

**A SOCIAL AND ECONOMIC ANALYSIS OF COMMERCIAL FISHERIES
IN NORTH CAROLINA:
BEAUFORT INLET TO THE SOUTH CAROLINA STATE LINE**

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INTRODUCTION

In 2009, the North Carolina Division of Marine Fisheries (DMF) conducted the ninth study investigating the social and economic characteristics of North Carolina's commercial fisheries by interviewing fishermen and fish dealers. The previous studies were similar analyses of the Albemarle Sound Management Area (Diaby 2000), Pamlico Sound (Diaby 2002), Core Sound (Cheuvront 2002), Beaufort Inlet to the South Carolina Border (Cheuvront 2003), the Snapper-Grouper Fishery (Cheuvront and Neal 2004), Albemarle/Pamlico Sounds (Crosson 2007a), Core Sound (Crosson 2007b), and the Atlantic Ocean (Crosson 2009).

The number of restrictive management measures in this area has increased in recent years, particularly in the gill net sector. Understanding the impacts of these restrictions on the commercial fishing industry as a whole requires knowledge of the social and economic characteristics of these commercial fishermen. This information is important for the development of both state and federal fishery management plans as required by the North Carolina Fisheries Reform Act of 1997 and the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006.

Study Area

This study focused on the fishermen and fish dealers who work the estuarine waters from Beaufort Inlet southwest to the South Carolina state line, most of which consists of an area referred to internally by the DMF as the "Southern District" (Figure 1.) with the exception of those areas located in Carteret County. The study area can be identified by NC Division of Marine Fisheries' trip ticket water bodies which include the Newport River, Bogue Sound, White Oak River, Inland Waterway – Onslow County, New River, Stump Sound, Topsail Sound, Masonboro Sound, Cape Fear River, Lockwood Folly River, Shallotte River, and Inland Waterway – Brunswick County. The boundaries of these water bodies lie within Carteret, Onslow, Pender, New Hanover, and Brunswick Counties. All of these rivers or sounds are behind barrier islands. While some fishermen and dealers in this study fish in the ocean, those activities generally are not reported here. These water bodies comprise approximately 115,005 acres of water and about 1,147 linear miles of shoreline from Beaufort Inlet to the South Carolina state line.

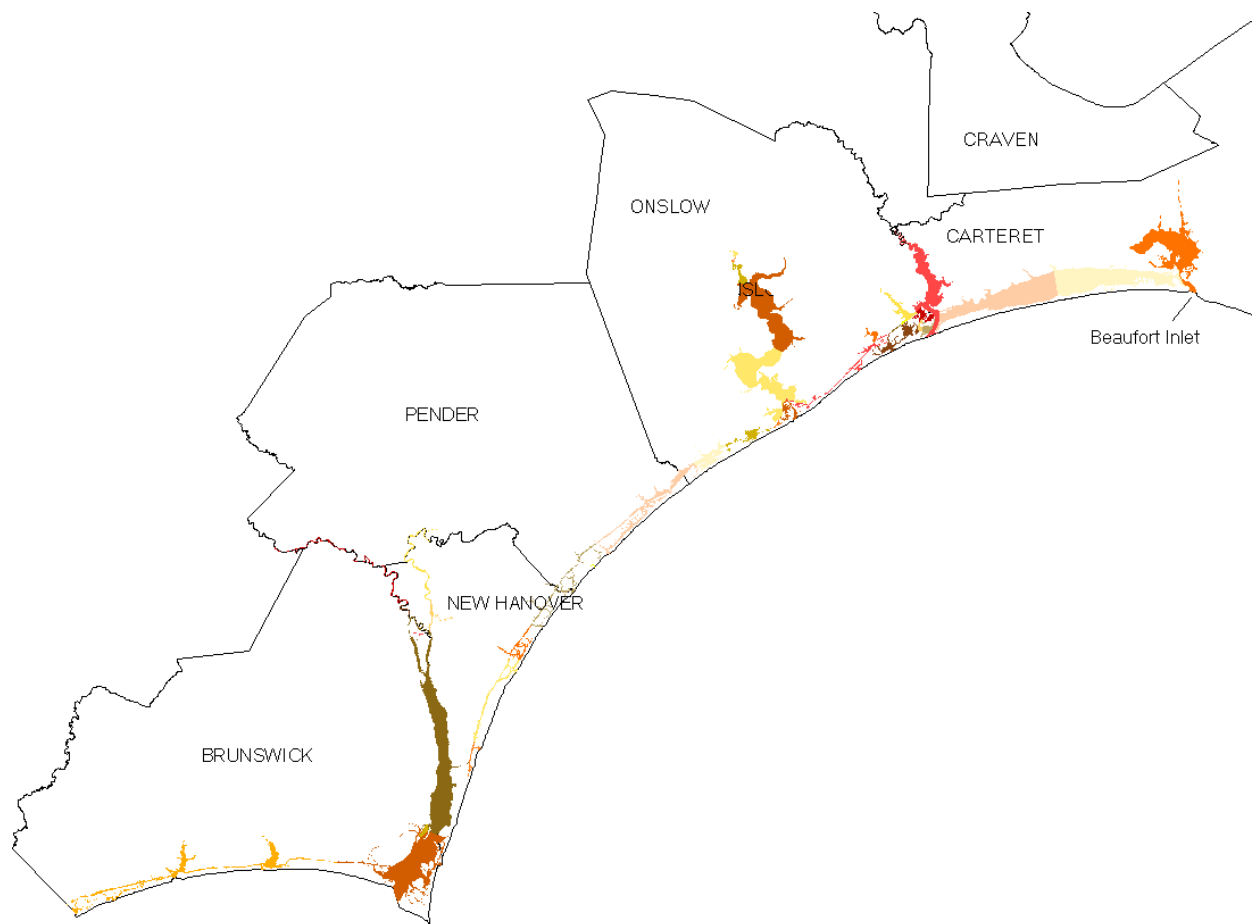


Figure 1. Map of study area (NC DMF GIS Program).

