Preface

This thesis, "Fishing-Dependent Communities on the Gulf Coast of Florida: Their Identification, Recent Decline and Present Resilience," was approved by Vu Huang's USF Thesis Committee and the USF Graduate School in December 2003. It developed out of Vu Huang's MA internship in applied anthropology, which consisted of one semester during which she worked with Impact Assessment, Inc., on a project under contract with the National Marine Fisheries Service (NMFS). Despite this relationship, the thesis is not sponsored by Impact Assessment, Inc., or by the National Marine Fisheries Service. Vu Huang alone is responsible for the contents, judgments, and opinions expressed in the thesis, and she does not intend to speak for Impact Assessment, Inc., or for NMFS. The thesis should in no way be seen as a report sponsored by Impact Assessment, Inc., or by the National Marine Fisheries Service.

Neither Impact Assessment, Inc. (IAI) nor the National Marine Fisheries Service (NMFS) reviewed or commented on the thesis prior to its presentation to Vu Huang’s Thesis Committee in the Department of Anthropology and to the Graduate School of the University of South Florida. Following placement of the thesis on the internet, however, NMFS and IAI identified what they believed to be inaccurate and erroneous statements about the work done by IAI under contract with NMFS. The interpretation of the data and the resulting statements are the full responsibility of the author and have been approved by the supervisory committee. The primary information for the thesis was collected independently by Vu Huang pursuant to methods approved by the Institutional Review Board of the University of South Florida, even though most of it was collected during the same time period when she was performing her internship on the project conducted by Impact Assessment, Inc.

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Fishing-Dependent Communities on the Gulf Coast of Florida:
Their Identification, Recent Decline and Present Resilience

by

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A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Arts
Department of Anthropology
College of Arts and Sciences
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Florida fishermen, who were all very kind and helpful to me in sharing their views and knowledge for this research project. I enjoy working with my research partners, Mike Jepson and Stacy Ellis and have learned a lot from them on interview skills, fishery knowledge, and report write-up.

Lastly, I am forever indebted to Yan, my husband, for his continuous support and encouragement in the whole process.
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FISHING-DEPENDENT COMMUNITIES ON THE GULF COAST OF FLORIDA: THEIR IDENTIFICATION, RECENT DECLINE AND PRESENT RESILIENCE

Yu Huang

ABSTRACT

U.S. fisheries legislation requires National Marine Fisheries Service (NMFS) to attend to the critical social and economic issues surrounding the definition and identification of fishing communities, and to the effects that changes to the physical environment and regulatory decisions can have on such communities. To fulfill their mandate, National Marine Fisheries Service (NMFS) sponsored the research entitled “Identifying Fishing Communities in the Gulf of Mexico” to study the economic, social and cultural status of potential fishing communities along the Gulf of Mexico.

NMFS contracted the research project to Impact Assessment, Inc. to study 80 plus potential fishing communities in the Florida Gulf Coast. I worked as an intern in the research and visited the communities with other team members. The task of our project was to provide NMFS with basic profiles of fishing communities for NMFS to develop a culturally appropriated intervention. Research methods include Rapid Assessment Procedures (RAP), semi-structured key informant interviews, participant observation, and archival and secondary research mainly for community histories.
Apart from my internship research, I also conducted some additional interviews and observations for my thesis. My findings indicate that fishing communities along the Florida Gulf Coast encounter with challenge from increased regulation, “dumping” seafood imports and virtually uncontrolled waterfront development. By a comparison of three groups of fishing communities, i.e., “diminished communities,” “residual communities,” and “resilient communities,” the thesis explores how communities respond to the challenges and encourages fishermen to take action to preserve their generation-long fishing tradition.

In conclusion, the thesis suggests that a solution to ease the decline of fishing communities requires cooperation of all parties concerned, including the fishery regulatory agency, commercial fishermen, and the federal and local government.
CHAPTER 1 INTRODUCTION

1.1. Background of the Research

My internship titled “Identification of Fishing Communities on Florida West Coast of the Gulf of Mexico,” is sponsored by Impact Assessment, Inc., under contract from National Marine Fisheries Services (NMFS), a federal agency administered by the Department of Commerce. Federal-level fisheries management is required by U.S. fisheries legislation to attend to the critical social and economic issues surrounding the definition and identification of fishing communities, and to the effects that changes to the physical environment and regulatory decisions can have on such communities. This concern is most clearly and recently reflected in the Magnuson-Stevens Act National Standard 8 (Section 301 (8)), which requires that:

Conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities in order to (a) provide for the sustained participation of such communities, and (b) to the extent practicable, minimize adverse economic impacts on such communities.

“Sustained participation” means “continued access to the fishery within the constraints of the condition of the resources.” However, “the long-term conservation and/or rebuilding of stocks may require limits on particular gears and the harvest of specific stocks.”

National Standard 8 currently defines the term “fishing community” as a community that is 1) substantially dependent on or 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 fish processors that are based in such communities; 2) a social or economic group whose members reside in a specific location and share a common dependency on commercial, recreational, or subsistence fishing or on directly related fisheries-dependent services and industries (for example, boatyards, ice suppliers, tackle shops). [National Standard 8, Section 300,345, part 3]

The fishing-dependent “communities” (hereafter to be called simply, “fishing communities”) include those reliant on both commercial and recreational fishing industries, but the legislation and mandates are vague in defining their interests or making this distinction. Communities are described as being “substantially dependent” or “substantially engaged,” but the levels of dependence on and engagement in a fishery are still subject to NMFS’ discernment. Furthermore, the fisheries management is mandated to measure their dependence and engagement not solely in economic terms, but also to incorporate “other social, cultural, and economic assessments specifically focused on the harvesting, processing and fisher-support industries” (National Oceanic and Atmospheric Administration 1998).

1.2. Objectives of the Research

To perform their legislated tasks, National Marine Fisheries Service, Southeast Region, sponsored the project of “Identifying Fishing Communities in the Gulf of Mexico.” Based on fishing permit registration, NMFS proposed to study more than 300 potential fishing-related communities along the Gulf of Mexico coastlines of Florida and Louisiana.

Given the lack of specificity of the Magnuson Act, it is necessary to assess how the definition of fishing community empirically related to potential fishing communities in the region of the Gulf Coast in terms of their economic, social and cultural status. Does
the definition need to be revised to address the dynamics and implications of fishing communities who have to respond to the changing social and natural environments? Has NMFS, as a federal fishing management agency, adequately performed its role of attending to the critical social and economic needs of the fishing communities after the recent implementation of regulations which significantly restrict commercial fishing? In attempting to answer these questions, the research was to 1) describe fishermen in social, economic, sociocultural, and socio-demographic terms; 2) delineate the nature and boundaries of local and/or regional fishing-related communities, and 3) provide qualitative reports of the experiences and relationships of fishery participants in those communities.

The final report to NMFS, prepared by the contract agent Impact Assessment, Inc., was to describe local geography, history, economy (especially fishing-dependent industry) and recent changes of the fishing-dependent communities. Furthermore, it will also develop an analysis of the causes of changes, document their impacts on the community composed of fishermen and other fishing-dependent personnel, and also record community members’ responses towards these changes. The contract also called for the report to include a Geographic Information System (GIS) map incorporating fishery license and trip ticket data, community history with fishing specific description, current demographic and economic conditions and trends, and a summary discussion addressing community involvement and dependence on fishing related activities.

The objective of my thesis is to explore the impact of the NMFS’ regulations. However, my objective focuses more on the changes in the fishing communities,
especially why some communities manage to maintain their fishing tradition in the face of adversity while others fail to survive the challenges.

1.3. Internship Setting and Timeframe of the Project

National Marine Fisheries Service contracted the project to Impact Assessment, Inc., a California corporation, which is, devoted to social impact studies. Founded in 1981, the agency has conducted a broad range of social, economic, environmental and health research under contracts from the California Department of Health Services (CDHS), Mineral Management Services (MMS), Gulf States Marine Fisheries Commission (MFC), etc. In summer 2002, I was working on a project to write up ten county profiles along the Florida Gulf of Mexico to provide basis information for MMS to assess the potential impacts of offshore drilling.

I was working on my internship in this project to fulfill the requirement of the master’s program in Applied Anthropology at the University of South Florida. After completion of the required courses, students enrolled in the program are required to commit the equivalent of a full time effort for at least one academic semester on his or her internship to gain experience as a professional applied anthropologist. With the coordination of Dr. Alvin Wolfe, my major advisor, I was able to choose my internship setting in Impact Assessment, Inc. and work with various potential fishing-dependent communities in Florida. Apart from fulfilling NMFS’ contractual requirement, I hope that this applied anthropology research will shed light to marine policy-makers by voicing grassroots community interests which are often ignored or minimized by the bureaucracy.
My internship was made possible with the coordination of Dr. Edward Glazier, manager of Impact Assessment, Inc., and my thesis committee members from the Anthropology Department of University of South Florida, including Dr. Alvin Wolfe, Dr. Susan Greenbaum and Dr. Kevin Yelvington, who provide guidance on literature review, method design and final write-up processes.

In this project, Impact Assessment, Inc. assigned several social science teams to do the fieldwork. Two teams were supposed to work in the Florida Gulf, one in the Panhandle and the other in the mid- and south- Gulf Coast. I am a member of the second Florida team along with two other members: Michael Jepson, a well-known maritime anthropologist who has many publications on research conducted in Florida fishing communities; and Stacy Ellis, who received her MS degree in Family, Youth and Community Sciences from the University of Florida in 2002 and is a PhD student of Education at the University of Florida.

Our team was assigned with 80 plus communities to study in the middle and south Florida Gulf Coast. The community listing is as follows:

Table 1.1 Community Groupings

<table>
<thead>
<tr>
<th>County</th>
<th>Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dixie/Levy</td>
<td>Jena, Old Town, Suwannee / Chiefland, Gulf Hammock, Inglis, Yankeetown</td>
</tr>
<tr>
<td>Citrus/Hernando</td>
<td>Crystal River, Hernando, Lecanto, Inverness, Homosassa Springs, Homosassa/Brooksville, Spring Hill</td>
</tr>
<tr>
<td>Pasco</td>
<td>Airpark, Hudson, Port Richey, New Port Richey, Anecdote, Holiday, Odessa</td>
</tr>
<tr>
<td>Community Grouping</td>
<td>Communities</td>
</tr>
<tr>
<td>--------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Pinellas</td>
<td>Tarpon Springs, Crystal Beach, Ozona, Palm Harbor, Oldsmar, Dunedin, Belleair, Clearwater, Indian Rocks Beach, Redington Beach, Madeira Beach, Gulfport, Treasure Island, Tierra Verde, Largo, Seminole, St. Petersburg</td>
</tr>
<tr>
<td>Hillsborough/Polk</td>
<td>Lutz, Tampa, Dover, Brandon, Riverview, Gibsonton, Apollo Beach, Ruskin / Lakeland</td>
</tr>
<tr>
<td>Manatee</td>
<td>Terra Ceia, Palmetto, Bradenton, Cortez, Anna Maria Island, Bradenton Beach, Holmes Beach, Longboat Key</td>
</tr>
<tr>
<td>Sarasota</td>
<td>Sarasota, Osprey, Nokomis, Venice</td>
</tr>
<tr>
<td>Charlotte</td>
<td>Englewood, Placida, Boca Grande, El Jobean, Port Charlotte, Punta Gorda</td>
</tr>
<tr>
<td>Lee</td>
<td>North Fort Myers, Alva, Fort Myers, Cape Coral, Matlacha, Bokeelia, St. James, Pineland, Fort Myers Beach, Sanibel Island, Captiva Island, Estero</td>
</tr>
<tr>
<td>Collier</td>
<td>Marco Island, Goodland, Royal Palm Hammock, Copeland, Everglades City, Chokoloskee</td>
</tr>
</tbody>
</table>

Our field visits lasted four months from mid-January to mid-May 2003 and the final report will be submitted to NMFS by the end of August.
CHAPTER 2 LITERATURE REVIEW

2.1. Community Study

Community study was a popular subject in social sciences from the 1950s to the 1970s. Arensberg and Kimball propose three elements that are essential in addressing the meaning of community (1972: 3). First comes the social aspect of community. The notion of community “as a master system” encompasses “social forms and cultural behavior in interdependent subsidiary systems (institutions).” The second element centers on the cultural identity of community. “Each form of community utilizes geographic space in a characteristic fashion, called its settlement pattern.” The last element is environment, including both physical environment and social environment.

The authors emphasize the close association between community and culture: on one hand, communities serve as “transmission units for human culture” (Arensberg 1955: 1143), and on the other hand, each culture has its characteristic community. The authors explore how different community patterns in the U.S. correspond with different communal traits and spirits. The “Yankee tradition” of New England hailed the egalitarian culture, because community members came from different backgrounds as farmers, artisan, shop keepers, merchants, seamen & fishermen, who required to build a community “without distinction or segregation either in community membership, political right, or use of living space” (p.104). The southern county, on the contrary,
epitomizes the two-class division and white supremacy. “Negro slavery, Anglicanism and Methodism, ‘Bourbonism’ and Fundamentalism” are culture traits unfamiliar to the New England town. They have recognized the county seat as the community center, a place to gather “nobles into the king’s place and capital” from the dispersal rural area. The “open-community neighborhood” of the great American Middle Country, however, reflects a culture that is “loose, open, Dionysian, kin-based, famille-souche, and subsistence farming rather than commercial- or urban-minded, egalitarian through isolation and personal honor rather than through conscience and congregational control (p.111). The primordial communities underwent great transformations at the Industrial Revolution as more and more mill towns and factory cities were developed. Now the industrial community is characterized by a set of dichotomies, such as the co-existence of both metropolitan glamour and city ghettos and a discontinuation of “age, class and ethnicity.”

In The Little Community, Robert Redfield extrapolates the characteristics of little communities and the methods of studying them. He defines the little community as a “distinctive,” “small,” “homogenous,” and “self-sufficient” community.

Wellman et al. look at “personal communities,” or “the ways in which networks of informal relations fit personas and households into social structures” (1988:131). As they studied the East York community, a residential area of central Toronto, they looked for the traditional community identifiers, e.g., “neighbors chatting on front porches, friends relaxing on street corners, cousins gathering for Sunday dinners, and storekeepers retailing local gossip” (Wellman et al. 1988: 130). When they “found few signs of active neighborhood life,” they did not immediately draw the conclusion that community life has vanished in the densely populated town. Instead, they argue that community ties in
East York were still robust, but were just represented in a way that does not conform to the stereotypical model.

Until the 1960s, scholars were divided into three groups in terms of the extent of community life, which was greatly transformed by the large-scale social changes. Some asserted that community had been “lost,” because “individuals had become isolated atoms in a ‘mass society’--dependent on large bureaucracies for care and control” (Wellman et al. 1988: 134). Contrary to this belief, some scholars maintained the “Community Saved” argument, evident by “abundant” and “strong” neighborhood and kinship groups that “acted as buffers against the large-scale forces, filled gaps in contemporary social systems by providing flexible, low-cost aid, and provided secure bases from which residents could powerfully engage the outside world” (p. 134). Wellman et al., point out the defaults of the two dichotomous views that both defined community as a “solidary,” “local,” and “kinship-like” group, and disregarded “widespread preindustrial individualism, exploitation, cleavage, and mobility.” Going beyond the traditional short-distance community ties, some scholars find a “Liberated” community, which is comprised of relationships beyond local areas offered by cheap and convenient transportation and communication services.

Using a network model, the authors find that beyond the empty streets, East Yorkers still maintained community ties in small clusters --“through meetings in private homes and on the telephone”—“and not in large, palpable bodies gathering in public squares, cafes, and meeting halls.” Through the strands of ties and networks, the East Yorkers got and expected to get “companionship,” “emotional aid,” and “small services”
both in daily life and in crisis (Wellman et al. 1988: 163). The author analyzes the functions of networks:

First and foremost, the networks provide havens: a sense of being wanted and belonging, and readily available companionship. Second, they provide many “band-aids”: emotional aid and small services to help East Yorkers cope with the stresses and strains of their current structural locations. Third, the outward linkages of network provide the East Yorkers with ladders to change their situations (jobs, houses, spouses) and levers (animal welfare, local politics, food addictives) to change the world. [Wellman et al. 1988: 174-175]

In conclusion, Wellman et al. argue that the East Yorkers’ ties and networks could not be explained with any single model of either Lost, Saved, or Liberated. Their personal networks do not conform to the Lost model, but some community patterns fit with the Saved model (e.g., women maintain close local relations with kin and men with workmates), and some patterns correspond to the Liberated model (e.g. several middle-class men use co-worker ties to climb up the occupational ladder). Although the traditional densely knit solidarities are far and few, East Yorkers have managed to maintain their networks and community ties and seem to be satisfied with the support and reciprocity from them.

Although the gurus have provided me with useful direction and guidelines, I still find it difficult to define a community, because the components of the community are not always bounded nor fixed, at least not so for the fishing communities I visited.

Community Study is “a method of observation and exploration, comparison and verification” (Arensberg and Kimball 1972:30). If the fishing communities of our study fit Redfield’s identifiers in the 1950s, they do not now. First comes the quality of distinctiveness. Before I started this project, I expected to work on communities that are small, rural and filled with a fishy smell. Coming from China, my image of a fishing
community was the small fishing village, which was remote from any urban hub. My misconception was soon corrected by my major professor Dr. Wolfe, who carefully reviewed my IRB application forms and suggested that the term “village” might not be appropriate to describe the status of fishing communities in Florida. During the visit, I gradually found that the primordial “fishing villages” basically no longer exist, but have either transformed into an urbanized/suburbanized dwelling site in which fishing is still able to reserve a corner of activity, or fishing submerges in the bigger sea of tourist/retiree dominance. Therefore, the difficulty in defining a fishing community on Florida’s Gulf Coast is enormous, in that the fishing communities of the 1950s were easily recognized by tracking the fishy smell and hanging nets, but most of the communities in our list reside in unincorporated areas and it is hard to tell where the community begins and where it ends. Only in very few places, like Cortez, does an outside observer detect the dominant fishing consciousness of community members, as the sign “Cortez Historical Fishing Village” claims (Figure 2.1). In most places, the distinction of commercial fishing has been more or less subsumed in the larger pictures of tourism and retirement industry. In Tarpon Springs, fishing boats decorate the background of the sponge dock, which has attracted tourists from all over the world to see sponge diving shows and to taste Greek ethnic food such as gyros, mousaka, etc. (Figure 2.2). In the Everglades, an outsider can tell immediately that one is in a fishing community from the sponge traps that stretch miles along the bank, but tourists also easily find numerous airboats and wonder whether the fishermen’s group consciousness of independence has been compromised as they entertain the guests in the airboat for extra income (Figure 2.3).
Figure 2.1 Cortez Historical Fishing Village

Figure 2.2 Tarpon Springs Sponge Docks
Secondly, the community of Redfield’s concern was so “small” that “some part of it, a unit of personal observation, could fully represent the whole” (Redfield 1956:4). This may be true in the sense that the study of fishing practices and culture along the Florida Gulf Coast can be reviewed by the observation of a small community like Hudson. However, the problems that confronted one community might not be the worries for fishermen from other communities. For example, casino boats in Port Richey have occupied fishermen’s dockage and forced them either to quit fishing or to relocate. This problem is not so devastating in most other communities.

Thirdly, Redfield’s “little community” is homogenous. Commercial fishing used to be an activity homogenously repeated from generation to generation. In the twenty-
first century, however, it is not the same. The fishing population is aging in most places, and many fathers do not want their sons to carry on the family tradition due to the various predicaments the older generation faces. As more young people take up non-fishing jobs or even leave the community to go to college, the primordial fishing community cannot preserve the “slow-changing” character, but has to undergo dramatic changes under outside pressure.

Fourth, Redfield’s type of community is “self-sufficient” and “provides for all or most of the activities and needs of the people in it.” In the 1950s, fishermen built nets and boats by themselves. Now, communities are working towards a more specific direction as technology and mechanization invade the society. Fish were caught and consumed within the community. Now, a fishing community cannot be self-sufficient. For example, there are no boat builders in most of the communities, but such institutions exist in non-fishing communities like Sarasota and St. Petersburg. The current young generation has not learned net-mending skills, since machine-made nets are readily available. The fish they catch, including grouper, crab, and shrimp, go to all corners of the country and beyond. In general, the once “little community” has transformed to incorporate modern influence either in lifestyle, income sources, or geographic outlooks.

2.2. Literature on Commercial Fishing

2.2.1. Characteristics of Commercial Fishermen and Fishing Communities

Historically, commercial fishermen were independent boat owners who primarily engaged in fishing to satisfy their material and social needs rather than to accumulate capital (Davis 1991). They usually lived by the sea and formed fishing communities
comprised of families who were closely linked for generations by kinship and marriage (Paolisso 2002).

**Independence**

Ocean fishing is among the most dangerous occupations in terms of physical danger as well as economic and psychological uncertainty (Smith 1993; Pollnac, Poggie and Cabral 1998). Maritime anthropologist illustrates fishermen’s difficulties into the following three categories: 1) the risks and uncertainties associated with fishing in the aquatic environment; 2) personal and governmental regulations to conserve marine species and limit fishing; and 3) sociocultural problems incurred as fishermen are often far away from home for extended periods of time (Acheson 1981).

Despite the dangers of life at sea, most fishermen like their job, not only because of the economic gains, but more importantly, due to non-monetary benefits. Anthropologists have identified *independence* as a crucial component of fishermen’s job satisfaction (Binkley 1990; Pollnac and Poggie 1979; Smith and Hanna 1993; Johnson et al 1998). Carolyn Ellis details fishermen’s pride in their job and dislike of wage labor:

> Our people are used to freedom. You go to work when you want in the morning; you come back home when you want. Some people put in a certain number of hours every day. Some people put in more. But you don’t have to punch a time clock. You’re your own man. On the other hand that requires a certain something about a person, because occasionally we see somebody who will need to work under a boss and who doesn’t have the whatever-it-takes to carry on his business. [Ellis 1986:109]

> I often heard my informants saying that fishermen like fishing because “you are your own boss.” Even for captains who do not have boat ownership or for crew who work for the captain, they both think that they are working independently. Therefore, fishermen vented out a lot of complaints about the net ban. Although the government
offered limited job retraining programs to net fishermen, they did not take into account
the latter’s social and mental disruption incurred in job changes.

**Communitarianism and Social Bonds**

A community may be seen as embedded in the network of personal relationships
and corporate groups. Social values such as security, equity and community bonds also
help to offset the challenges of their work. The strong social ties among fishermen enable
information sharing between boats. White (1989) argues that among the different types of
strategies in trawl fishing, working in fleets is preferred by most fishermen. Russell and
Alexander (1998) also find that boats like to follow other boats that are catching fish,
while independent fishing is generally less successful or desirable. Ellis claims that
“communitarianism was a central value” in a fishing community culture. Fishermen “kept
in touch about locations of “good places” where the most seafood was being caught.”
“Everyone usually knew everyone else’s situation through word of mouth or Citizen’s
Band radio (Ellis 1986:116).

