans or something to do and then they had a person with the Marine Fisheries to draw up the plan and bring it back, and it would be the Marine Fisheries plan, it would not be the group's plan. Our group included recreational fishermen, commercial fishermen, and scientists . . . it was a diverse group.

All participants believed that many of the recent regulations as constructed and enforced in the current fisheries do not always make sense. The discussion of regulations elicited strong responses from the participants as the following indicates:

Some of them are ridiculous that we got. When they put a regulation on one thing, it pushes the boats that's in that, they have to go to a different industry, they got to go to a different species to fish. Say a lot of the boats that would be flounder fishing now, if they could do it, they wouldn't be find shrimp in here, you know, the shrimp probably might be a little better, but they push everything right into one knot.

The following fisher clearly believes that fishers are unfairly characterized and that their knowledge of fish is often ignored. He obviously believes that fishers are seen as villains:

Well, I think they think we're killing up everything, you know, but that ain't true. That them little 'ol fish out there are that long, I don't believe that they'll get no bigger, I just don't believe it. They're here ever year.

The turtle shooter device was mentioned in every single interview. In the fishers' eyes, this device is a prime example of a poorly constructed regulation. The turtle shooter device puts a three-foot hole around the bottom of nets and is a government requirement to cut down on the deaths of sea turtles. The turtle shooter provides an escape opening for turtles caught in nets and as mentioned was a hot topic of discussion among the fishers interviewed for this study. While it protects the sea turtles, the fishers see this as an

economic drain because it not only shoots turtles out of the net but the catch, as well. All of the participants said that before the requirement of turtle shooters they had caught very few sea turtles in their nets that were dead. The fishers not only are sensitive to the impact of the turtle shooter on their catch but also propose alternative solutions that come out of their long-term knowledge of fishing in North Carolina as evidenced by the following fisher's statement:

I would much rather the turtles, they get there and you see it on television, where they start hatching out and the seagulls eat them before they get to the water, and they talk like nothing but one or two of them survive, or two to three get to the water. I'd much rather give them \$1,000 to pay somebody to sit to the nests, and put the little turtles in the water and let them survive. Buy a permit or something, you know, let the money go towards protecting them that way.

No, we didn't ever catch many [sea turtles before turtle shooters] but then they came out with the turtle shooters and we started pulling the turtle shooters and the fish excluders and that cost us about \$30,000–\$40,000 a year to pull those. This is not thinking or hearsay. I carried the marine biologist [on his boat] for 300 hours and I know how many shrimp get lost through the turtle shooters.

The captain who made the above statement also provided the following photograph (4.7) of a state observer from the marine fisheries who went out with him and

a crewmember on his smaller boat (he also owns a large trawler). The observer spent a day measuring fish and talking to the fisher about his work.



Photo Caption 4.7: Marine Fisheries State Observer [in suspenders] on a Small Boat

Some of the fishers have little patience with individuals who do not appear to have the training or expertise the fishers believe is required to have input in the serious decision-making regarding the fisheries. Some of the captains get very emotional at times about the individuals making decisions as the following quotation indicates:

What gets me is, they will take somebody out of the state of Kansas and bring him down here to make laws for the rest to go by and they don't know what in the world they are doing to start with. They don't know a croaker [small fish] from a whale! And they take those people to make laws for us to go by, it's just stupid.

Stuff comes in cycles. One of the biggest comebacks really has been croakers and there really has been more croakers and there were no regulations at all imposed on them. Fifteen years ago you couldn't catch a croaker. I mean they were near about extinct in the ocean. But now, you can't hardly sell them, there are so many of them. And there was no management plan at all imposed on it, no restrictions whatsoever.

The following matrix (Table 4.3) is meant to assist the reader in understanding that all of the fishers in this study believe that many of the fishery regulations do not make sense. However, the majority of the participants believe that some of the regulations do make sense and according to the interviews the majority believe that there is a need for some regulations.

Table 4.3

Struggles to Make Sense of Regulations

Fishers	Many Regulations Do Not Make Sense	Some Regulations Make Sense
F1	Yes	No
F2	Yes	Yes
F3	Yes	Yes
F4	Yes	Yes
F5	Yes	Yes
F6	Yes	No
F7	Yes	Yes
F8	Yes	No
F9	Yes	Yes
F10	Yes	Yes

4.2.2 Voices That Are Discounted or Not Heard

The fishers believe that they have no voice in decision-making regarding regulations that control the industry. The fishers' belief in their lack of input regarding regulations was never more apparent than when they discussed fishery meetings.

Although they had in the past attended fishery meetings dealing with changes and new regulations, they had eventually stopped attending as they indicate in the following quotations:

I haven't been to a meeting probably in a 1-1/2 years - 2 years, but we've been to them all our lives.

I used to go to every one of them. I never missed one until I figured I was wasting my time because the fishermen didn't know anything [said sarcastically].

Because they believe that the real decision-making occurs prior to the public meetings taking place and that no one listens to their voices, only one participant still attends fishery meetings at all and he attends "very seldom." The fishers continued talking about what little input they had in meetings and how unimportant they felt as evidenced by the following:

I don't think they pay much attention to us, no. I don't think they do. I've been in meetings with them and they don't seem like they've ever helped none. I just didn't see where it was helping none. I just thought it was a waste of my time.

I was so frustrated; I have been to so many meetings. I haven't been going to meetings in the last ten years. They only invited us to the meetings because they had to; they didn't really want our input. They said they wanted it, the fishermen. I don't really remember any time they took that advice from fishermen, I don't.

Little to none [fishers' influence on regulations]. North Carolina and Virginia, we are on the Mid-Atlantic and the North Atlantic [Fishery Councils] too. We fall in both regions the way they have done [organized] it. North Carolina and Virginia, and even New Jersey have got real poor representation on it. Them states don't pull much weight, and even what little bit of weight they got, the people that we got representing us don't help us out. New Hampshire, Massachusetts, and all, their state government backs their fishermen a lot.

Table 4.4

The Fishers Believe that Their Voices Are Not Heard

Fishers	Attended Meetings in Past	Regulatory Decisions	
		Currently Attends Meetings	Reasons for not Currently Attending Meetings
F3	Yes	No	View of meetings not helping any
F6	Yes	Very Seldom	Feelings of fishers not being heard
F7	Yes	No	Feelings that fishers' advice was never Used
F8	Yes	No	Feelings of government doing whatever it wants regardless
F10	Yes	No	Feelings that government does not listen to the fishers

4.3 What Do Fishers Anticipate for Their Future?

The third question of the study, "What do these fishers anticipate for their future?", reveals that the fishers in this study have a pessimistic view of the future outcome of the fisheries. Although the fishers' views vary in the degree of pessimism, all of the participants questioned the future of the fisheries based on the way it is being regulated.

I don't think the future for the young people looks very good.

Well, it looks terrible for the younger generation. I can't see no future in it for the younger generations. Reasons why is because I think these permits is going to be higher—if you got enough money to buy a permit I believe in the future you wouldn't need to do no fishing. But I don't see how nobody is going to get started later on in their future; in other words, I don't see how no young person can get started. First of all, they can't buy no permits. They can't, like when I come along all I had to do was get enough money to get a boat and if I proved myself, if I worked hard enough [photograph 4.8 – crew at work] and done good enough I could work my way up. The other people ain't got that chance because they got to have money to buy a permit and all that to start with and they haven't got the opportunity. You can't take your boy out there and help him get a boat because he can't get no permits. Ain't nobody going to sell him permits because everybody

that's got one is going to keep it because that's their life. I don't see how it's got no future at all for the younger generation.

Well, I've got enough permits and stuff, you know with my flounder permits and my shark permits and all, you know. I think that stuff will still be where you can make you a little bit out of it.

I will hang on until I get too old to work.

I think I will [be able to continue fishing] because I know I don't have many years left in it.

Well, I think as far as personally, I think you know I'll make it part of my lifetime. I'll be able to keep making a living. That's because I've got all of it paid for. I don't have no payments to worry about. I really don't know what is going to happen to the industry. I don't know if they got enough people out of it, if they'll open it back up gradually, you know where the one's that stay in it can make a living out of it. I don't know. It's hard to tell with the government.



Photo Caption 4.8: Crew At Work

One fisher spoke of other fishers who are leaving the industry and what they are doing for work.

They just try to get a job if they can. A lot of them went to the prison [to work]. I know a few of them done that you know. And as far as me, I've got no education so I don't know what I would ever do or I didn't finish high school neither. I would just probably do piddly jobs, just what I am doing now [in the off-season when he has no license to fish with his boat].

The lack of training for other work and the lack of education along with the questionable future of the fisheries led to the belief for some of the fishers that their personal futures could be in jeopardy. There was a strong sense of uncertainty about the future. One fisher stated that "it is too difficult to do anything else," and one believes that his future is questionable. Only one of the participants seriously considers the possibility of not being able to finish his career as a fisher. Although not certain about their futures, seven of the ten fishers believe that they will be able to finish their careers as fishers.

Table 4.5

The Reasons Fishers Believe That The Future of Fishers and Fishing is Questionable

	Future Fishers of Fishing	Personal Future in Fishing	Educational Level	Age	Changes in Fishing
F1	View of shrimping Ending	Too difficult to do anything else	Middle school	59	No longer travel whole East Coast
F2	Not enough licenses to keep fishing	Questionable	Middle school	41	Profit margins have decreased
F3	Not enough permits to keep fishing	Will be able to finish career as a fisher	High school	54	Cannot afford Insurance
F4	Questionable	Will be able to finish career as a fisher	High school	40	Fish prices have slowly declined

F5	Plenty of fish but too many regulations	Will be able to finish career as a fisher	High school 48	Quotas
F6	Industry must change in order to survive	View of not finishing career as a fisher	Middle school 47	Regulated nets
F7	Feelings of government ending fishing	Will be able to finish career as a fisher	High school 59	Fishers cannot afford big boats
F8	Too many regulations	Will be able to finish career as a fisher	Middle school 61	Regulations
F9	Too many regulations and not enough licenses	Will be able to finish career as a fisher	High school 60	Quotas
F10	Too much government Intervention	Will be able to finish career as a fisher	Middle school 69	Fishing is easier due to technology

4.4 Fishing History In The Family

The fishers' views of the future may have connections to their past. The participants began their careers between the ages of 5 and 13 by going to sea with their fathers and grandfathers. When they began their careers, all had other family members who made their living by fishing. Only one of the participants no longer has other family members who fish. Having sons following in their father's footsteps is also declining for this group. Loss of life at sea is not uncommon.