STUDY OBJECTIVES

The specific objectives of this study are:

1. To describe the socioeconomic aspects of commercial fisheries from Beaufort Inlet to the South Carolina state line, including demographic characteristics of commercial fishermen and dependence on commercial fishing activities;
2. to collect costs and earnings information from commercial fishermen in order to develop estimates of the costs, earnings, and returns associated with commercial fishing;
3. to assess commercial fishermen's perceptions of fishery regulations, conflict, and relevant issues including the future of the industry; and
4. to compare these results to those of previous surveys when appropriate.

METHODS

Recruitment and Participation Rates

In 2009, a list of 629 commercial fishing license holders was obtained from the NC DMF license database. The list reported every person or business which landed at least \$1,000 in ex-vessel value of seafood from water bodies in the study area during calendar year 2008. Licenses included were the Standard Commercial Fishing License (SCFL), Retired Standard Commercial Fishing License (RSCFL), and the Land or Sell License (for non-residents landing federally-managed species in North Carolina). Thirty fishermen had recently completed other DMF socioeconomic surveys, therefore, in order to reduce survey fatigue, were removed from the list. Project-specific interviewers completed surveys of 153 of the remaining 599 fishermen for the project. This response rate (25%) is lower than in previous surveys. Of those fishermen who did not participate, 58 (13%) outright refused and 32 (7%) were no longer involved in commercial fishing. The remaining fishermen either could not be located or did not answer the phone.

Survey Instrument

The Socioeconomic Program of the Division's License and Statistics Section has a goal of continually surveying fishermen on a staggered five-year basis. Fishermen representing an area of the coast are usually being surveyed in any given year, with the goal that the area will be surveyed again in five years for longitudinal purposes. Cheuvront (2002, 2003) and Cheuvront and Neal (2004) refined the survey to the point that the general format is set, with minor modifications made to reflect each area's specific fisheries and industry. Surveying was done over the phone.

The data collected in the survey (see Appendix 1) includes information concerning:

- Individual socio-demographics
- Characteristics of the fishing business
- Fishing vessel characteristics and expenses
- Targeted species and gear combinations
- Income from fishing
- Financial costs of doing business
- Attitudes regarding fishery management
- User group conflicts
- Perceptions of the fishing industry

Fishermen were surveyed throughout 2009 and results were entered into an Excel spreadsheet. The data were analyzed using the Statistical Package for the Social Sciences (SPSS release 12.0.0 [SPSS, 2003]). Final data verification, assigning labels to variables, and additional variable calculations were completed in SPSS along with all data analyses. The primary analyses in this report consists of frequency and simple univariate analyses.

RESULTS

Demographics

Demographic information was collected for each respondent (Table 1). The fishermen interviewed here were almost all white (95%) males (96%). They had fished, on average, for 22 years. They ranged in age from 20 to 85 years old, with a mean age of 55. Most (69%) were married.

Table 1. Demographic information of respondents.

Demographics	Frequency	Percent
<u>Gender</u>		
Male	145	96%
Female	6	4%
<u>Racial/Ethnic Background</u>		
White	146	95%
Hispanic	3	2%
Unknown	4	3%
<u>Education</u>		
Less than High School	49	32%
High School Graduate	59	39%
Some College	25	16%
College Graduate	16	10%
<u>Marital Status</u>		
Married	105	69%
Divorced	22	14%
Widowed	9	6%
Separated	1	1%
Never Married	12	8%
<u># of People in Household</u>		
One	27	18%
Two	85	56%
Three	19	12%
Four	10	7%
Five	5	3%
Six	3	2%

These numbers are very similar to those of fishermen surveyed in recent years in Albemarle, Pamlico, and Core Sounds. They are substantially different than those of Atlantic Ocean fishermen, who tend to have pursued or obtained a college degree and have higher incomes (Crosson 2008). They are also slightly different than the numbers found earlier in the same area by Chevront (2003). The percentage of fishermen who made more than \$30,000 per year from fishing increased from about 2% to 5% (Figure 2). At the same time, fishermen who didn't make anything or lost money increased from 12% to 20%. Almost half have come from a fishing family; 48% reported that their parents commercially fished, and 42% had grandparents who fished.

Household incomes for the fishermen in this area were lower than previously found (Figure 3). Less than 20% of these fishermen reported household incomes of over \$50,000/year, and the number with less than \$15,000 is double that found by Chevront (2003).