The danger and uncertainty of working on the sea have built the fishermen’s
mutual help mechanism. When a fisherman is missing, the whole community will go out
to search for him at sea. This mechanism helps expand personal ties beyond geographical
boundaries and binds the various adjacent fishing communities together. As one shrimper
told us, shrimpers will save their colleagues even if it means they have to give up a good
catch or that the person in trouble is at odds with those who save him. As a result, a lot of
fishermen have made acquaintance beyond their community boundary. For example,
Cortez fishermen know their counterparts from Pine Island, and Pine Islanders get to know fishermen from Fort Myers.

Currently, however fishing has been diversified and it is not very common that community members can possibly work at the same area on water, thus restricting the capacity of fishermen who would like to offer help. For example, grouper fishermen work offshore with longlines in shallow water (30-50 miles out) and bandit (rod-and-reel) boats stay in deep water. Shrimpers work around 70 miles offshore. Net fishermen and crabbers work in-shore (within nine miles). Some shrimpers say that they mostly talk to other shrimpers in the community, but do not hang out with grouper fishermen in the community very much.

**Fishermen’s Economic Rationality**

Despite their predilection for independence, fishermen are usually “employed” by a fish house, which is a place where commercial fishermen offload their catches. However, the relation between a fish house and its “contracted” fishermen is not only confined to monetary exchange. Compared with the Alabama oyster bed owners, who “just sit there in a beer hall while other people catch his oyster” (Durrenberger 1992:xiii), Florida Gulf Coast fish house owners seem less exploitative. The fish house owner is usually a retired commercial fishermen or the child of fishermen who, rather than binding the fishermen to the fish house by a formal contract, establishes a “handshake obligation” with commercial fishermen to whom he or she provides docking space, fuel, bait, ice and even loans in exchange for the latter’s products. Gudeman proposes the two facets of economy, i.e., community and market.
In one guise, economy is local and specific, constituted through social relationships and contextually defined values. In the other, it is impersonal, even global, and abstracted from social context; this dimension consists of separated but interacting agents. [Gudeman 2001:3]

The two realms may be institutionally and tactically interwoven, as in a "trade partnership"… Similarly, in a "trader's dilemma," a local merchant is caught between the aims of maximizing profit in selling, and maintaining relationships with customers with whom he shares kinship, residential, or social ties. [p.11]

The fish house often serves as more than “an office”; it offers a social place where commercial fishermen gather together. They chat with each other when they offload fish, work on boat maintenance, and get ready to fish again.

The free working style and social comfort that fishermen gain from a fish house are the magnet that attracts fishermen to stick to their fishing careers. One fisherman told me that he learned fishing in a boat that was owned by the fish house. After five years, he was able to afford a boat of his own, but he still docked his boat in the fish house and unloaded fisheries there. I feel that this semi-social way of doing business resembles the Chinese way of acting that often involves obligation and personal ties rather than just profits.

It is very hard to decide whether fishermen’s enthusiasm about fishing is a rational choice. Weber compares substantive rationality and formal rationality.

“Substantive rationality designates material behavior shaped by political, religious, or ethical standards; formal rationality refers to action based on calculation and means-to-ends reasoning” (Gudeman 2001:16). Ellis details the economic situation of fishermen in the Fishneck community on Chesapeake Bay:

Most Fishneckers bought the same things. An increase in resources did not lead to a change in patterns for people other than middlemen. Those making high income chose to live much as their less prosperous relatives and neighbors did. Adults often still slept in the same room with children, even when other bedrooms were available. And tubs continued to be used for storage. A Fishnecker who had more resources than others
would rarely buy much that was different from the possessions of other Fishneckers. [Ellis 1986:91]

I visited a third-generation fisherman’s house. It has two stories, but the first story has been turned into a museum to display historical artifacts or tools in memory of the community’s fishing tradition. The second floor is small with only two bedrooms and accommodates three generations. They do not have a dryer, but hang clothes outdoors to dry and are very proud of their energy-saving invention. Their furniture is old, but is decorated with fishing pictures and maritime gifts.

When I asked a shrimper if fishermen work for money or for fun, at first he said both, but then he suggested that even if there was another job with higher pay, a lot of commercial fishermen probably would not switch jobs. He said that money is not their priority and very few fishermen get rich. If they get money, they will spend it on boat maintenance rather than getting a luxury car or a big house. “I have struggled all my life to make a living,” he said. Put by priority, fishermen would spend money in these three major areas: 1) kids, 2) boats, and, 3) wife.

Gordon ascribes fishermen’s low-income status to the following two factors:

The first is the great immobility of fishermen. Living often in isolated communities, with little knowledge of conditions or opportunities elsewhere; educationally and often romantically tied to the sea; and lacking the savings necessary to provide a “stake,” the fishermen is one of the least mobile of occupational groups. But, second, there is in the spirit of every fisherman the hope of the “lucky catch.”…As a consequence, they will work for less than the going wage. [1998:23-24]

The communitarian ideology in a fishing community and contentment with being fishermen have resulted in a subdued quest for upward mobility.

In spite of concern with work and success, money did not serve as a major basis of status on Crab Reef Island. Most people working independently made about the same amount of money…Other controls on economic competition and social practices in the watermen’s
culture prevented monetary aspects of everyday life from being transformed into status distinctions. Among these was Crab Reefers’ refusal to discuss amounts of money earned for certain periods of time. [Ellis 1986:114]

Upward mobility in Fishneck was fraught with problems for people accustomed to working only when they wanted to, who hadn’t much knowledge about business operations, and lacked education to deal with elementary paperwork. Few people attempted to break out of the pattern of small-scale individual entrepreneurship and fill-in wage labor. [p.92]

Fishermen’s dependence on fishing, to a certain degree, is boosted by the lack of alternative job choices. Fishermen usually do not have much education. “They perceived the experience as unrewarding; it did not teach them to be parents, clean fish, or tong for oysters. Children viewed school as a hostile and strange place where they were teased about their appearance, lack of cleanliness, ‘backwardness’, and dialect” (Ellis 1986:150).

A fish house owner I interviewed said that when a regulation came out, the fishermen’s first reaction is to try to get around it, rather than learning to understand what they are required to do. He attributed that to the average low education level of fishermen. Another leader of a fishermen’s union indicated that some fishermen lack the education to do the paperwork and they were unwilling either to make phone calls or fill out the forms necessary to fight against the net ban.

This situation seems to be changing since, in view of the declining fishing industry, current commercial fishermen often encourage their sons and daughters to go to college even at the expense of giving up the generation-long fishing tradition. Some fishermen told me that they would beat their kids if they wanted to become fishermen. Is this self-empowerment a good indication for fishermen? Fishermen are weak in fighting against the recreational fishermen and developers, a situation which social scientists
analyze as the partial result of fishermen’s low education (Ellis 1986; Weeks 2000). However, if the advance in education leads to social mobility that leads to the demise of the labor-intensive fishing career, how should we handle this two-edged sword?

### 2.2.2 Defining Fishing-Dependent Communities

Although research on fishing communities is plentiful, not many publications really address the basic question of “What is a community?” Eacker argues that fishing communities, as “occupational fishing communities” fit three criteria: 1) they provide “a workplace that is spatially and temporally isolated from the wider society,” exemplified by terrestrial isolation as well as the “unconventional” working hours; 2) their residents feel “a sense of belonging and exclusivity that helps to foster an ‘us against them’ or countercultural ideology”; 3) they have “an autonomy from supervisory constraints” reflecting “a radical sense of independence” (1994:94-96).

While Eacker does not address the quantitative criteria to define fishing-dependent communities, Jacob et al. explore the threshold of dependency of fishing communities. Before the authors jump on the discussion of the threshold of fishing communities, they had a review of how ERS-USDA defines other industry-dependent communities as follows:

- **Farming-dependent**: Farming contributed 20% or more of total labor and total income.
- **Mining-dependent**: Mining contributed 15% or more of total labor and total income.
- **Manufacturing-dependent**: Manufacturing contributed 30% or more of total labor and total income.
- **Government-dependent**: Government contributed 25% or more of total labor and total income.
- **Services-dependent**: Service activities (private and personal services, agricultural services, wholesale and retail trade, finance and insurance, transportation and public utilities) contributed 50% or more of total labor and total income. [ERS-USDA 1989]
However, it is noteworthy that ERS-USDA has not provided a definition of *fishing-dependent* communities. Jacob et al. adopt central place theory to develop a protocol of defining fishing-dependent communities (2002). The central place model sees communities as central places with respect to a hinterland, as Amos Hawley proposed in 1950 the central place extending approximately a ten-mile radius for most goods, services, jobs, and social interactions (1950:255-257). Using a threshold of dependence at 15 percent of employment, Jacob et al. identified five commercially dependent communities and six recreationally dependent communities. They explain that the threshold they use is the same as USDA ERS typology category as mining-dependent, another industry with extensive forward and backward linkages but a raw product that is likely to be exported out of the community quickly before value is added. The fishing industry, however, is typified by a necessary level of handling in the local community, namely cleaning, processing, and packaging before distribution. Additionally we chose a lower threshold because the data that were available to us and other researchers is likely to substantially underestimate fishing employment and income. [Jacob et al. 2002:7]

They argue that “an absolute definition” is “unnecessary” in application. When it is applied to larger communities, even if the engagement of fishing is significant, its portion in the overall economy could be only a small portion, given the large figure of employment in urban areas. When the threshold is utilized in small communities, “an absolute definition would be redundant with the relative definition.”

Based on early scholarly work and on my own field observations, I propose that fishing communities be identified by three criteria: geographic location, economic infrastructure, and cultural distinction. However, we should not expect the boundaries defined by these three parameters to be clear-cut.
Although all the fishing communities I studied are located on the waterfront, it is hard to come up with a fixed definition to delineate the geographic boundary of each community. The difficulties reside in the following areas. Firstly, some of the communities are located in unincorporated areas and it is hard to draw their boundaries, such as Hudson, Cortez, Pine Island and Goodland. Secondly, none of the communities of our study area are homogeneous entities such as Redfield refers to. They often contain sub-communities subject to different economic and cultural functions. Therefore, fishing no longer occupies the whole, but merely concentrates in a corner of the community. Homosassa is comprised of three sections, in which only Old Homosassa is involved in commercial fishing while the other two sections are oriented to tourism and the retirement industry. Third, fishermen are mobile. Though they are supposed to work at their home port, through which their fishing permit is registered with NMFS, in fact, they often fish elsewhere. The list of communities studied in this project was generated using the permit/vessel registration, in the belief that mobility is “circumscribed” and that the majority of fishermen do not move from one community to the other very often (Kitner and Brownrigg 2001:37). Some fishermen do travel to other ports to offload fish, either because of the need to trace fishing stocks, or because of the opportunity to get a better price of fish. For example, some commercial fishermen live in Ozello, but there are no fishing facilities in the community and those fishermen usually dock their boats at Crystal River or Homosassa. Therefore, rightly or wrongly, we did not view Ozello as a fishing-dependent community, because the local fishermen are embedded in the fishing activities in the adjacent communities of Crystal River and Homosassa.
Since we are studying fishermen and fishing-dependent communities, we cannot disregard components of the community. The primordial fishing village in which every community member was somehow involved in fishing is basically gone on the Florida Gulf Coast, as fishing gives way to tourism or the retirement industry as the dominant economic activities in the community. Furthermore, the activities of fishing are diversified, including river fishing, inshore reef fish fishing, inshore crabbing, inshore bait fishing, inshore shrimping, offshore reef fish fishing, offshore shrimping and other kinds.

Haraldsdottir describes some of these complications in a chapter on “state and community”:

The terms “fisheries communities” and “fisheries folk” refer to people who depend on fisheries-related activities for their living. Terms such as “fishing communities,” “fishermen’s communities,” “fisherfolk,” or “fishing people,” frequently used to refer to the same groups, focus on fishers and their families and suggest that fishing is the primary economic activity in fisheries. This terminology is both ideologically biased and misleading, as it deemphasizes the socio-economic diversity of fisheries communities and the variety of economic activities that take place in any fishery. [Haraldsdottir 2000:132]

Furthermore, we have to take into account the forward and backward linkages that most Florida fishing communities have developed. Backward linkage, or incrementalism, is the initiative step for the economic development of a community relying on natural resources extraction (Richardson 1979). It develops as natural resource extraction equipment manufacturers and service facilities starts up (Humphrey 1994). For fishing communities in Florida, “backward linkages in most communities include boat building and repair, net making and repair, marinas, bait and tackle shops, and other fishing-related businesses supported by both recreational and commercial fishermen.” “As the
economy further matures, forward linkages are established that produce and market ‘added value’ to the raw resource, which offers numerous economic benefits, including better paying jobs.” “Forward linkages would include fish houses, wholesalers, exporters, seafood shops and restaurants, and other related businesses. Also included are other community retail/service businesses that service employees of the fishing and related industries (i.e., grocery stores, drug stores, automotive repair, banking, etc.)” (Jacob et al. 2000:4).

In our research, we look for the following technical/economic indicators:

• For commercial fishermen: fisheries targeted, vessels, gear, seasonal changes of fishing activities, crew;

• For dealer/packing house/processor: equipment and facilities (bait, ice and cold storage), products (seasonality, sources and markets), change of business, employment.

It is interesting to note that my informants, whether commercial fishermen, fish house owners, or seafood processors, mostly consider the existence of fishermen an important criterion in deciding whether a community is a fishing community or not. For example, Sarasota has several boat building companies (backward linkages), but none of the informants would think the city is a fishing community. The same is true for St. Petersburg, which hosts several major seafood processors (backward linkage) on the gulf coast, but obviously is not categorized as a fishing community. However, Tampa, also a center of seafood processing, is partially regarded as a fishing community due to the existence of shrimp fleets operated out of the Port of Tampa. Some informants do not think that Tampa is a fishing community, because commercial fishing only plays a small role in the city’s economic basis.
Cultural identifiers of fishing communities are even harder to find, since they often entangle with or are subsumed by the mainstream culture. Cultural carriers include fishing monuments, fishing folklore, maritime museums, communal organizations in support of fishing, and so on. Some fishing communities demonstrate a strong cultural atmosphere, while some do not. Cortez is the community that consciously strengthens fishing culture in defiance of the challenge of tourists and retirees. They still maintain the outlook of their community basically as it was eighty years ago. They have a fisherman statue and a museum to memorialize their history. When someone wants to sell their house, community members try to persuade them to sell the house to fishermen or people who support commercial fishermen. They have established their communal organization to preserve the fishing culture of the community, which I detail later. In contrast, Madeira Beach, as a community with a viable fishing business, has not focused much on cultural development. The dominant culture there is obviously tourism-oriented with fancy shops, wave runners and recreational fishing tournament. If we look for the presence of cultural identifiers, I would say that the dominance is not equal in each community.

In our project, we developed a protocol that addressed the geographic condition, economic dependency and cultural entity of the fishing communities. Out of these indicators, we developed basic community profiles for NMFS to review. It was not our duty to perform the assessment to decide whether those communities are really fishing-dependent communities or not, but NMFS will take the responsibility to evaluate the degree of dependence of the various fishing communities.

Before we started our field visit, due to the heavy weight of our task and time limitations, we had to filter out insignificant fishing-communities for just a drive-through
study, while reserving more time for communities substantially engaged in fishing. One important criterion that we used to filter out non-fishing communities was the presence of a fish house. Basically, if a community does not have a fish house where fishing activities take place, we would just give a brief observation of that community. Based on this criterion, the potential commercial fishing communities in which we conducted serious study included: Inglis and Yankeetown, Crystal River, Homosassa, Hudson, Tarpon Springs, Tampa and St. Petersburg, Madeira Beach, Cortez, Placida, Fort Myers Beach, Pine Island (Matlacha, St. James, Pineland and Bokeelia), Goodland, Everglades City and Chokoloskee.

2.2.3 Studies on Community Impacts of Fishing Regulations

Communities of New England and the Mid-Atlantic, particularly those dependent upon the Multispecies Groundfish Fishery, are experiencing a social and economic crisis brought on by regulatory changes. With the development of a “Community Classification System,” the research identifies important issues that concern fishers, their reaction and adjustment to the crisis, and finally, the economic and social disruption that negatively impacted the fishing communities (Griffith and Dyer 1996).

Wilson and McCay (1998) conducted “Social and Cultural Impact Assessment of the Highly Migratory Species Management Plan and the Amendment to the Atlantic Billfish Management Plan.” Focusing on the three community-level factors (alternatives, economic vulnerability, and community support), they discuss the expected overall impact of increased fishing restrictions on both participants in the industry and the community as a whole.
CHAPTER 3 METHODS

The task of our project was to provide NMFS with basic profiles of fishing communities along the Florida Gulf Coast (from Yankeetown/Inglis to Chokoloskee), so that NMFS would be informed of what has happened to those communities and could develop a culturally appropriate intervention. Due to time and financial constraints, we adopted the method of Rapid Assessment Procedures.

3.1. Rapid Assessment Procedures (RAP)

Rapid Assessment Procedures (RAP) was first developed for evaluation of nutrition and primary health care (Utarini, Winkvist and Pelto 2001:391). “RAP efforts are intended to obtain useful data for the purposes of social action rather than the expectation of dissemination to a wider community of scholars through formal publication outlets” (p. 390). Anthropologists master the skills to collect ethnographic data, but often see a gap in contributing to the policy-making process. “A major difficulty is that it often takes far too long for an anthropologist to collect information to inform policy” (Ervin 2000:188). That happens because “given the tradition of holism, anthropologists may feel that it is important to record in almost encyclopedic detail the customs and behavior of a people or community” (Ervin 2000:188). That difficulty is well presented in our project, which covers about 80 potential communities, but allows only a timeframe of several months. Furthermore, the budget is limited and we have to
choose economic accommodations and save travel expenses. All these limitations require us to adopt an approach that does not aim to “solve theoretical puzzles or generate theory but to reach more rational decision-making processes in real-life circumstances” (Kumar 1993).

3.2. Our Methods

Efficient as RAP claims to be, when tested by official evaluation standards, the method still poses problems. Four standards adapted from the Joint Committee on Standards for Educational Evaluation can be used to judge its efficiency: accuracy, utility, feasibility, and propriety (Harris, Jerome, and Fawcett 1997:376). In terms of accuracy, RAP works better with social and cultural elements of the program, but cripples in political and economic elements of the context. Moreover, RAP meets measurement validity (measuring what it is intended to measure), but performs inadequately with construct validity (“giving variables or behaviors the wrong names and assigning inaccurate meaning to observations”) (p. 376). Lastly, RAP’s external validity and reliability are still questionable. The second standard is utility, which “refers to the usefulness of the results produced.” Due to the limited number of key informants involved, some products might not be useful to all stakeholders. For the products to be useful to decision-makers, RAP can recruit a multi-disciplinary team to increase its credibility. The next standard is feasibility, which refers to “using procedures that are appropriate, politically viable, and easy to implement.” RAP can adopt a combination of methods to achieve this goal. Finally, propriety “refers to using procedures that are
ethical and fair to those involved and affected by the results of the assessment.” Informed consent procedure can help protect informants’ rights (p.376-377).

Our study presented the pros and cons of RAP as discussed above. We tried to interview a variety of fishing-related personnel for triangulation purposes. However, due to the shortened timeframe, we were not able to discern the social network that ties the community together.

**Entering the Field**

Every week, we worked on a group of communities on a county basis. Due to the time constraints, we had to pick a key community that is considerably engaged in fishing and conduct in-depth research, while we merely drove through the remaining communities that were less engaged in fishing. To decide which community was the key community, Mike Jepson sometimes had hints. At other times, we usually used archival and secondary data to find out how significant the fishing business was to a certain community.

Soon after we arrived at the destination, we drove around the vicinity, observed local settings, and made adjustments to our plans. We also did the checklist to mark down the fishing identifiers.

Our informants are fishing-related businesses and personnel. We got the primary contact lists from NMFS’ permit data, boat registration and seafood dealer registration data. However, that database is not very updated and fails to include recent changes. Therefore, we used the method of snowball sampling to recruit our key informants,
because fishermen mostly know each other well. Sometimes, we even got referrals from other communities.

**Exploratory, Semistructured Interview**

Interview protocol

Mike Jepson and Stacy Ellis developed the interview protocols from the previous researches. I also helped to revise some protocols as our research progressed. Take the example of protocol for key informant commercial fishing interview. We had 17 questions that addressed different components of a “community.”

Table 3.1 Interview Protocol for Commercial Fishing Informants

| Fishing Practice in the Community | 1. What is your role on the vessel?  
| 2. What types of fishing do you do?  
| 3. What type of gear do you use?  
| 4. What type of fish do you usually catch during the different seasons?  
| 5. Where do you off-load and sell your fish?  
| 6. (If same place) Is this typical of fishermen in this area? |
| Community as a Supply Center | 7. Where do you buy supplies associated with your fishing? If you buy outside the community, how many miles away do you travel? |
| Employment | 8. How many crew do you have on your vessel? Does the number vary with the seasons?  
| 9. Is it difficult to find reliable crew? |
| Spatial Community | 10. Where do you live (inside or outside of the community)? If you live outside, how many miles do you travel to work?  
| 11. Do most commercial fishermen live inside or outside of the community? |
| Economic Condition | 12. Do you feel that fishing families are having financial difficulties? Why? |
| Social Community | 13. How do commercial fishermen get along with each other in your community?  
| 14. Are there any places or occasions that commercial fishermen and/or their families gather together? If so, please describe them. |
Table 3.1 Interview Protocol for Commercial Fishing Informants (Continued)

<table>
<thead>
<tr>
<th>Politics</th>
<th>15. Are commercial fishermen in this port active in any industry organizations or associations? If yes, please describe.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>16. Are local fishermen active in no-fishing community organizations or activities (civic organizations, city government, schools, etc.)?</td>
</tr>
<tr>
<td>General</td>
<td>17. Do you consider this port a “fishing community”? Why or why not?</td>
</tr>
</tbody>
</table>

Training

Mike Jepson trained Stacy Ellis and me when we did our field work in Cortez, where Mike spent years on his research and had developed rapport with community members. Mike did his dissertation research in Cortez and lived in the community for several years, during which he acted as an activist to strengthen community identity and to protect fishing culture. For example, he recorded oral history from Cortezians, and helped design the community vision plan. In late January, 2003, we spent three days in Cortez and learned how to approach the informants and do the interviews. As with many other communities, Cortez has undergone changes over the years. Although most of our informants are acquaintances of Mike, some informants moved to live or work in Cortez after Mike left the community. We experienced interviewing old friends as well as strangers. Once, we even met a bait shop owner who said that he was not interested in doing the interview. At that time, I was worried that if we approached strangers, how possible it was that they would agree to do the interview, when they had to stop their work and would not get much benefit. However, it turned out that the man who refused to talk to us in Cortez is the only person who did not cooperate with us.
Schensul et al. propose five steps in beginning an exploratory interview:

- Introduce yourself and the project, including the organization sponsoring it.
- Ensure confidentiality, and explain how you will protect privacy.
- Tell interviewees that their views are very important to you and to the project, and explain why.
- Ask permission to record interviews by tape-recording and in writing.
- Make interviewees comfortable by asking how they are, how their day went, how their family is, or some other culturally appropriate small talk. [1999:133]

Mike Jepson told us that we had to be very careful in introducing ourselves and the purpose of the project, because we worked for NMFS, which did not necessarily strike a good impression on commercial fishermen. From the interviews we did later, I felt that a lot of fishermen viewed NMFS as an “exploiter” that was partly responsible for the decline of their livelihood. Therefore, when we did our research, we should not stress that we were NMFS’ allies, but rather, we worked to help NMFS understand the consequences of their regulations and to facilitate communication between the policy-makers and the fishermen. Here is an example of our self-introduction before the interview:

We are doing research on fishing communities. We work for an agency called Impact Assessment, which is a non-partisan group that assesses various impacts on fishing, whether it is regulation, weather, imports, or development. After the research, we will present a report to the National Marine Fisheries Service, informing them of the current status of fishing communities on the Florida Gulf Coast. We do this for NMFS, because they are mandated by the federal government to know what is happening in fishing communities, especially the sociocultural status of fishermen. However, NMFS mostly hires biologists to get fish stock assessment, but not enough social scientists to assess the social impact on fishermen and fishing communities. We hope that you can do an interview with us, because your views are important in helping us and NMFS understand the changes happening in fishing communities. Therefore, NMFS can keep track of the impacts of regulations, imports and others. All information, including personal and business names, will be kept confidential.