The following fisher's account of being the last family member fishing is especially poignant when one views the photograph (4.9) that follows. The photograph shows his home with his boat docked behind his house and his dock connected to his workshop. He and his father (a fisher) and his two sons (who are not fishers) built or rebuilt two family boats in this space. On my visit for the second interview he showed me the swinging cradle he was building for a grandbaby in the shape of a boat in his workshop. This fisher has been greatly affected by the changes in the fishery and his reality altered as a result. He plans to retire as soon as he can draw his social security, in two or three years. I have to wonder how he will make the transition. He tells about being the only fisher left in his family by saying:

[I am] the only one left in my family [who fishes], yes, and my immediate family. There was a time when every one of my cousins and my uncles, on both sides of my family, were on the water. It was just a family thing. Jobs on land were better, with more security and being home, they could be home more.



Photo Caption 4.9: Everything Connects to Fishing

One fisher told the story of his earliest memory of going out on the boat with his father.

I was seven years old, that I can remember and it was Christmas week. I'll never forget it. Yes ma'am, I cried like a baby the whole time. Sitting on top of the cabin looking for Santa Clause. I'll never forget it. I remember the boat's name and everything. We left [to go fishing] before Christmas and we come in the day after Christmas. Yes ma'am, it was so bad I'll never forget that. Like I said, I cried. I was on top of the cabin looking for Santa Clause out there and that's no joke!

[Santa had left his Christmas toys at home for him when he returned with his father from sea].

Other memories did not have such a positive ending. Four of the ten fishers interviewed had experienced death of family or crewmembers at sea but continue to fish. The dangers and stress connected to fishing are illustrated by the following quotations and photograph 4.10.

Had two sons that was on a [family owned] boat in 1987. They were fishing offshore, off of Ocean City, Maryland and on February 23, 1987 and they were caught in a bad storm and the boat capsized and sank. They were about 60 miles offshore and the water was about 1200 feet deep where they sank. Wind was blowing around 90 miles an hour.

Later the same fisher added:

Well, I had a grandfather and an uncle that got drowned on an oyster sailboat in 1923.

Fishing is dangerous work and just getting out to the ocean can be hazardous for this group of fishers. The only access to the ocean for larger boats in the northern part of coastal North Carolina is to cross Oregon Inlet, which is treacherous because the bottom

is continually shifting. It can change from one day to the next before the Coast Guard has time to change the channel buoys and many boats go down there each year.

The graveyard of the Atlantic, that's it [near Oregon Inlet and off coast of North Carolina]. A friend of mine worked on a company boat, The Captain ____, I met him working in Rhode Island last year. The last time he come in there [Oregon Inlet] two weeks ago, he caught his boat on that [sand] bar. He'd been to Rhode Island and tried to make a scallop trip. He had 10 or 15 days he could pull scallops left [on his permit]. Instead of fishing he went up there and pulled them 10 days [catching scallops]. Well, they had bad weather. I don't know how long he was gone but it was a little while. Anyway, when he come back he followed them buoys like they were, thought he'd be all right. He got her [boat] aground and washed the seas all over the boat, told the boys [crew] to get in their life rafts, survival suits and he done give up. Finally, he got her [boat] off [the sandbar]. When he got her off and got her to the dock he quit. He took his stuff off and went home and he had done it for years - took his stuff off the boat, told them that was it, his last day. That just happened three weeks ago and he just lost one boat there [Oregon Inlet] about a week before.

The following photograph (4.10) is of a shrimp boat that is beginning to sink. The captain and crew were getting ready to abandon ship but the participant who took the picture called to shore and a fish house owner put a powerful water pump on a very fast

boat and sent it to the boat in trouble. Since the boat had not gotten too far from shore the extra pump made the difference in the boat staying afloat until it reached the dock and could be repaired.



Photo Caption 4.10: Boat Sinking

Table 4.6

Family Life

Impact of Fishing on the Family			
Fishers Start into Fishing		Immediate Family Fishing	Health and Safety
F1	With father at age 15	One son currently fishing; both grandsons fish when not in school	Death of two sons, grandfather and uncle
F2	With father at age 10	Son fishes part time but is encouraged to find other employment	

F3	With father at age 5	No sons	Lost 1 crew member Off Boat
F4	With grandfather at age 5	Son fishes part time but is encouraged to find other employment	
F5	With father at age 10	No sons	Owned boat that went down with all crew aboard, drowned
F7	With grandfather at age 11	Both sons fished but found other employment due to financial reasons	
F8	With father at age 10	One son fishes; the other fished part time until he found another job	
F9	With father at age 13	Son fishes	Two nephews, grandfather, and uncle drowned
F10	With father at age 13	One son currently fishes; grandsons may want to fish	

4.5 Fishing Is A Way of Life

Fishing is a way of life that not only includes the work of fishing but also involves other aspects. The work of fishing, the effects on family relationships of being at sea and unavailable for days on end, and fishers' feelings about fishing are presented in Table 4.7 and more fully described using the photographs and comments of the fishers. While only one of the fishers said that he presently disliked his work he felt that he no longer likes

fishing because for him, the regulations “came on too strong, too fast” and he could not make the transition. He described his present feelings in the following manner:

Well, I used to be bitter at the government, but I’m not. It’s just a change of times—everything is changing. I don’t think we are going to be in the fishing business. We are farm raising so much stuff. I think its just going to go by the wayside, I think it’s always going to be here, but it’s not going to be a big industry at all. That’s the way I feel about it.

From interviewing this fisher his dilemma about fishing seemed more to do with difficulty adjusting to change rather than a sudden dislike of fishing. I had the distinct sense that if he could have continued fishing as he once had that it would still be a satisfying way to work and live for him. On one level his change in feeling about fishing had nothing to do with fishing but much to do with feelings of restriction and no choice or control over what was happening to him.

One subject that came up often was how fishing affects family life, especially the amount of time fishers spend away from their families. One fisher spoke of a recent incident involving his granddaughter.

To give you a perfect example, my granddaughter, she's nine years old; we were going to the movies yesterday. She says, “When I get married I am going away

from here to get married. I said, "Why are you going away from here to get married"? She said, "Because I don't want to marry no fisherman because they work all the time. They aren't ever home." Now, she told me that just yesterday, nine years old. And that's the truth, I ain't ever home.

Although the amount of time away from their families came up again and again in the interviews, the fishers also spoke about the satisfaction they feel from their work. Often it was described as feelings of "peace" and "enjoyment" as the following fisher relates:

As far as I am concerned, I'm proud of it [being a fisher]. I've never seen nothing wrong with it. It's enjoyable; I mean it really used to be, so peaceful. You just went and worked, done like you supposed to do and then you come in. You didn't have a bunch of people over your head always having to worry about it. I mean it's just something I've always loved.

When asked how he would respond if his 16-year-old son told him he wanted to be a fisher, one captain replied in a way that suggests why many fishers are drawn to their way of life:

I don't know what I would tell him. I've asked him several times about it, because I've thought about selling some of my permits that I don't use, but if I thought he

was going to stay in the business, I wouldn't even consider selling them. You know, where he could have them when he come along. It's a good life, you know, we make good money at it at times, it's not as good as what it has been but you do get to take your time off like you want to, you are your own boss, you're not cramped up in an office or whatever. I really don't know how he'll make out. I don't think he's going to like it, if he goes to school and has to be in an office and stuff like that, I don't think he is going to be satisfied with it.

The same captain related that he thought fishing "gets in your blood" but that, "Well, I dislike it more right now then I ever have. I'm just saying the regulations took a lot of fun out of it." But still, he could have spoken for the group when he listed what he considered the strengths of the work: a good life, making good money at times, controlling your time off, being your own boss, and not being cramped up in an office are likely elements all the fishers would have listed as to why they like their work.

Another fisher spoke of his feelings about fishing by saying:

Definitely, I like fishing. It's in my blood! It's in everything I've got. I would like to see my youngins be able to keep on fishing too or anybody else that wants to fish. Fishing has been a great asset to this county.

Many of the photographs that the fishers took were scenes of nature: beautiful sunrises, sunsets, seabirds, pictures of the ocean and sky which as indicated in both their interviews and photography played a role in their connection to this work. Although, the fishers talked about their work as sometimes being fun, peaceful, joyful, liking the quietness, the hum of the motor, being out in the elements and more; it was the photographic images that most captured the importance of the natural world in fishing and in their lives. The following photographs, (4.11 & 4.12) are two such scenes. Photo 4.11 shows a very peaceful setting of the sun going down with birds flying in the foreground of the picture. The caption of photo 4.12 hints at one fisher's appreciation of wildlife and his sense of humor. When talking about the photographs he took for the study one of the older fishers called me at home one night from another state where he was scalloping and shared "every picture I took has a story". He had not waited for me to develop the photographs but had instead had them developed on his own because he needed "five copies – the crew wanted a copy, too". The fisher was correct in his assessment that each photograph told a story but the story was much richer with him doing the telling and interpreting. Photographs 4.11 and 4.12 as well as others assist the reader in understanding that just because these men were short on formal education and may have presented as a bit rough around the edges did not mean that they were insensitive to the beauty of their environment and work. As hard as their work was, both their interviews and their photographs illustrated the importance of the natural world and the sense of fulfillment they experienced from this work.