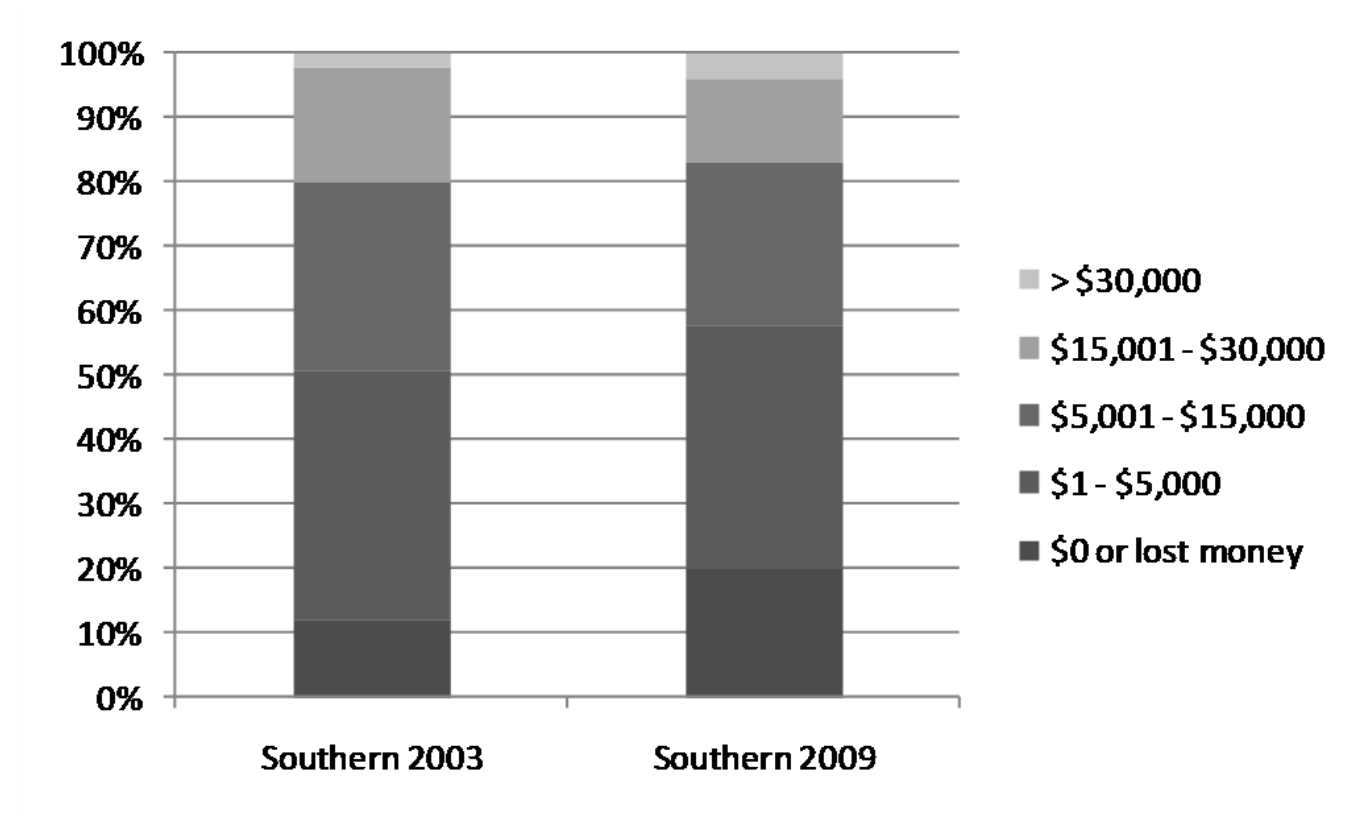


Figure 2. Commercial fishing income of respondents.

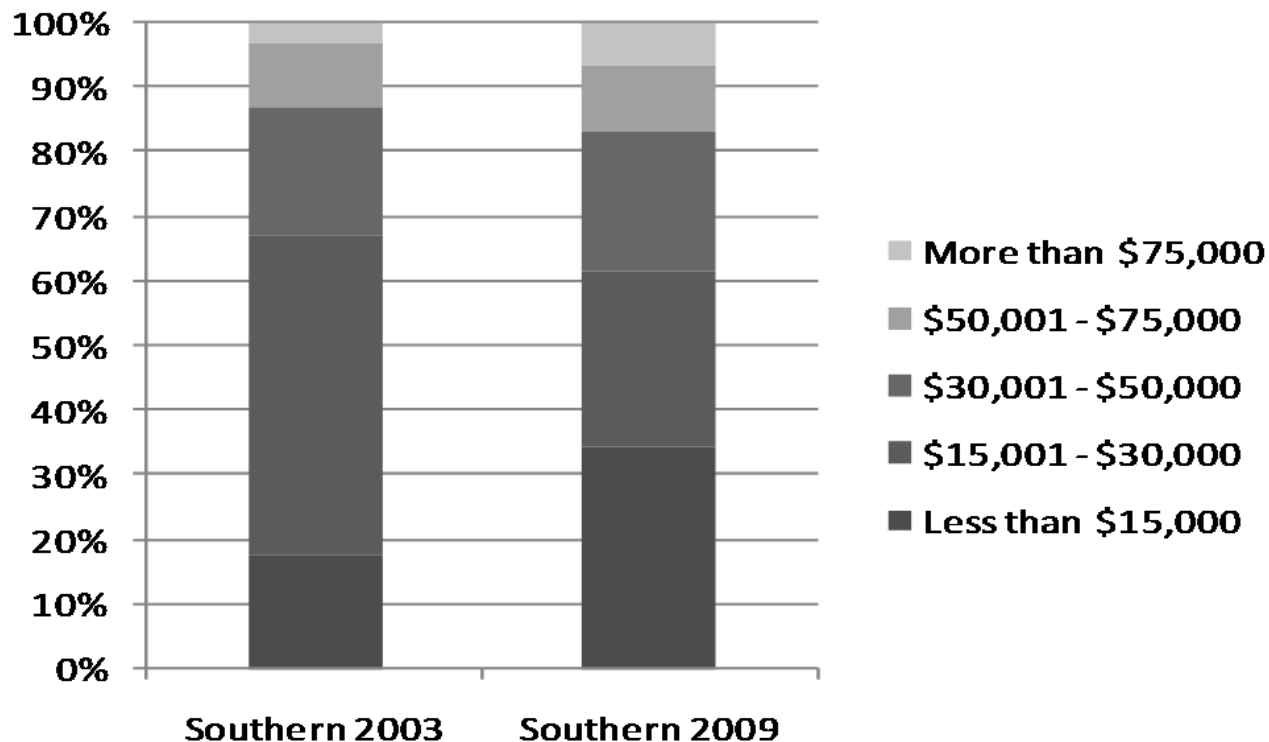


Figure 3. Household income of respondents.

