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An Overview of Cod Fishing Regulations: Implications for the New England Fishing Industry

James J. Corbett

Years of overfishing and mismanagement have drastically reduced the cod population in New England waters, threatening Boston's reputation as the home of the bean and the cod (Knudson 1994). In 1994 the Commerce Department moved to prohibit commercial fishing in 6,600 square miles of Georges Bank and other areas, effectively closing 17% of the total fishing area off the coast of New England, in a move designed to protect rapidly depleting stocks of cod, haddock, and yellowtail flounder (Noah 1994). The resilience of groundfish stocks has Yankee fishermen champing at the bit, however; regulators say recovery is fragile, but harvesters balk at increasingly severe restrictions (Fraser 2001).

The situation facing the world's fishing industry has many similarities with the problems associated with industrialized agriculture. As highly mechanized production techniques displace traditional, proven methods, multinationals are taking an even greater proportion of fishing capacity (Griffith 2003). New England, like any coastal corner of the world, has tended to view the problem of declining fish stocks through the lens of the fluctuating hauls brought back by boats working out of the region's harbors. Just how limited this perspective can be is demonstrated by the galvanizing study published in the May 2003 issue of the journal *Nature* reporting that stocks of big ocean fish like tuna and swordfish have declined by 90 percent since World War II (*The Boston Globe* 2003).

Over the last five decades, commercial fishing has extracted a heavy toll on economically important species of fish including tuna, swordfish, marlin, halibut, and cod (*The Springfield Republican* 2003). For many years fisherman have considered cod the most important food fish found in the waters of the North Atlantic (Pierce 1989). Historically—but not in recent years, because of overfishing—the cod stock off of Massachusetts was the largest and meatiest in the world (Kurlansky 1997).

In reality, catches were increasing not from an abundance of fish but because the efficiency of the modern trawler fleet made it possible to locate the sectors with remaining cod populations and systematically clean them out (Jensen 1972). The fisherman had long been a skilled navigator, seaman, biologist, meteorologist, mechanic, weaver, and mender. Now he also had to learn, like a good civil servant, how to work the regulations—to sidestep their pitfalls and sail through their loopholes (Kurlansky 1997).

The future of New England's groundfish fishery hung in limbo in April 2002. Environmentalists and fishermen had hammered out a tentative compromise for downsizing the catch. Terms of the agreement included fewer days at sea, a reduction in fishing area, and an increase in the mesh size of nets. Five environmental groups brought suit against the National Marine Fisheries Service in 2000 for not doing enough to prevent overfishing. Last December, U. S. District Court Judge Gladys Kessler ruled against the Service and ordered it to come up with a solution (*Sea Food Business* 2002).

On April 26, 2002, Judge Kessler imposed the most restrictive fishing limits ever on New England fishermen (Daley 2002a). Kessler's order closed more fishing areas, but most importantly, Kessler cut fishing days at sea from 88 to "a maximum of 70, determined by the average number of days a fisherman used between 1996 and 2001, one year, minus 20 percent" (Lindsay 2002).

In a highly unusual move, Judge Kessler later abandoned her April 26, 2002 order, saying it would produce "unintended consequences" that would "cause grave economic and social hardship, as well as injustice to individuals, to families, to fishing communities, and to surrounding cities and states." In her new order, Kessler said she would honor the historic agreement reached April 16, 2002 by fishermen, environmentalists, and federal regulators, who designed a sweeping plan to reduce overfishing of the region's depleted stocks (Lazar, 2002). In the new order, Judge Kessler pledged to

Corbett is associate professor of Marketing at Merrimack College, North Andover, MA.

monitor the case to ensure New England's Fishery Management Council reached a more permanent solution by August 2003 (*Yankee Food Service* 2002).

On November 7, 2002, the National Marine Fisheries Service and a coalition of environmental groups asked a federal judge for a nine-month delay of harsh new restrictions on New England fishermen because of questions over the Service's method of counting fish. The request came only two weeks after New England legislators pledged to file legislation to postpone the restrictions for at least two years because of the problems with fish-population estimates, dubbed "trawlgate" in fishing circles (Daley and Cook 2002). A Federal judge on December 4, 2002 agreed to delay new commercial fishing restrictions until May 2004, although some say the postponement could ultimately make it harder for New England fishermen by leaving less time to rebuild depleted fisheries. New England fishermen have faced a growing web of restrictions as regulators try to solve the problem of too many boats going after too few fish. Many boats that go after cod and other groundfish can only fish 70 days a year, a number that is expected to plummet when the restrictions called Amendment 13 go into effect (Daley 2002b).