Photo Caption 4.11: Peaceful Scene of the Natural World

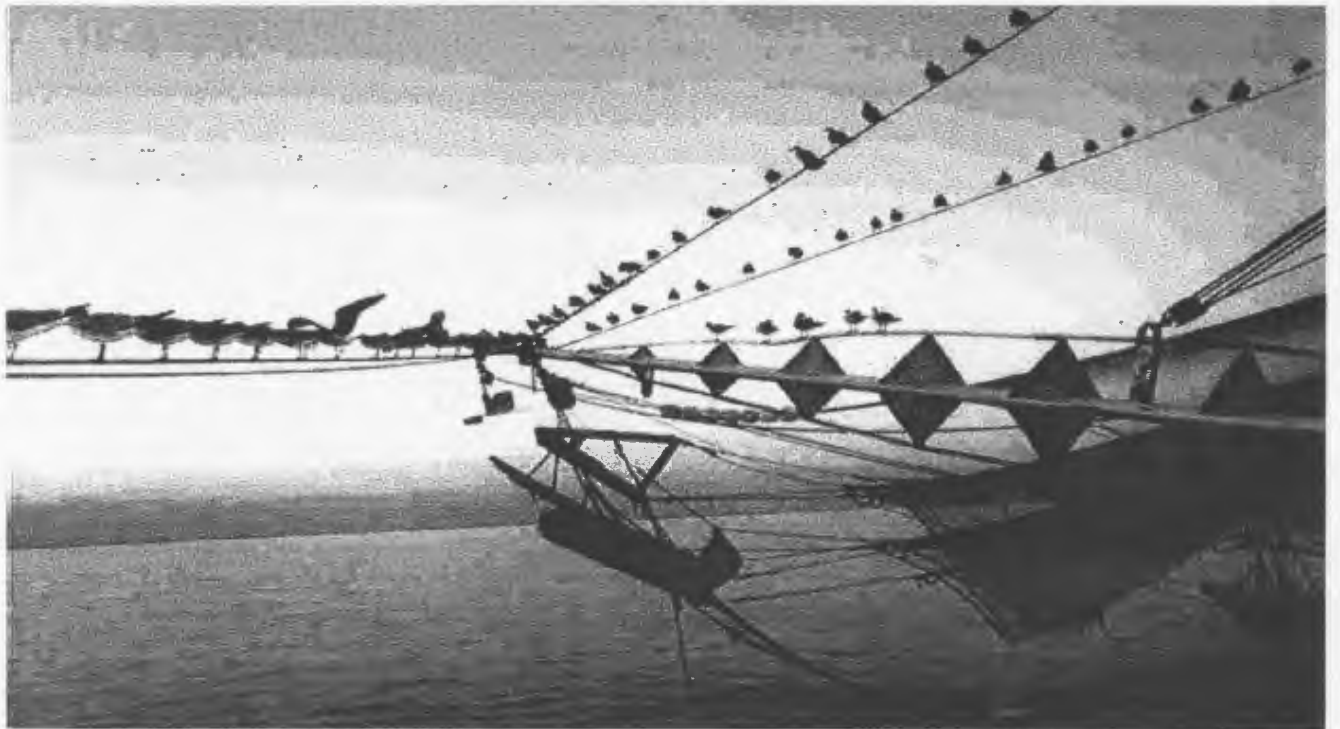


Photo Caption 4.12: "Hitching a Ride"

Table 4.7

Fishing Is a Job and Way of Life

Fishers	Work	Time and Family	Feelings About Fishing
F1		Too much time away	Loves it but does not recommend it to others
F2		Away from family for weeks when fishing out of state	Very Proud
F3	"4,5,6-day Trips; gone for weeks if I am up north"	"Seems like I'm never home"	Honest living
F4		Rents home for family to be nearby when fishing out of state	Still likes fishing but "not as Much fun" as in past
F5	4,5,6-day trips	"Away a lot"	Loves fishing
F6	4 or 5 day trips	Away from home more than he likes, especially when fishing out of NC	Loves fishing
F7	6-day Trips	Home every other weekend during shrimp season	Has gotten sort of used to just shrimping. Misses the old ways.
F8	4,5 day trips	No longer goes south to shrimp	Does not like it as much as in the past

F9	6-day Trips	Away from home too much	Loves fishing
F10		Used to be away a lot but has slowed down so is at home more.	Loves fishing

4.6 The Impact of Pollution and Recreation

It was apparent from the interviews that the impact of pollution and recreational interests regarding the coast was very real to the fishers. They were also aware of the conflict that existed among the different groups interested in the resources that the coast offers. Table 4.8 shows that eight of the ten fishers commented or discussed the issues between commercial and sports fishers. Some of the fishers in this study had stronger feelings than others regarding the sports fishers. For example, some saw the sports fishers as a threat to commercial fishers and fishing while others seemed perplexed at what they perceived to be the sports fishers' strong feelings against commercial fishers and fishing. Table 4.8 also shows that six of the fishers in this study commented or discussed the water quality problem in eastern North Carolina waters. Some of the fishers spoke of the water quality problems as an accepted conclusion that everyone knows about. While discussing water quality the following statement portrays one fisher's understanding of the effects of pollution:

Any kind of pollution, you know . . . that affects us.

Another fisher discussed in detail the problems associated with water quality in nearby Pamlico Sound. His description revealed his knowledge of the area:

We got a bad water quality problem in the Pamlico Sound. To start with, all the inlets are filled up. Can't nothing get in and out of the ocean really, I mean no volume at all. Use to, everybody complained there was no croakers or trout in the sound for sport fishing now, but there have been the most of them [croakers] in the ocean than there's been as long as I can remember. Most croakers there's ever been, but they won't come in the Sound. They'll come right up to the inlet, turn off and go on back up the beach, and they're going up the Chesapeake Bay. You can near about walk on croakers up there right now. The croakers will go up to Chesapeake Bay and they won't come in to the Pamlico Sound. I don't know what to say. I don't know if it's the water quality or the inlets are not just deep enough. They have got the inlets closed right in; it's just like a little ditch. I think they are trying to stabilize them too much. Don't let them do naturally. I don't know exactly, you know what's doing all this. I'm thinking if they could go take about a mile off the end of Ockracoke or up there around Oregon Inlet and pen up a mile hole, you would see all the difference in the world in the Sound, what it could produce.

Comments on the sports/recreational fishing industry brought out the fishers' concerns of being overlooked as when the following fisher alleged:

With the sport industry, [commercial] fishermen are not very important no more.

Another concern for the fishers is that while there are many more recreational fishers than commercial fishers, the recreational fishers are generally not a part of the day-to-day coastal environment. Because of this, the recreational fishers are seen as not having a deep understanding or knowledge of what is really happening in the fisheries and to the coast. One fisher indicated:

They should start a new group [to regulate the fisheries]; put fishermen in there, somebody that knows something about it. You know, a lot of the recreational people, they go in there and they are anti-this and anti-that, but they're not educated. They don't really know, they just know what they have heard. They don't really know the facts on what's going on.

Table 4.8

Impact of Coastal Pollution and Tourism

Fishers	Sport Fishing	Water Quality
F1	They don't seem to like commercial fishermen much	
F2	They think they know everything	

F3		Some fishing places - choked with sea grass
F4	They are anti this & anti that	Bad water quality
F5		Too much oxygen in the water...they say it is from bad runoff...
F6	They are a threat to us	
F7		Bad water quality
F8	Sports fishers are more important	
F9		Poor water quality
F10	They don't want us around	Bad water quality

4.7 Summary

Although the majority of fishers interviewed for this study still enjoyed fishing, they did not enjoy it as much as in the past. The one exception, a captain who had great difficulty transitioning to the requirements and results of new regulations indicated he would retire as soon as he reaches social security retirement age. All of the other fishers stated that they will continue to fish as long as possible.

The first question of the research asks, "How are fishers making sense of changes in the fisheries?" The participants in this study were downsizing, which not only included selling the large boat/s and buying smaller boats but also consisted of keeping their current boats and purchasing additional boats that include specific licenses and permits. In the historically multi-species fishery of eastern North Carolina these additional permits

allowed the fishers to continue fishing for more than one species of fish, which has long-term economic benefit to the fisher. Several captains in the study did not have flounder permits which meant they could not participate in this traditional late fall and winter fishery. These captains' inability to participate in this fishery severely limited them economically. While the majority of the fishers worked only on their own boats, the three captains who did not have flounder permits sometimes worked other jobs in the off-season. One captain worked in a fish house owned by a family member, another fisher captained other boats or sometimes even worked as a crewmember, and only one had so far worked outside the fishing industry.

The second question of the study, "What external forces and aspects of fishing do these fishers believe have an impact on their way of life?" According to the fishers in this study the greatest impact on their way of life came from fishery regulations and secondly, not having a voice in constructing these regulations. These two factors resulted in difficulty earning a living and paying for needed health and boat insurance. The majority of the fishers could no longer afford health insurance. Only one of the fishers had boat insurance and while all of the others had boat insurance in the past, they could no longer pay the expensive premiums.

The third question of the study asks: "What do fishers anticipate for the future"? The fishers interviewed saw a bleak future for fishing, but the majority asserted that they will continue in their family traditions as long as possible. The captains believed that both the fishing industry and their personal futures were in jeopardy. There is an extensive list of factors that not only influenced the fishers' views of the future but more importantly

why they persisted in an industry that appears to have such an uncertain future. Age (the majority between the ages of 40 and 60 years), educational levels (middle school through high school), their young start in fishing, the early influence of fishing fathers and grandfathers, and immediate family members still fishing may all contribute to the fishers' plan to stay in the troubled industry. Even though the fishers spoke of increased worries and stress and time away from family, they also spoke of still finding joy and peace in being out on the water. Often in the interviews the fishers confided "having fishing in my blood." They also spoke of the extensive investments that they had in their boats. Some of the fishers believe they will never recoup what they have invested and their plan of selling out, as a part of a retirement plan no longer looks as promising as it once did. The fishers also discussed health issues and the losses of life at sea that some had experienced. They felt frustration at the lack of knowledge the public exhibits about commercial fishing and especially their perception of lawmakers' lack of knowledge and political games. The fishers expressed concern about recreational/sports fishers based on knowledge of what has happened in other states with this group. They were uneasy that powerful groups of sports fishers might negatively impact the future of commercial fishing.

Overall the participants struggled to make sense of regulations imposed on their work. All had strong and early connections to the fishing way of life, and in spite of everything the majority of the participants continued to like their work. Some liked it less now than in the past, but none of them could seriously imagine doing any other type of work.

