

Northeast Fisheries Science Center Reference Document 10-12

# A Survey of Social Capital and Attitudes toward Management in the New England Groundfish Fishery

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### Abstract

In the spring of 2010, a telephone survey was conducted of Northeast Multispecies (groundfish) permit holders. The primary purpose of the survey was to develop a baseline of social capital in the groundfish fishery and to document attitudes toward the current management system based on days at sea and the new system based on sector allocations. A total of 542 permit holders were interviewed including 300 who are currently active in the groundfish fishery (over 50% of active permit holders). The survey results suggest that a high degree of social capital exists in the industry as a whole. It also revealed that permit holders in the groundfish fishery are generally dissatisfied with the current fishery management system and there remains substantial trepidation about the new sector system.

### Introduction

The New England groundfish fishery is undergoing a major transformation with the expansion of the "sector" allocation program. Sector allocations are meant to provide fishermen with greater control, flexibility, and economic efficiency in their fishing businesses, while simultaneously fostering sustainable management through catch limits and improved monitoring. The program gives substantial management responsibilities to groups of fishermen and makes members of sectors jointly liable if the sector exceeds its catch allocation or commits other regulatory violations. These new arrangements represent a significant departure from past management regimens that have not required collaboration between fishermen or joint accountability.

The success of any individual sector will likely depend on the attitudes and capabilities of the sector members, the skills and commitment of the sector leaders, and on relationships among the members – including their degree of trust and ability to collaborate. The value of these relationships and the ability to cooperate is commonly referred to as 'social capital.' Social capital can yield benefits that flow from the trust, reciprocity, information, and cooperation associated with social networks (Putnam 2000).

In the spring of 2010, a telephone survey was conducted of Northeast Multispecies (groundfish) permit holders. A total of 542 permit holders were interviewed. This total comprised 244 permit holders who had signed up for sectors, 56 active vessel owners who were not planning to participate in the sector program, and 242 permit holders who were not active in the groundfish fishery in 2009. The primary purpose of the survey was to develop a baseline of social capital in the groundfish fishery, both as a

whole and then disaggregated by individual sectors and common pool vessels. Permit holders were also asked questions about the current state of the fishery and the current management system to be able to track the socio-economic impacts of the sector allocation system on these individuals over time. A follow-up survey will be performed in approximately two years to evaluate if – and how – social capital has changed, and to assess the role of social capital in the success of sectors and the sector management system.

### Summary of Responses to Social Capital Survey

The survey results suggest that a high degree of social capital exists in the industry as a whole, as measured by criteria such as trust in fellow fishermen, levels of cooperation and information sharing, and participation in the management process.

Most permit holders have been involved in the groundfish fishery for over a decade; 70% indicated that they first captained a vessel over ten years ago, and 60% said they bought their first vessel over ten years ago. The families of survey respondents have been involved in commercial fishing for an average of 2.69 generations.

Interviewed fishermen placed high importance on their fishing communities. Respondents defined their fishing communities in different ways including: where they tie up their vessel (67%); the areas they fish (59%); where they live (27%); the harbor town nearest their domicile (30%); and by the fishermen who belong to the same industry association as they do (33%).

Respondents, on average, had 17 close friends who were also commercial groundfish fishermen. The majority of fishermen interviewed (71%) said they trusted "most" other fishermen in their self-defined fishing communities, while another 17% said they trusted "many." This trust extends to financial dealings within the community; 83% of respondents agreed or strongly agreed with the statement "fishermen in the community trust one another in matters of lending and borrowing." Although only 35% of fishermen surveyed have ever gone into business with another fisherman, of those who did, 85% had a positive experience. Outside of their own communities, trust among fishermen is lower: 33% of respondents indicated that they trust "most" fishermen <u>not</u> in their community, 41% said they trust "many," and 17% responded "a few."

Information sharing networks are important to almost all fishermen. Nearly 93% of fishermen surveyed have a network of friends used in sharing information about fishing. The average network size is 12 individuals, and 71% of the fishermen surveyed said that they share useful information about fishing "a lot" while another 27% "sometimes" share information.

Most fishermen are active to some degree in the fishery management process and also in cooperative research. Over the past year, 32% of respondents had attended fishery management meetings frequently, 41% a couple of times, 11% only once, and 16% never. About one third (35%) of the respondents had participated in cooperative research as a primary partner and 86% had participated in a minor way (e.g., returning a cod tag).

### **Sectors and Social Capital**

Fishermen who had joined sectors were asked a number of questions about their involvement and knowledge of these sectors. Respondents experiences were mixed: 17% indicated that they were "very involved;" 36% "somewhat involved;" and 46% "not involved at all." About one-fifth (21%) said they understood their sector's operations plan "very well," 39% understood their sector's plan "somewhat well," and 38% responded "not well."

On average, fishermen knew 56% of their sector's members very well, but didn't know 35% of their sector's members at all. When asked if their sector was important in preserving their fishing community, 65% of sector respondents agreed or strongly agreed – while 21% disagreed or strongly disagreed.