Many of the fishermen had income from sources other than commercial fishing. The other most common jobs held were in construction (8%), the service sector (7%), and landscaping (5%). Some fishermen also worked in a fish house (3%) or in maritime trades (3%). Another 31% receive retirement or disability checks. The number of retirees from other jobs is higher than those found in previous surveys. Fifty-two percent (52%) of the respondents consider themselves to be full-time fishermen, which is lower than in previous surveys.

The most common county of residence for these respondents was Onslow (31%), followed by Brunswick (18%), Carteret (16%), New Hanover (15%), and Pender (10%). The respondents had lived in their communities for an average of 39 years.

Characteristics of the Fishing Business

Almost all (96%) of the fishermen run their businesses as the sole proprietor. Seventy-four percent (74%) worked the water year-round. August through October were the months of highest fishing participation with over 90% spending some time on the water, while December through March was the slowest time (Table 2). However, activity rates did not vary widely throughout the year.

Table 2. Monthly fishing activity of respondents.

Month	Frequency	Percent
January	119	78%
February	122	80%
March	123	80%
April	125	82%
May	133	87%
June	135	88%
July	136	89%
August	140	92%
September	141	92%
October	143	93%
November	136	89%
December	122	80%

Fishing Vessels and Business Expenses

Ninety-five percent of the fishermen owned boats, with 31% owning two boats, and 16% owning three or more. Vessels were classified as small (less than 19 ft. in length), medium (between 19 and 38 ft. in length), and large (over 38 ft. in length) (Table 3). Value includes gear used on that boat. Boats are generally kept at their homes (73%), at fish houses (7%), or at a rented slip (9%). The number kept at homes in this survey is much higher than found in previous surveys in coastal North Carolina, perhaps reflecting the higher costs and scarcity of slip space in the study area (which is the most congested area of the North Carolina coast). Per-trip and annual operating expenses incurred by boat owning-fishermen in the study area were estimated and include both the average and the median (that of the “middle” fishermen) (Table 4).

Only 25 of the fishermen reported using some sort of share system during the past year, with the most common division of shares went to the captain/crew/boat as a 25/25/50 or 33/33/33 split. Most of the fishermen surveyed for this report worked alone, or with a spouse or other family member occasionally assisting.

Table 3. Summary characteristics by vessel size of respondents.

Vessel Characteristic	Small (n=144)	Medium (n=81)	Large (n=9)
Avg. Length (in feet)	16	24	44
Avg. Years Owned	11	8	16
Avg. Value	\$4,152	\$16,287	\$27,833

Table 4. Average and median estimated boat expenditures of respondents.

Trip Expenses:	Average	Median	Annual Expenses:	Average	Median
Fuel	\$36	\$15	Capt/Crew (not self)	\$435	\$0
Bait	\$64	\$0	Pay to Relatives	\$46	\$0
Groceries	\$1	\$0	Insurance	\$90	\$0
Ice	\$4	\$0	Licenses	\$323	\$260
Other Expenses	\$0	\$0	Startup costs	\$4	\$0
Total/Trip:	\$106	\$15	Loan Payments	\$85	\$0
			New Gear	\$1,950	\$800
			Repairs	\$2,668	\$1,000
			Docking Fees	\$225	\$0
			Other Expenses	\$11	\$0
			Total/Annum:	\$5,837	\$2,060

The impact of the area's harvest on North Carolina's economy for 2008 was calculated using IMPLAN, an economic modeling software (Table 5). The IMPLAN software models the contribution of commercial fishing to the state's economy beyond the simple value of landings. For example, with part of the money generated from landings, a fisherman may purchase insurance for his or her boat. This helps employ an insurance agency, which in turn must purchase business supplies from another store and pay its employees. All of these actions have contributions of some degree to the economy at a local and state level. IMPLAN models estimate how this money is spent and re-spent until it leaves the state's borders. Commercial fishermen in North Carolina operate almost exclusively as independent businessmen; because of this, the commercial fishing model native to IMPLAN is somewhat imprecise and must be edited to reflect the true nature of North Carolina commercial fishing expenditures. Using the expenditure data illustrated in Table 4, total expenditures for commercial trips for 2008 are as follows:

$$\text{Total commercial expenditures} = (t\tilde{E}) + (n(t/t_{\text{all}})\tilde{Y}) + (n(t/t_{\text{all}})\tilde{I})$$

where t = number of trips, $\tilde{E}$ =median per-trip expenditures, n = number of fishermen, t_{all} = total trips taken by fishermen throughout the year regardless of water body, $\tilde{Y}$ =median yearly fixed expenditures, and $\tilde{I}$ =median profit. Analysis using the IMPLAN model for North Carolina yields the economic impact from expenditures shown in Table 5.

Table 5. Economic impact of commercial trips in study area, 2008. DMF Trip Ticket Program, IMPLAN.

Economic inputs (costs)	\$3,377,395
Proprietary income (profit)	\$2,566,282
Additional economic activity generated	\$2,580,065
Additional jobs generated	56
Total economic Impact	\$8,523,742

The economic sectors most affected by the commercial catch of fisheries are fuel sales, wholesale trade, domestic trade, banks, home building and repair, the federal government, boat building/repair, insurance, real estate, and docking facilities. This model does not include the post-landings economic effect of landings, only the business inputs from the commercial fishermen. The economic effect of landings on dealers, seafood markets, restaurants, and shipping interests requires data that is not currently available.