The old ways of making sense of events in the fishers' lives have been challenged and a new reality is emerging. In the past the fishers' realities were rooted in the knowledge that they were part of a long line of generational fishers within the same family, the belief that the fishers and their children would always be able to fish, the belief and even assumption of earning a good living (ability to buy a boat, a house, educating children), fishing as a strong and even proud tradition, and the ability to bounce back after a lean year of disappointing catches. Again, their reality was constructed on the premise that one would always be able to fish. Although the photographs illustrate a pictorial account of the fishers' world and give us insight into what creates their reality, just as significant is what the photographs elicited from the fishers in the second interview. As with any interview it is sometimes what the participant did not say—the look on their faces when they viewed a photograph of a sinking boat, a burned boat, a sunset, or a deck loaded with fish or shrimp. The photographs and interviews worked hand-in-hand and together created a depth and richness in the data. I am convinced that some of the stories would not have been told without the photographs. I would likely not have been privy to the story about the sinking boat or the fishing family (discussed later in chapter five) who will need to sell part of their island because of the increase in a tax base brought on by an influx of wealthy coastal landowners. The use of a matrix summarized and gave another view of the data. The intent of this study was always for the voices of the fishers to be heard and my belief and hope is that this has occurred.

Chapter 5 provides a summary and integration of these results for each research question. Implications for practice, policy, and social work education are presented, with

the chapter closing with limitations of the study and recommendations for future research.

CHAPTER 5

. . . . And They Continue to Fish

I was also a shrimper's son in love with the shape of boats. I grew up a river boy with the smell of the great salt marsh predominant in sleep. In the summers, my brother, my sister, and I worked as apprentice strikers on my father's shrimp boat. Nothing pleased me more than the sight of the shrimping fleet moving out before sunrise to rendezvous with the teeming shoals of shrimp that made their swift dashes through the moon-sweetened tides at first light. My father drank his coffee black as he stood at the wheel of the boat and listened to the heavily accented voices of the other shrimp boat captains keeping each other company. His clothes smelled like shrimp and there was nothing that water or soap or my mother's hands could do to change that. When he worked hard, his smell would change, the sweat cutting into the odor of fish and becoming something different, something wonderful. Standing beside him as a small boy, I would press my nose against my father's shirt and he would smell like some rich, warm, acre.

(Conroy, 1986; p. 4)

5.0 Introduction

The original aims of this study—listening to the voices of the fishers about how they are making sense of recent changes in the fisheries, what external forces have an impact on their way of life, and what the fishers anticipate for their futures—were all addressed in this research. The study reveals that these fishing captains were going about their work differently, regulations were the strongest external force affecting their day-to-day way of life, and hope for the future was at an all-time low. A goal of the study was to gain the fishers' perspectives on what was happening in their lives related to fishing. As the

fishers believed that they had no voice in decision-making within the industry, providing an opportunity for them to present their thoughts and beliefs was of paramount importance in the study. These captains were valuable informants because of their years of experience as fishers.

In addition, although not an aim of the research, a parallel process occurred for the researcher stemming from her unique position in the study. This position is explored in relation to how it influenced the study. Finally, the conclusions that emerged are discussed as well as implications and recommendations for further research.

5.1 Parallel Process

Early in chapter one, I spoke of my place as the researcher in this study. My position was an odd one, neither exactly inside nor outside of the research. In some ways I had a stake in each discussion, but in the end this situation seemed to add to the research rather than create problems. From the first interview, the fishers seemed to have a level of trust that was of note because, according to many of them, they had negative experiences involving past research. My history and family connections to the industry, I believe, gave me an inside track that was beneficial to the research process. The fishers likely made assumptions that I would not try to use what they said in their interviews against them because in some ways I was “one of them.” I felt honored that they trusted me with what ended up being their powerful stories. Although it is the task of any researcher not to compromise the participants of a study, my connection to the fishers made this burden seem especially heavy for me. I believed and felt that by having insider information and

experience that this gave me added responsibility and high expectations regarding my work from both the fishers and myself. I felt a need to get the research “right” in the sense of representing and interpreting what the fishers said in their interviews to a public that does not always seem interested in this group and their experiences. Because it appeared from the beginning that the research participants had limited power in what was occurring in regards to the fisheries, I was especially conscious of sharing their stories in a way that might be helpful to them but certainly would not make their situation any worse.

A great part of social work education fosters the growth of self-awareness in students with the intent of laying a foundation for self-awareness in social work practitioners. According to Kondrat (1999), “professional self-awareness is widely considered a necessary condition for competent social work practice” (p. 451). It seems reasonable that this same cultivated self-awareness makes social workers unique candidates for carrying out research that has components of both being inside and outside of the population being researched. I certainly believe that my social work training in self-awareness was beneficial in this work.

In many ways, the research process was twofold. There was a personal process that paralleled the professional process. While the professional process was about the fishers’ narratives, the personal process was about recognizing how growing up in a fishing family was woven into my own self-narrative and how this would affect the research. The interviews with the captains both brought back memories from my own past of growing up in a fishing family and community and justified my commitment of

offering them a place to tell their stories. At the same time, the distance created by education and living in another place provided another layer to my personal narrative as well as to the research process. It was a narrative that contained my own history and the history of my family but also contained my later history of education and leaving my childhood community. My early history and the more current history of a troubled industry drew me to the research. Most of all, though, I was touched by the troubled spirits of the fishers, and as the research progressed, I became curious about their tenacity and problem-solving ability applied in what many consider to be a dying industry. I believe my connections to the industry made me a better researcher, in part, because I was so afraid of making wrong assumptions because of my personal experience within the culture; I thoroughly and continually questioned everything I thought and did concerning the research. In the end this research study afforded me an opportunity to go back to my roots, a pursuit, which I believe, enriched the research. My past certainly influenced my commitment to and choice of topic and merged with my present role as a social work educator and researcher that allowed me (what I consider) a significant opportunity—hearing the stories of ten fishing captains.

5.2 Trying to Make Sense

The first question posed in this study was “How are the past/present fishers located in Scott County, on the coast of North Carolina, making sense of recent changes in the fisheries?” In answering this question as well as the other two questions of the study, the reasoning is grounded as much as possible on the data themselves. The fishers studied here believed that they must fish in a way different from that of the past in order

for their work and way of life to survive. What is also clear is that each fisher might interpret survival differently. Continued existence for the fishers may depend on how well they make sense of changes in the industry and also how they incorporate these changes into their everyday reality.

5.2.1 Formulas for Survival

As reported in chapter four, it appears that there is no one formula for survival that works for all fishers in the group. Some have sold their large boats and bought one small boat, while others have added one or more smaller boats to the one large boat that they had in the past, thereby creating a small fleet. Decisions regarding the selling and buying of boats are directly related to the purchase and ownership of permits and licenses to fish as well as the economics of operating a smaller craft. Because no one knows what new regulations may be coming in the future or the effects of global economics on the industry, it is difficult to know which decision is best. Therefore, no matter what formula fishers use for survival, speculations about the future are always a gamble. While chance has always been associated with the industry, the new layers of regulations and global economics make speculations about surviving in the industry a much more complicated gamble than in the past. If nothing else, the added layers lengthen the list of factors that appear to be out of the fishers' control.

5.2.2 The Paradigm Shift

Given their choices, the direction in which the fishers are moving does not fit with the commons theory of exploitation of resources. As discussed in chapter two, the tragedy of the commons theory is that if no one has ownership of an entity and this entity

(for example, the ocean) is common property with access by everyone, then no one will take responsibility for it. The end result will be destruction, overexploitation, or both. True, on the one hand, the fishers in this study resisted the changes in the industry and indicate that although they did not always agree with the constraints connected to regulations within the fisheries, legally they must work within the regulatory guidelines mandated by Marine Fisheries. On the other hand, the fishers were willing to be as creative as possible in order for the fish, a way of life, and the fishers themselves to survive. The fishers attempted to make sense of the changes by rethinking how they fish and to make changes that might help them fish until retirement. Although the fishers found it difficult to give up past ways of fishing that encompassed fewer restraints regarding limitations of the catch, rather than giving up fishing altogether, they seemed to be moving toward a new/old paradigm—one of smaller-scale fisheries. Much of the research on smaller-scale and community-based fisheries (Pauly, 1999; Pinkerton, 1987, 1999) indicates this method leads to better results in management of the fisheries.

I checked my findings with Jerry Schill, the president of the North Carolina Fisheries Association, and he responded by saying that “there’s nothing I can add. The fishermen don’t really share that kind of information with me voluntarily, and I haven’t had the need to dig into it” (Schill, personal communication, October 4, 2003). I also checked with two fish house owners in the geographical area of the study and one responded:

I would say that [my findings] was an accurate take on why fisherman are downsizing by buying smaller boats instead of hanging on to their larger one boat.

The fact that [they] are limited in what they can catch [regulated], means that it's cheaper to operate a smaller boat. They don't need as big a boat to catch a smaller limit. The permit deal is a factor as well in some cases. They are buying boats for the permits and transferring the permits to smaller boats since they can't go larger anyway.

The other fish house owner agreed with the findings and expressed similar beliefs to the first one.

5.2.3 Change Is Not Easy

The results of this study may be consistent with McCay's (1999) findings that show the difficulty fishers have in moving from a way of thinking that is embedded in certain beliefs. McCay's findings were based on crab fishers in Newfoundland and the struggle the fishers had in moving to the use of an individual transferable quota system. Difficulty in moving to a different way of fishing altogether, as is the case of the North Carolina fishers, could mean that McCay's findings have broader implications and extend to what these troubled fishers are experiencing in rethinking and reorganizing their ways of fishing. As mentioned previously, the fishers in this study are having difficulty moving to a new paradigm that for example, sometimes includes selling their large steel hull boats for smaller wooden ones. Both McCay's findings and the findings in this study are similar in that they offer a perspective that assists in understanding the dilemma fishers experience when making any substantial change in how they think about fishing compared to fishing in their recent past. The fishers in this study may be on their way to once again developing a smaller scale sustainable fishery similar to the smaller scale

fisheries of North Carolina's past but whatever they decide in the long run, it will not be easy.

5.3 External Forces

The second question of this study was "What external forces do these fishers believe have an impact on their way of life?" For North Carolina fishing captains, both the increase in fishery regulations and having no voice in decision-making regarding the regulations are the most problematic on a daily basis.