Sector members are relatively confident in their sector's leadership and in their fellow sector members. Most (89%) feel that there is a member in their sector who is a well recognized fishing leader in the community or region; 67% believe that their sector's Board of Governors will make decisions that are in the best interest of the whole sector; and 72% feel that their sector has (or will establish) a fair system to deal with sector rule violations.

Asked if members of their sector would (or do) work well together, 67% of sector respondents said yes, 6% answered no, and 27% were not sure. Of the fishermen surveyed, 85% indicated that members of their sector will strive to avoid exceeding their

individual quota allocations<sup>4</sup>, and 81% responded that most or all of their sector members of their sector would avoid fishing a stock if the sector allocation for that stock was running low. Additionally, 69% felt that if they ran out of their individual allocation for a stock, other sector members would sell or trade them quota, and 79% said they would sell or trade some of their quota to another sector member who needed quota. Given that sector members are both jointly and individually liable for violations of some fishery regulations and for overages of sector catch limits, 45% of sector respondents are concerned that not all members will abide by all the rules in the sector contracts while 48% are not concerned.

### Attitudes towards Fishery Management and the State of the Fishery

Groundfish permit holders were also asked about the current management system and the state of the fishery. Questions on this topic were designed to gauge trends in financial viability, stewardship, well-being, governance, and distributional outcomes. The responses indicated a high level of dissatisfaction with the current state of the fishery and the fishery management system, and a lack of trust in the science behind management. Only 7% of fishermen surveyed felt that the science supporting fisheries management decisions is accurate, while 29% disagreed and 61% strongly disagreed. Most respondents (82%) think that the current groundfish rules and regulations are unclear. Most also indicated that their income from fishing—and their crew's income from fishing— was declining; 78% said their expected income from groundfish in 2010

<sup>&</sup>lt;sup>4</sup> The sector management system allocates annual catch entitlements (ACE) to sectors, not individual quotas. However, all of the sectors have subdivided their ACE into individual allocations. We refer to these in the survey as quota since that term appeared to be more commonly understood than ACE.

would be lower than two years ago, while only 4% thought it would be higher. Similarly, 75% thought their crew's income from fishing had declined over the last two years, while only 3% felt the crew's income had increased. Nearly two-thirds (65%) of the respondents said it was getting more difficult to find and keep competent crew relative to two years ago; only 2% thought it was easier.

Asked how long their current income from groundfish fishing could keep them in business, most respondents felt they could only remain in business for the short term: 62% indicated they could remain in business for only 1-2 years, 13% responded 3-5 years, 13% responded over 6 years, and 12% did not know how long their business would persevere. When asked if changes in groundfish regulations over the past two years had increased their costs, 69% responded affirmatively, while 13% thought that the regulatory changes had decreased their fishing costs. Over the next five years, further increases in fishing costs associated with regulatory changes are expected by 74% of the respondents, while decreases in fishing costs are expected by 7% of the respondents.

Dissatisfaction by permit holders with the present groundfish management system is not limited to financial considerations. Most respondents (64%) felt the regulations in place during the 2009-2010 fishing year compromised crew safety because of (a) the need to fish in bad weather to avoid losing fishing days and (b) having to fish further from port because of rolling closures. When asked if they thought they would personally benefit if the health of groundfish stocks improved, 28% of the respondents replied yes, while 56% replied no.

In terms of job satisfaction, responses were mixed. While most respondents (78%) are dissatisfied or very dissatisfied with actual earnings, and with the predictability of

earnings (81%), there is less dissatisfaction with other aspects of working in the groundfish fishery. Slightly more than half (53%) of the respondents are satisfied with job safety, although 33% are dissatisfied. Nearly half (44%) of the respondents are satisfied with the time spent away from home fishing compared to 37% who are dissatisfied, and 49% are satisfied with the physical fatigue of fishing compared to 31% who are dissatisfied. About two-thirds (64%) are satisfied with "the adventure of fishing" but about a quarter (23%) are dissatisfied.

While most active groundfish permit holders have joined sectors, there is little satisfaction with the allocation process – whether or not an individual has joined a sector. Around 80% of both common pool and sector respondents feel the allocation process is unfair or very unfair. However, 11% of sector respondents believe that the allocation is fair or very fair vs. only 2% of common pool respondents. Those respondents who did not join sectors gave a variety of reasons for their decisions including: (a) not getting enough allocation to make it worth the cost (36%); (b) not having enough information to make an informed decision to join a sector (19%); (c) not being invited to join a sector (10%); and (d) they could make more money in the common pool (10%). For those who joined sectors, 46% said they felt forced into joining or felt they had no other choice. Others sector members responded that they joined a sector because (a) it was the "lesser of two evils" (8%); (b) they could not make a living in the common pool with the new limitations (15%); and (c) the sector regulations were less risky (18%). Only 11% responded that they joined a sector because it would be more profitable, while 13% said they joined because they would have greater control of their fishing activities.