If the informants agreed to accept our interview, we asked them permission to record interviews in writing.
In-Depth Interview

After the fieldwork for the project was over, I conducted some in-depth interviews with key informants in Cortez, Tarpon Springs, and Hudson to get more information for my thesis. At this time, I had already developed rapport with the participants and I really appreciated their patience and enthusiasm in helping me do the interviews. They often sat down and talked to me for three to four hours to give me detailed answers. Some fishermen showed me how they unloaded fish and shrimp when the boats returned to their homeport.

Report to NMFS

After all the fieldwork was finished in late April, we worked on the report to NMFS from May to August 2003. Stacy and I were responsible for writing up community profiles. Here is an outline of the profile:

- Community Overview
- History
- Demography
- Current Condition and Trends
  - General economic
    - Current predominant economic activity and scope of activity
  - Fishing specific economic and demographic factors
    - Types/areas of fishing/shrimping and predominant local gear use(s) if any
    - Trends in resident commercial permits, by species groups or nearshore/offshore if relevant
    - Brief geospatial description of residence, business, and fishing patterns
    - Percentage of population involved in commercial fish harvesting (ratio of permit holders to resident adult population)
    - Fishing-related business trends (commercial, for-hire, and recreational support businesses and recent changes as discernible)
- Social
  - Fleet/business interactions and conflicts if notable
  - Festivals/celebrations/unique/notable customs, subsistence practices
  - Salient issues

(Source: Impact Assessment 2003)
3.3 Ethics

IRB

Before I began this project, I submitted my IRB application to the USF Institutional Review Board along with the informed consent form. The Board approved my application and the consent form, which had also been reviewed and approved by my internship agency, Impact Assessment, Inc. However, as I started the research with the other team members, I was told that the informed consent form was unnecessary, as it would scare fishermen away. The agency maintained that the final report to NMFS will be a general description of the communities rather than details on individuals and businesses and an oral consent could suffice. Later, I discussed this issue with an IRB representative at the university and was told that I could apply for a waiver of the written consent and oral consent would suffice. Then, Impact Assessment, Inc., sent the USF IRB a letter, stating the reason for not using the written consent form.

In our research, when we sought the approval from informants doing interviews, we told them that 1) the information they provide will probably be included in a report that will be submitted to NMFS on what is happening in the fishing communities; and 2) All information will be kept confidential and anonymous unless the informant insists on using the real name.

In my thesis, I used pseudonyms for all cases, including business names and personal names. I also returned my draft to some key informants for review and they have given me constructive feedback.

Reciprocity
Contrary to some public allegations that commercial fishermen are “drunkards” and “merciless killers,” I found that most of the commercial fishermen I have met are hospitable and helpful. Some fishermen tended to shun us at first, when they heard that we were doing the research for National Marine Fisheries Service. When we explained that we were writing a report to inform NMFS what is happening in fishing communities, especially the socio-cultural impacts of the regulations, some fishermen began to look on us as saviors and expected that our research would help bring them a better life. Gaining so many “advantages” from my informants, I wonder what I can give them in return. The only thing that I can do is to publicize their “plight” so that they will be in a better position to make judgments about their own actions.

3.4 Difficulties of Fieldwork

I have encountered some difficulties in the fieldwork, especially during the first several weeks. Before our fieldwork started, my husband was very concerned, worrying whether it was safe for a young girl who is foreign to the country to go out to some remote and isolated fishing village to conduct research. His worry was soon relieved as I began my first training trip in Cortez and experienced the hospitality of the fishermen, who not only kindly accepted our interview, but also invited us for dinner, a boat ride and community meetings. I still remember the dinner at an old fisherman’s home (Alcee). They cooked soup and served us a lot of seafood. I was very moved, because I had not experienced dinner with my family for nearly two years since I left home to study in the U.S. I have had problems adjusting to the new environment and still experience “culture shock.” The situation got worse when I missed my family and realized that I was an
“inept” anthropologist, who should take the role as “culture broker” to facilitate understanding of different cultures. That night, at the fisherman’s home, I just felt that I was home again, when everybody chatted and shouted at the dinner table.

As a graduate student who did not have much research experience, I was confronted with other problems, at least at the early stage of the research.

1) Language barrier. Fishermen often have an accent, which I sometimes could not understand;

2) Interview skills. Sometimes, fishermen chatted on topics not related to the research and I did not know how to drag them back on track;

3) Unfamiliar with fishing culture. I had not worked with any fishermen before and had to both learn and work at the same time. My first dilemma was to know the name of fish, since a lot of the fish served here are strange to me.

I got more confident later when I interviewed more people and learned more.
CHAPTER 4 WHAT HAS HAPPENED TO FLORIDA GULF COAST COMMUNITIES?

4.1. Introduction of Commercial Fishing on Florida Gulf Coast

Figure 1.1 is a map of the Florida Gulf Coast marked with the communities discussed in the thesis.

4.1.1. History of Florida Gulf Fishing

From the earliest period of human occupation, the Florida Gulf Coast was an abundant fishing ground that provided subsistence for the earlier dwellers. What amazed the Spanish in their explorations were the various kinds of shell mounds built by early Indian tribes many years before Christ. Indians at that time already used canoes and rafts to sail to sea to catch shellfish. After they ate conch, oysters, clams, scallops and other shellfish, they used the discarded shells to build the mounds either for living, burial or ceremonial purposes. Archaeological evidence also recorded seafood trading between the Indians and Cuban fishermen, as the former prepared mullet and mackerel to sell to the latter. Seafood also provided an important nutrition source for the Spaniards who built various “fish ranchos” along the shores of Tampa Bay. At the time when Florida obtained its statehood in 1845, the state’s 1,197 miles of shoreline was one of the main attractions for tourists as well as commercial fishermen who came down from northern states. The
earlier fishermen aimed for one thing on the gulf—mullet, an inshore fishery ideal for the primitive boat with ice or electric motor (Green 1986). A U.S. Fish Commission survey
recorded mullet “kench-cured” before they were shipped to the Cuban market (Green 1986:46-47). Fish trade was further enhanced by the launch of the railroad and the establishment of the ice plant. In 1884, Henry B. Plant built the railroad connecting north and south Florida and it escalated the sales of gulf fish. The gulf communities were able to ship fish to the vast U.S. markets from Jacksonville and Atlanta, to cities further north.

The sponge industry thrived in the early 20th century, when some 9,300 square miles of sponge beds between St. John’s Light and St. Mark’s Light in the Gulf of Mexico were identified (Pinellas County Board of Public Instruction 1945:101). Tarpon Springs became the “Sponge Capital of the World” to bring in over $30,000,000 in raw materials alone for the 1910s to 1940s (p.103).

Shrimp trawling was first introduced on the Gulf of Mexico around 1918 (Durrenberger 1992:9). In 1956 a Gulf of Mexico exploratory research team discovered a royal red shrimp fishery, opening the gulf shrimping chapter. “The 1950 U.S. Fisheries report recognized a trend of fleet expansion, discovery of new fishing grounds, and larger shrimp boats in the gulf. In the gulf states, there were three hundred new vessels of greater than five tons displacement, and the boats were larger, more powerful, and better equipped, with longer cruising ranges than before” (Durrenberger 1992:100). In 1962, it was reported that 19 commercial fishermen were converted for it within the year. The next year, Gulf gear research demonstrated that the electrified trawl net could significantly improve commercial shrimp trawling efficiency (National Marine Fisheries Services 2002).

Longline grouper fishing came in the 1970s, introduced by the Japanese longline fleet that fished in the central and western Gulf of Mexico for yellowfin tuna. When they
caught all the yellowfin and left, their longline technology remained behind for our commercial industry to copy and adapt to bottom fishing. Florida commercial fishermen began longline grouper fishing in the late seventies. As the fish were depleted in shallow water, they had to go farther and farther offshore (Walker 2002).

Mullet remained an important commercial fishery along the gulf coast until the mid 1990s (Gulfport Historical Society 1985; Quesada, Jr. and Luisi 1999; Indian Rocks Area Historical Society 1980). In 1994, the last year before the net ban, mullet landing on the Florida west coast recorded 12,448,318 pounds, or $9,499,241 (National Marine Fisheries Annual Commercial Landing Statistics). The net ban that began to be enforced in 1995 pushed a lot of mullet fishermen out of their fishing careers. Some of them quit fishing, while some switched to cast net fishing, crabbing, grouper fishing, or shrimping.

4.1.2. Current Status of Commercial Fishing

Our research has found that presently Florida mid- and south- Gulf fishermen concentrate on the following fisheries and gear:

Table 4.1 Florida Mid- and South- Gulf Fisheries and Gear

<table>
<thead>
<tr>
<th>Fishery</th>
<th>Gear</th>
<th>Geographic Area</th>
<th>Fishing Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net fish (mullet, pompano, etc.)</td>
<td>Cast net</td>
<td>Mostly in Pine Island</td>
<td>Inshore (within 9 nautical miles), return same-day</td>
</tr>
<tr>
<td>Bait fish (Thread herring, chum)</td>
<td>Purse Seine</td>
<td>Cortez, Crystal River, Homosassa, Hudson</td>
<td>Inshore (within 9 nautical miles), return same-day</td>
</tr>
</tbody>
</table>
Table 4.1 Florida Mid- and South- Gulf Fisheries and Gear (Continued)

<table>
<thead>
<tr>
<th>Grouper</th>
<th>Longline rig</th>
<th>Mostly in Madeira Beach and Cortez</th>
<th>Offshore, fish for about 14 days</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bandit rig</td>
<td>Crystal River, Hudson, Madeira Beach, Cortez</td>
<td>Offshore, fish for about 7 days</td>
</tr>
<tr>
<td></td>
<td>Fish trap</td>
<td>Mostly in Homosassa</td>
<td>Inshore, return the same day</td>
</tr>
<tr>
<td>Shrimp</td>
<td>Bait shrimp (live)</td>
<td>Roller Rig</td>
<td>Bait shrimp: Crystal River, Homosassa, Hudson</td>
</tr>
<tr>
<td></td>
<td>Prawn shrimp (frozen)</td>
<td>Otter trawl</td>
<td>Prawn shrimp—Tarpon Springs, Tampa, Fort Myers Beach</td>
</tr>
<tr>
<td>Crab:</td>
<td></td>
<td>Crab trap</td>
<td>Crystal River, Homosassa, Hudson, Cortez, Pine Island, Everglades</td>
</tr>
<tr>
<td>Stone crab</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blue crab</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clam farming</td>
<td>N/A</td>
<td>Pine Island</td>
<td>N/A</td>
</tr>
</tbody>
</table>

4.2. The Decline of Florida Commercial Fishing Communities

My study has made it apparent to me that fishing communities on the Florida Gulf have undergone drastic changes in response to the economic and social changes happening in their surroundings. In general, commercial fishing communities have declined as represented by the following facts:

1) Fish houses have shut down

I have observed the severe decline of fish houses along the gulf coast. Fifteen years ago, there were four fish houses in Hudson. Now only one remains in the whole area.
Pasco County. In Madeira Beach, the “Grouper Kingdom of the World,” three fish houses closed in the last decade. Boca Grande has completely changed into a retirement haven now and none of the four fish houses that once supported a hundred commercial fishermen is still active.

Table 4.2 illustrates the decrease of commercial landing at the Florida west coast. The net ban slashed the finfish landing by 40 percent and it could never recover to the prior-net ban level even in 2001. Even though shrimp harvests had a few good years between 1995 and 1998, grand totals of commercial landing after the net ban still rated lower than the 1994 level.

Table 4.2 Commercial Landing of Florida West Coast (1994-2001)

<table>
<thead>
<tr>
<th>Year</th>
<th>Finfish</th>
<th>Invertebrates</th>
<th>Shrimp</th>
<th>Bait Shrimp</th>
<th>Grand Totals</th>
<th>Fishing Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>72,677,041</td>
<td>26,308,560</td>
<td>14,846,009</td>
<td>1,166,733</td>
<td>114,998,343</td>
<td>11,353</td>
</tr>
<tr>
<td>1995</td>
<td>43,904,241</td>
<td>25,618,053</td>
<td>20,560,078</td>
<td>1,175,350</td>
<td>91,257,722</td>
<td>10,390</td>
</tr>
<tr>
<td>1996</td>
<td>37,069,032</td>
<td>28,930,495</td>
<td>27,042,243</td>
<td>1,360,026</td>
<td>94,401,796</td>
<td>10,186</td>
</tr>
<tr>
<td>1997</td>
<td>40,318,175</td>
<td>26,058,682</td>
<td>19,420,230</td>
<td>1,367,612</td>
<td>87,164,699</td>
<td>9,817</td>
</tr>
<tr>
<td>1998</td>
<td>39,097,133</td>
<td>31,345,835</td>
<td>26,144,840</td>
<td>1,612,251</td>
<td>98,200,059</td>
<td>9,499</td>
</tr>
<tr>
<td>1999</td>
<td>44,398,508</td>
<td>31,405,621</td>
<td>15,421,548</td>
<td>1,666,011</td>
<td>92,891,688</td>
<td>9,214</td>
</tr>
<tr>
<td>2000</td>
<td>39,479,558</td>
<td>22,922,151</td>
<td>13,970,376</td>
<td>1,707,110</td>
<td>78,079,195</td>
<td>8,992</td>
</tr>
<tr>
<td>2001</td>
<td>44,534,523</td>
<td>18,805,232</td>
<td>13,639,717</td>
<td>1,626,626</td>
<td>78,606,098</td>
<td>8,378</td>
</tr>
</tbody>
</table>
2) The number of commercial fishermen decreases

The closeout of fish houses leads to the decrease of commercial fishermen, who rely on the fish houses to make a living. In Crystal River, according to a commercial fisherman, the number of commercial fishermen declined by 80 percent compared with the 1960s. I was told that twenty-five years ago, every man in Old Homosassa was a commercial fisherman. Now the area has more tourists than commercial fishers.

Florida fishermen have to acquire a combination of fishing permits to catch different fish. The saltwater products license (SP) is the primary commercial fishing license a fisherman has to have in order to fish in Florida's marine waters. That fisherman could also have a series of endorsements attached to the SP such as crawfish, stone crab, blue crab, etc. In other words, the SP allows the fisherman to fish, the crawfish endorsement to the license allows the fisherman to catch crawfish. Therefore, the number
of SPs reflect directly the fluctuation of the number of active fishermen. Figure 4.2 shows that the number of commercial fishermen dropped dramatically after the net ban. Prior to the net ban in 1994, there were 11,353 commercial fishing permits (SP) on the Florida west coast as well as 390 gill net permits. In 1995, the first year of the gillnet fishing ban, permit number fell eight percent to 10,390, while all gill net licenses were revoked. In 2001, the latest year with a commercial landing report, license number recorded only 8,378, or a significant 26 percent decline compared with 1994.

Figure 4.2 Florida West Coast Commercial Fishing Permits (1994-2001)

![Florida West Coast Commercial Fishing Permits (1994-2001)](chart)

(Source: Florida Marine Research Institute)

3) Fishermen suffer financially
One of our questions on the livelihood of fishermen is “Do you think that commercial fishermen suffer financially?” A great majority of our informants say yes. This year, the shrimpers harvested shrimp at the docking price of the 1970s. “In the past, they only went fishing and were self-sufficient. But in the last 15 years, they jumped to alternatives.” Many of the commercial fishermen we interviewed were pessimistic towards the future of commercial fishing. “I will beat him (my son), if he wants to be a commercial fisherman. This [commercial fishing] is a dying business.”

4.3 Causes of the Decline

The main causes resulting in the decline of commercial fishing on the Florida Gulf Coast include: regulations, imports, and the combination of tourism and urban sprawl.

4.3.1 Regulations

“Whoever has been charged with the task (of fisheries management) has been accused by others of self-interest, incompetence, neglect, maladministration, corruption, or worse” (Durrenberger 1992:viii).

Currently, Florida fishermen are under the administration of both federal and state level fishery management. The National Marine Fisheries Services represent the federal-level management and regulates the boundary of federal waters, which are known as the Exclusive Economic Zone (EEZ) that extends from state waters out 200 nautical miles to the outermost point in the United States. The state waters in Florida, which fall in the terrain of state level management by Florida Wildlife Conservation, consist of all waters
within nine nautical miles of the shoreline in the Gulf of Mexico and three nautical miles in the Atlantic Ocean.

**History of Fishery Management**

The first fishery administration in the U.S. was established in the late 19th century and was called the U.S. Fishing Commission, the antecedent of the current federal management of National Marine Fisheries Service. The mission of early administration was to document the scale of commercial fishing in the nation and to conduct research to improve the efficiency of undeveloped fishing methods. With the advancement of technology, i.e., the debut of massive ice-making machines and electric hauling, the capacity of fishing expanded swiftly. In the 1970s, the fisheries management began to impose regulations to combat the crisis of overfishing (Schley 1971).

The regulatory regime was initiated during the apogee of the U.S. economic growth following World War II. The recessions of the 1970s and 1980s weakened fiscal resources available to government and increased competition in the private sector. There was also increased international competitiveness, particularly from Europe and Japan but also from the newly industrializing countries. Together these factors generated a strong incentive to reduce the social overhead of U.S. business. The *efficiency regime* was initiated in which market mechanisms are viewed as appropriate for dealing with negative externalities (e.g., pollution permits) and where the general level of economic competitiveness is more important than (marginal) improvements in the environment. [Pooley and Townsend 1998:155]

The Magnuson Fishery Conservation and Management Act of 1976 asserted federal government control over marine fisheries within the 200-mile exclusive economic zone (EEZ). It also created eight regional fishery management councils to advise NMFS on management issues by working on “how best to balance conservation and human use and enjoyment of the oceans” (National Marine Fisheries Service 2003). The area we
studied—mid Florida gulf coast—falls into the realm of the Gulf of Mexico Fishery Management Council, which is comprised of members from Florida, Alabama, Mississippi, Louisiana and Texas. Right now, the council consists of four members representing the commercial fishing sector, six members representing the recreational fishing sector, and one from the environmental protection sector.

**Model of Fishery Management**

Fishery management usually exercises its sovereign power through the technical model of the common property resource (CPR), in the belief that the result of each one acting in his or her individual interest would deplete the resource beyond any use (Durrenberger 1994 and Maustrad 2000). For example, as Garrett Hardin (1977) made clear, a pasture open to all will urge each herdsman to keep as many cattle as possible on the commons. As a biologist, Hardin proposed that the human intention to survive would result in overpopulation, because individuals acting in their own best interest would bring disaster to the whole society.

The stricter regulations over fishing since the 1970s have reflected the federal and state officials’ initiative to curb the “human greed.” This management model, however, has been criticized by anthropologists for being “overly simplified and deterministic” (Feeny et al. 1998:88) and for ignoring the complexity and nuances of issues (Durrenberger 1994; Maurstad 2000). When the Norwegian government implemented regulations to revive cod by limiting activities of non cod-dependent fishers, they were surprised to see that though the number of fishers was reduced by 20 percent the total landing of cod remained the same four years after the enforcement of the regulation. The
fishing managers mistakenly equated technical capacity (boat size) as productive capacity (real catches), and failed to realize that many fishers actually fished little. After the new allocation rules, fishers had to increase their harvest to meet the quota of “cod dependency.” The regulation did not fulfill its goal of recovering cod, but ended up putting fishers into stressful conditions (Maurstad 2000).

Confrontations between regulators and the regulated are bound to happen, as the two parties possess opposite ideologies of action. “A central problem in natural resource management involves a gap between the public interest (e.g., long-term conservation of fishery stocks and their ecological environment) and the immediate interests of those utilizing a fishery” (Pooley and Townsend 1998:154).

This incompatibility is reflected and exacerbated by the different mindsets towards natural resource utilization. The fishery management upholds the “Tragedy of the Commons” model and thinks that fishermen (fishing activity) should be regulated to preserve the health of fishing stocks. Fishermen, on the contrary, often show doubts regarding fishery managers’ assertions. I have observed fishermen’s ambivalent viewpoints as to whether regulations are necessary.

Many fishermen resent the limitation of fishing, because they do not think that they are overfishing, or have overfished. “The watermen treated anything that floated, swam, crawled, or flew into their marshy domains as God-given and therefore not subject to the laws of mortal men. What the Lord provided, no landsman should tell them how to harvest” (Warner 1976:77). A common saying that I heard from fishermen is that “Mother nature will take care of it.” They view the good-year and bad-year as the self-regulating mechanism of fish stocks that have not depleted. A fisherman claims, “Despite
the allegations of the policy-makers, there is not a single fishery that disappears in the world." Contrary to the allegation that fishermen deliberately destroy natural resources, I found that a lot of them have a close relation with nature. Fishermen in Cortez purchased a natural reserve to protect the sound environment for fisheries against the manipulation of real estate developers. A fish house owner in Tarpon Springs was angry that a power plant dumped polluted water into the gulf. When we visited Pine Island, before we posed our questions, local fishermen asked us “Why do you think God created fish for?” As my partner and I failed to give satisfactory answers, fishermen corrected us “For Food.” Then they criticized recreational fishermen that use fish for play and destroy the natural environment by dredging canals to build condominiums.