5.3.1 Regulations, Regulations, Regulations

Throughout the study, participants commented on how some of the regulations were positive, but in their eyes many of the regulations resulted in wasted resources like the fishers' time, fuel, and perhaps viewed by the fishers as being most wasteful—dead fish that had to be thrown back. Clearly, science does not have all the answers as to the best way to sustain the fisheries. Although Pauly (1999) stresses that "excessive fishing reduces stocks and eventually causes them to collapse" (p. 359), he also highlights the significance of place. The results of this study are consistent with Pauly's (1999) argument (as discussed in chapter two) for the importance of considering the different aspects of place and the interdependence among these aspects. The aspects of the places of people, small-scale fishing communities, other stakeholders, and fish will all need to be considered if fisheries management is going to be effective. The results are also consistent with Pinkerton's (1999) argument that local knowledge should be considered and she uses the example that there are over fifty "well documented cases of problem

solving by local bodies in pre-industrial and post-industrial settings” (p. 340). Local knowledge should not be discounted because it is not considered to be professional knowledge. I believe we sometimes confuse professional knowledge with formal knowledge. Is the fisher not the professional in the world of fishing? Because the fisher does not have a degree in biology does not mean, for example, that he does not understand the importance of or the quality of water, or that he does not recognize the changes in fish stocks. For years fishers have managed to buy and equip boats, take care of upkeep, hire and fire crews, fulfill increasing requirements of permits, licenses, and government paperwork, and more. So, why could local fishing people not assist in solving problems in the fishing crisis? Both Pinkerton and Pauly argue that there is a growing need for co-management of the fisheries that would include the fishers. The findings are also consistent with Griffith’s (1999) view that there is a need to add to scientific knowledge by integrating the “intimate understandings of coastal ecosystems that fishing families possess” (p. xii). The question remains, “How can we best create a sustainable fishery”? The answer may lie in incorporating many kinds of knowledge, including the fishers, in whatever plan evolves.

5.3.2 No Voice

The captains were uniform in their belief that their knowledge is unappreciated and leads to no voice in decision-making regarding regulations. This appeared most dramatically in the interviews when the captains spoke about the Marine Fishery meetings. These meetings occur in particular locations throughout coastal North Carolina with places and times publicly announced. When the industry first began to be more

closely regulated, there were many meetings that the fishers were invited to attend.

According to the fishers in this study they all attended the meetings faithfully for the first few years. But gradually the fishers came to believe that the meetings were perfunctory and considered by the state marine fisheries organization as the politically correct thing to do. Eventually the fishers stopped attending the meetings because they never saw any results that came from their input.

5.3.3 A Global Economy

In addition to increased regulations and no voice in decision-making regarding fishery decisions, fishers are adversely affected by the globalization of local economies. Half of the captains in this study now depended on the shrimp fishery for the largest portion of their income. More shrimp were caught off the North Carolina coast in the 2002 season than in many years, but the price of the catch was at an all-time low because of a market glutted with imported farm-raised shrimp. Market issues come with the territory of fishing, but they become much more critical when so many other uncertainties abound. For example, most of these fishers would struggle financially to get through a poor season, but in today's uncertain fishery two bad seasons could sink them because they no longer have the resources to see them through bad times. The 2003 season looks bleaker because of even lower prices due to a glutted market from international farm-raised shrimp and signs of fewer shrimp in North Carolina for the season, but it is too early to know the final outcome for sure.

5.4 Being a Fisher Is Not As Satisfying as It Once Was

According to the fishers in this study, the results of increased fishery regulations, no voice in decision-making, and a global economy often lead to feelings of frustration and despair for the group, a situation that is consistent with Hooper-Brian and Seck's (1995) study on the negative impact of economic change. The findings are also consistent with Goldberger and Breznitz's (1993) classic work on stress, which makes the point that little participation in decision-making and ambiguity about job security "correlates with job-related tension and job dissatisfaction" (p. 348). Although fishing is an unusual occupation with unusual stressors (danger for example), it appears that the Hooper-Brian and Seck (1995) findings as well as the Goldberger and Breznitz (1993) findings extend not only to mainstream groups but extend to fishers as well.

5.5 The Future of Fishing

The third question of the study was "What do these fishers anticipate for their future?" This question caused pause for many of the fishers interviewed. When field notes and taped interviews were reviewed at least seven of the ten captains paused for a moment when asked about the future. I was immediately reminded of what Sinclair (2002) said in a presentation to the Workshop on Rural Canada when he gave his thoughts on the future of fishing in rural Newfoundland and Labrador and declared that "The fishery is not dead . . . I am unsure what the future will look like, but it likely will be precarious and will not sustain as many people as in the past" (p. 16). What came

through in the interviews with the fishers in this study was the tremendous uncertainty the captains felt about the future for themselves and the whole fishing industry.

5.6 If There Is a Future in Fishing, Who Will Be the Fishers of This Future?

At least one of the fishers will be the last in his family to fish. This seems significant when one considers that his family migrated to the United States from Holland because of religious persecution. He was able to trace five generations of fishers in his family. He is a proud fisher who during one of the interviews shared old black and white photographs of the boats owned by his father, grandfather, and great-grandfather. It was interesting that he shared pictures of the boats – not the family members who owned the boats.

Based on this research it appears that the next generation of males will not automatically go into fishing as in the past. The fishers in this study do not advise family members to choose fishing as an occupation for the future. Fishing has become too complex and too difficult. Although permits and licenses may be handed down, there are times when the captain will still be working and not ready to hand down the permits to the family member who may be ready to take over the family boat. As early as the fishers in this study began their careers and often their families, they could easily be 35 years old when their oldest child graduated from high school and have many years ahead of them to work. In the past fishers could help family members get a start in the business of fishing in a number of ways. For example, they could help them buy their first boat, help them equip a first boat, or assist them in obtaining a loan from the bank where they (the

captain) had standing. It is a new day and these methods are no longer available for most fishers to give or receive. Even if a boat could be purchased, what good is a boat if no permits are available?

5.7 The Real Story

In the following section an interpretation of the research findings is presented. It is a story within a story. It is a story of determination and tenacity. It is a story of unwelcome change for the fishers that are complicated by a need to create a sustainable fishery with shrinking resources. It is the story of sometimes hidden agendas playing a role in the control of these resources. It is about the use of power in controlling limited resources, which is an old story, but it becomes more prominent as the resources shrink. This is a story about regulations that do not make sense to the fishers rather than resistance to regulations generally. It is a story about the connection between environmentalists, recreational fishers, and commercial fishers and their seeming inability to collaborate in respectful and meaningful ways to establish a sustainable fishery that can benefit all involved parties. It is the story of historical elitism and classism bound to work, leisure, and resources. Finally, the most significant story that emerges from this study is one of the determination and tenacity of a group of individuals who in spite of tremendous odds continue a kind of work and lifestyle that they began as children.

5.8 When Creating a Sustainable Fishery,

Where Is the Place That Honors the Fishers' Ways of Knowing?

Hartman (1994), in a collection of essays on social work argues, "There are many truths and many ways of knowing" (p. 13). She further asserts, "Each discovery contributes to our knowledge, and each way of knowing deepens our understanding and adds another dimension to our view of the world". Is one way of knowing then, more important than another way of knowing? How do we evaluate ways of knowing? In the American culture, scientific knowledge is highly valued. Belenky et al. (1996) in their work on women and ways of knowing argue:

In the institutions of higher learning most of these women attended, the subjective voice was largely ignored; feelings and intuitions were banished to the realm of personal and private. It was the public, rational, analytical voice that received the institutions' tutelage, respect, and rewards.

(p. 124)

In this study I have analyzed the fishers' interviews and their photographs using the constant comparative method discussed in chapter three, and I have also had the fishers speak for themselves by using quotations directly from their interviews. True, the power that comes with the fact that "I" chose the format for this study, the guiding questions for interviews, and the quotations that were used to illustrate what (I thought) emerged as important points in this work cannot be discounted. But my goal was always to listen to the voices of the fishers in a way that valued and respected their knowledge. Listening to the fishers in this study one realizes that much of the fishers' knowledge comes from

experience and observation of their environment over long periods of time. Some of their knowledge is tacit—somehow they just know. They cannot verbalize how they know—they just know.

Again and again in the interviews conducted for this work the fishers spoke of their frustration about regulations that did not make practical sense. The results of the study indicate that the participants have useful and specific knowledge about their environment that comes from daily contact. Integrating the fishers' ways of knowing with the scientific knowledge could result in more effective ways of managing the fisheries. But the fishers believe that they live in a world where politics plays a critical role in resource distribution and at best their knowledge is discounted, and in the worst-case scenario their opinions are not heard at all. The fishers are suspicious of politicians as too often influenced by who can contribute economically to their campaigns. They understand that political power influences who is heard on what subject. This situation does not provide fertile ground for collaboration between groups. Not considering all knowledge sources regarding sustaining natural resources is a luxury that our planet with our increasing population and shrinking resources can no longer afford.

There are a number of reasons that the knowledge of fishers is not given the same weight or respect as other individuals who are involved in fisheries decisions. Although based on this study and others (Brakel, 2000; Garrity-Blake, 1994; Griffith, 2000) the fishers possess in-depth ecological, tacit, and experiential ways of knowing coming from years of often-daily encounters in their work areas, they are not seen as having expert knowledge that could be helpful in creating a sustainable fishery. Brakel (2000), based on

the work of Borofsky (1994), posits that “people who have interacted with an environment for a long time [sense of place] know much more about it than they can say, and certainly more than an anthropologist can say” (p. 26). She argues that fishers illustrate this kind of knowledge in the way they “observe changes in nature and learn how to fish” (p. 26). Yet another view of place comes from the work of Pocius (1991) whose work in the fishing community of Calvert, Newfoundland led him to assert that in this community “life is the sharing of space” (p. 298). This sharing of space as Pocius describes it includes “an entire community sharing the resources that surround it, the resources of land and water, all shared through systems that ensure knowledge of place and equity of product” (p. 298). It is difficult to talk about fishers without discussing the importance of the concept of place in a fisher’s life. According to Garrity-Blake, based on her (1994) work on the Menhaden fishery, “just as fishing was considered a natural activity, a waterman’s understanding of the environment was considered intuitive, not intellectual” (p. 68). Fishers were successful because they could “read signs” and they just knew things (p. 69). Griffith (2000) gives a telling account of what happened when he was collecting information for a state committee that would propose new fishing regulations to the state legislature.

At one committee meeting, I made the seemingly innocuous comment that commercial fishers observed and monitored the resource through the year day in and day out and that regulating them off the water would upset the balance of predator and prey. For saying this, the committee chairman took steps to have me screened and censored before future presentations. (pp. 110–111)

The idea that fishers having knowledge could be helpful in the fishing industry is seen as somehow suspect. This way of thinking seems akin to organizations that treat parents as suspect when the parents advocate for their children (as in some public schools). It is as if because the fishers' livelihood comes from fishing, their view is so subjective that it is not useful or does not count.