Targeted Species and Gear

Fishermen were asked about the species targeted and the gears used. Most fishermen in this area target more than one species. Some target only shellfish, while others target only crustaceans. However, the majority of fishermen target a combination of shellfish, crustaceans, and finfish. Table 6 shows the major species these fishermen targeted along with the proportion of the fishermen who targeted them.

Table 6. Species commonly targeted by respondents.

Species	% who land
Oysters	56%
Clams	53%
Flounder	43%
Spot	35%
Shrimp	31%
Sea Mullet	26%
Crabs	18%
Speckled Trout	16%
Croaker	6%
Red Drum	3%

The estuarine areas in the southern half of the state are much smaller than the sounds to the north and the coastal population is denser. Gears such as pound nets are not permitted. Most fishermen in the southern district use gill nets for finfish and species-appropriate gear for crustaceans and shellfish (i.e. rakes for clams, pots for crabs) (Table 7).

Table 7. Reported gears used by respondents.

Gear	% who use
Gill net	52%
By hand	46%
Tongs	32%
Rakes	28%
Crab pot	16%
Skimmer trawl	16%
Gigs	15%

Macroeconomics

The total value of all seafood harvested and landed in the southern district has declined by over one-third since 2000 (Figure 4). This is at least partially due to the declining prices of estuarine species caught inside the inlets, especially shrimp (Crosson 2008). The number of fishermen working in the area has likewise declined (Figure 5).

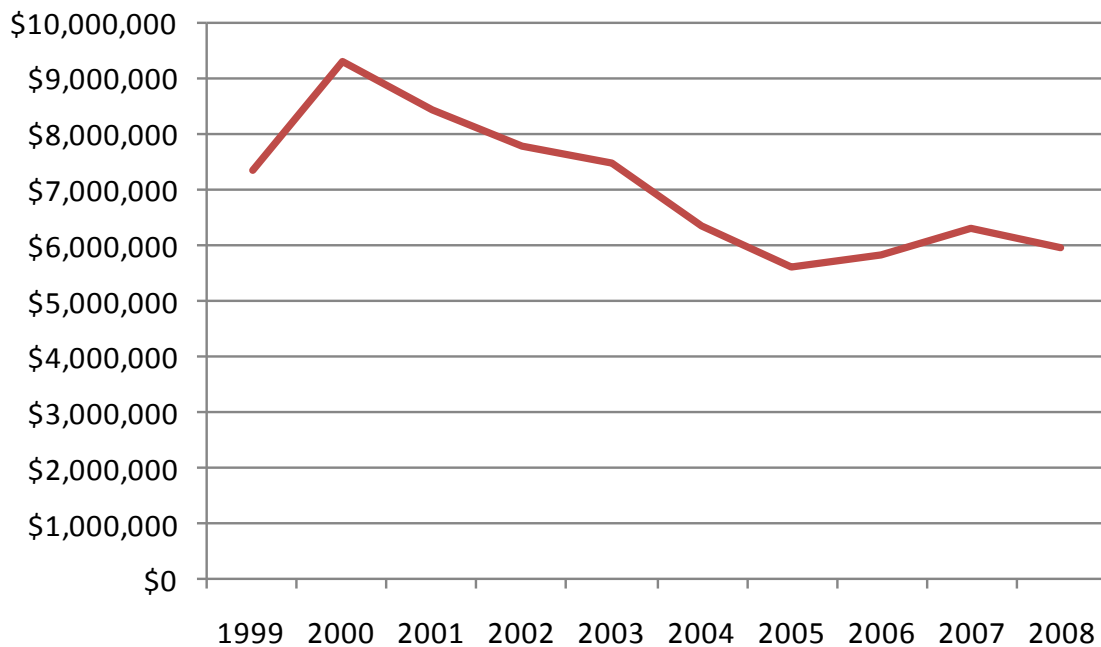


Figure 4. Value of landings in the area of study (NC DMF Trip Ticket Program).