However, a few of the fishermen think that fish stocks should be regulated. A fish house owner mentioned that his parents fished in the gulf in the 1980s and could harvest up to 10,000 pounds of fish in a trip (mullet, Spanish mackerel and jacks), compared with the present maximum volume of 2,000 lbs. She said that later, when fish was depleted in the Gulf of Mexico, her parents had to travel to Columbia and Honduras to fish. In fact, fishermen do not think that all regulations should be abandoned at all. They are just not satisfied with the inequity of regulations between recreational fishing and commercial fishing.

Weeks discusses problems with the communication among the several parties: “Management is a dialogue among representatives of government agencies, scientific communities, and citizen groups” (2000:103). The dialogue between the agencies and fishermen is often unsuccessful largely because the two sides speak different languages. Weeks analyzes the three layers of language. “First, language refers to the words used by
various actors to describe the world and to relate to others.” “Second, it reflects the conceptual framework of its users.” “Third, language designates differences among social groups.” (2000:103-104) Williams and Matheny identify three different languages involved in policy process. Managerial language is based on the technical library and assumes that science is the sole creditable criteria in policy-making. For fishery policy-making, managerial language is “goal-oriented” and aims to “conserve fish, regardless of the wishes of various interested social groups” (Weeks 2000:105). On one hand, it poses a communication barrier as the “experts” insist on using scientific and technical jargon that not all fishermen are capable of mastering. On the other hand, fishermen’s practical experience in water is either disregarded or minimized. Pluralistic language takes a political approach and views the policy process as a balance of power. In terms of fishery management, the equilibrium of power is to be achieved among the following interests: recreational fishing, commercial fishing, tourism, seafood imports, and environmental conservation. Communitarian language represents citizens’ desires to participate in the policy-making process and to maintain grass-roots control. William and Matheny claim that policy makers engage the first two either singularly or in combination, while lay citizens adopt the third language. In the Texas limited entry program for shrimp, fishermen’s explanations of the higher catch rate of small fish were delegitimized by managerial acceptance of biological and economic models (Weeks 2000).

The fisheries management obviously upholds the text-mediated bias, in contrast to the fishermen’s standpoint situated in the actuality. The “Big Science,” scientific data and methodologies designated by the government as the only truth or only norm, has become the dominant paradigm of fishing administration, at the expense of “Small Science”
based on indigenous knowledge (Smith and Jepson 1993). Commercial fishermen in Florida are regulated by the type and size of their gear, closure of fishing areas, quotas, and seasonal closure of fisheries based on a bioeconomic model. However, the indigenous model, which is based on the premise that nature is unpredictable, however, is often ignored by the bureaucratic management because it counters the scientists’ attempt to predict resource trends and to intervene with sea life (Paolisso 2002:227). One fisher sadly complained, “It just shows me that you can hire [a biologist] to tell you anything you want” (Smith and Jepson 1993:47).

Here the production of knowledge and the exercise of administrative power intertwine, and each begins to enhance the other. The supervision of normality was firmly encased in a set of biological data that provided it with a sort of--what Foucault terms--‘scientificity’; it was supported by a judicial apparatus, which, directly or indirectly, gave it legal justification. The production of new knowledge had become aligned with corporate, disciplinary, and administrative power. “It ‘naturalizes’ the legal power to punish, as it ‘legalizes’ the technical power to discipline” (Foucault 1977:303).

I talked to an economist from NMFS who asserts that there is a gap between advanced scientific methods and common language and it is hard explain biologic, socio-economic assessment to common persons due to their different levels of understanding. In numerous public hearings, communication is often one-sided (top-down), resulting in fishermen’s inability in understanding the scientific model and failure to express their own views. He further expresses that “it is not just one end’s (fishermen) fault. Scientists can’t bring down the jargons to common language.” Furthermore, there is a question of whether the data are valid or whether the explanation of the data is credible. “Sometimes
people make assumption before they analyze the data.” “It is not the issue of who is lying and who isn’t, but whose evidence is most compelling.”

Finally, the NMFS official shows sympathy to fishermen, saying “it is hard for fishermen to bear the burden without understanding why.” However, it is still fishermen who suffer because their position is less advantaged than that of other interest groups.

**The Net Ban and Its Consequences**

**Introduction of the Net Ban**

Over many years, Florida fishermen were subject to the above-mentioned management restrictions, but they have recently been thrust into a deeper plight by the net ban. The constitutional amendment (so-called net ban) was approved by Florida voter referendum in November 1994 to “prohibit the use of entangling nets (i.e., gill and trammel nets), monofilament material, nets over 500 square feet, more than two nets from a vessel, and possession of mullet and a gill net on the same vessel” (Florida Constitution Article X Section 16). The prohibition targets the protections of mullet, which are almost entirely a commercial fishery but ecologically play an important role in the food chain (Salz 1998). By outlawing the use of gill nets, commercial fishermen are basically cut off from mullet catches, which are valuable for them due to the high demand for roes in Asian markets.

The controversy of the constitutional amendment represents the prolonged and escalated conflicts between commercial and recreational fishermen. It again confirms Foucault’s statement that authority manages to control individuals by exercising political arithmetic. Power, in this case, is not possessed, but exercised. Through a possession of
biological statistics, the recreational fishermen successfully manipulated the public to act against commercial netters. Though commissioners expressed concern about the lack of information on fish mortality rates by recreational and commercial catches, recreational anglers had already successfully persuaded the public that commercial fishers were greedy predators who used entangling nets that caused unnecessary killing of other animals and that a prohibition of nets would help revive fishing stocks. The fishermen’s combat has proved unsuccessful when the amendment was approved by 72 percent of the voters. Prior to the vote there were over four million recreational anglers in Florida compared to only 16,000 commercial net fishers. The former claimed certain sources of scientific, social or political power, while the latter were disadvantaged in access to decision-making in the bureaucratic management. The commercial netters’ voices were weak when they claimed that the mullet fishery had not collapsed nor been over fished; that inshore gill net fishermen were not killing hundreds of turtles; that the net ban would eliminate a traditional way of life in Florida as well as access to low cost fish for many low income people. Finally, the net ban was officially implemented on July 1, 1995, although many commercial fishermen criticized recreational fishermen for using environmental protection as a ploy to maneuver the public, but in fact, trying to grab Florida’s marine resources for themselves and for the lucrative sport fishing industry (Smith and Jepson 1993; Barnes 1995; Salz 1998).

The net ban has negatively affected Florida fishermen since its inception. Research conducted upon 44 commercial fishing families with children in 1997-98 revealed that the percentage of fishers fishing full-time dropped from 90 percent at 1991-
1993 to 70 percent in 1997-1998, while family income from fishing declined from 80 percent in 1991-1993 to 55 percent currently (Adams, Jacob and Smith 1999).

Deconstructing the Net Ban

The net ban debate turned out to be a political battle under the guise of environmental protection. Recreational fishermen successfully colonized the lifeworld of both the general public and fishermen with media-steered forces of money and power. Habermas (1987) posits that if communication is normal, mutual understanding will be achieved through communicative rationality devoid of systematic distortion. Members know that they can err, but “even a consensus that subsequently proves to be deceptive rests to start with uncoerced recognition of criticizable validity claims” (Seidman 1989:185). Communicative action requires no pretended convictions brought about by force, but a transparent process of reaching understanding. In the net ban campaign, communicative action is replaced by media-steered interaction. A group of recreational fishermen, who are editors of the *Florida Sportsman* magazine, initiated the net ban proposal and ambitiously aimed directly to secure a constitutional amendment by public initiative in Florida. They also had monetary interests to carry out this campaign, since they know as well as any one else that the 1,350 miles of coastline and productive waters in Florida are treasure islands whose health and sustainability can not be ignored (Barnes 1995).

Quickly, recreational fishermen colonized the lifeworld of the general public and fishermen with the monetary-bureaucratic complexes. In November 1992 they kicked off the program of “Save Our Sealife” through their massive advertising network to appeal to
public interests by portraying commercial fishers as ruthless and greedy netters (Figure 4.3). In just a year, by late 1993, they successfully gathered 242,394 signatures, over 50 percent of the required number to file a bill of constitutional amendment (Barnes 1995). The media-steered forces were so strong that the general public had no chance to mobilize their own communicative rationality when their lifeworld was dominated by the deceptive statements from the recreational fishers. Furthermore, recreational fishermen deliberately excluded the discussion of several issues. For example, “is the mullet population declining?” “If yes, who caused the fish stock depletion? (i.e., it could be sports fishermen and developers).” Actually, no scientific evidence has presented that mullet was overfished. Even though the mullet stock did decline, recreational fishermen failed to provide evidence that commercial fishermen were the single party to bear the cost. And, what is the price of depriving commercial fishermen’s livelihood and the lost of Florida tradition?” As Gaventa asserts, “One of the most important aspects of power is not to prevail in a struggle but to predetermine the agenda of struggle-to determine whether certain questions ever reach the competition stage” (1980:10). Sports fishermen know the rules of political games well and direct the public only to the issue of by-catch, while concealing the discussion of other important controversial issues.
Situated in a disadvantaged position, fishermen also saw a breakdown of their communicative infrastructure. Although there lacked information regarding the mortality rates for recreational and commercial catches of nearshore species, commercial fishermen’s voices were too weak to alert the public’s awareness of their communicative crisis. At the same time, fishermen’s own sense of integration in society is corrupted, as their cultural traditions, which serve to bind associated individuals to one another and secure social integration (Seidman 1989:184), face the risk of collapse.

4.3.2 Imports
Saltwater fish imports are abundant and tuna had always been the No.1 seafood import to the U.S. until 2001, when its position was replaced by shrimp (National Marine Fisheries Service, Foreign Trade Information). We have not met any tuna fishermen yet and have not heard of any significant impacts of other saltwater fish, except that Mexican and South American grouper supplied local restaurants during the gulf grouper closure month. I will discuss more about shrimp imports, which have had posted great impacts on local shrimpers.

The shrimp import history can be traced back to the late 1939s and the volume keeps a steady increase for decades.

In 1939, United States imports were a little over 3.7 million pounds, 4 percent of the 93 million pounds of shrimp consumed. The United States imported about 40 million pounds of shrimp in 1954, sufficient to bring down significantly the price of domestic shrimp. Imports were 85 million pounds in 1958; they accounted for 107 million pounds in 1959 compared to the domestic catch of 142 million pounds. Furthermore, at the end of 1959 there were 50 million pounds of shrimp, 20 percent of annual domestic consumption, in storage as surplus. [Durrenberger 1992:104]

Increasing imports had two consequences. On the one hand, they tended to suppress the price of domestic shrimp. On the other hand, imports feed packers from dependence on local shrimpers. At the same time, shrimpers were going into debt for larger boats to bring in the increased catches from farther out in the gulf. They became more independent on processors for their livelihoods. [p.106]

Shrimp farming took off in the mid 1970s in over a dozen countries in the world. By 1975, world production probably reached 50,000 metric tons, or 2.5 percent of world shrimp supplies of approximately two million metric tons. At the same time, from 1975 to 1985, production grew from 50,000 to nearly 200,000 metric tons, recording an increase of 300 percent. From 1985 to 1995, the momentum kept a vibrant growth of 250 percent (Rosenberry, 2003). In contrast to the skyrocketing shrimp imports, in 1980,
United States shrimping inside Mexico's 200-mile limit was terminated (Durrenberger 1992:182) and domestic shrimp production has been steady since then.

In 2001, for the first time, shrimp topped the list of most consumed seafood in the country. Per capita intake reached 3.4 pounds, surpassing 2.0 pounds for the second-ranked tuna. Over the last decade, shrimp consumption in the U.S. has increased by almost one pound per person (Saulnier 2003). Table 4.3 illustrates annual shrimp imports by the U.S. over the last decade. Shrimp imports have increased steadily since 1996 and struck a significant 16 percent hike in 2001 as “dumping” launched. Compared with the uncontrolled increase of imports, domestic harvest has remained steadily between 130,000 and 180,000 metric tons (Table 4.4). In 2002, imports dominated 99 percent of the U.S. market by tonnage, and occupied 85 percent of the market by value.

Table 4.3 Shrimp Imports (1993-2002)

<table>
<thead>
<tr>
<th>Year</th>
<th>Tons</th>
<th>Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>272,601,682</td>
<td>2,169,581,266</td>
</tr>
<tr>
<td>1994</td>
<td>284,828,325</td>
<td>2,667,783,921</td>
</tr>
<tr>
<td>1995</td>
<td>270,891,416</td>
<td>2,580,891,416</td>
</tr>
<tr>
<td>1996</td>
<td>264,207,166</td>
<td>2,457,499,875</td>
</tr>
<tr>
<td>1997</td>
<td>294,077,687</td>
<td>2,953,589,311</td>
</tr>
<tr>
<td>1998</td>
<td>315,442,463</td>
<td>3,112,411,481</td>
</tr>
<tr>
<td>1999</td>
<td>331,706,474</td>
<td>3,138,447,045</td>
</tr>
<tr>
<td>2000</td>
<td>345,076,835</td>
<td>3,757,327,794</td>
</tr>
<tr>
<td>2001</td>
<td>400,337,115</td>
<td>3,626,796,957</td>
</tr>
<tr>
<td>2002</td>
<td>429,302,730</td>
<td>3,422,089,353</td>
</tr>
</tbody>
</table>

(Source: National Marine Fisheries Service)
Table 4.4 Domestic Shrimp Landings (1993-2002)

<table>
<thead>
<tr>
<th>Year</th>
<th>Tons</th>
<th>Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>139,261.20</td>
<td>434,039,295</td>
</tr>
<tr>
<td>1994</td>
<td>133,933.10</td>
<td>574,989,660</td>
</tr>
<tr>
<td>1995</td>
<td>154,008.30</td>
<td>608,288,182</td>
</tr>
<tr>
<td>1996</td>
<td>155,633.10</td>
<td>538,192,278</td>
</tr>
<tr>
<td>1997</td>
<td>138,959.30</td>
<td>571,614,911</td>
</tr>
<tr>
<td>1998</td>
<td>144,520.30</td>
<td>575,547,705</td>
</tr>
<tr>
<td>1999</td>
<td>143,257.30</td>
<td>588,297,507</td>
</tr>
<tr>
<td>2000</td>
<td>175,140.30</td>
<td>775,351,213</td>
</tr>
<tr>
<td>2001</td>
<td>156,958.70</td>
<td>577,570,060</td>
</tr>
<tr>
<td>2002</td>
<td>165,889.20</td>
<td>585,059,951</td>
</tr>
</tbody>
</table>
Ocean shrimping used to be a profitable business, especially for shrimpers who worked in boats as big as 70-90 feet. These big boats usually install a freezer with up to 20,000 pounds capacity and haul with four nets. Without the hassle of carrying bait or keeping the shrimp fresh, the big shrimp boats are free to trace shrimp from Key West to Texas in different seasons of the year. Except for the mandatory use of the Turtle Excluder Device (TED) to protect sea turtles and the BRD (By-catch Reduction Device) to save red snapper, shrimpers have not faced very strict regulations like grouper or mullet fishermen do.

Shrimpers did not always oppose imports, which account for 88 percent of domestic consumption. They know that they cannot compete with the low-cost farmed shrimp, which is usually raised in developing countries, especially in Asia and Latin America. Those countries have cheaper land use and much lower labor costs. Moreover, aquaculture voids the expenses of boat, fuel, and insurance. However, domestic ocean
wild-caught shrimp have not been totally replaced by the farmed products in the category of large-sized shrimp, because farm-raised shrimp usually live shorter than ocean shrimp and therefore have to be harvested before they are fully grown. Thus, imports have not much threatened the big shrimp sector.

The shrimp price plummet beginning in early 2002, shocked domestic shrimpers. The price slide is widely believed to be caused by “dumping” of farmed shrimp from some Asian countries including Vietnam, China, and Thailand to the U.S. market, after the products were banned by the European Union as a food health threat. At the end of 2001, EU food inspectors detected the existence of Chloramphenicol, a powerful antibiotic that is widely banned for agricultural uses. In mid-March 2003, the EU announced a ban on all imports of Chinese food, valued at $330 million annually, on the grounds that Chloramphenicol was found in shrimp, rabbit meat, and honey from China. At the same time, EU took stringent measures to test all farmed shrimp coming from other Asian countries after finding residues of nitrofuran, another banned antibiotic in Thai shrimp. Hampered by the banning and even the destruction of unhealthy shrimp in the EU, the giant Asian aquaculture producers hastily transferred the exports to the U.S., which is not worried about the minute level of chloramphenicol. From 2000 to 2002, the price of shrimp in Florida has dropped as much as 40.75 percent below prior periods according to the state government report (React Program, State of Florida, 2003). The price for shrimp 40/50 head-on (indicating the number of shrimp within a one pound limit) dropped from $2.10 in January 2001, to $1.40 in October 2001, to only $1.15 in April, 2003. Since 2000, imports from large exporting countries have exploded —
Vietnam up 169 percent, India up 74 percent, China up 73 percent, and Brazil up an incredible 210 percent (Southern Shrimper Alliance 2003).

Shrimpers complained that the dockside value of domestic shrimp decreased below the 1970s level. Exacerbated by the increase of fuel costs, many shrimp boats tied up at the docks for weeks from the Gulf Coast to the Atlantic Coast.

4.3.3 Tourism and Urban Sprawl

Commercial fishing is at odds with the urbanization process accompanied by the development of tourism. On one hand, the two stakeholders—fishermen and developers—compete for the same resources, the valuable waterfront property. Fishermen often live and work by the water, which, however, has not fallen into fishermen’s exclusive use, but lures tourism promoters, developers, and recreational businessmen as well. On the other hand, commercial fishermen mentioned that the stingy smell of fishing boats and crab traps often scares tourists and retirees away and infuriates developers. In this cake-cutting game, the party that contributes more to the local revenue will definitely gain more support from local government, and therefore, acquires more access to the use of waterfront property. In our research, we heard that a lot of fish houses closed down to build condominiums and fishermen were forced to relocate due to the increase of waterfront property taxes. This fishing-tourism imbalance can be explained by the unequal sales revenues of the two industries in the State: 0.2 billion versus $51 billion (2001) (National Marine Fisheries Service Commercial Landing Data; Wall Street Journal 2003).
The Urban-Rural Dissonance

If fishing, as a resource extraction career, belongs to the rural category, the dissonance between such activity and the complex of urban/suburban facilities, tourism (recreational fishing, boating, and beaching), retirement homes and condos, echoes the urban-rural contrast. I have observed that the more a fishing community maintains its rural character, the more likely it can survive. 1) The two different groups advocate different values. Granovetter defines the strength of a social tie between persons as “a (probably) linear combination of the amount of time, the emotional intensity, the intimacy (mutual confiding), and the reciprocal services which characterize the tie” (1973:1361). For urban dwellers who are mobile, their network is characterized by contacts to whom they are weakly tied. On the contrary, rural community is marked by “geographic immobility” and “lifelong friendships” (Gans 1962). The fishermen I interviewed express pride in “a sense of community” that their urbanized emmigrants fail to receive. 2) Commercial fishing stands in the way of the tourism/retirement boom for practical reasons. Not many tourists or the middle/upper-middle class could stand the pungent smell of fish, crab traps, or shrimp nets.

The following example tells us that the survival of commercial fishing depends on certain geographic/environmental conditions. Despite the disruptive impact of the net ban on all coastal fishing communities, Pine Island still remains rural and possesses a strong commercial fishing basis, compared with the adjacent Boca Grande, both of which are located at the Charlotte Harbor-Pine Island Sound area that is abundant with fish. One reason is that Gasparilla Island where Boca Grande is located has a beach while Pine Island is surrounded by swamp land. Pine Island looks like a preserved community
“thirty-years behind time” with little development, while Boca Grande has been transformed into a haven for the rich. I begin to wonder about the relations between rurality and the sustainability of commercial fishing. Does rurality help the preservation of commercial fishing, or the reverse? The degree of rurality seems not under the control of fishermen themselves. Basically, it is the developer in association with local government who decides which area has the potential for development. One important identifier is the beach. All the beachfront areas are very well developed, like Sarasota, Clearwater Beach, Anna Maria Island, Indian Rocks Beach, Marco Island, Punta Gorda, Boca Grande, Sanibel and Captiva (Figure 4.4), while the swamp and mangrove waterfront communities like Crystal River, Homosassa, Hudson, Everglades and Pine Island can temporarily escape the massive manipulation of developers (Figure 4.5).
It is important to be reminded that most geographically defined communities are not uniform entities, but can be further divided into sub-communities. Whenever I arrived in a place, I asked myself “Is this a rural or urban community?” but the answer is not easily found. If I say that Cortez Fishing Village is rural, then my confidence withers as I observed the surrounding suburban condos and retirement homes. The community of Homosassa, for example, could be divided into (1) Old Homosassa (south of Homosassa River, west of U.S. 19), which is still predominately a commercial fishing community, (2) Homosassa (north of Homosassa River, west of U.S. 19), which features recreational fishing, and (3) Homosassa Springs (East of U.S. 19), which is an urban/retirement community. The same is true for Fort Myers Beach, within which San Carlos Island has
been reserved for the shrimp fleet, while Estero Island is dominated by condos and
marinas.

I have observed how some commercial fishing communities, intentionally or
unintentionally, use various ways to claim their territory against the invasion of
unfriendly forces. In Tarpon Springs, commercial fishing facilities are largely located
north and west of the Anclote River, while tourism concentrates on the southern bank or
the sponge docks. In Cortez, fishermen claimed the designation of “Commercial Fishing
Village” to evade the intervention of condos and other anti-fishing sources.

The invasion of urbanity into the former rural villages reflects what Summers
terms “vertical integration.”

The increased presence of extra-local forces in the community (vertical integration) had
destroyed the horizontal integration and rendered small rural communities powerless in
the face of broad and powerful forces of urbanization, industrialization,
bureaucratization, and centralization. [Summers 1996:349]

The key issue in this transformation relies on who can obtain the control of
essential resources. For commercial fishing, competition arises both on the water and on
the land. Although the ocean is a common property resource, the right to use it is not
unlimited and falls under both federal and state regulation. The Net Ban issue
demonstrates how recreational fishermen cunningly seized control of the inshore fishing
resources by banning commercial mullet fishing.

The result of “vertical integration” in the vast Florida coastal communities
represents “development in the community” rather than “development of community”
(Summers 1996). “Community is a qualitative field of social interaction with the capacity
to influence and shape the well-being of participants” (Summers 1996:355). Therefore,
community development should be evaluated not only in the economic realm, but also in the socio-cultural settings. “Development of Community” is stated eloquently by Wilkinson, who argues that “community refers to certain social relationships in the life space of the person, which it is argued, serve both as a means of achieving social well-being and as a definition, or end, of its realization” (1979:7). “Self-actualization” is the central concept and refers to a growth motive which emerges when motives for survival, security, and esteem are satisfied (Maslow 1954). “Development in the Community,” in contrast, emphasizes economic development by creating jobs and raising the real incomes of residents (Summers 1996:356).