In the following section, changes in the wording of fishery amendments that made fishers less visible in the industry are discussed. In addition, public views of fishing that include ideological views of nature and wilderness, and the underlying issues of class connected to power are viewed as playing roles in dismissing the fishers' knowledge as expert.

5.9 The Fishers Are Invisible in Regulations

The results of this study indicate that the fishers believed regulations do not include their interests and that they are barely visible to policy makers. One example that supports the fishers' beliefs is the change in the status of fishers that occurred 25 years ago in the August, 1978 amendment to the Magnuson Act. In this act the term "United States fishermen" was changed to "United States fishing industry". In the six purposes listed in The National Fishery Management Program the word fishermen is mentioned only once. "Conservation" is mentioned four times and "manages" or "management" is mentioned seven times. There is much written about the industry, regulations around the catch, size of catch, and limitations in general. Much of the document is about the punishment of fishers who disregard or break regulations, etc. There is no mention, however, of making

use of the knowledge that comes from the individuals who earn their livelihood by fishing and often have many years of accumulated knowledge regarding their work.

5.10 The Impact of Nature and Wilderness Ideologies

The fishers spoke of their work being unimportant to the public. The public view of fishing for commerce is not always favorable to the fishers. In her study on Alaskan fishers who fish in Glacier Bay National Park, Brakel (2000) speaks of her own increasing awareness of mainstream views of fishing that are quite different from the fishers' views. Mainstream views include "a remarkable amount of misinformation about fishers, misinformation that would tend to increase the negative way in which fishers are viewed" (p. 14). The Glacier Bay fishing controversy centers on closing park waters to commercial fishing. "Ongoing biological studies in park waters could conclude that there is evidence that fish stocks have been depleted, or that habitat has been damaged, but these studies have not done so to date" (p. 13). Therefore, Brakel believes that closing park waters would be based on "ideological rather than on biological or legal considerations" (p. 13). Brakel (2000) lists eight nature ideologies that are often used to argue against the fishers' use of nature or their place in nature:

1. The idea that the wild, or "wildness," should be separated from the human-controlled and used environment;
2. the perception that mobile and flexible use of territory is suspicious; and that
3. agriculture is more acceptable than hunting (hence aquaculture is more appropriate than catching wild fish);

4. "wilderness" is a sacred category whose purity is essential;
5. man is a visitor to wilderness and does not remain;
6. productive human labor should not occur in wilderness;
7. work is therefore not an appropriate way to learn about nature; and
8. there are two kinds of nature, utilitarian and 'wild,' each treated very differently. (p. 147)

The Puritan work ethic has historically been highly valued in America and connected to religion and spirituality—"idleness is the devil's workshop". It seems curiously out of place then that work in natural settings has come to be viewed as unnatural and inappropriate. It is all right to play or recreate in wild and natural settings and even to view them as sacred but not to work in them.

5.11 The Impact of Work, Leisure, and Coastal Development

Sustainability is more than a resource issue. In chapter two, Garrity-Blake's (1994) views on the division Americans make in work and leisure were discussed. Coastal development, for example, is often guided by attracting vacationers and retirees and has little consideration for protecting fragile ecosystems and legitimate conservation efforts much less respecting fishing families who may have lived for generations on the coast. One of the fishers spoke of the development of the Outer Banks of North Carolina:

The Outer Banks is really a threat to us; you know the buildup of the Outer Banks, I think is a big threat. Once they get that, man makes all kinds of rules and regulations and the fisherman does not count. I

have seen that happen on Long Island.

Later in the interview the same fisher pointing to a boat moored at a fishing dock that he had photographed for the study began to relate the history of the family who owned the boat:

They have one, two, three boats and they have their own fish house too, next door to this one. And uh, it is quite a history to that family really and the man [father] that had this boat [in following photograph] he just died a year ago and they [his family] are having a struggle keeping everything with taxes because you know fifty years ago [when he purchased] an island, hey big deal, who wanted an island?

[The island is still only accessible by boat] Today everybody wants an island and the value goes up so high. They are worth a fortune and they cannot hold on to their own island on account of taxes, because they are working people. So they are going to have to sell things just to stay alive.



Photo Caption 5.1: Family Fishing Boats

The island is close to a large southern coastal city that has become a playground for the wealthy. With development comes an increase in the tax base and property values that often makes working and living difficult for a working class that has a history of living in the area. Building close to the water continues despite laws stating development in fragile coastal areas will not qualify for disaster assistance when needed. Laws and building codes continue to be circumvented by powerful interests.

5.12 Issues of Class and Power

Class issues that may be at the center of much of the debate among sports fishers, commercial fishers, and coastal development have been around for centuries. As

discussed earlier in chapter two, the growth of a leisured, sporting class really began to develop in the 1650s. By 1873, Charles Hallock began to publish *Forest and Stream* magazine. Soon after the advent of this magazine began the projection of the elite sports fishers who wanted to “protect” certain good fishing areas for their own kind. According to Griffith (1999) this method of attempting to control or have power regarding resources under the guise of conservation continues today. As some of the commercial fishers in this study were describing how unimportant they felt compared to sports fishers, a battle was taking place in North Carolina’s state capitol, Raleigh. The ten-year battle among state legislators debating whether or not to instate a recreational saltwater fishing license where one had not been required in the past has never made it through the North Carolina Senate. According to a debate published in Raleigh’s *News and Observer* between Dick Brame (2003), Atlantic States Marine Fisheries director of the Coastal Conservation Association (CCA), and Jerry Shill (2003), president of the North Carolina Fisheries Association, Inc.; the reasons given for and against the new saltwater license were titled: For—Saltwater license would provide resources for managing stocks” and “Against—Consider harm [to commercial fishers which might appear contradictory but will be explained shortly in this section] that would come from what happened elsewhere.”

Revenue from the license could provide as much as \$6 million to \$10 million dollars; but according to Dick Brame (2003), director of CCA, the “anglers [also] want oversight of how the money from a saltwater recreational fishing license is spent” (2003, ¶ 7) . . . In Shill’s article he pointed to the 1999 issue of *Field and Stream* magazine, where national (CCA) founder Walter Fondren of Houston made his case for “all coastal

states to have a recreational license for ‘political leverage’” (2003, ¶ 6). Commercial fishers are against the salt-water fishing license while sports fishers are in favor, which on the face of things makes little sense since commercial fishers pay considerable amounts of money for their licenses and permits. Why would they not want the sports fishers to also pay for the privilege of fishing? A closer look, however, reveals that if power in decision-making regarding the fisheries is related to numbers and money, then the “estimated two million marine anglers” (Brame, 2003, ¶ 3) could have much to gain from the license. Historically in the states where the recreational saltwater fishing license (RSWFL) has been introduced, commercial fishers have not fared well.

If they advocate the RSWFL for political leverage, and that advocacy is in writing, and they have a history of hurting commercial fishing families [net bans, designating certain species as game fish, etc.] in other states, how on earth does anyone expect us [commercial fishers] to endorse such a license? (Shill, 2003, ¶ 14).

The fishers in this study suspected that passage of the RSWFL would mean that they would have even less voice in the fisheries of the future.

5.13 I Will Let You Know When I Am Ready to Quit

The most important theme that emerged from this study may be about why fishers remain in the industry with all the hardships attached to this way of life. The fishers exhibited characteristics of “dogged tenacity” when it came to continuing their way of life. According to *Merriam-Webster Online*, the definition for “dogged” is “marked by

stubborn determination.” (Retrieved June 2, 2003). Interestingly, the synonym given for “tenacity” is “courage.” What is there about fishing, with all of its issues, that makes the fishers persist in their quest to fish for a living? Is it stubborn determination or courage or both? Perhaps for the fishers pursuing a worthwhile social goal such as feeding the masses plays a role in their tenacity or courage in persisting in their way of life. As discussed throughout this paper fishing has always had its obstacles. Historically there have been the issues of uncertainty related to weather, catch, price of the catch, and danger surrounding the work. As this study reiterated, the loss of life while fishing is not uncommon. But in addition to the problems that have always been inherent in the industry, the past decade has introduced more complex and difficult concerns.

According to the fishers in this study, the outlook for the future of fishing appears bleak. They would not encourage the younger generation to enter this work. Some of the fishers question whether they will be able to finish their own fishing careers. A number of them believe that fishing may be a dying way of life. Yet they do not seriously consider other work paths. The fishers continue to fish.

What is there about fishing that made the fishers so determined—perhaps stubborn—about their way of life? It is true that they have no training for other work, that available work is limited as is their educational backgrounds. But these issues are only a part of the story. I would argue that there is something else at work here. One of the older fishers in this study has had five heart attacks and currently suffers from cancer. When he was interviewed, he was still working. It did not appear that he was working because he needed the money. He had already paid for his boats and his beautiful family home on the

water, and he was putting one of his sons through medical school. He made a lot of money in the 1980s and invested it wisely. Still he continued to fish.

5.14 Early Identity Formation

One of the original themes that emerged from the interviews was the very early age at which the fishers began going out on the boat to fish. Most of these fishers were between the ages of 5 and 13. In fact, only one fisher began at 15, and this seemed almost old because the others began prior to this age. So early on the participants' world was constructed around fishing. Even before they began to go out on the boat to fish, they likely saw their family members come in from the boat. They probably heard conversation about the catch, crew problems, and saw preparations being made for the next trip such as getting ice, fuel, and groceries. Even before they were old enough to go to sea, they may have gone to the boat with their family members to make these preparations for the next trip. In my own family my father would bring home the money he had made and my job when I was in grade school was to "help" count the money out and put it into piles as to where the money would go each week. I mostly remember the pile that went to the man who had financed the boat for my father. In fishing families life revolves around the boat and fishing. Keeping the boat going comes first because in a fishing family there is usually limited or no income without the boat. The role of the boat cannot be over-estimated. While children growing up with parents who go to work each day may not have a real sense of what their parents' job entails, the child of a fisher likely understands the importance of the boat and fishing in the life of the family. If according

to the constructivist perspective, human actions are strongly influenced by the surroundings in which they occur, then for the fishers in this study fishing at a very early age influenced their reality.