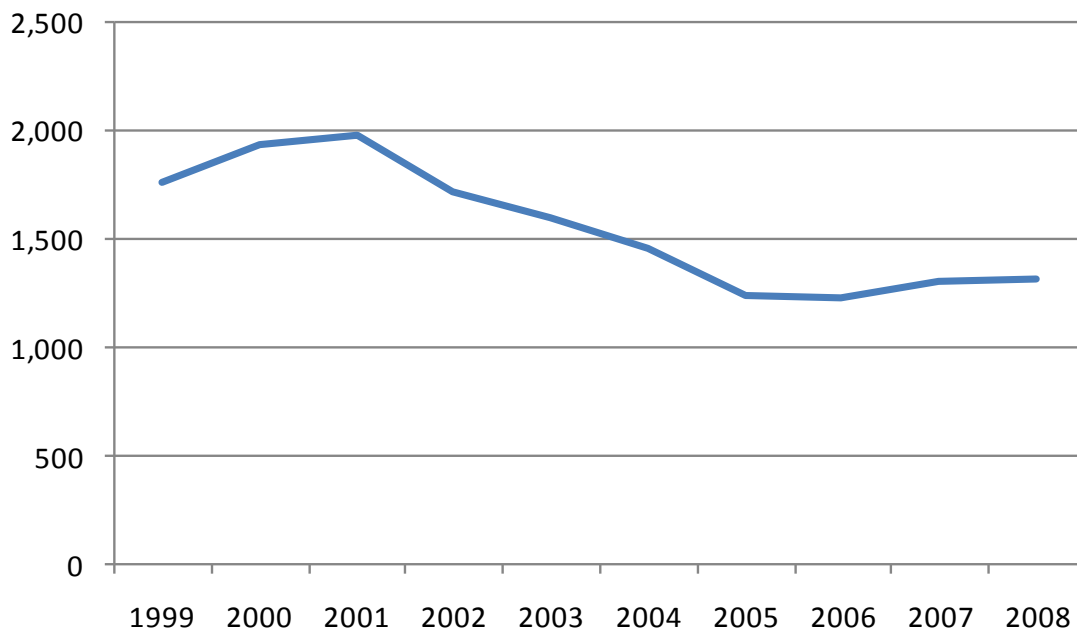


Figure 5. Number of active commercial fishermen working the area of study (NC DMF Trip Ticket Program).

This is in keeping with the general trend of declining participation in commercial fishing in North Carolina, except in the Atlantic Ocean fisheries. The decline in prices for many estuarine fisheries may be driving fishermen to leave the business of commercial fishing.

Perceptions

Respondents were asked a variety of questions designed to elicit their opinions on the business of commercial fishing, particularly regarding the challenges fishermen face today. Every fisherman ranked a variety of different issues on a ten-point scale by “how important [he or she] considers each of these issues to [his or her] fishing business” (Table 8).

Table 8. List of issues of concern of respondents.

Rank	Issue
1	Development of the coast
2	Low prices for seafood
3	Imported seafood
4	Losing working waterfronts
5	Weather
6	Aquaculture
7	Area Closures
8	Fuel Prices
9	Inability to predict the business future
10	State Regulations

Pollution and water quality was the top issue found in the same area by Cheuvront (2003). He also found regulatory burdens to be at or near the top of a list of concerns in other surveys (Cheuvront 2002; Cheuvront and Neal 2004), but Crosson (2007b) found an increasing concern over fuel prices and imported seafood in the Core Sound area. Fuel prices remain as the top concern for fishermen who worked the Atlantic Ocean, but the time period during which that survey was administered included the summer of 2008, during which domestic fuel prices approached and exceeded \$4/gallon several times. The recession since then has lowered fuel prices substantially and fuel prices have dropped dramatically as an issue for the commercial fishermen in this study. They instead expressed concern over the issues that plague more congested areas—coastal development, the loss of working waterfronts, and area closures from pollution. Low prices for seafood (and the imports and aquaculture that drive it) were also a concern.

User Group Conflicts

The fishermen were also asked about conflicts with regulations and with other user groups. The highest number of conflicts was with recreational fishermen, at similar levels to that seen in other surveys (Figure 6). Conflicts with other commercial fishermen were much less common. Conflicts with state officials were almost non-existent and no conflicts with federal officials were reported.

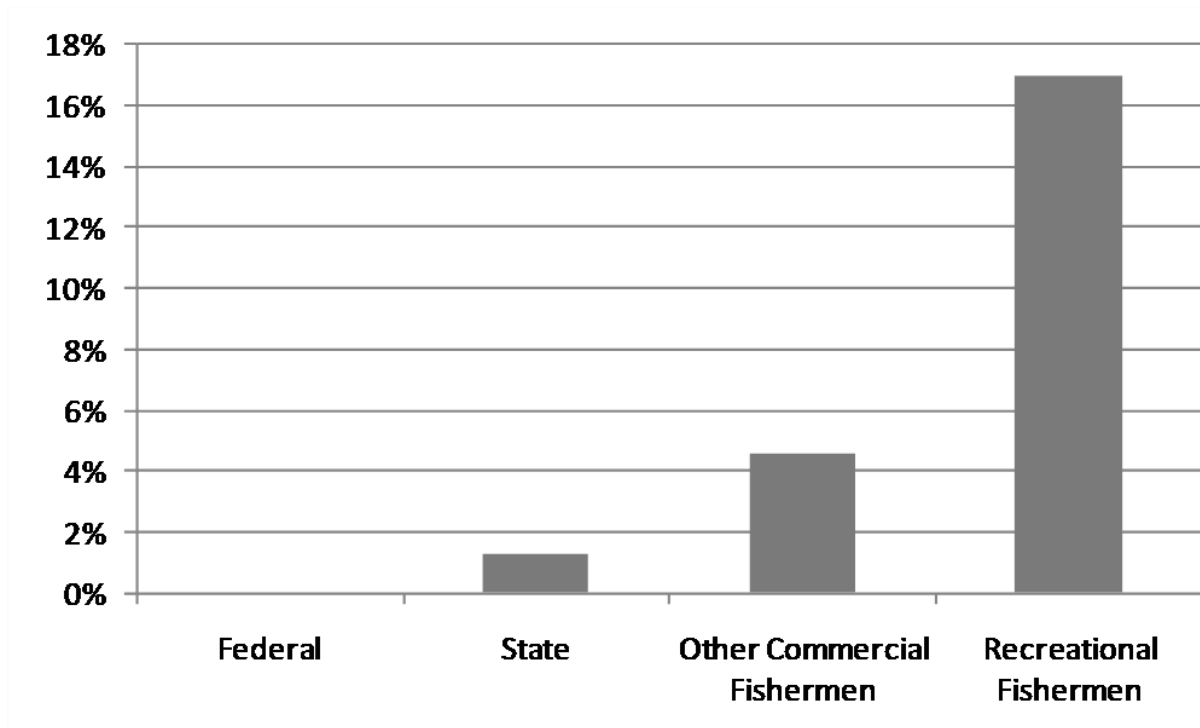


Figure 6. Percentage of respondents reporting conflicts with federal or state regulations or other user groups in previous years.