While the Florida Gulf Coast fishing communities may prosper from tourist revenue and retirement housing sales, local fishermen could suffer financially due to the deprivation of their means of livelihood. That happens partly because economic development concerns top the list of local officials’ perceived needs (Summers 1996:356). For all the communities we visited, only a few fishermen indicate that local government supports commercial fishing (Tampa, Tarpon Springs). For the majority of the communities, fishermen complain that either they gain no support from the government, or worse, some governments knock down fishing docks for redevelopment (Figure 4.6). However, we cannot criticize the officials for irresponsibility, if their performance is judged by how much tax revenue they gain each year and how much GNP the community generates. Moreover, the loss of cultural tradition might not affect an official’s appraisal as long as he or she creates satisfactory tax income. It is important to note that “development in the community” does not necessarily lead to “development of the community,” because there is an issue of the distribution of income. As long as the
current system favors the decent economic statistics, I do not see hope for local
governments to really address the issue of equity among community members.

Figure 4.6 Casino Boat Wipes Out Commercial Fishing Dockage in Port Richey. Twelve
years ago, about 40 shrimp boats docked here. However a casino cruise bought up most
of the commercial fishing dockage and now only two shrimp boats still have dockage.
CHAPTER 5 COMPARISON OF FISHING COMMUNITIES

I group the fishing communities into three categories, based on their dependency on commercial fishing as well as on the fishermen’s self-appraisal. I label as “diminished” the two communities, Boca Grande and Placida, which once depended heavily on fishing, but are now in a situation where no fish house is left and local commercial fishermen either quit fishing or switched to other ports. Residual communities -- Crystal River, Homosassa, and Hudson -- still have a few fish houses struggling to survive, but fishing activity has declined dramatically and local fishermen are very pessimistic of their future. Resilient communities -- Cortez and Tarpon Springs -- appear to have overcome the adverse challenges to fishing so that it still remains a vibrant industry. Both local fishermen and fishermen from adjacent communities recognize the resilience of these communities. Table 5.1 provides the landing data of some of the communities on the county level.

Table 5.1 Commercial Landings of Charlotte, Citrus, and Manatee Counties (2001)

<table>
<thead>
<tr>
<th>County</th>
<th>Finfish</th>
<th>Invertebrates</th>
<th>Shrimp</th>
<th>Bait Shrimp</th>
<th>Grand Total</th>
<th>Permits (SP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charlotte</td>
<td>865,266</td>
<td>413,383</td>
<td>29,218</td>
<td>140</td>
<td>1,308,007</td>
<td>147</td>
</tr>
<tr>
<td>(Diminished)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citrus</td>
<td>1,377,399</td>
<td>1,683,452</td>
<td>255,958</td>
<td>354,210</td>
<td>3,671,019</td>
<td>277</td>
</tr>
<tr>
<td>(Residual)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manatee</td>
<td>3,291,960</td>
<td>262,201</td>
<td>24,907</td>
<td>24,575</td>
<td>3,603,643</td>
<td>306</td>
</tr>
<tr>
<td>(Resilient)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source: Florida Marine Research Institute)
5.1 Diminished Communities—Boca Grande/Placida

5.1.1 Community Profile

History

The fishing history of Boca Grande could be traced back to the Indian time by 800 or 900 A.D, when Calusa Indians built hundreds of fishing villages on Gasparilla Island and over 200 on nearby islands. Like the Indians, the Spanish were also attracted to this island abundant with fish. By the late 1870s, several fish ranches were operating in the Charlotte Harbor area, while Spanish or Cuban fishermen harvested good catches of mullet and other fish and salted them for shipment to Havana and other markets (Edic 1996).

Twentieth century Boca Grande is remembered for two things: phosphate and tarpon. In the 1880s, phosphate rock was discovered on the banks of the Peach River. Later, the American Agricultural Chemical Company built a railroad in 1907 that connected Boca Grande with Arcadia, forty-nine miles away and expanded it to link up with the Atlantic Coast Line at South Mulberry in 1910. Port Boca Grande, the nearest Gulf port to the Atlantic seaboard, covered 40 acres and represented a $4 million investment. In 1969 Port Boca Grande ranked as the fourth busiest port in Florida. The railroad continued to transport phosphate from the port without interruption for 50 years until phosphate companies shifted grounds to ports in Tampa and Manatee. The railroad was abandoned in 1979, ending the history of phosphate on the island.

The railroad not only shipped the mineral, but also brought wealthy people in from the north. Bordered by Charlotte Harbor and Gasparilla Sound on the east, the island embraces 750,000 acres of estuary. By 1910 Boca Grande Pass was already
famous for its unequalled tarpon fishing. The Gasparilla Inn was built in 1909 and was transformed into a world-class hotel in 1912, followed by the completion of a casino in 1914. Game fishing and tourism were responsible for most of the development during the 1920s, when more and more Florida east coast residents were attracted to the quiet and quaint town. Since 1977, every spring, tarpon fishermen, tarpon fishermen head to Millers Marina for the "Tarpon Capital of the World" to fish famous Boca Grande Pass, striving to become the "Catch King," which has a top prize of $100,000 (Reidy 1982).

Commercial fishing in Boca Grande also spurred out of the railroad. In 1914, the Gasparilla Fishery was opened by the rail from leased land at the northern end of Gasparilla Island (Edic 1996:46). They got ice from and shipped fish to the Florida Fish and Ice Company at the railroad in Punta Gorda (p.9). A fishermen’s quarter, called “Gasparilla Village,” was built around the fish house with sixteen small houses to attract fishermen and their families. The Gasparilla Fishery purchased a satellite office originally built by the Punta Gorda Fish Company in the early 1900s and named it Boca Grande Fishery. During WWII, fish was valued as essential to the wartime effort and many commercial fishermen were exempted from active duty. Mullet fishing was popular, though it gave way to grouper fishing when the inshore grounds were under pressure. Bait shrimping came around 1949 (p.46).

In 1945, after the war, Walter Gault had to move the Gasparilla Fish House to nearby Placida, because the land had been sold to a real estate company. In Placida, Gault built an ice plant to keep the fish house in operation.

Commercial fishing declined in the 1960s at Boca Grande, when boats from Punta Gorda Fish Company no longer picked up fish from the outer island. With the boom of
recreational fishing for tarpon, many commercial fishermen became seasonal fishing guides and only did mullet fishing during winter peak seasons. The Japanese demand for mullet roe in the 1980s drove up mullet price to over $12 a pound, luring many outsiders to the join the mullet fishing spree from November to January. “By the mid-1990s the price of ‘red mullet roe’ had increased eight-fold. Over-fishing was the result” (p.47). When the net ban started in 1994, many commercial fishermen quit. Now none of the fish houses have survived, either in Boca Grande or Placida.

Geography

Boca Grande is located at the western end of Charlotte Harbor, the second biggest estuary system in Florida. It is also the deepest natural port between Tampa and Miami with a thirty-two foot controlling depth and holes reported up to ninety feet deep. Placida is a community on the mainland and is linked to Gasparilla Island by a toll bridge. A community member called Placida the “slum” of Boca Grande to contrast the different degree of development between the two communities.

Population

Census 2000 shows that Boca Grande has a population of 950 and median age as 55.3 years. Population growth was recorded with a notable 31.2 percent from 1980-1990 and another significant 11.9 percent from 1990-2000 (Source: Boca Grande Chamber of Commerce).

5.1.2 Problems
Boca Grande

In the 1970s and 1980s, there were several fish houses on the island, but none of them survive today. We talked to one of the owners of the Boca Marina, which was built in 1926 with a fish house, a bar, a bait shop, a fish market and a restaurant (Figure 5.1). They added a dance hall 50 years ago. Now the fish house and dance hall are closed. The owner said that some fishermen still fish with cast net and seine nets for mullet. Her father-in-law fished mullet in December and worked as a recreational fishing guide the rest of the year.

She said that the number of fish guides increased in the last five years in the area, not just on the island. Many guides have regular jobs on Monday to Friday and earn extra money as guides on weekends. However, the guides do not live on the island because they cannot afford the houses there.

Figure 5.1 Boca Marina Has Closed and Turned into a Museum and a Bait Shop.
Placida

Placida used to be a commercial fishing community ten years ago, but after the net ban a lot of commercial fishermen went out of business. Table 5.2 shows that mullet harvest in Charlotte County dropped significantly from 1.3 million pounds in 1994 to only 0.4 million pounds in 1995. Though some gillnet fishermen switched to clam farming and shrimping, commercial fishing permits were 23 less than the previous year.

Table 5.2 Commercial Landings of Charlotte County (1994-1995)

<table>
<thead>
<tr>
<th>Year</th>
<th>Finfish (Black Mullet)</th>
<th>Invertebrates</th>
<th>Shrimp</th>
<th>Bait Shrimp</th>
<th>Grand Total</th>
<th>Fishing Permit (SP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>1,967,662 (1,316,782)</td>
<td>564,622</td>
<td>82,022</td>
<td>1,300</td>
<td>2,615,606</td>
<td>289</td>
</tr>
<tr>
<td>1995</td>
<td>893,285 (402,358)</td>
<td>879,290</td>
<td>94,972</td>
<td>6,157</td>
<td>1,873,704</td>
<td>266</td>
</tr>
</tbody>
</table>

(Source: Florida Marine Research Institute)

Besides the challenge of regulations, local fishermen also face pressure from the soaring waterfront property prices (Figure 5.2). In the past decade, the waterfront property tax skyrocketed to more than $5,000 a year. A lot of commercial fishermen have to relocate, when their income drastically decreased after the net ban. Some of them switched to clamming five years ago.

As mentioned above, the fish house was opened in 1945 when Walter Gault moved the Gasparilla Fish House to Placida. After more than 50 years of operation, Charlotte Fishery was closed in July 1999 after five years' struggle under the net ban (Figure 5.3). With the reduction of mullet, they could not make enough money to keep the 120-block ice machine running and had to close the fish house. Now the owner only
runs the retail seafood market and a restaurant. A place called Fishermen's Quarter, where fishermen lived together, was sold four years ago. The fish house owner said that she used to have more than 100 commercial fishermen working with her, now she only has two fishermen who bring in mullet. After the net ban, a lot of fishermen could not fish. Some of them switched to crabbing and clamming, while some got other jobs. Not many people are doing well with clamming, which is fostered by the government as a part of the post-net-ban job retraining program. Too much rain is not good for clam growing. The red tide that hits the area from time to time affects the clam harvest, because clams infected with algae are unhealthy to human beings. Placida used to be a fishing village, but now a lot of dockage has been sold to a golf course and a mobile home park.

Figure 5.2 Recreational Fishing Boat at Boca Grande. In Boca Grande and Placida, many houses are built by the water with private dockage. The skyrocketing property price has forced commercial fishermen to relocate and boosted recreational fishing.
Figure 5.3 Charlotte Fishery. It struggled for five years after the net ban, but had to shut down its business in 1999. Now only one shrimp boat docks there and goes shrimping occasionally.

Figure 5.4 Charlotte Fishery Leases Its Dockage to Charter Boats.
5.1.3 Discussion

Boca Grande and Placida have become history in terms of fishing communities. For Boca Grande, the waterfront land is too valuable to designate its use by commercial fishing, which has been pushed out by recreational fishermen and wealthy people. The Boca Marina, which opened to serve both commercial and recreational fishermen, has completely shut down its commercial fishing facilities.

As commercial fishing faced ever-growing challenges from the recreational fishermen, the net ban expedited the demise of a generation-long tradition. After the net ban, the property tax soared, forcing commercial fishermen to relocate. Some of them switched to guide fishing, while others moved out and took other jobs. Clam farming is new to the fishermen and a bountiful harvest is not always guaranteed. The independence and freedom that commercial fishermen have enjoyed for centuries have vanished.

5.2 The Residual Communities—Crystal River, Homosassa, and Hudson

5.2.1 Community Profile

I include Crystal River, Homosassa and Hudson in this “residual” group of fishing dependent communities. The three communities share similar geographic and historical backgrounds.

Geography

Located on the one of Florida’s busiest roads, U.S. 19, the three communities are close to each other, within one hour’s drive. Moreover, they are only one to two hours north of the Tampa-St. Petersburg metropolitan area. All these communities embrace an
abundant supply of fisheries, be it fresh water or salt-water reef fisheries. The towns of Crystal River and Homosassa do not have immediate access to the gulf. The Crystal River links the city center to the gulf ten miles away, while the Homosassa River connects the town center to the gulf within five miles. Although residences concentrate by the banks of the rivers, the construction of canals is minimal. Different from the other two communities, Hudson looks straight to the gulf and has a massive set of canals, as shown by the map below (Figure 5.5).

Figure 5.5 Hudson Viewed from Above
(Source: http://www.hudsonfla.com/neighborhoods.htm)
History

The numerous water resources endowed the communities with a strong fishing history, especially of commercial fishing. “From the time of the Indians to the time of the ‘Mullet Express’, the seafood industry was a staple and integral part of the combined Homosassa’s culture” (Homan and Reilly 2001:9).

In Hudson, “spongers from Key West and the Bahamas came in the 1880s and developed substantial sponging and fishing business that continued to grow until the late 1940’s. Along the banks of the creek, fish houses and warehouses were built where the railroad tracks also ran. The railroad allowed fish and supplies to be shipped to the nearby lumber towns of Fivay and Sagano for local use and delivery to towns” (Figure 5.6) (Hudson Chamber of Commerce).

Figure 5.6 Abandoned Fish House in Hudson. (This building used to be a fish house that shipped fish by the railroad. Now it is an abandoned building.)

Demography
All three communities were once small retirement towns of America, but they experienced a population boom in recent decades. Table 5.1 shows the demography of each community in Census 2000.

Table 5.3  Demography of the Residual Communities

<table>
<thead>
<tr>
<th>Community (CDP)</th>
<th>Population</th>
<th>Median Age</th>
<th>Employment in agriculture, forestry, fishing and hunting (number/percentage)</th>
<th>Major Private Employers (County)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystal River</td>
<td>3,485</td>
<td>48.5</td>
<td>21/1.6%</td>
<td>Florida Power Corporation, Citrus Memorial Hospital, Citrus County School Board, Seven Rivers Community Hospital and Pro-Line Boats</td>
</tr>
<tr>
<td>Homosassa</td>
<td>2,294</td>
<td>58.1</td>
<td>34/5%</td>
<td></td>
</tr>
<tr>
<td>Hudson</td>
<td>12,765</td>
<td>57.2</td>
<td>28/0.7%</td>
<td>County School District County Government State of Florida Government Pasco County Sheriff Community Hospital of NPR (2001)</td>
</tr>
</tbody>
</table>

(Source: U.S. Census Bureau; Citrus County Chamber of Commerce; Pasco County Chamber of Commerce)

**Current Fishing Status**

Compared with their prime time in the 70s and 80s, all three fishing communities have declined in the scale of commercial fishing. In Crystal River, the number of commercial fishermen has decreased by 80 percent in the last 20 years. Dick, a second-generation fisherman whose family has owned a fish house in Crystal River for over 40 years, lamented, “Crystal River is a declining commercial fishing community. The identity of commercial fishing village will soon be lost.” The same happens to the
neighboring community of Homosassa, said Tim, a former commercial fisherman whose 
boat was destroyed by a hurricane in 1993 and now runs a recreational fishing business, 
“Twenty-five years ago, everybody I saw was a commercial fisherman. Now we have 
more tourists than commercial fishermen here.” “Commercial fishermen are not doing as 
good as they were, though they have better equipment than before.” “There is no 
guarantee.” 

Local fish house owner, Jenny, says that there used to be over a hundred 
commercial shrimp boats in Hudson/Port Richey, now there are only about 40. There 
used to be four fish houses in Hudson/Port Richey, now Pasco Seafood is the only one in 
the area. Another Hudson fishermen claims that in the late 1970s and 1980s, every 
family did commercial fishing. Hudson was designated as a Historical Fishing Village, 
but nobody seems to remember it any more.

As described in Table 5.4, finfish landings declined 35 percent the year that the 
net ban was enforced and could never revive the prior-net ban level in 2001. Shrimp 
harvest increased dramatically after the net ban, as some net fishermen switched to 
shrimping. Shrimp harvest more than doubled in 1995 compared with 1994. However, 
shrimp landing declined again to the pre-net ban level after 1999 as cold winter and 
increased imports hurt local shrimpers. Commercial fishing permits dropped 16 percent 
Table 5.4 Pasco County Commercial Landing (1994-2001)

<table>
<thead>
<tr>
<th></th>
<th>Finfish</th>
<th>Invertebrates</th>
<th>Shrimp</th>
<th>Bait</th>
<th>Shrimp</th>
<th>Grand Total</th>
<th>Fishing Permit (SP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>702,058</td>
<td>167,431</td>
<td>268,470</td>
<td>63,200</td>
<td>1,201,159</td>
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<tr>
<td>1995</td>
<td>455,307</td>
<td>173,640</td>
<td>578,787</td>
<td>71,255</td>
<td>1,278,989</td>
<td>341</td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>326,127</td>
<td>202,492</td>
<td>771,115</td>
<td>73,417</td>
<td>1,373,151</td>
<td>335</td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>233,093</td>
<td>119,454</td>
<td>707,466</td>
<td>80,535</td>
<td>1,140,548</td>
<td>295</td>
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<tr>
<td>1998</td>
<td>333,101</td>
<td>101,346</td>
<td>474,496</td>
<td>76,511</td>
<td>985,454</td>
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<td></td>
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<tr>
<td>1999</td>
<td>260,526</td>
<td>52,049</td>
<td>238,384</td>
<td>56,755</td>
<td>607,714</td>
<td>310</td>
<td></td>
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<tr>
<td>2000</td>
<td>191,285</td>
<td>41,983</td>
<td>219,302</td>
<td>57,238</td>
<td>509,808</td>
<td>320</td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>232,214</td>
<td>58,102</td>
<td>248,651</td>
<td>81,664</td>
<td>620,631</td>
<td>293</td>
<td></td>
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</tbody>
</table>

Table 5.5 shows that commercial landings in Citrus County remained quite stable, except for a significant decrease in 1995 as finfish catches slashed 40 percent.

Invertebrates output increased after the net ban as some net fishermen switched to clam farming. However, the number of commercial fishing permits (SP) decreased 32 percent from 410 in 1994 to 277 in 2001.
Table 5.5 Citrus County Commercial Landing (1994-2001)

<table>
<thead>
<tr>
<th>Year</th>
<th>Finfish</th>
<th>Invertebrates</th>
<th>Shrimp</th>
<th>Bait Shrimp</th>
<th>Grand Total</th>
<th>Fishing Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>1,745,121</td>
<td>1,658,713</td>
<td>214,055</td>
<td>192,940</td>
<td>3,810,829</td>
<td>410</td>
</tr>
<tr>
<td>1995</td>
<td>1,040,155</td>
<td>1,367,947</td>
<td>334,552</td>
<td>172,251</td>
<td>2,914,905</td>
<td>364</td>
</tr>
<tr>
<td>1996</td>
<td>1,006,749</td>
<td>2,160,106</td>
<td>781,481</td>
<td>149,613</td>
<td>4,097,949</td>
<td>344</td>
</tr>
<tr>
<td>1997</td>
<td>1,166,618</td>
<td>2,303,875</td>
<td>697,689</td>
<td>283,026</td>
<td>4,451,208</td>
<td>331</td>
</tr>
<tr>
<td>1998</td>
<td>914,527</td>
<td>3,093,521</td>
<td>617,994</td>
<td>377,440</td>
<td>5,003,482</td>
<td>297</td>
</tr>
<tr>
<td>1999</td>
<td>1,088,191</td>
<td>2,277,019</td>
<td>174,919</td>
<td>272,716</td>
<td>3,812,845</td>
<td>304</td>
</tr>
<tr>
<td>2000</td>
<td>1,227,666</td>
<td>1,548,542</td>
<td>191,834</td>
<td>383,951</td>
<td>3,351,993</td>
<td>300</td>
</tr>
<tr>
<td>2001</td>
<td>1,377,399</td>
<td>1,683,452</td>
<td>255,958</td>
<td>354,210</td>
<td>3,671,019</td>
<td>277</td>
</tr>
</tbody>
</table>

(Source: Florida Marine Research Institute)

![Citrus County Commercial Landings (1994-2001)](image)

5.2.2 Problems

Net Ban

Before the net ban, mullet was an important seafood source that many gulf fishermen targeted. Whenever we talked to commercial fishermen about the net ban, they were all very angry but helpless. Dick comments, “The older generation was left “high and dry” with the net ban because they were too old to earn another trade and too
old to use cast nets [because it is labor-intensive work]. The Net ban has negatively affected commercial fishermen, especially the elderly who are too old to switch to other jobs…. Sports fishermen are rich people that make big money, while commercial fishermen are phased out like Indians.” When the net ban was enforced in 1995, “some fishermen joined the stone crabbing business… Fishermen want to stay in fishing and do not want to work as security guards or truck drivers.” “The net ban has significantly hurt commercial fishermen who used to catch mullets. After the net ban, only a dozen switch to stone crabbing, while most fishermen sold their boats and did other jobs like construction.”

We have heard that several fish houses closed, while others have to switch their product line to adapt to the changes. Now the main products that the fish houses in the three communities deal with include: grouper, stone crab, and shrimp. Tyler Fishery did use net boats prior to the net ban to catch mullet, trout and red fish, but they had to switch to stone crabbing when mullet supply minimized. Crystal River Shrimp replaced mullet with bait shrimp as the main product after the net ban. Citrus Seafood was forced to close in 1995-1996 due to the net ban, because they relied on mullet as their main product. Now the property is still there and is used to offload shrimp only for the 11 small shrimp boats.

Post Net Ban—Dilemma for Groupers, Crabbers and Shrimpers

Are the residual “mullet heads” doing very well when they switch to other fisheries? The answer is not very positive. Take the example of the crabbers. Prior to the net ban, mullet was widely used as the favorite bait of stone crab. Since the net ban,
however, the price of mullet has soared and crabbers have to switch to grouper heads, pig feet as well as a little bit of mullet. They have to pay for crab tags that cost $1.30 each. A crabber told us that he had to pay an extra $3,500 every year for the tags. Stone crab season opens every year from May 15-October 15 only and crabbers usually alternate with grouper fishing when crabbing is off-season. However, we did see some optimistic crabbers who were doing very well. Two brothers who work on a crab/grouper boat said that commercial fishermen would not suffer financially if they work hard. When they fish for grouper, they stay out for several days. When they do crabbing, they usually go on a daily trip that starts at 3:30 a.m. and comes back at 6 p.m.