Another significant factor in the study was that the fishers not only began fishing early they also began their work of fishing with their fathers and grandfathers. According to *Merriam-Webster Online*, one definition for “acculturation” is “the process by which a human being acquires the culture of a particular society from infancy (Retrieved June 2, 2003) If individuals have different ways of making sense of events and create their personal realities based on how they interpret what is going on around them, it is likely that the fathers and grandfathers of the fishers in this study had strong influence on how the fishers interpreted and constructed their world. Given that the fishers in this study were included and maybe even indoctrinated by close male role models in the ways of fishing from a young age, this early environment may play a role in why they hang on to this way of life so tenaciously. Bourdieu in his (1990) work, puts forth the concept of habitus, an idea that “what is learned by body is not something that one has, like knowledge that can be brandished, but something that one *is* [emphasis mine]” (p. 73). According to Bourdieu, habitus begins developing in childhood and is developed further through work. Bourdieu’s idea of culture develops from habits of mind and body acquired through doing, as in the actions of our daily life. Both the construction of their reality and the culture of fisher-captains in this study are likely to have developed from their early roots in the fishery with close family role models *and* through their constant

fishing habits. It is likely that both concepts contribute to the fishers' self-narrative, which includes continuing to fish no matter the circumstances.

5.15 Self-Narrative as a Fisher

Perhaps a large and important part of the fisher's self-narrative is not about fishing as a livelihood but rather that of being a fisher. The captain is a fisher and that is who he (in this case) is. The fishers in this study have a self-narrative that encompasses the lives of earlier generations (they learn about fishing from their fathers and grandfathers), the fishing life that draws them, and their lifelong learning from experience, observation, and what they "just know". Their view of the future of fishing and their way of life all comes together from and within this self-narrative. In addition to frustration with present-day fishing, I sensed real grief from the fishers at the thought of leaving their way of life. Only one fisher in the study was giving any serious consideration to quitting the industry and he was planning to continue until he reached retirement age in three years. His interviews were filled with his family history of fishing for many generations and his feeling of loss was obvious in the way he discussed his present circumstances. He made it clear that he could not cope with all the changes in the fisheries and that he thought he would be dead from stress if he had not made the change to a simpler way of fishing. But all of the fishers in the study continue to fish.

5.16 Limitations and Strengths of the Study

The findings in this study from a small group of individuals who have a unique job and way of life cannot be generalized to a larger population. Nevertheless, they may have relevance to other small groups of fishers who live and fish under similar circumstances in comparable environments. The sample may be viewed as biased toward those who continue to fish since being an active fisher was a requirement for being in the study and retired or inactive fishers were not considered.

Another limitation of the study is that issues regarding power relationships on the boats were not explored and the views of the crew were not heard. As explained in chapter three, the reason for looking only at captain/owners is the issue of confidentiality and safety. In addition the economic investment is different for captain/owner and crew and may play a role in keeping the captain/owner in the industry. Still, individual methods of downsizing by the captains may pose particular threats to crewmembers in terms of employment and these threats were not addressed in this study.

A further limitation of the study was that there was not a guiding question focused directly to get at information about the fishers thoughts and feelings about both beginning to fish at such early ages and fishing with their father and grandfathers. It was not until I began to analyze the data that these two themes emerged. My insider connections to the fishing community and allegiances to fishers could also have predisposed me to a limited scope of critical analysis of the data.

Strengths of the research methodology included the receptiveness of the fishing captains to the study and the researcher. Although the participants' work presented

problems around scheduling appointments for interviews, they were very interested in accommodating the researcher. Once we began the interviews, the fishers overall seemed very engaged in the process. Almost all of them invited me to call or come back if I needed to talk with them further. There was not one fisher that I would not feel comfortable contacting again. It may be important to note that almost all of the participants mentioned memories of my fisher-father in the course of the interviews. This was another indication that led me to believe that at least a part of the fishers' trust and receptiveness to me as the researcher might have connections to my own fishing family background.

Another strength of the research was the mixed modes of data collection. Data were collected at three points in time. Each stage built on the prior stage of the data collection. Having the fisher-captains take photographs provided a method to determine what was important to them. The photographs provided yet another method of collecting data and added depth to the overall data collection. The constant comparative method was another asset. This method was used to develop themes and theory that emerged from and were grounded in the research. Finally, as discussed previously in chapter three, I enlisted the assistance of a colleague who had experience in qualitative research to review and give feedback on the interview questions for the study. A pre-test was also used to receive input from fishers not involved in the study on the questions to be used. This same colleague also read a section of two interviews and identified themes. We then compared my findings with her findings as a check of trustworthiness. An important check for trustworthiness was sending the participants a written draft summary of the

findings for their review and comments. Included with the draft summary was a cover letter (Appendix J) that asked the fishers to reflect on four questions in anticipation of the phone interview:

- Is there anything you disagree with in the summary report?
- Is there anything you would like to add?
- Do you believe this report reflects what fishers in your area are experiencing in today's fisheries?
- Did I miss anything important?

Since an aim of the study was to hear and understand the participants' views, it was vital for them to have final input. The questions to guide the final interview about the findings were meant to provide the fishers latitude to include pertinent feedback but also to help them feel free to focus on what they wanted to say. The questions were meant to diffuse any power issue regarding the researcher as expert. By providing questions that specifically asked, for example, "did I miss anything important?" indicated that I might have missed something of importance. Member checks are an essential element of trustworthiness and an added strength in the methodology of this study.

5.17 Implications and Recommendation for Further Research

It is obvious that there are problems in fisheries worldwide but the immediate issue for fishers in this study may have more to do with being a real player regarding decision-making about the future of the fisheries than about continuing to fish as they have in the recent past. Shouldn't decision-making include players who have diverse

knowledge whether it is based on a formal or informal ways of knowing? If numbers and/or clout such as found in sports fishers, ideological nature groups, the formally educated, and the wealthy—equal power, then the average commercial fisher will continue to have difficulty being heard. So where does this situation leave fishers and fishing communities? Here is a group of people who have fished for generations and who feel set upon in part by coastal development, recreational and sports fishing, environmentalists, and government decisions about the fishery that do not include the fishers' input. All of this has an underlying theme of fishing as work being not quite 'nice' in a natural environment that some would like to reserve for play.

According to Solomon (1976) when addressing black empowerment, "powerlessness of black individuals, groups, and communities arises through a process whereby valued identities and roles on the one hand and valued resources on the other are denied – all of which are prerequisite to the exercise of interpersonal influence and effective social functioning" (p. 12). On the basis of this study I would put forth that the participants could identify with much of the process that Solomon describes. Although the fishers in this study are Caucasian males, they are part of a specific group that is not a part of mainstream American culture. Their identity as fishers and the roles inherent in being a fisher are central to the reality of their lives and hold value for the fisher, fisher family, and community. How can the fishers move to be included in the powerful process of real decision-making regarding the fisheries and in a real sense their lives? The question ultimately becomes 'what can the fishers do to be heard' and require decision makers to be both responsible and responsive to their needs? In areas like Newfoundland

or the northeastern United States there are fishing unions. But in the southern United States there has historically been difficulty organizing any group into a union. In North Carolina there is a fishermen's association with a president who serves as a paid representative/advocate for the group. As mentioned previously in this study, out of approximately 5000 full time fishers in the state there are roughly 2000 members in the association. With only 40 percent of North Carolina fishers involved in the association this could have serious implications regarding change in the fisheries initiated by a collective of fishers.

The issue of power in the fisheries is an important one. What would facilitate collective action to increase the power of fishers? Is collective action even viable in an industry that includes for example different kinds of fishers scattered around the perimeter of the country in both rural and urban areas, the independent nature of fishers, the lack of control regarding time because of weather and locations of fish, and so forth? There is implied in this study an opportunity for collective action that could benefit the fishers and their communities. But for the independent nature of both fishers and rural people—both of which the participants are members, —the idea of collective action seems complex. Collective action is complicated by the fishers' views of who retains power regarding the fisheries. According to Sharp (1973) power is not about numbers and money but about people because in the end governments depend on people. Based on much of Sharp's (1973) work, Bicklin (1983) puts forth an interactive definition of power that includes notions which, "in addition to clarifying the dynamics of power, are of

obvious importance to community organization” (p. 18). Components of Bicklin’s model include:

- Power is not necessarily durable, monolithic, or immutable.
- The source of power rests with people and that it can and does change itself, belongs to no one person.
- Power depends not on quantifiable physical resources such as money or property, but on significance that people give to such things.
- Even legitimized power (that is authority) depends on the support of people to execute its functions.
- People fail to act in their own interests or for progressive interests because they perceive themselves as passive objects. (pp. 18–20)

Fishers will need to claim their power by shifting their thinking to a model that incorporates at least some of the ideas contained in Bicklin’s interactive definition of power. They will likely need to consider stepping out of their rather insulated but familiar place (both spiritual and physical) and risk shifting their thinking and actions for gain. Both the social and cultural place in the community that they have constructed for themselves will be especially vulnerable to survival without an economically viable way of life.

According to Harrison (1995), in his discussion of social work and community development “social workers recognize that community involves a sense of well-being and integration that comes from belonging to a functional group” (p. 557). Harrison

(1995) also notes that there is an increased interest in community development in social work and “the ideas of community and community development can be understood most fundamentally in terms of the constructions of social reality that they represent and the practical benefits that can be made of them (p. 561). There is a role for social workers in joining with the fishers in working to create a more optimistic future/reality for their group.

For fishing communities the possibility of a total collapse of the fisheries is not just an academic, political, or scientific debate. The threat is not only to the livelihood of the fishers but to their way of life. As stated throughout this work, changes in the fisheries have social as well as economic impact for this population and their communities. Following this group over the next 10–20 years in a longitudinal study could yield more in-depth knowledge and information outside the scope of the present study. While the past decade has been difficult, the next decade may be even more challenging for the participants. The fact that the United States does not have a federal health insurance policy in place to benefit all its citizens leaves whole segments of the population without adequate health care. Added to this general reality of no federal health care plan is the fact that the fishers in this study are part of an aging group, which makes the health care issue even more problematic for them. The implications from this study are that fishers and their families are in an overall economically fragile position and no health care coverage leaves them even more vulnerable. Not only can many of them not afford health insurance, neither can most of the fishers afford insurance on their boats. Given the dangerous nature of their work, in addition to health and boat insurance, the

fishers need income replacement insurance in the case of accident or illness.