A May, 2003 report by the independent Pew Oceans Commission, "America's Living Oceans: Charting a Course for Sea Change," warns that the oceans are dying and could run out of fish unless better cared for. Recommendations in the Pew report that could affect the state's commercial fishing fleet include a call for new ocean policy, a national ocean council with regional governing bodies, and a national system of marine reserves. The marine reserves would be off-limits to fishing so fish stocks could recover (Kittredge 2003).

Survey Design and Data Collection

A mail questionnaire was sent to the presidents of the top 30 seafood distributors in the New England marketplace. The list of seafood distributors was obtained from the annual *Yankee Food Services-Top Lists*. The sample was representative of the New England marketplace. The survey responses were impressive. A total of 30 surveys were mailed in early August of 2003. Eleven presidents responded to the survey, a very respectable yield of 37%.

Demographic Profile of Respondents

An examination of the demographic profiles of the presidents of the top 30 seafood distributors in the New England marketplace indicates that they were all male, with a mean age of 49 years. Forty-six percent were college graduates, 27% completed graduate school, 18% completed community college, and 9% graduated from high school. The respondents were representative of the population area, with 46% from Massachusetts, 36% from Rhode Island, and 9% from New Hampshire and Maine. The average mean number of years in the seafood business was 25.

Survey Results

Survey respondents were asked to rate nine questions on a seven-part scale, and one question asked for an opinion rating the four options proposed by the New England Fishery Management Council in Amendment 13. Two other questions asked for a one-answer response.

Part A: On the following questions, circle one answer 1 to 7, 1 being not concerned to 7 being very concerned.

Table 1 shows a significant concern by the sample. It indicates that 82% of the respondents are very concerned about fishing-related issues.

Table 2 shows a very significant response by the sample. It indicates that 91% of the respondents are very concerned about government policy concerning fishing.

Table 3 shows a very significant response by the sample. It indicates that 91% of the respondents are very concerned about government regulations concerning fishing.

Part B: The New England Fishery Management Council is asking for public comment on four options which may sharply reduce the New England Fishing Fleet.

Ten respondents ranked their choice of options (Table 4). A very significant 60% indicated Option Four would be their first choice, followed by 20% each indicating Options One and Two. No respondents selected Option Three.

Table 5 shows a somewhat divided response by the sample. It indicates that 46% thought Option One would be the one selected, 36% thought Option Four would be selected, and 18% thought Option

Table 1.

Question	Category Response							
How concerned are you about fishing-related issues?	Not Concerned	–				Very Concerned		
	CR	1	2	3	4	5	6	7
	F	-	-	-	-	2	6	3
	%	-	-	-	-	18	55	27
	Cum %	-	-	-	-	18	73	100

Table 2.

Question	Category Response							
How concerned are you about government policy concerning fishing?	Not Concerned	–				Very Concerned		
	CR	1	2	3	4	5	6	7
	F	-	-	-	-	1	6	4
	%	-	-	-	-	9	55	36
	Cum %	-	-	-	-	9	64	100

Table 3.

Question	Category Response							
How concerned are you about government regulations concerning fishing?	Not Concerned	–				Very Concerned		
	CR	1	2	3	4	5	6	7
	F	-	-	-	-	1	6	4
	%	-	-	-	-	9	55	36
	Cum %	-	-	-	-	9	64	100

Table 4.

Question	Category Response	Ranked #1
In your opinion, rank 1, 2, 3, 4. #1 your first choice followed by #2, #3, #4 your last choice.	Option One – Up to 65% reduction in use days at sea.	2
	Option Two – Reduction of Allocation – Das/Gear Modification.	2
	Option Three – Area Management.	0
	Option Four – Hard total allowable catch.	6

Table 5.

Question	Category Response				
In your opinion, which of the four options will be the final one to prevail?	Option	1	2	3	4
	F	5	2	0	4
	%	46	18	0	36
	Cum %	46	64	64	100

Two would be selected. No respondents thought Option Three would be selected.