For grouper fishermen, the biggest complaint we have heard about is the one-month grouper closure season. “From February 15 until March 15, each year beginning 2001, the sale or purchase of gag, red grouper, or black grouper is prohibited” (National Marine Fisheries Service, Southeast Regional Office, 2000) (Figure 5.7). Jenny complained that 1) NMFS should not close all the area at once, because not all groupers respond to NMFS’ instruction to spawn at all sections of the gulf, but the spawning depends on weather, waves, and other factors. She suggested that NMFS close one area at one time and the other area at another time. In this way, the fishery can be better protected and commercial fishermen would still be able to make a living. She said that she talked to an NMFS official about this suggestion, but the official explained that closing the gulf at different times of the year would be too much work for NMFS. 2) NMFS should consider switching the closure to another month, preferably a month in summer. She said that she made more money in mid-February to mid-March than any
other month of the year, because that month is the middle of snowbird season and the demand for grouper is high.

Compared with crabbers and grouper fishermen, shrimpers seem to be doing worse. The commercial value of shrimp is decreasing due to the abrupt increase of imports. In 1987, all of the boats docked at Crystal River Shrimp were shrimp boats. Now they do not have any shrimp boats there, but only grouper and crab boats. He goes shrimping five days a week and has to catch 9,000 lbs of shrimp per week to break even. The Goodwill Fish House in Hudson sold their property and is temporarily out of business because shrimp prices are too low. But they still have boats that are individually owned docking there because the independent fishermen have nowhere to sell their boats. A shrimper who has been engaged in shrimping for over twenty years said that now is the toughest time he has ever experienced. He shrimps both for bait and food shrimp, but has moved more towards bait shrimp because the imported farmed shrimp has flooded the food shrimp market. The price of bait ranged from $1.25 to $2.50 per pound. This year, the average price is only $0.75 per pound. He was even asked for $0.50/lb, but he did not want to sell at that low price. He pays $1.4- per gallon for fuel and consumes 40 gallons a night. He goes shrimping five days a week and has to catch at least 9,000 lbs of shrimp per week to break even (Figure 5.8). When we were visiting the community in winter (late January and early February), they complained of the harsh cold weather that negatively affects shrimp harvest. Shrimping is low in summer (July and August) and winter. Both cold and heat affect shrimp.
Figure 5.7 Fishermen Unloaded Their Last Catch Before the Grouper Closure Month (Hudson).

Figure 5.8 Shrimp Boats at Homosassa Struggle to Make Ends Meet.
Tourism/Urban Sprawl

The Mystery of Docking Space Shortage

One other big problem that all commercial fishermen in the three communities are concerned with is the lack of docking spaces. We heard complaints that fishermen are having difficulty in finding a place to dock their boats. However, when I read my field notes carefully, I found that the communities do not really lack dockage. In Hudson, the total slips for commercial fishermen is less than 40, but the marinas that cater to recreational fishing occupy more than 100 wet slips. In Crystal River, recreational wet slips outnumber commercial fishing slips more than twice. In Homosassa, the ratio between recreational slips and commercial slips is 61:39. Perhaps an insider from a major marina can help us solve the mystery:

Before the owner bought the marina (in 1999), there used to be more than 20 commercial fishing vessels docking in the second canal. The new management didn’t like the look or the smell of the fishermen and their vessels, because the fishermen left old fish, bait, traps, and lines all over the dock area, so they pushed them off the property. Now there are only two crab boats, one shrimp boat, and two grouper boats remaining on the
property. They were allowed to dock at the marina after agreeing to follow the new owner’s rules.

Another commercial fisherman told me that when the marina was built in the 1980s, they had to sign a contract with the government to assure that 80 percent of the storage would be reserved for commercial fishing boats, while 20 percent was for recreational uses. Now it does not seem to be the case, but the government does not seem to care so long as they duly pay their taxes. The marina representative also told us that the owner has a plan of expansion to include 60 more wet slips and 100 more dry slips. They just bought up a few waterfront patches of land and even eyed the property where a fish house is currently located.

When we asked whether the local government (city or county) supports recreational fishing, commercial fishermen from Crystal River and Hudson said no. When we interviewed a government official in Crystal River, we were told “We don’t have any place for fishing in the city’s master plan, except that we try to preserve a few docks for tourists.” That was confirmed by a shrimper who said that the government is “driving shrimpers out of the community.”

Some commercial fishermen believe that the government’s purpose in buying up docks is to boost the tourism industry. Manatee watching has become a popular activity in Crystal River. When we were visiting there in early February, we saw scuba diving shops everywhere and a lot of hotels and motels offered manatee-watching cruises to attract customers. We went on a trip one afternoon and saw a few manatees swimming in Crystal River. The government official told us that historically, manatees did not come to Crystal River. The construction of Florida Power in the 1960s warmed up the water and
attracted manatees here. A biologist wrote a journal article confirming the appearance of manatees in Crystal River in the 1960s (Powell 2003). Actually the city government was not supportive of manatee protection regulations before the 1980s, for fear that “the ensuing rules would have a negative impact on the local tourist economy.” “Finally, in the mid 1980s and in response to major development plans on most of the islands of Kings Bay that included condos and causeways, the importance of Crystal River and its manatees was acknowledged nationally and internationally when it was designated a national wildlife reserve” (Powell 2003). The limitation of docking space posts the same headache for commercial fishermen in Hudson, who complained that the properties on the beach have occupied the docks and phased shrimp boats out. We have noticed that canals were extended in the community and each waterfront property has a boat, mostly recreational fishing boats, on the water.

The only official support that commercial fishermen enjoy comes from the Homosassa government, which is enthusiastically implementing the “Old Homosassa Waterfront Plan.” The broad area of Homosassa presently contains three sections: 1) Old Homosassa, a commercial fishing community located south of Homosassa River—Fishbowl and Yulee Dr., Bay Shell Seafood, Tyler Fishery; 2) Homosassa, a recreational fishing community at the north of Homosassa River—W. Halls River Road, Homosassa Marina and Manatee Marina; 3) Homosassa Springs, an urban and residential area not located on the waterfront.

The government recognized the community of Old Homosassa, “known for years as an area rich in traditional fishing village history, cracker style architecture, and distinctive natural resources. . . . The unique character of this unincorporated Florida
town is under considerable pressure from development” (Citrus County 2002). They have a visioning process and the 6th goal is to support the commercial fishing industry. The county (with the help of the Waterfronts Florida grant) does take some interest in Old Homosassa (historic Homosassa), because it is part of the historical preservation plan. What they have actually done is:

1) Limit code enforcement. Commercial fishermen usually store their fishing equipment outside and it triggers complaints of some new neighbors. The Waterfront Plan tries to preserve the identity of a fishing community by minimizing code enforcement practices.

2) Educate the public. Expecting more people to move to the area because of the construction of the Suncoast Parkway in Citrus County, the Plan aims to educate the public to protect the status of the community.

Like other communities located on the Florida gulf coast, the three communities have moved towards tourism and retirement communities. Eco-tourism has thrived since the mid-1980s when Crystal River National Wildlife Refuge was established and has boomed with the construction of the Suncoast Parkway in 1999, which has made Crystal River and Homosassa the convenient backyard of metropolitan Tampa and St. Petersburg (less than 1.5 hours drive), and intensified the communities’ reliance on tourists and retirees.

People have different sentiments towards the development and changes in the communities. For Crystal River, we heard that “If you go out to U.S. 19, you will find that less than ten buildings were built in the 50s and 60s.” “We had changes in the last 30 years and bizarre changes in the last ten years.” For Homosassa, a resident expresses that the community had not changed very much compared with other communities like Ocala.
Another says, “If they don’t stop growth and development now, we are going to end up just like Clearwater.” For Hudson, one person indicated that the construction of the Suncoast Parkway has tripled housing prices while another feels that the community has not really changed much in the past ten years.

Despite the different views of residents, I feel that these communities still retain the reputation of being “small quiet towns” beneficial for the continuation of commercial fishing tradition. I have not heard that any developers force fishermen to relocate.

5.2.3 Discussion

I call this group the “residual fishing communities,” because commercial fishing still contributes somewhat to the local economic basis even though the community is not substantially engaged in fishing, far less than the 15 percent threshold of participation, when tourism becomes the dominant industry. The three communities are rural or semi-rural and therefore prohibit the invasion of high-rise condominiums, as a Crystal River government official indicates. The net ban has forced a lot of commercial fishermen out of business and some have switched to crabbing and shrimping. Unlike shrimp boats in Tarpon Springs, Tampa, and Fort Myers Beach, shrimp boats in the three communities are small and are not able to “trace” shrimp to Louisiana and Texas when it gets too hot or too cold in Florida. Therefore, shrimpers depend a great deal on local weather for harvest and are weak in competition with imports. There is no local fishing union in any of the communities since the net ban. The Organized Fishermen of Florida (OFF) used to be powerful at one time. After the net ban, however, it gained no support from commercial fishermen. A crabber used to donate one cent to OFF for every pound of crab
they caught to help fight against the net ban. Now she no longer does that. A fish house owner comments, “Commercial fishermen are not involved in anything but fishing. They are independent people who don’t want to associate with the public. That’s the reason why they are in difficulty now.” Even the Old Homosassa Waterfront Plan, which partly aims to support the commercial fishing industry, fails to get commercial fishermen to participate because “they are too busy.” Although fishermen worry about the incoming regulation to ban fish traps in 2007 and they complain of the biased regulation on recreational and commercial fishermen, I have not heard of any ongoing plans to strengthen themselves or to fight against these challenges.

5.3. Resilient Communities---Cortez, Tarpon Springs, and Madeira Beach

5.3.1 Cortez

Geography, History and Economy

Located east of Anna Maria Island, north of Sarasota Bay, the “Historic Fishing Village” of Cortez is the only commercial fishing hub in Manatee County. Census 2000 shows that the Cortez CDP incorporates a population of 4,491 with the median age of 62.5.

Originally known as Hunter’s Point, Cortez celebrates over 100 years of commercial fishing history (Figure 5.10 & 5.11). The village was permanently settled in the late 1880s by fishermen from Carteret County, North Carolina who came to the area seeking one thing, mullet. The names of the pioneers, Fulford, Taylor, Bell, Guthrie, MacDonald and Miller, still carry on in the present generation. In 1912, Cortez was incorporated with a population of 110 and had a record-breaking catch of 200,000 pounds.
of mullet the next year. Before 1884, the mullet and the roe—salted and dried—were mainly shipped to the Cuban market. Since then, since Henry B. Plant built the first railroad between Tampa and Bradenton to allow fresh fish to be shipped with ice to cities in Florida and Georgia. By the mid-1960s, with the advent of giant ice-making machines, Cortez fish were being trucked as far north as New York (Green 1985).

As a long-time resident remembered in Cortez:

fish houses cranking with noise and bustle, boats of every description tied to their posts, sagging netspreads and old wooden camps built over the water, connected by a spiderweb system of walkways, and beyond—the whole sweep of Sarasota Bay. [Green 1985: 44]

The sentiment to keep the community “as it used to be” is forever strong among the residents who audaciously fight against all the anti-fishing forces.

Figure 5.10 Cortez Historical Memories
Present Challenges

Cortezians lived through hurricanes, the Depression, world wars, and red tides. They were proud of their independence: “Cortez was the only place in the whole country that didn’t get a dollar of federal assistance during the Depression” (Green 1985:59). They had a vision that as long as they worked hard, they could carry on. Despite their wish to keep their generation-long fishing tradition, modern complications seem to perplex them and make them wonder why their hereditary strategy does not quite work out as they expected.

Now, Cortez is the only fishing community in Manatee County. As indicated by Table 5.6, the grand total of commercial landing dropped significantly after the net ban as finfish production declined. Total finfish catch declined nearly half from 7.2 million pounds in 1994 to 3.8 million pounds in 1995. Total commercial catches remained stable after the net ban, however, between three million pounds and five million pounds.
Though mullet used to be the main stake of fishery, now the community has diversified to include grouper and other fisheries to survive.

Table 5.6 Manatee County Commercial Landing (1994-2001)

<table>
<thead>
<tr>
<th>Year</th>
<th>Finfish</th>
<th>Invertebrates</th>
<th>Shrimp</th>
<th>Bait Shrimp</th>
<th>Grand Total</th>
<th>Fishing Permit (SP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>7,247,035</td>
<td>270,693</td>
<td>41,357</td>
<td>19,161</td>
<td>7,578,246</td>
<td>349</td>
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<td>1995</td>
<td>3,783,446</td>
<td>468,070</td>
<td>71,695</td>
<td>13,302</td>
<td>4,336,513</td>
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<td>1997</td>
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<td>152,997</td>
<td>31,126</td>
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<td>4,943,789</td>
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<td>1998</td>
<td>3,337,754</td>
<td>264,448</td>
<td>36,165</td>
<td>12,717</td>
<td>3,651,084</td>
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<td>1999</td>
<td>4,587,379</td>
<td>191,040</td>
<td>17,230</td>
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<td>24,907</td>
<td>24,575</td>
<td>3,603,643</td>
<td>306</td>
</tr>
</tbody>
</table>

(Source: Florida Marine Research Institute)

Net Ban
Similar to other communities along the Gulf Coast, Cortez fishermen face the challenges of net ban, imports, and tourism/urban sprawl. The net ban forced the old fishermen to retire, because they cannot work with the labor-intensive cast net. We talked to two old fishermen who are descendants of the pioneer families and who had fished their whole lives. One expressed the concern that the government did not take into account the over-50 and handicapped population of fishermen when they suggested the use of the smaller cast net to catch mullet. The other fisherman has to build cast nets and other nets to supplement his income. Fishermen in Cortez complained about the unfairness of government regulations. “The number of commercial fishermen has declined. They suffer financially and mentally. I mean, regulations are good, but they should be fair.” “The law only acts on one side.” “They blame commercial fishermen, but they didn’t mention anything about pollution.” “They should be enforced on both sides--recreational fishermen and commercial fishermen.” “They take away fishermen’s livelihood” and “treat us as criminals.”

After the net ban, some fishermen left the community, some changed species fished, and some took other jobs such as guide fishing, trucking, and correctional officers. As fisherman David indicates, “They (commercial fishermen) are doing the best to survive with what they have.” Prior to the net ban, fishermen only went fishing. In the past 15 years, however, “they jumped to alternatives.” He and his brother own three big boats (one purse seine and two crab boats) and four mullet boats. They do three types of fishing in different seasons in a year: mullet, in fall; crab, in fall, winter and spring; bait, in spring and summer. His wife used to go fishing with him, but now she focuses more on fishing guide and cruise tours to secure a stable income. They deal with “anything
marine,” including historical rides, ecology rides, bird watching, shelling, flats fishing, education and awareness. She even got involved in a Hollywood film-making process in Cortez. (I took a boat ride on her pontoon boat at the annual community festival. She told tourists the ecology of the surrounding area, the history of Cortez, and significance of fishing to the residence. I think she is doing a good job to educate the public of the importance of this declining Florida heritage). Besides, the couple does waxing, painting, and detailing boats on the side for extra income because commercial fishing and fish guiding do not pay all the bills.

For net fishermen who switch to grouper fishing, they see a slow circulation of money. Before the net ban, fishermen netted fish inshore (within nine miles) and could return home in the same day. Now the netters join the longline fleet and go as far as 200 miles for 14-17 days in a trip. “We used to take shorter trips and there used to be a fast circulation of money. Now we can’t catch fish inshore and we can’t catch baits. We have to go further away. The crew used to make more money, like $2,000 a trip. Now people make $3,000 for three months. The circulation of money is very slow now.”

One fish house closed after the net ban. Now there are only three fish houses left in the community. The Morris Fish House was established in the 1940s, and is the biggest fish house that has been operating with $5.2 million in reported sales (Figure 5.12). They own 14 large boats (2 shrimp, 11 grouper, and 1 bait) and 7 small boats (stone crab). Moreover, they get fish from 15 independent fishermen who dock at the fish house.

Before the net ban, they dealt with 50 percent mullet and 50 percent grouper. Now they have switched to 70 percent grouper and 30 percent mullet. The other fish house is Cortez Seafood., also owned by the Morris family, which gets products from Morris Fish
House. The third fish house is Palm Fish House, built in 1976 and owns four vessels (two bait boats, one stone crab boat, and one cast net boat). The fish house used to rely on the mullet catch, but after the net ban, they had to switch product. The owner said, “Net ban killed every one. We were at the slump.” However, his business bounced back in recent years because of the production of commercial bait. Now he sells bait to large-scale commercial fishing operations in Texas, Louisiana, and the east coast of Florida.

![The Morris Fish House at Cortez](image)

Figure 5.12 The Morris Fish House at Cortez (It has been operating in Cortez for over 50 years and is still the major fish house in the community).

**Imports**

In Cortez, as in the other two “resilient” communities, we have not heard many complaints about imports, except for some grumbles on grouper imports from Mexico. Robert, a retail shop owner as well as a restaurant owner, says that he only sells Florida seafood, but he has a hard time competing with businesses that sell imports. For example, he sells grouper fillet for $9/lb, but a grocery sells Mexican grouper for only $5 without
any origin labels. “Some small stores are pushed out of business.” Another fisherman also expresses the concern that there is no regulation on imports, especially the size limit.

**Tourism/Urban Sprawl**

The beachfront in Cortez has lured the interests of developers and tourist businesses just as it has in most of the other fishing communities. Manatee County, where Cortez is located in, was recognized by *Money Magazine* as the 21st Best Place to Live in America. Bradenton, the county seat, which is only 20 minutes’ away from Cortez, was recently ranked as one of the top five places to retire in the United States. *PC World* ranked Manatee the Second Best Mid-Size City in which to work out of home. As Table 5.7 shows, the county is almost eight times as populous as it was in 1950.

**Table 5.7 Population Growth of Manatee County (1950-2000)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>264,002</td>
</tr>
<tr>
<td>1999</td>
<td>249,906</td>
</tr>
<tr>
<td>1998</td>
<td>245,060</td>
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<td>1997</td>
<td>242,417</td>
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<tr>
<td>1996</td>
<td>237,932</td>
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<td>1995</td>
<td>233,564</td>
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<tr>
<td>1994</td>
<td>228,104</td>
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<tr>
<td>1993</td>
<td>223,508</td>
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<tr>
<td>1992</td>
<td>219,313</td>
</tr>
<tr>
<td>1991</td>
<td>215,130</td>
</tr>
<tr>
<td>1990</td>
<td>211,707</td>
</tr>
<tr>
<td>1980</td>
<td>148,445</td>
</tr>
<tr>
<td>1970</td>
<td>97,117</td>
</tr>
<tr>
<td>1960</td>
<td>69,168</td>
</tr>
<tr>
<td>1950</td>
<td>34,704</td>
</tr>
</tbody>
</table>

(Source: U.S. Bureau of Census)
Cortez was the site of my first field visits and I had not been to this place before. When I first came here, from Tampa, I passed Anna Maria Island and then crossed the Bradenton Bridge. I looked at the high-rise condominiums standing next to each other that block all the beach views in Anna Maria Island and wondered how a commercial fishing community could exist in this manicured area. After I crossed the Bradenton Bridge, there was a traffic jam because the Cortez Road suddenly narrowed down from four-lane to two-lane. I saw a sign amidst the mangroves that says “Cortez Historic Fishing Village.” The village looks like the final patch of oasis among the surrounding suffocating concrete.

I have heard that community has undergone changes over the last decade. “Tradition has moved out and tourism has moved in.” “The housing price has doubled since 1995. It used to be a working community here. Now a lot of people move in.” “Cortez is very expensive to live in, unless you already have a house here. Rental is very high.” For fishermen who work in Cortez, about half live inside the village and another half live in the vicinity, like Bradenton, Palmetto, and Sarasota.

Resilience

In my personal opinion, Cortez is the most vocal community to fight against different challenges and to preserve their generation-long fishing tradition. They actively launch two kinds of campaigns to maintain their cultural heritage and to challenge the biased fisheries management.

1) Preserve the community style
Cortezians enthusiastically preserve their historical heritage by the establishing two local non-profit groups: the Cortez Village Historical Society (CVHS) and the Florida Institute of Saltwater Heritage (FISH). CVHS has preserved written and oral histories by publishing three books about Cortez and its history written by native descendents as well as a video documenting historic fishing tales. In 1990, the village saved the 1924 waterfront Burton’s Store, from demolition when the US Coast Guard decided to build a new station on the site. In 1998, the residents helped save the Old School House, where a lot of old Cortezians share their childhood memories from the hands of real estate agents, and turned it into a maritime museum and community center.

“Through projects like interpretive displays and collecting for a future maritime museum, residents are able to share their pride in Cortez’ 110 years of commercial fishing heritage” (Waterfronts Florida 1999) (Figure 5.13).

As I mentioned earlier, residents were concerned with the decline of the fishing communities and the threat of encroaching condos. In 1995, Cortez was listed in the National Register of Historic Places to help protect their historical resources. In 1999, Cortez became a Waterfronts Florida community and received roughly $76,000 in grants (Waterfronts Florida 1999). In April 2000, Local residents, property owners and business owners organized visioning sessions to develop their vision statement as the following:

The Vision for Cortez is to keep Cortez as much the way it is now as possible. Over the next 20 to 50 years, Cortezians hope to retain the unique heritage of Cortez. This includes the continuation of the fishing culture and preservation of the existing community’s character, with limited change. [Cortez Village Community Vision Plan 2000: 3]

A survey was sent to all households in Cortez and all property owners in the Waterfronts Florida Boundaries to identify the most pressing problems. The number one goal identified in this vision plan is to “maintain village character through control of
building size, setbacks and elevation requirements” (Cortez Waterfront s Florida Committee 2000:5). Community members would like to keep the village open and the waterfront accessible, and they were concerned about the ever-increasing new homes covering over 10,000 square feet and over 40 feet high, incompatible with the historical homes that have less than 1,000 square feet and 13 feet high. The Waterfronts grant helped to design guideline to ensure that new homes do not negatively affect the primordial image of the community. Other goals aim to: 1) prevent incompatible development on vacant properties; 2) control traffic on Cortez Road, and; 3) maintain historic fishing culture, improve drainage, contain tourism, and some renovation projects on historical houses. Sara told me that she tried to rent houses to fishermen with low rent from $375-$500 per month. Local residents would try to persuade the seller to sell the house to “fishing people,” meaning commercial fishermen, or people who support commercial fishing.

Besides salvaging their unique histories, local residents also engage in the protection of eco-system and education of the public on the significance of fishing as a way of life. In 2001, FISH purchased the 95 acres of undeveloped land east of the Cortez fishing village. They signed a contract with a part-time Sarasota resident to pay $250,000 for the property, which consists of 72 acres of wetlands and 23 acres of dry land and is vitally important to the health of the marine ecosystem. We were told that they bought the reserve right before a developer showed interest in turning the natural land into condos (Figure 5.14).

Payment for the reserve will be due in four years and the bulk of funds will come from the annual Cortez Commercial Fishing Festival. This February, the festival
celebrated its 23rd anniversary with nearly 30,000 attendances in the two-day festival.