Crewmembers may be even more vulnerable than the captains because although the crewmembers have fewer expenses connected to their work than do the captains, the crewmembers also make less money and have less power in making decisions that might affect them.

For example, the fishers who are now depending on the shrimp fishery to stay in business are facing an uncertain future because of cheap prices for their catch related to imported farm-raised shrimp. Following this group to see what happens in the industry and how the fishers continue to make sense of and cope with whatever changes occur in the future, who survives, and who does not survive will be important in filling the knowledge gap that exists regarding the warm-water, multi-species fishers of coastal North Carolina.

Additional research that follows what happens to the rural communities where a fishing economy has been an economic mainstay for generations could result in knowledge that will guide both policy and practice decisions that affect rural populations in general and particularly the few remaining populations bound to resource economies. As discussed in chapter one, it is important for social work to understand the perceptions of fishers in order to devise interventions that address issues arising for this population, bearing in mind the resources that such fishers use. Although fishing is an ancient way of life, which persists in the 21st century, it remains one of the few resource-based economies left in the United States. An economy based on disappearing natural resources makes for a fragile existence and social work should be poised to both learn about and

assist any population in distress. As a social work educator I teach that, as social workers, we often learn more from our clients than our clients learn from us. This thinking honors and invites learning from, accepting, and respecting other ways of knowing and has potential to add to our learning and work with populations that have much to teach us.

5.18 Dissemination of Results of the Study

Portions of this work will be sent to various political representatives from North Carolina, the president of the North Carolina Fisheries Association, and a variety of other entities that might find the work useful when considering social policy development and collective action. There is also a plan to write articles and to make presentations at professional conferences based on the research from this study. But in the end, when considering how the study might be used, the focus will be on the fishers, and how well we listen to their voices will ultimately determine the usefulness of the study. My hope is that at the center of this work are the voices of the fishers and what they are saying to us will in the end benefit them most of all.

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APPENDIX A

Letter to Potential Participants

Dear _____,

I am conducting a study of off-shore fishermen, in your geographic area and am hoping you will be a participant. At my request, I was given your name by the North Carolina Department of Marine Resources (NCDMR) in Morehead City as a fisherman who lives in your geographic area and who owns a commercial fishing boat 50 feet or more in length. Because of these two things, you meet the requirements for participation in the study.

The title of the study is Listening To the Voices of the Fishing People. The purpose of my study is to gain a better understanding of how off-shore fishermen like you are making sense of your lives in the face of all the changes in the fisheries. According to the NCDMR, there are approximately 30 off-shore fishermen in your geographic area. The participants of my study will come from these 30 fishermen.

Although I teach in the School of Social Work at East Carolina University, I grew up in Hyde County. I am the daughter of a fisherman. As many members of my family still fish for a living, I have stayed connected to the fishing community. Presently, I am pursuing a doctoral degree at Memorial University of Newfoundland, and this study on off-shore fishermen in your location is the subject of my doctoral dissertation. I am working under the supervision of Dr. Joan Pennell of North Carolina State University and Dr. Leslie Bella of Memorial University of Newfoundland.

The research will have several stages. As a participant, you will be asked to do the following things:

Take part in a sixty to ninety minute interview any time that is convenient for you.

Take 12 or more pictures which describe who you are. I'll provide a disposable camera and have the film developed; you will have copies of the photographs to keep.

Take part in another sixty to ninety minute interview any time that is convenient for you. This interview will focus on the 12 or more photographs you took earlier.

After I have had time to analyze and write up the data I will send you a draft summary of the research findings so as to ensure that the work reflects your intent. It is important to me that you are comfortable with what has been written. I will telephone you

within one week of your receiving the draft summary for your verbal feedback and reflection on the work.

None of those participating will be named in the final report, and participants can withdraw at any stage in the research. I will make every attempt to protect the identity of all participants. All information you share will remain strictly confidential. I hope that you will be willing to take part in this research study. After you have made your decision about whether or not you would like to participate, would you please mail this letter back to me in the enclosed stamped envelope? Just check yes or no at the bottom of the second page so I will know your decision. You may telephone me at 252-752-4744 or email me at carawanl@mail.ecu.edu if you would like more information about this research before making your decision. I look forward to hearing from you. If you have any questions about your rights as a research subject, you may call the Chair of the University and Medical Center Institutional Review Board at phone number 252-816-2914 (days) and/or the hospital Risk Management Office at 252-816-5592.

Sincerely,

Lena Williams Carawan

Yes ____ I will participate in this study.

No ____ I will not participate in this study.

APPENDIX B

Interview Guide

Guiding Questions

1. Can you tell me about your life as a fisher? (Prompt: “What led you to fishing”?)
2. Could you describe to me how you feel about being a fisher?
3. Could you tell me about your fishery business and how it works?
4. Can you tell me what fishing was like when you started, and what fishing is like now? (Prompt: Have changes influenced your life as a fisher; how?)
5. What affects your life as a fisher?
6. Can you talk about how you see your future as a fisher? The future of fishing in general?

Questions 1, 3 , and 4 are designed to get at research question #1.

Questions 5 is designed to get at research question # 2.

Questions 2 and 6 are designed to get at research question #3.

Interview Notes Form

Name of informant (pseudonym):

Date:

Place of interview:

Time interview began and ended:

Number of interview:

NOTES:

OBSERVATIONS:

Demographic Data Sheet

Age:

Gender:

Number of years fishing:

Size of boat:

APPENDIX C

Photographs Consent Form

I give my consent that the photographs that I took for this study (with the exception of photos of individuals) can be used in possible future presentations and/or publications by Lena Williams Carawan. If there are particular photos that I would like not to be included, I will list them on this page. I will receive a copy of all photos at the time of the second interview.

Signature

Date

APPENDIX D

Audio-Taping Consent Form

I agree that my interviews with Lena Williams Carawan, which is a part of this research, may be tape-recorded. I give my permission on the following conditions:

Only Lena Williams Carawan and any person employed to transcribe the tapes will hear the contents.

Anyone who transcribes the tapes of the interviews will sign an oath of confidentiality.

The tapes will be erased after research reports and any publications based upon them have been completed, or five years from the date of the last interview, whichever comes first.

Signature

Date

APPENDIX E

Transcriber Confidentiality Form

I agree and consent to not divulge anything that I have learned during the process of transcribing interview data for the study “Listening to the Voices of the Fishing People.” I will also keep confidential any and all reflections of the interviewer in this research study. (Although, most of the interviewer’s reflections will not be recorded, immediate key thoughts may be recorded just after the interview has ended and while travelling in the car. These reflections may or may not be transcribed by the transcriber).

Signature

Date

APPENDIX F

Reminder Letter to Participants

Dear _____,

I wrote to you a short time ago to ask if you would participate in a research study, "*Listening to the Voices of the Fishing People*." Since I have not heard from you, I am writing again as a friendly reminder. I have enclosed a copy of the original letter. Would you please let me know of your decision, and return the letter to me in the envelope provided as soon as possible?

Thank you so much for considering this request,

Sincerely,

Lena Williams Carawan

APPENDIX G

Interview Guide for Second Interview

Grand Tour Question

At the end of our first interview I gave you a camera and asked you to photograph things that would describe who you are. I have really enjoyed looking at these pictures.....can you tell me what you were thinking as you chose what to photograph? (Prompt: Can you tell me what led you to these particular choices?)

APPENDIX H

Letter to Accompany Copy of Summary Data

115 South Harding Street
Greenville, North Carolina 27858

Dear Captain _____:

As you likely remember you graciously participated some time ago in interviews for a research project that I was conducting. I am so appreciative since I could not have gathered the data for the project without your support. As we discussed in the first interview no names were used in the research. A fictitious name (Scott County) was used for the location of the study. Every attempt was made to keep identities of the captains and places protected.

As I promised, I am sending you a copy of the data (enclosed) that I collected, analyzed, and wrote up. I hope you will be able to take a bit of time and read over it. I will call you within the next two weeks to get your thoughts on the report. It might be helpful when you read it to reflect on the following four questions:

Is there anything you disagree with in the summary report?

Is there anything you would like to add?

Do you believe this report reflects what fishers in your area are experiencing in today's fisheries?

Did I miss anything important?

One of the aims of this research study is for the voices of the fishers to be heard. It is important to me for you to have final input in the end product so our phone conversation is my attempt to go back and check with you to make certain that I heard what you were saying and am reporting it accurately.

My plan is to call you on the weekend approximately two weeks from the time you receive the report. I look forward to talking with you soon and I hope you enjoy reading the research summary. Thanks so much for your time and support.

Sincerely,

Lena Williams-Carawan

APPENDIX I

Follow-up Telephone Call

I am calling to ask what you think of the work that I mailed to you approximately two weeks ago?

(Prompt: Do you feel comfortable with what has been written?)

APPENDIX J

Data Reduction

Original Categories

1. Purchase more boats with permits/licenses
2. Work other jobs
3. Fishery jobs
4. Health Insurance
5. Boat Insurance
6. Difficulty earning a living wage
7. Regulations do not make sense
8. Regulations do make sense
9. Attended fishery meetings in past
10. Currently attends fishery meetings
11. Reasons for not attending fishery meetings
12. Future of fishing
13. Personal future in fishing
14. Educational level
15. Age
16. Changes in fishing
17. Start in fishing
18. Immediate family fishing
19. Health and safety
20. Work
21. Family
22. Feelings about fishing
23. Sport fishing
24. Water quality

Rules for Combining Categories

1. Ways fishers were able to continue fishing
2. Factors impacting life style stability
3. Fishers thoughts and interpretations regarding regulations
4. Experience regarding participation in regulatory process
5. Influence of historical perspective on future of fishing
6. Factors influencing fishing as a career
7. Responses to fishing as a way life
8. Responses of fishers to resource issues

Final Categories

1. Making sense of fishing these days: 1-3
2. Regulations and economics of fishing: 4-6
3. Struggle to make sense of regulations: 7-8
4. Voices not heard: 9-11
5. Future of fishing: 12-16
6. Family life: 17-19
7. Fishing as a job and way of life: 20-22
8. Impact of coastal pollution and tourism/recreation: 23-24