Respondents were asked whether they expected to still be commercial fishing ten years later. Fifty-four percent believed that they would, which is slightly lower than the 59% of fishermen in the Cheuvront (2003) study who affirmed the same.

CONCLUSIONS

The NC Division of Marine Fisheries has surveyed commercial fishermen for over a decade, and nearly every commercial fisherman in the state with significant (over \$1000 per year) landings has received a call from an interviewer in the past five years. When comparing the results of this survey to those of fishermen in the other areas of the state, and to the results found by Cheuvront (2003) in the same area, several trends become apparent:

- The number of commercial fishermen is declining, especially in the estuarine areas.* According to Crosson (2007b), the number of commercial fishermen in the Core Sound area who stated that they were breaking even or losing money from their fishing activities increased substantially from 2002 (5%) to 2007 (23%). While not quite as dramatic, a similar trend is evident in the Southern District, and the drop in the number of participants (from 1,763 to 1,316) from 1999 to 2008 shows that fewer individuals find fishing to be a lucrative business. Meanwhile, the number and value of commercial trips in the area both declined by approximately 20%. There is a positive note, however, as the mean fishing income per participant rose from \$4,160 to \$4,516 during the same time period.

- *Disparities in fishing and household income are growing.* Although fishing income has grown, the percentage of fishermen in the lowest categories of fishing income (lost money or broke even) and household income (less than \$15,000 per year) has increased substantially since this area was last surveyed. Similar results were found in the Core Sound (Crosson 2007b) study. The current recession may be a contributing factor here.
- *Commercial fishermen are becoming more difficult to reach.* The number of completed surveys from the survey pool has dropped over the past three years, from 46% in the Core Sound (Crosson 2007b) study to 25% in the Atlantic Ocean (Crosson 2009) and area covered in this report. Refusals are more common, but the largest contributing factor seems to be fishermen who will not allow themselves to be reached. Because DMF continually surveys fishermen throughout the state, they may have become aware of the time required to complete the survey. Additionally, a general mistrust of regulatory agencies and reluctance to incur government intrusion may play a role in increased avoidance of surveyors. Recent experiments with online data collection as a supplemental mode have been promising, in both a commercial dealer and recreational angler settings. Efforts should be made to add an online option format to the current survey.

Gill nets are the most commonly used fishing gear in estuarine waters of North Carolina. Over a third of the commercial fishermen in every estuarine socio economic survey mentioned using gill nets—52% in this survey, 38% in Core Sound (Crosson 2007b), and 39% in Albemarle and Pamlico Sounds (Crosson 2007a). As a result of a recent legal settlement of a court case over the protection of endangered sea turtles (see *Karen Beasley Sea Turtle Rescue and Rehabilitation Center vs. North Carolina Division of Marine Fisheries*), fishermen working in estuarine areas such as the Southern District will only be allowed to set gill nets during nighttime hours days a week and with limited yardage. These regulations will likely impact fishermen in this area but to what degree is currently unknown. It is probable that future surveys of fishermen in this area will show a lower overall participation rate or a shift to other non-gillnet fisheries with associated economic impacts.

ACKNOWLEDGEMENTS

I wish to thank all of the commercial fishermen who took the time to answer this long survey. Catherine Jones worked tirelessly to track down the fishermen, interview them, and enter their answers into the database. Alan Bianchi and Stephanie McNerny from the Trip Ticket Program delivered prompt answers to my numerous data requests for further data. NOAA provided the funds, allowing these invaluable surveys to continue to provide topical, up-to-date information on North Carolina's commercial fisheries.

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APPENDIX I - 2008 SOUTHERN DISTRICT FISHERMAN SURVEY

1. How many years have you been a commercial fisherman? _____
2. Compare yourself to other fishermen using a scale of 1 to 10. With 1 being "not at all successful as a commercial fisherman" to 10 being "no one has more success than I do", how successful do you think you are? _____
3. What are the main species you land and gears you use each month?
4. Have you ever changed the species you target because of changes in regulations?

☐ No ☐ Yes ☐

If "Yes", record any comments _____

FISHERY PARTICIPATION

5. What is the ownership type that best describes your fishing operation?
☐ Sole Owner
☐ Partnership
☐ Corporation
6. How many vessels do you own that are registered for use in your fishing operation?
How many vessels? _____

Fill this out starting with the vessel used most often.

Vessels Years Owned Market Value (incl. all gear) Length
- 7.
8. Do you consider yourself to be a full time fisherman?

☐ No ☐ Yes
9. What percentage of your total individual income do you earn from commercial fishing (that is, sale of fish taken with commercial fishing gear)?
10. What other kinds of work do you do to earn income other than commercial fishing?

OPERATING EXPENSES

11. Please provide the average operating expense for an inshore fishing trip in 2008 (for the vessel you use the most). Round off your answers to the nearest dollar.

Expense categories	Amount
Fuel and Oil	
Ice	
Groceries	
Bait	
Other	

12. Do you use a share system to pay the crew and captain of the vessel you use the most when you are fishing in the ocean?

☐ Yes ☐ No

If no, then how do you pay the captain and crew?

What percentage of the net share (gross total revenues minus the expenses indicated above) goes to. . .

Boat share:	_____ %
Captain's share:	_____ %
Crew's share:	_____ %

13. Total annual expenditures for 2008 for the vessel while fishing in the ocean.

Expense Category	Amount
Labor-Capt. and crew (not in your household)	
Payments to people in your household	
Vessel loan payments	
Vessel/Gear Repairs	
Docking Fees	
New Gear/Equipment	
Insurance	
Other Professional Expenditures/Fees	

Where do you keep the boat you use most often when you are fishing in the Ocean?