When I visited the village for the first time in late January, local residents were having a meeting to plan for the festival. I was amazed at how well organized they were to plan on everything in detail, from banner design, parking reservation, traffic control, medical assistance, vendor management, entertainment scheduling, to newspaper advertising. Sara Morris, one of the organizers and the treasurer of FISH, told me that they insist on reserving the right to host the fishing festival as an act to promote fishing culture to the public. In some fishing communities (like Madeira Beach and Everglades), the chamber of commerce took over the festival and turned it into a commercialized event. I attended the festival on the first day and the whole community was packed. Visitors enjoyed folk music, maritime arts and crafts, aquarium visit, and boat ride. The aquarium was one of the big draws that attracted both children and parents. The Cortez resident and commercial fisherman, David, prepared two weeks for gathering the samples for display, which include different kind of reef fish, crab, shrimp, and shell fish. I learned the interesting story of how octopus sneakily preyed on stone crab (Figure 5.15 & 5.16).

The purchase of the reserve and the fishing festival were to help the public to understand that commercial fishermen are not “greedy” money mongers that deliberately deplete fishing stocks, and to encourage the public to see them as nature lovers concerned with the protection of the eco-system. Fishing, for them, is not a chore for making a living, but a lifelong career they enjoy at present and hope continue to the future. It is a way of life.

2) Fight with policy-makers
Cortezians historically knew how to take political positions to protect their rights. Back in the 1960s, when the first big wave of northern immigrants and retirees began settling in Manatee County, they destroyed forest and dredge canals to transfer natural land into private property. In 1967, a group of developers, politicians, and some neighborhood associations proposed local legislation to ban commercial fishing within 1,700 yards of any county shoreline. Cortez fishermen joined the newly established Organized Fishermen of Florida (OFF) to fight the local anti-netting legislation. As the OFF movement expanded, Cortez fisherman Blue Fulford became the head of the Cortez chapter, then state president, and served as executive director from 1972-1977. In 1972, OFF “succeeded in getting a bill passed that made fisheries regulation the responsibility of the state, thereby voiding all local anti-netting laws passed by county or city commissions” (Green 1986: 200).

Despite their success in countering the “local” anti-netting campaign, OFF did not win the battle of fighting with the statewide net ban. Sara Morrison, the owner of Star Fish Co. and A. P. Bell Fish House as well as the treasurer of FISH, reflected on why they failed in the anti-net ban campaign. When they fought in the net ban, a public relations firm in Tampa asked for $300,000 to do an anti-net-ban campaign for them. They did not agree to the contract, because they thought that it was too expensive and that they could do it for themselves. Now she thought that probably they should have taken the contract. Compared with the extravagant TV commercials and pamphlets that sports fishermen made, their products looked crude and unattractive. Apart from that, fishermen’s independence also contributed partly to the failure. Commercial fishermen are independent people and a lot of them just like to fish. They do not like to do
paperwork or make phone calls and that limited the success of the campaign. Sara pointed out the power unbalance between recreational fishermen and commercial fishermen. The former claim more money and power. A lot of them know the business and political world very well and are very skillful to manipulate the public. Commercial fishermen possess much less monetary and political capital than them.

Their failure in the net ban fight has not mitigated Cortezians’ will to fight against inequality and biased fisheries management. In 1999, Sara Morris was elected as Florida’s only commercial fishing representative in the Gulf of Mexico Fishery Management Council, which, then and now, is dominated by recreational fishermen. In 2002, the council had 14 recreational fishing representatives against three commercial fishing representatives, one of the latter worked at farmed shrimping business in Texas. In general, only two out of the 15 members in the panel fought for the rights of commercial fishing. Bell, allied with a fish house owner at Madeira Beach, successfully dissolved the council’s resolution of strictly restricting longline fishing.

In Cortez, tourism is reduced to minimal. They like tourists but they do not want tourists to stay there for a long time. They would like them to visit for one or two days and leave. Residents want to keep their place for themselves, but are unwilling to give off their generation-long territory to tourists. If fishing is only a way to make money, they can make more money just by selling their history and culture out to developers. They see fishing not only as a means of live, but an embodiment of their history and culture.
Figure 5.13 Statue in Memory of the Lost Fishermen (Cortez).

Figure 5.14 Cortez Fish Preserve (Cortezians saved the natural preserve from the manipulation of real estate developers).
Discussion

If a community has a long history, does it help it remained “unchanged”? Here comes the problem of development vs. tradition, business vs. culture, a set of antitheses
that anthropologists often address. What are small communities suppose to do in the face of modern development? I cherish those who live for their pride, and those who strive to preserve their ancestral heredity.

The problems Cortez has encountered are basically the same problems that other gulf communities are experiencing. I think that the reason for the success of Cortez is their strong initiative in preserving their generation-long family tradition. The residents are very active in various activities to maintain their historical heritage and tell the public of the pride of commercial fishermen. Unlike some communities that just complain of the biased fishery management, Cortezians take action to show their resilience by challenging the authority. A community can shape itself rather than merely sit vulnerable to be changed by impersonal forces (Bridger 1996). The fourth and fifth generation of commercial fishermen use “heritage narrative” (story telling) to draw audiences together by making them think that they belong to the same group (Bridger 1996: 355). It is through this self-reinforcing and self-reconfirming system that Cortezians carry on their fishing tradition from generation to generation.

Compared with fishermen who searched for fish amid the storm 100 years ago, commercial fishermen today face fewer natural challenges, thanks to the help of technology that brings in better equipment. However, it does not seem that commercial fishermen today are having a better time than their antecedents if you look at the decline of the fishing industry. The challenges fishermen face today are more human than natural factors. If fishermen want to make a living, it is not enough for them just to work hard. No matter what, challenges will confront them and they cannot solve the problems by disregarding or passively accepting them. In this world, everything can be political:
media, regulation, science and so forth. The Cortezians have given us some hint of the secret to survive, i.e. to take action.

5.3.2 Tarpon Springs

The other two resilient fishing communities are Tarpon Springs and Madeira Beach, both of which are located at Pinellas County. Table 5.8 shows the commercial landing data of Pinellas County from 1994 to 2001. As Tarpon Springs relies mainly on shrimp and Madeira Beach on grouper, the county has not experienced the dramatic finfish decline after the net ban. On the contrary, finfish catch even increased 25 percent in 2001 compared with 1994, partly due to the grouper harvest in Madeira Beach. However, fishing permits dropped from 1,010 in 1994 to 723 in 2001, representing a 28 percent decline.

Table 5.8 Pinellas County Commercial Landing (1994-2001)

<table>
<thead>
<tr>
<th>Year</th>
<th>Finfish</th>
<th>Invertebrates</th>
<th>Shrimp</th>
<th>Bait Shrimp</th>
<th>Grand Total</th>
<th>Fishing Permit (SP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>8,925,295</td>
<td>936,022</td>
<td>1,280,700</td>
<td>158,160</td>
<td>11,300,177</td>
<td>1,010</td>
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<tr>
<td>1995</td>
<td>7,852,670</td>
<td>1,137,406</td>
<td>2,383,668</td>
<td>189,318</td>
<td>11,563,062</td>
<td>928</td>
</tr>
<tr>
<td>1996</td>
<td>9,042,052</td>
<td>1,378,511</td>
<td>2,212,683</td>
<td>169,810</td>
<td>12,803,056</td>
<td>901</td>
</tr>
<tr>
<td>1997</td>
<td>7,888,060</td>
<td>1,047,411</td>
<td>2,068,594</td>
<td>165,403</td>
<td>11,169,468</td>
<td>820</td>
</tr>
<tr>
<td>1998</td>
<td>7,811,252</td>
<td>1,097,123</td>
<td>3,396,872</td>
<td>198,079</td>
<td>12,503,326</td>
<td>810</td>
</tr>
<tr>
<td>1999</td>
<td>10,216,127</td>
<td>781,725</td>
<td>1,232,396</td>
<td>294,029</td>
<td>12,524,277</td>
<td>756</td>
</tr>
<tr>
<td>2000</td>
<td>9,877,922</td>
<td>939,320</td>
<td>1,224,743</td>
<td>207,893</td>
<td>12,249,878</td>
<td>771</td>
</tr>
<tr>
<td>2001</td>
<td>11,235,045</td>
<td>668,971</td>
<td>1,274,810</td>
<td>175,108</td>
<td>13,353,934</td>
<td>723</td>
</tr>
</tbody>
</table>
History, Geography, Population

Famous as a Greek sponge community, Tarpon Springs is a place “rich in history, cultural diversity, and striking natural beauty” (Kilgo 2002: 7) (Figure 5.17). The town grew up around the mouth of the Anclote River. When it was incorporated in 1887, it was flourishing as “the first fashionable winter resort area on Florida’s Gulf Coast.” In 1891, John Cheyney, a local businessman, started sponge harvest in nearby shallow waters and late founded the Anclote and Rock Island Sponge Company. The new industry attracted scores of sponge boats from Key West to vie for sponge harvest. In 1905, John Cheyney hoped to expand his sponge business and hired a young Greek immigrant, Cocoris, who convinced Cheyney of the existence of rich offshore sponge beds at the gulf. Cocoris then began to introduce Greek divers to Tarpon Springs and many of their countrymen soon followed. By 1930, the sponge fleet in Tarpon Springs numbered 200 boats and the sponge industry brought multi-million dollars to the community. Tarpon Springs was
renowned as the “sponge capital of the world” until the late 1940s, when blight destroyed Gulf coast sponge beds. From 1949-1986, many sponge distributors went out of business and the Billiris was the only one to survive until now. Sponge industry could never revive to its primetime level and became auxiliary to the tourism industry. In 1986, the reappearance of healthy sponge beds helped drive up the sponge business and in the following decade Tarpon Springs became the focus of sponge industry that attracted 85 percent of the global sponge production excluding Cuba. Tarpon Springs Downtown Historic District, which is listed on the National Register of Historic Places in 1990, features buildings from the late 1800s that house shops, art galleries, restaurants, and music venues that bring in around one million tourists annually (Pinellas County Board of Public Instruction 1945) (Figure 5.18).

Named after tarpon, a great fish found frequently off shore, Tarpon Springs has offered abundant fishing resources. A picture dated 1937 showed that a few small grouper boats were docking amidst the huge sponge fleet. Harold Gould started the fuel company in the 1930s to supply fuel to the whole town. In the 1960s and 70s, fishing industry prospered as fishermen came to the area from North Carolina, Key West, Marathon and other places for shrimp, grouper, snapper and mullet.

Today, Tarpon Springs has a population of 21,000 with tourism as the major economic contributor that totals $20 million every year. According to an Information & Research Officer from the city government, the most important sources of jobs are tourism, hospital and government.

Thirty years ago, 75 percent of the fishermen in Tarpon Springs were commercial, and only 25 percent were recreational. Now it reverses. There used to be seven fish
houses versus only one high-dry marina. Now the number of fish houses was reduced to four, while Anclote Road is packed with at least five hi-dry marinas. In the 1960s and 1970s, they had about 50 shrimp boats docking here, which came from the Keys, Apalachicola and Louisiana. Now about 15 local shrimp boats can find docking space here and no extra dockage is available for outside boats. The four fish houses that are still operating in Tarpon Springs include Anclote Seafood, which mainly deals with shrimp; Tarpon Seafood, whose products include shrimp, grouper, stone crab and some other fish; Falk Seafood, which mainly deals with grouper; and Martin Seafood, which wholesales tuna and mahi mahi.

Figure 5.17 Sponge Diver Statue in Tarpon Springs.
Problems

Tarpon Springs fishermen are subject to the impact of net ban and two fish houses closed after the net ban. However, the impact was not hard hit. A few old fishermen retired, while a lot of fishermen switched to shrimp, stone crab and grouper.

Most of our informants indicate that the community has not changed very much and the city government supports to keep the sponge docks. In Tarpons Springs, commercial fishing concentrates on the north and west side of the Anclote River (Figure 5.19), while tourism largely takes place south of the river at the famous Sponge Dock (Figure 5.20). Tarpon Springs Historic District (roughly bounded by Read St., Hibiscus St., Orange St., Levis Ave., Lemon St. and Spring Bayou) is listed in the National Register of Historic Places to prevent excessive development. The kind of tourism that
the city encourages is cultural tourism, or historical tourism, instead of sheer profit-seeking tourism. At least, there are no high-rise condos or resorts at the waterfront.

Right now, shrimp is the biggest fishing sector in the community, Cathy Ford, a fish house owner said. Shrimpers face big problems in the recent two years as the tariff-free imports swarmed to the U.S. market. Several informants expressed that the number of shrimp boats have declined. Ford reported 13 shrimp boats offloading to the fish house the year after the net ban, but she has only three now. Some old boats have sunken and people cannot afford $160,000 to buy new boats. Most of the shrimp boats do not have insurance, because shrimpers cannot make enough money to pay for it. In February, the Coast Guard ordered a shrimp boat to stop operation, because it was leaking badly. She said that in the past, when shrimpers got money, the first thing they did was to maintain their boats. “Now people just don’t have money to fix the leak.” In 1997, the year after net ban was enforced, she and husband decided to jump to the more profitable shrimping business by building a new boat. They have their boat yard and therefore did not have to worry too much about boat maintenance. However, during the 4.5 years before the boat was built, she saw the price of shrimp sliding due to the increase of imports. Now she has to pay $24,000 a year for insurance, spends about $4,200 for a 14-day trip fuel and pays 30 percent of the catch to the crew. The fish house has much less margin than before.

Anclote Seafood, which deals exclusively with shrimp, also feels the pressure from the skyrocketing imports (Figure 5.21). The fish house was established in the 1920s and now it is run by its 5th owner. The fish house now owns seven boats and offer dockage to other five independent boats. They operate all big boats up to 70 to 90 foot long and go out to federal water to shrimp. The boats track the shrimp according with the
season. For example, in summer, they shrimp at Texas and Alabama and returns to Florida in winter. A shrimper used to make $2,000 to $4,000 per month. Now due to the low shrimp price and high fuel cost, a shrimper can make from zero to only $750. Mark Brown, one of the owners of Anclote Seafood, shows me the data for one of his boats that unloaded shrimp on Oct. 3, 2002:

Boat owner’s (fish house) share: $1,964.51 = $15,177.75 (Sales) - $13,213.24 (Cost)
Boat owner actually earns: -$3,535.49 = $1,964.51 (share) - $5,500 (boat mortgage)

The cost for $13,213.24 includes $7,000 fuel cost and $2,250 crew salary, which translates to only $750 for a shrimper’s monthly earning.

Figure 5.19 Commercial Fishing Boat at the North Side of the Anclote River
Figure 5.20 Tarpon Spring Sponge Dock Has Turned into a Popular Tourist Spot (Photo by Stacy Ellis)

Figure 5.21 Shrimp Harvest at Tarpon Springs. (The shrimp harvest did not bring in a good earning for shrimper, when the shrimp price plummeted.)

Resilience
Tarpon Springs is one of the many communities, not only in Florida but in eight states to suffer from the adverse effects of uncontrolled imports. To counter those effects, shrimpers from eight states including North Carolina, South Carolina, Georgia, Florida (Tarpon Springs shrimpers among them), Alabama, Mississippi, Louisiana, and Texas, founded the Southern Shrimp Alliance to lobby the U.S. government to put necessary measure to protect domestic shrimp industry. They hired a trade law firm Dewey Ballentine LLP to file an anti-dumping petition against the farmed products. They are lobbying several issues:

1) Impose tariff on dumping imports

SSA requested the congress to agree to impose tariff to the imported shrimp that have been proved to “dump” to the U.S. market and hurt domestic shrimpers. Dewey Ballentine LLP has collected evidence that some Asian countries are exporting shrimp at the price it normally charges on its own home market, which, according to the World Trade Organization (WTO), was judged as “dumping” of the product. Once the congress review the petition and agree to levy tariff on the imports, U.S. shrimpers not only encounter less threat from the farmed shrimp, but also can enjoy the distribution of payments collected by duties Promised by the “Byrd Amendment.” The Continued Dumping and Subsidy Offset Act of October 28, 2000 (also known as the Byrd Amendment), “directs the US government to distribute the collected anti-dumping and anti-subsidy duties to the US companies that brought the cases in the first place” (Lamy 2003). However, the Byrd Amendment is currently condemned by WTO for being “incompatible with WTO rules” and the U.S. government has until Dec. 27, 2003 to repeal it before the 15-nation European Union and the ten other countries that brought the
complaint start to retaliate with trade sanctions with the U.S. (Sparshott 2003). SSA will of course hope that the Amendment can continue to function and benefit shrimpers, but it does not seem that shrimpers can affect foreign trade policy very much.

SSA also faces competitors in the country, the biggest of which is the American Seafood Distributors Association, which represents the majority of restaurants, seafood retail market, and groceries in the U.S. They are also sending documents to the congress to prove that imports are normal and necessary.

2) Fisheries disaster assistance.

In their 2003 budget, Congress recently appropriated $35 million to both the Gulf region and the South Atlantic region for disaster relief fund. Florida was assigned with $5.6 million, among which 20 percent went to marketing, five percent to related business, and 75 percent to shrimper (5 percent for petition).

3) Improve food inspection

SSA demand that FDA increase its current inspection rate of two percent to match the EU rate of 20 percent and reduce the tolerance rate of five part per billion (ppb) tolerance to the EU level of 0.01 ppt. Moreover, EU destroyed the contaminated imports at the spot, but the U.S. allowed the banned goods to return to the origin. Some contaminated products were banned in one U.S. port and managed to enter the market from the other port. SSA demanded that the customs be strict with the banned products.

4) Country of origin labeling

They require a label of the country of origin to be attached on food, at every step in the processing of the food from distributors to retailers, so that consumers can be better informed before they make a decision. SSA is still negotiating with Department of
Agriculture on the details of the campaign, which is expected to carry out in 2004 around the country.

To file a petition representing the whole shrimping industry, they need to have at least 25 percent production involvement, turning into one million pounds of shrimp. They have already got that (Southern Shrimp Alliance 2003).

A fish house owner who serves as the Florida SSA representative said that 95 percent of local shrimpers have joined SSA. The members have donated funds to support the anti-dumping petition.

When I asked them why Tarpon Springs is doing better than the communities up north, like Crystal River, Homosassa and Hudson, several informants pointed out that the deep Anclote River helps them. Anclote River is deep enough to hold big boats up to 10-foot deep, enabling the traveling of big shrimp boats up to 90-foot wide. However, in the further south communities, the water is shallow and is not accessible for big boats.

Another informant indicates that the “big-boat” shrimpers can survive better than other fishermen, like grouper fishermen, mullet fishermen and crabbers, because shrimpers have big investments and therefore are more powerful. From my observations, the shrimpers’ quick reaction to the “dumping” shows that they are both powerful and organized. This has been confirmed by a local fish house owner, saying that “shrimpers are more power (than grouper fishermen).”

Shrimpers work at the north and west side of the Anclote River, while groupers and crabbers gather at the west side of the river. It seems to me that shrimpers do not hang out with grouper fishermen very much. When I ask shrimpers questions on commercial fishermen, they often said that “I can’t say for grouper fishermen, but for
shrimpers…” Grouper fishermen do not have any local union. One fish house owner, who used to work at the OFF committee board, reflected the chaos and sadness of the net ban in that some fishermen did not give money to OFF. Fishermen quarreled and fought with each other so badly that she had to call the police for help. She said, “Commercial fishermen are independent people who won’t change their minds. They are divided by different types of fishery they do and different gears they use. They even could not agree with each other by themselves. How could they stand up and speak in a voice against the sports fishermen? Moreover, most people are afraid to stand up and speak.”

She has a vision that they need a national organization that unites all fisheries together. In the net ban, OFF did not unite fishermen together and fishermen fought locally and individually. She thinks that SSA makes a good start to involve shrimpers in eight states to work together.

5.3.3 Madeira Beach

Located in Pinellas County, Florida, Madeira Beach is well-known as the “Grouper Kingdom of the World” which turns out over $6 million annual ex-vessel value of grouper. In 1999-2000, there were an estimated 87 bottom longliners and at least 48 bandit rigged (hook and line) vessels home ported in Madeira Beach (Lucas 2001:37). A bandit rigged vessel carries about 4-6 hooks in a boat, compared to longliners’ 600-1000 hooks stretching 4-10 miles. While hook and line boats stay on the water for 5-8 days, longline boats go for 10-15 days per trip. As a result, longline vessels average three times the annual harvest per vessel compared with the bandit rigs. In 1999-2000, grouper
fishermen had good harvests on the gulf, which, according to some fishermen in Madeira Beach, was due to the frequent hurricane attacks during the year that frightened fish into schooling together. Based on some grouper stock assessment data, the Gulf of Mexico Fishery Management Council, the local representative of NMFS, ruled that red grouper, a fishery targeted by longline vessels, was overfished. In July 2002, the Gulf Council voted to make regulatory changes to implement a rebuilding plan for red grouper stock in the Gulf of Mexico, in which the commercial quota for shallow-water grouper would be reduced from 9.35 million pounds gutted weight to 7.08 million pounds gutted weight, representing a reduction equivalent to 45 percent of the average annual red grouper commercial harvest from 1990-2000 (Gulf Fishery News 2002).

Local fishermen expressed doubts about the credibility of the council’s report and decided to challenge their administrators. Led by a major local fish house owner, grouper fishermen from Madeira Beach organized the Southern Offshore Fishing Association, Inc., (SOFA), to represent their interests and voice their concerns. More than 50 local fishermen have joined the organization and they donate $150-$300 per trip to support SOFA’s campaigns. One of SOFA’s actions is to hire their own scientists to review the assessment made by the Council’s Reef Fish Stock Assessment Panel (RFSAP). Dr. Kenchington from Nova Scotia found errors in RFSAP’s assessments and pinpointed that committee reviews “do not and cannot provide an adequate mechanism to ensure that the data sets used in an assessment are valid” (2001:38).

SOFA’s evidence blunted the arguments of the fishery managers, who were forced to reassess the validity of their data. In January 2003, the Council reconvened to discuss the red grouper issue. They acknowledged SOFA’s statement and announced that
“less restrictive measures are needed than previously proposed, and only about a ten percent harvest reduction is needed rather than the 45 percent previously sought” (Gulf Fishery News 2003). Recently, from my interview with an NMFS official, I was told that RFSAP made a mistake by confusing the economic weight (gutted weight) with the biological weight (whole fish weight), and thereby wrongly assessed the overfishing status.

When I talked to some grouper fishermen about their victory, they were both happy and proud. They realize that their success did not come easily, because, on one hand, commercial fishermen just like to fish, but do not like to do paperwork or make phone calls. On the other hand, it is hard for fishermen to gather together and come up with a solution, either because they do not have much spare time for politics, or because their individualist nature hampers them to make reconciliations. Now, they realize that they need representation in the policy-making process, especially after commercial fishermen’s failure in the net ban. That is why they support SOFA and are willing to make donations to help with its plans. The victory made them more confident that policy-making is not always running from top-down, but they can take the initiative to reverse the management approach to regain their rights.