Table 6 shows a somewhat divided response by the sample. It indicates that 54% of the respondents thought all options be given equal weight and 46% thought they should not.

Part C: On the following question, circle one answer 1 to 7, 1 being to strongly disagree to 7 strongly agree.

Table 7 shows a somewhat divided response by the sample. It indicated that 72% of the respondents somewhat agree that the new options presenting overkill on the part of the regulations.

Table 8 shows a somewhat divided response. It indicates that 46% of the respondents agree that the present New England fishing fleet is too large for the current fishery while 27% somewhat disagree. Eighteen percent are undecided.

Table 9 shows a significant response by the sample. It indicates that 63% of the respondents

somewhat disagree that the present New England fishing fleet is too large for a fully recovered fishery.

Table 10 shows a significant response by the sample. It indicates that 73% of the respondents somewhat disagree that the New England fishing fleet even at a reduced level is too large for a fully recovered fishery.

Part D: On the following questions, circle one answer 1 to 7, 1 being decreased to 7 being increased.

Table 11 shows a somewhat significant response by the sample to the degree of control that the government has over fishing regulations. It indicates that the respondents are somewhat divided on an increased role of the government with this statement.

Table 12 shows a somewhat significant response by the sample to the degree of control that society has over fishing regulations. It indicates that most

Table 6.

Question		Category Response	
Should all options be given equal weight?		No	Yes
	F	5	6
	%	46	54
	Cum %	46	100

Table 7.

Question		Category Response							
The new option present overkill on the part of regulations?	Disagree	-							Agree
	CR	1	2	3	4	5	6	7	
	F	3	-	-	4	2	1	1	
	%	28	-	-	36	18	9	9	
	Cum %	28	-	-	64	82	91	100	

Table 8.

Question		Category Response							
The present New England fishing fleet is too large for the current fishery?	Disagree	-							Agree
	CR	1	2	3	4	5	6	7	
	F	-	2	1	2	1	2	3	
	%	-	18	9	18	9	18	28	
	Cum %	-	18	27	45	54	72	100	

of the respondents are in favor of a decreased role of society with the statement.

Conclusion

The New England Fishery Management Council conducted public hearings in New Jersey, New York, Rhode Island, Massachusetts, New Hampshire and Maine during the fall of 2003 to solicit comments on Draft Amendment 13 and a Draft Supplemental Environmental Impact Statement to the Northeast Multispecies Fishery Management Plan.

The controversy is not over at this time. The fishermen have been working under interim regulations that were put in place by a Federal judge back in May, 2002. These regulations will be updated in May, 2004. These new regulations will evolve from the fall of 2003 New England Fishery Management Council’s public hearings, which are one important part of the overall process. Some feel that the new regulations may not necessarily have a negative effect on cod landings for the New England fishing industry, while others take an opposite point of view.

Table 9.

Question	Category Response								
The present New England fishing fleet is too large for a fully recovered fishery?	Disagree	–							Agree
	CR	1	2	3	4	5	6	7	
	F	1	3	3	1	2	-	1	
	%	9	27	27	9	19	-	9	
	Cum %	9	36	63	72	91	-	100	

Table 10.

Question	Category Response								
The New England fishing fleet, even at a reduced level is too large for a fully recovered fishery?	Disagree	–							Agree
	CR	1	2	3	4	5	6	7	
	F	3	3	2	1	1	-	1	
	%	27	27	19	9	9	-	9	
	Cum %	27	54	73	82	91	-	100	

Table 11.

Question	Category Response								
Overall, do you think the degree of control that the government has over fishing regulations should be?	Decreased	–							Increased
	CR	1	2	3	4	5	6	7	
	F	-	-	1	6	1	2	1	
	%	-	-	9	5	9	18	9	
	Cum %	-	-	9	64	73	91	100	

Table 12.

Question	Category Response								
Overall, do you think the degree of control that the government has over fishing should be?	Decreased	–							Increased
	CR	1	2	3	4	5	6	7	
	F	2	5	1	2	-	1	-	
	%	18	46	9	18	-	9	-	
	Cum %	18	64	73	91	-	100	-	

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