- ☐ When I fish in the ocean I'm on someone else's boat
- ☐ At my home
- ☐ A rented slip
- ☐ A slip not at my home, but I don't pay rent (e.g. at a fish house)
- ☐ Other place

14. I'm going to read some numbers. When I reach a number equal to or higher than the amount you personally earned last year just from fishing, tell me to stop. Include only profit, that is, after you paid all expenses associated with your fishing business.

Read these numbers: \$0

Mark here:

1. \$0 or lost money
2. \$1 - \$5,000
3. \$5,001 - \$15,000
4. \$15,001 - \$30,000
5. \$30,001 - \$50,000
6. \$50,001 - \$75,000
7. \$75,001 - \$100,000
8. > \$100,000
99. Refused

DEMOGRAPHIC QUESTIONS

15. How old are you? _____

16. (Don't ask, just mark) ☐ Male ☐ Female

17. What do you consider to be your ethnic background?
☐ Hispanic/Latino (all races) ☐ Asian-Pacific Islander
☐ White/Caucasian ☐ American Indian
☐ African-American/Black

18. What was the highest grade you completed in school?
☐ Less than high school diploma ☐ Some college/technical school
☐ High school diploma ☐ College diploma (or more)

19. What is your marital status?
☐ Currently married ☐ Widowed ☐ Separated
☐ Divorced ☐ Never married

19b. Do you have health insurance?

☐ No ☐ Yes

19c. Who pays for it?
☐ self ☐ other job ☐ spouse's plan ☐ other_____

20. How many people live in your household? (include respondent, people such as students away at school, someone in the hospital, or currently away on business or vacation, etc., but not someone whose main place of residence is somewhere else.)

21. How many people do you financially support that don't live in your household? (e.g. your parents, students away at college, children who live with a different parent)

22. Of the people who now live in your household, how many of them work at least part time in some aspect of the fishing industry? (Do not include the fisherman)

23. Which of the following people in your extended family work or have worked in commercial fishing?

- _____ No one
- _____ Parents
- _____ Grandparents (How many? _____)
- _____ Children (How many? _____)
- _____ Siblings (How many? _____)
- _____ Aunts or Uncles (How many? _____)
- _____ First Cousins (How many? _____)

24. How many generations back have there been fishermen in your family?

25. I'm going to read some numbers. When I reach a number equal to or higher than the amount of the total income of everyone who lives in your household, tell me to stop.

If they give an actual dollar amount, write it here:

Read these numbers:

1. \$15,000
2. \$15,001 - \$30,000
3. \$30,001 - \$50,000
4. \$50,001 - \$75,000
5. \$75,001 - \$100,000
6. > \$100,000
7. Prefer not to answer

26. What is the name of the community/town/city where you live?

27. Which county is that located in?

28. How many years have you lived in this community?

OPINIONS ABOUT COMMERCIAL FISHING

29. Do you think you will be a commercial fisherman 10 years from now?

- ☐ Yes ☐ No (why?)

Use a scale of 1 to 10, with 1 being "not at all" to 10 being "extremely" and tell me how much you agree or disagree with each of the following statements.

30. I believe I will be able to make a living in fishing in the future.

30b. My health is affected by my fishing.

31. Commercial fishing is important economically in my community.

32. Commercial fishing has an important role in the history of my community.

33. Commercial fishermen are respected in my community.

34. My community actively supports commercial fishing with activities like seafood festivals, memorials to fishermen lost at sea, a “blessing of the fleet”, etc.
35. I have to work harder now to land the same amount of fish that I did a few years ago. (If you think there is no difference, your answer should be 5.)
- 35b. Have you had any trouble finding a dealer to sell your catch to?
- ☐ No ☐ Yes
36. Do you have a dealer’s license?
- ☐ No ☐ Yes
37. Do you have a relationship with a specific dealer or are you independent?
- ☐ He is a dealer and sells his own catch
☐ Independent (sells to whomever he wishes)
☐ Relationship with a specific dealer or dealers

If the fisherman has a relationship with a specific dealer, ask the following questions:

38. Does the dealer provide you with docking space?
- ☐ No ☐ Yes
39. Will the dealer give you an advance for bait or other necessities?
- ☐ No ☐ Yes
40. Does the dealer provide you with credit or loans?
- ☐ No ☐ Yes
42. Are you a member of any fisherman’s organizations?
- ☐ No ☐ Yes (NCFA) ☐ Other

In the last year, have you had any negative experiences: (Yes or No)

43. with other commercial fishermen
44. with recreational fishermen
45. involving federal regulations
46. involving state regulations

47. Use the scale of 1 to 10 and tell me how important you consider each of these issues to your fishing business. 1 means "it's not important or doesn't affect me" and 10 means "it's extremely important or it affects my business a great deal".

Overfishing

Competition with other fishermen

Environmental regulation

Keeping up with proclamations or changes in rules

Gear Restrictions

Areas off limits to fishing

Seasonal/area closures

Bag limits

Size limits

Quotas

Federal regulations

State regulations

Seafood prices

Imported seafood

Weather

Predicting the future for your fishing business

Fuel prices

Losing working waterfronts like docks, marinas, and fish houses

Development of the coast

48. Use a scale of 1 to 10 again. This time the scale ranges from 1 meaning "not at all likely" to 10 meaning "extremely likely". If a young person came to you and said they wanted to be a commercial fisherman, how likely is it that you would recommend being a fisherman?