5.4 Other Communities

Besides the above-mentioned “Resilient Communities,” other communities have some notable stories and experiences that I think would be valuable to share with fishermen and policy-makers.
Pine Island

Located as the largest island on the west coast of Florida (17 miles long and 2 miles wide), the secluded Pine Island is surrounded by four aquatic preserves (Charlotte Harbor Preserve, Matlacha Pass Wildlife Reserve, Pine Island Wildlife Reserve, and Charlotte Harbor State Buffer Preserve) with abundant water resources. Pine Island comprises five communities: Matlacha, Pine Island Center, Bokeelia, Pineland, and St. James City, which are connected to the mainland (Cape Coral) only by the Pine Island Road.

Commercial fishing has declined compared with the island’s heyday in the late 1940s with over 20 fish houses scattered around. Now there are four fish houses with dockage left. Prior to the net ban, mullet was the main source of fishery that fishermen targeted. Mullet supply has always been abundant in the Pine Island Sound and the Gulf, which is easily accessible to Bokeelia five miles away. The two fish houses on the island used to sell only mullet. After the net ban, their business volume dropped dramatically and they had to make adjustments to their products. Both fish houses diversify their products to include stone crab, mullet, grouper and clams. They mostly sell mullet in whole to Georgia and stone crabs to Miami. They distribute grouper and other fisheries to Georgia and Apalachicola. One fish house picked up offshore fisheries in addition to the continuing mullet supply. Shrimping was added to their business earlier this year. It also added a cruise to show tourists around the adjacent islands (including the Cayo Costa State Park) to earn some extra income. The other fish house used to be co-owned by 25 commercial fishermen, but now only eight owners are left. After the net ban, they switched product from mullet to stone crab.
Local fishermen complained about the net ban that pushed them out of business. They can not agree that they should be the sole cost bearer of the decline of fish stocks. Instead, they argue that the palm tree farms on the island polluted the eco-system by dumping nitrogen in the water. The farm has been there for more than ten years and grows hybrid hibiscus, organic vegetable, all kinds of palms, mango, lychee and other tropical fruit.

After the net ban, many older fishermen retired, because they could not switch to the labor-intensive cast net fishing. One fish house indicates that they have more young fishermen working. Some commercial fishermen complained that they hated to use crab traps, but have to do so to stay in fishing since 1996 when the government assigned them an average 100 trap tags. Some fishermen switched to grouper fishing by paying $3,000-$4,000 for the grouper permit. Some turned to clamming, but are not doing very well this year because of the red tide problem.

**Everglades**

The community is located just northwest of Everglades National Park and is substantially engaged in crabbing. The park was designated in 1947 and kept expanding its territory ever since. In 1984, to protect the ecosystem and to attract more tourists, the park decided to ban all commercial fishing in the territory (three-mile offshore).

Crabbing has flourished since the 1960s and is still the dominant fishing activity in the community, especially after the net ban when some mullet fishermen switched to crabbing. When we were visiting the communities, we smelled the fishy smell from far away and saw stone crab traps lying in every corner of the community. The fishermen we
interviewed said that the city government is very supportive of the crabbing business, because the government leases the land to crabbers to store crab traps when the season is over.

It should be noted that even though the Everglades community is located next to the national park, the city itself has not become a tourist haven. It still maintains a rural appearance without any high-rise hotels or condominiums. As accommodation facilities are provided inside the park, tourists do not usually seek activities in the Everglades City.

Tampa

The City of Tampa is the largest city as well as the county seat of Hillsborough County. It is the third most populous city in Florida. It is located on the west coast of Florida, approximately 200 miles northwest of Miami, 180 miles southwest of Jacksonville, and 20 miles northeast of St. Petersburg. Today, Tampa's economy has diversified to include a combination of tourism, agriculture, construction, finance, health care, government, technology, and the Port of Tampa (City of Tampa 2003).

Tampa’s fishing activities concentrate largely on the Tampa Shrimp Dock located at the Port of Tampa off the 22nd Avenue Causeway. The deep-water port facilitates the operation of large shrimp boats. Currently, two fish houses operate at the dock, both of which are family-owned businesses that moved to the present location from Hookers Point in the 1980s. The fish houses offer dockage to gulf shrimp boats coming from Texas, Alabama, Louisiana, and Florida. Every year, about five million pounds of shrimp have been unloaded at the Tampa Shrimp Dock, with the bulk of them being gulf pink shrimp.
Most of the shrimp boats operating at the Tampa Shrimp Dock are large boats ranging from 60-90 feet. They target gulf pink shrimp, but also harvest some white shrimp and rock shrimp. There is a seasonal change in the shrimp operations in Tampa, because shrimpers track shrimp along the gulf in different seasons. In the hot summer of July-August, shrimp migrate to the north and boats often harvest and unload shrimp in Texas and Louisiana. From September to June, shrimp migrate back to Florida, with Tampa, Fort Myers Beach and the Keys being the major shrimp ports. In Tampa, about 50 boats operate at the shrimp dock from September to June, while only ten stay in July and August.

All of the people we interviewed expressed their belief that the city supports the shrimping business, often mentioning that former Mayor Greco actually came down to the docks and talked to shrimpers.

About a dozen giant seafood processors with over 100 employees along with dozens of small-scale seafood processors spread out in the Tampa Bay metropolitan area. A manager of a processor indicates that the reason that Tampa-St. Petersburg can develop into a seafood processing center is due to its special geographic location. Several highways cross Tampa-St. Petersburg area, which is easily accessible to the gulf coast. Moreover, cheap labor is easy to find in Tampa, while in areas like Tarpon Springs and Madeira Beach, a lot of low-income workers can not afford to live there. One processor notes the employees’ ethnic backgrounds as follows: “Americans” (white), Hispanics (Cubans and Puerto Ricans), African Americans (Haitians and African Americans), and Asians (Cambodians and Vietnamese). The majority of the employees working on the
processing line are minorities, compared to our study of the other fishing communities where “white” fishermen are the dominant population.

5.5 Discussion of the Comparative View of Florida Fishing Communities

Commenting on the whole versus the parts in the study of small communities, Redfield said, “There is a certain tension between the interest in the analysis of the community as a whole and the interest in the general uniformities of human behavior and institutions” (Redfield 1960:159). In my study of some relatively small fishing communities, what did I learn about American society and even about human institutions?

From the perspective of community studies of anthropology, I would say that the top-down approach of fisheries management disregards local interest and disrupts the livelihood of commercial fishermen. This has been intensified by local, city/county government officials who seem to concern themselves largely with the profitability of the community by approving as many development projects as they can, while ignoring the interests at the grass-roots level. The top-down approach of U.S. government results in the import of cheap seafood, but fails to take into account the sustainability of local industry. Viewed from the sociological angle, however, the decline of the fishing villages can be explained by the urban sprawl and globalization that mercilessly crash primordial, rural places.

The rural fishing communities in Florida suffer double exploitation – the classical kind in which urban centers exploit their rural hinterlands, and the more recent kind in which a “global system” is seen as exploiting local systems.
1) **Urban-rural exploitation.** As rural sociology articles recognize, resource-extraction industry is declining in the whole world. Rural areas that turn out raw materials are suffering from poverty, while urban and industrial areas that provide value-added services tend to be gaining profit. The fishing communities that I visited do not possess any processing facilities. Most of the fish houses serve only as a place to unload fish, which is immediately transferred to the processors in the processing plants in metropolitan areas. Even though a lot of the fish house owners are aware of the profit from value-added services, like cutting shrimp heads, grouper fillet and even cooking shrimp, there are various reasons that the rural areas are trapped into the resource-extraction capacity. They do not have the convenient traffic of urban areas. I was frustrated enough traveling back and forth on U.S. 19 and U.S. 41 to visit the fishing communities, compared with the ease of traveling on I-75. The rural fishing communities do not have a cheap labor supply. The processing plants in Tampa and St. Pete employ a lot of minorities, including African Americans, Hispanics and Asians. A manager told me that they like to recruit minorities because they work hard without much complaint. The small fish houses that are fed by 10 to 20 boats do not have the capital and products to run a large-scale processing facility.

2) **Globalization and exploitation.** Many studies have focused on the exploitation of developed countries over Third-World countries, but have not addressed the ripple effect within the developed countries themselves. Labor-intensive jobs are declining in the U.S., as the world manufacturing base transfers to developing nations. The threat of shrimp and grouper imports well reflects the effects of globalization on the fishing industry in the United States. A lot of fishermen know that they cannot compete with the
$0.25/hour salary of the Mexican grouper fishermen, nor can they compete with the low cost of aquacultures quickly developed in Asian and South American countries.

Sometimes, I have been embarrassed when a fisherman pointed to me and said, “You Chinese raised the farm shrimp and crashed our markets!” At first, I was shocked and did not know how to respond. Later, I could say that “It is not the Chinese fishermen who ruined your livelihood, but some Chinese businesses in alliance with American businessmen that take the large bulk of profit. Or it is the Americans that crash your own market.” Durrenberger discusses that one of the reasons that the United States allowed tariff-free seafood from Ireland in the 1960s was that it was part of a deal to keep U.S. military bases in that nation (1992: 104). Currently, the unrestricted seafood import from China is inseparable with the U.S. government’s intention to open China’s finance, telecommunication, automobile, and electronics markets (Hatano 2002; Hong and Fan 2001). Here, I think that shrimpers encounter the same dilemma as a lot of labor-intensive workers in the U.S., as Nike, IBM, and other U.S. brands transfer their manufacturing bases into developing countries such as China. Coming from China, I cannot agree with the fishermen’s allegation that the Chinese “exploited” U.S. shrimpers, for the Chinese workers do not earn much profit by exporting these low-tech and labor-intensive products. The lion’s share goes to American importers, redistributors, and restaurant owners, if you realize that one pound of 20/25 shrimp sells at only $1.15 for exports, but prices $9.99 at grocery retail, and even $20 at restaurants. Globalization is more a merciless process in which developed nations exploit developing countries to reap maximum profit than a humanitarian aid to help developing countries prosper. In this respect, I view the U.S. shrimpers, along with millions of Chinese labor-intensive
workers, as victims in the globalization structure. So far, I have no simple recommendation or suggestions in this regard.
CHAPTER 6 SUMMARY AND RECOMMENDATION

The problems that Florida Gulf Coast fishing communities encounter are not limited to the economic realm. Those problems entail wide political, environmental, and social-cultural concomitants. Therefore, the decline of fishing communities cannot be solved by fishermen alone, but call for cooperation from all parties concerned, including fishing community members, fishery management, federal and local government.

Regulations

A lot of fishermen express that they prefer an independent lifestyle in which they can work on their own and do not have to associate with the public. Many dislike the onerous tasks of filling out paperwork, making phone calls to fishery managers, and negotiating with government officials. Fishermen have all kinds of explanations, either they were born like that, or they are too busy to get involved with such things, or they feel too powerless to make changes happen.

However, the successful stories from the resilient communities indicate that fishermen’s participation in political negotiation would facilitate communication between policy-makers and fishermen. Although a lot of fishermen feel that they are vulnerable under the control of fishery management, they should also see that this top-town approach could at least be mitigated, if not reversed, if fishermen got involved in the
decision-making process. The case of SOFA shows that fishermen are not merely passive policy-followers, but can employ their own scientists to gather fish stock statistics and monitor the accuracy and objectivity of NMFS’ data.

Fishery managers should be aware of their dual responsibilities, on one hand to protect the marine wildlife, and on the other to meet the sociocultural needs of fishermen and fishing communities. While the former duty has been more easily attended to due to readily accessible biological statistics, the Magnuson-Stevenson mandate seems comparatively more difficult to fulfill, because the criteria are vague in defining fishery managers’ duty and in judging the performance of the policy-makers. For example, the net ban controversy turned out to be a farce that relied more on public sentiment instead of scientific evidence for policy-making.

I recommend that follow-up research should be conducted every year, or at least every 3-5 years, since commercial fishing is declining swiftly and massively.

Imports

Despite the skyrocketing shrimp imports that have severely depressed domestic shrimp prices, a lot of fishermen I talked to realized that it is difficult to change the federal government’s free trade policy. Fishermen, especially shrimpers, have been trying to push the U.S. government to limit imports. The eight states on the Gulf of Mexico have formed the Southern Shrimper Alliance to fight against what they consider to be the “dumping” of farm-raised shrimp from Asia and South America. Although their actions have not yet succeeded, they have already persuaded Congress and the state government to allocate subsidies to help them get through dire straits.
Urbanization/Tourism

Many fishermen expressed feelings of helplessness in preventing the invasion of urbanization and tourism. The majority of the fishermen and fishing business personnel thought that local government did not support commercial fishing, and that it, rather, buttressed tourism. However, some communities have found ways to reserve property for the use of commercial fishing. Cortez community members united together and formed a communal organization to purchase a natural reserve before developers swarm in. They also forestalled any ambition of condominium construction, even though tens of high-rise buildings have dominated the beachfront in the neighboring Anna Maria Island and Longboat Key. Now, the community has not turned into a retiree heaven, because the rural landscape has kept property taxes low so that a lot of fishermen can still afford to live in their generation-long homes. In short, Cortezians work hard to preserve their valuable fishing tradition and the fishing property that their ancestors have bestowed on them. If fishermen in a community organize together and develop a plan to claim their territory against the competing forces, they would have a better chance of prolonging their fishing activity.

However, not every commercial fisherman thinks that commercial fishing always runs into conflict with tourism development. There is a juncture at which the two industries work compatibly, e.g., commercial fishing provides seafood for restaurants, as “Fresh Florida Seafood” can be a big draw to tourists. Sara Morris, a fish house owner as well as commercial fishing representative serving the Gulf Council, estimates that overall 60 percent of the fish landed in Florida is consumed locally, while 90 percent of the grouper is sold within the state. She pinpoints that when local government or fishery
managers make decisions to build condominiums and ban commercial fishing, they often ignore the great value that local seafood contributes to the tourism industry. Right now, the contribution of commercial fishing to the state economy has been minimized as it is defined by the raw landing value, but not the higher added value of restaurant sales and retail sales. Sara recommends that officials reconsider the value of commercial fishing in Florida, without the support of which, the growth of tourism will definitely slacken if not decline.

In the U.S., election is inseparable from a candidate’s economic promises and performance. Local county and city government leadership positions are no exception and it is not surprising that the officials give more support to ventures that bring in higher profits to the community than the lesser ones. However, government officials should realize that commercial fishing not only brings in revenue, but, more importantly, also contributes to the cultural diversity of a community. Moreover, development in the community should not be accomplished at the expense of development of the community or the welfare of community members. Fishermen’s livelihood should be assessed and attended to when condominiums buy up dockage and force fishermen to relocate. Florida’s fishing tradition needs to be preserved and promoted. A community thrives not only because of its economic viability, but also because of its internal diversity.

Following is a list of some remaining issues of concern for commercial fishermen with, in some cases, implied recommendations that derive from this study. In most instances, the only recommendation that can be made at this point is that more information is needed.

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1) What are the implications of the trend that fishermen are going further offshore to fish now than before? If shrimpers survive better than longline grouper fishermen, and longline grouper fishermen survive better than bandit-rig grouper fishermen, and bandit fishermen better than netters, is there an important principle in such a hierarchy?

2) Are urban populations exploiting the rural ones, including fishermen in the latter? This exploitation contains two layers. Geographically and culturally, fishermen’s rural setting has been gradually corrupted by the overwhelming urbanization process. Economically, the small-scale rural fishermen and fish houses are exploited by the urban giant processors, who, simply acting as middlemen, take the lion’s share of the profits in the seafood industry. What can fishermen do to put themselves in a more advantageous position in negotiation with their urban exploiters?

3) If they do not have time or money, can commercial fishermen effectively protect themselves and their communities by getting involved in politics? Commercial fishermen are not a unified group, but they seem to agree that longliners make more money than “bandit fishermen,” and shrimpers are more powerful than grouper fishermen. More needs to be learned about fishing communities. To what extent is it true that “money is power” even among fishermen themselves, within a fishing community?

4) If fishing communities along the Gulf Coast disappear, where can fishermen go? What are the cultural implications of their moving to other fisheries, switching to serving the tourism industry through the charter boat system, or switching to other fields such as clam farming or truck driving?
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Cortez Waterfronts Florida Committee

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**Wilkinson, Kenneth P.**


**Wilson, Doug, and Bonnie J. McCay**

APPENDICES
Appendix A

Gulf Coast Marine Business Checklist*

PORT: __________________________

Check for the presence of the following:

___Air fill stations (diving)
___Bait houses (commercial)
___Bars/ clubs (dockside or in town)
___Boat builders
___Boat insurance companies
___Boat yards (recreational)
___Boat yards (commercial)
___Churches with maritime touch
___Cold storage for bait, catch
___Docking facilities (commercial)
___Electronic, navigational, computer equipment and repair
___Fishing associations
___Fish auctions/packers/buyers
___Fisheries research laboratories
___Fishing monuments
___Fishing pier
___Fish processors
___Fishing supplier
___Fuel company (oil, diesel, or gasoline companies that service recreational/commercial facilities)
___Harbormaster
___Hotels/Inns (dockside)
___Ice houses
___Labor unions (seafarers)
___Lawyers (admiralty and others working with fisheries)
___Marine conservation organization office
___Marine railways/haul out facilities
___Marine boating suppliers (type)
___Marine surveyors
___Museums—fishing/marine-related
___Net makers
___NMFS or state fisheries office (port agent, etc.)
___Public boat launches
___Recreational docks/marinas
___Recreational bait/fishing supplies
___Sea Grant Extension office

* Checklist developed by Impact Assessment, Inc.
Seafood restaurants

Appendix A (Continued)

Seafood retail markets
Trucking operations
Welding and welding suppliers
Whale watching/pleasure tours

Gulf Coast
Gentrification Indicator Checklist

PORT:

1. Visitors bureau
2. Marinas
3. Upscale housing (condominiums, townhouses or residential development close to waterfront)
4. Recreational bait/tackle shops
5. Fish/Seafood retailers
6. Fishing excursion vessels
7. Trendy retail shops (Gourmet and/or organic food shops, coffee houses, boutiques, brewpubs, cigar bars, art studios and galleries)
8. Recreational boat tours (including whale watching)
9. Seaside restaurants
10. Recreational boat dealers
11. Hotels/Inns dockside
12. Maritime museums
13. Franchise restaurants, grocery stores, bookstores
14. Resorts (spas, hotels, etc.)
15. Public beautification – flowers, street lighting, parks etc., trash receptacles
Appendix B

Key Informant Commercial Fishing Interview*

Date: ____________________
Community: ____________________  Interviewer: ____________________
Respondent: ____________________  Phone/email: ____________________

====================================================================================================

FISHING ACTIVITIES

1. What is your role on the vessel?

2. What types of fishing do you do?

3. What type of gear do you use?

4. What type of fish do you usually catch during the different seasons?

<table>
<thead>
<tr>
<th>Season</th>
<th>Type of Fish</th>
<th>Choice of Bait</th>
<th>Fishing Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
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<td></td>
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<td>Summer</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Where do you off-load and sell your fish?

6. (If same place) Is this typical of fishermen in this area?

7. Where do you buy supplies associated with your fishing? If you buy outside the community, how many miles away do you travel?

8. How many crew do you have on your vessel? Does the number vary with the seasons?

* Interview Protocol developed by Impact Assessment, Inc.

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Appendix B (Continued)

9. Is it difficult to find reliable crew?

10. Where do you live? (Inside or outside of the community)? If you live outside, how many miles do you travel to work?

11. Do most commercial fishermen live inside or outside of the community?

12. Do you feel that fishing families are having financial difficulties? Why?

13. How do commercial fishermen get along with each other in your community?

14. Are there any places or occasions that commercial fishermen and/or their families gather together? If so, please describe them.

15. Are commercial fishermen in this port active in any industry organizations or associations? If yes, please describe.

16. Are local fishermen active in no-fishing community organizations or activities? (civic organizations, city government, schools, etc.)

17. Do you consider this port a “fishing community”? Why or why not?
Appendix C

Dealer/Packing House/Processor*

Name: Company Name:
Job Title: Company Address:
Phone Number:
E-mail Address (if applicable):
Fax Number (if applicable):

Current Operations / Physical plant
1. In general, list the major equipment or structures in use at the plant or dock, (i.e., freezers, trucks, plant infrastructure, docks, etc.)

2. Do you own your own vessel? If so, how many?

3. What percent of your product comes from your own vessels or outside vessels?

History of Operations:
4. How long has your company been in business?

5. How long has this facility been in this location?

Product
6. What is your primary species/product?

<table>
<thead>
<tr>
<th>Season</th>
<th>Type of Product</th>
<th>Location Fished</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter</td>
<td></td>
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<tr>
<td>Spring</td>
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<td>Summer</td>
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<tr>
<td>Fall</td>
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</tbody>
</table>

7. What significant changes, if any, have there been over the past ten years or so in the species you process and the products you produce?

8. Where do you sell your product? (locally, regionally, nationally, internationally)?

9. How do you ship it there?

10. What job positions are involved at your plant?

* Interview Protocol developed by Impact Assessment, Inc.
11. How do seasonal fluctuations in supply affect your ability to keep customers and employees?

Employment:
12. What kinds of jobs do people who work for your operation have? Describe their ethnic background.

13. How and from where do you recruit your employees?

14. Where do most of the employees live (inside or outside of the town/community?)?

15. In general, do you have high, medium, or low turnover rate?

Community Ties
16. From what other local businesses, if any, does this operation or the employees of this operation, purchase goods or services? (e.g., local welders and electricians to repair equipment and local convenience store where employees purchase lunch or breakfast)

17. In what ways, if any, has local government actions supported your business or made things more difficult?

18. What are the significant or well-known local civic associations of this company’s owners, staff, if any?

Personal
19. How long have you been in this business?

20. Do any of your family members work in this business? In what positions?
Appendix D

Resilience Protocol*
(Tarpon Springs)

1. How was Tarpon Springs developed as a fishing community?

2. How has commercial fishing changed in Tarpon in the past ten years? (Changes in the number of fish houses, number of boats and number of commercial fishermen)

3. What are the greatest impacts that fishermen have had in the community?

4. How do you encounter those impacts? Has your business been better or worse?

5. How is Tarpon Springs different from Cortez and Madeira Beach?

6. Why is Tarpon doing better than some other communities, like Hudson, Crystal River and Boca Grande? Why do some other communities fail to survive the ordeal?

7. Do you think that civic organization or industrial organization would help with the survival of commercial fishermen?

8. Some people are saying that commercial fishermen are self-divisive. What are the difficulties that you have met in trying to get people to work together?

9. Is the city/county government supportive of the commercial fishing industry?

10. Future of Florida commercial fishing. What can commercial fishermen do to save themselves?

* Interview Protocol developed by Yu Huang.