### **Summary and Conclusions**

Based on the survey results, permit holders in the groundfish fishery are generally dissatisfied with the current fishery management system. They feel that their profitability has declined and the management system sometimes compromises safety.

Moreover, there is little optimism that sector management will greatly improve conditions and most survey respondents believe the allocation process in Amendment 16 was unfair. Concerns also exist about rising costs. While individuals joined sectors voluntarily, most felt they had little choice and that constraints on common pool vessels would become even more limiting.

Despite a general lack of optimism about the groundfish fishery and its profitability, the groundfish industry still has a relatively high level of social capital. Although most groundfish fishermen have little experience formally working together in business, there is a high degree of trust among fishermen and substantial cooperation occurs through information sharing. These social capital features are likely to be critical to the success of sectors and to sector management in general. With this capital, the industry should be able to take on more responsibility and craft a management system that works for its health and betterment.

Sectors represent a marked change in management approach, and create new risks and uncertainties for fishermen. It should therefore not be surprising that substantial trepidation exists towards this new approach. Only time will tell whether the sector system is an improvement over past approaches, or simply a transitory step toward yet another management system.

### **Appendix A: Tables of Responses to Fishery Management Questions**

How would you define the fishing community you feel most a part of?	
The town in which you tie up your vessel	67%
The geographic region where you mostly land fish	59%
The town in which you and your family reside	27%
The harbor town closest to where you & your family reside	30%
The fishermen who fish in the same area you fish	59%
Fishermen who belong to the same industry association as you	33%

# Would you say the science that fisheries management decisions are based on is accurate?

Strongly agree	1%
Agree	6%
Disagree	29%
Strongly disagree	61%

### Are the current groundfish rules and regulations clear and straightforward?

Very unclear	43%
Unclear	39%
Neither clear nor unclear	4%
Clear	12%
Very clear	1%

# Compared to two years ago, how have the groundfish rules and regulations in place this fishing year changed your fishing costs?

Strongly increase	16%
Increase	53%
Not change	15%
Decrease	8%
Strongly decrease	5%

change your fishing costs?	
Strongly increase	24%
Increase	50%
Not change	5%
Decrease	4%
Strongly decrease	3%

# Over the next five years, how do you expect the groundfish rules and regulations to

Is the current level of income from your groundfish fishing business enough to keep
you in business over the short, medium, long term?

Short term (1-2 years)	62%
Medium term (3-5 years)	13%
Long term (6+ years)	13%
Don't know	12%

How do you think your income from groundfish this year will compare to two years ago?	
much lower	42%
Lower	36%
No change	10%
Higher	3%
Much higher	1%

How has your crews' average income from groundfish changed over the last two	
years?	
	2.1

Much lower	31%
Lower	44%
No change	17%
Higher	3%

How difficult has it been to attract and keep competent groundfish crew members compared to two years ago?	
Very difficult	27%
Difficult	38%
No change	30%
Easy	2%

Do the current regulations in the groundfish fishery ever compromise the safety of your crew?

YES	64%
NO	32%

# If the health of the groundfish stocks that you fish improves, will you personally benefit?

Strongly disagree	18%
Disagree	38%
Neither disagree nor agree	6%
Agree	22%
Strongly agree	6%

# How would you rate the fairness of the Amendment 16 allocation process?

Amendment 16 allocation process?	common pool	sector	
very unfair		50%	62%
unfair		29%	18%
neither fair nor unfair		4%	4%
fair		2%	7%
very fair		0%	4%
don't know		8%	4%

## Why have you not joined a sector?

NOT INVITED TO JOIN A SECTOR	10%
NOT AWARE OF THE OPTION TO JOIN A SECTOR IN TIME	0%
PREFER WORKING ALONE	1%
I DON'T TRUST OTHERS ACTIONS - (JOINT LIABILITY OF SECTOR MEMBERS)	0%
I THINK I CAN MAKE MORE MONEY IN COMMON POOL - (BETTER BUSINESS DE	CISION) 10%
Don't feel I have enough information to make a move at this time	19%
Not enough allocations to make the cost worth it	36%
Against it	6%
Runs a charter boat/ hand gear, will stay with that for now	4%
Haven't kept up with new allocations and regulations	4%
No point in joining: would be excluded anyway	10%
It's not what I'm doing right now	4%
Planning on selling my vessel, getting out altogether	2%

## Why did you join a sector?

I WILL BE MORE PROFITABLE IN A SECTOR	11%
I FEEL LIKE SECTORS HAVE LESS RISKY REGULATIONS THAN THE COMMON POOL	18%
I WANT TO BE ABLE TO HAVE GREATER CONTROL OVER MY FISHING	13%
I LIKED THE IDEA OF WORKING WITH OTHER FISHERMEN	4%
I THINK SECTORS WILL YIELD MORE CONSISTENT MANAGEMENT RULES	5%
MOST OTHER FISHERMEN I KNOW HAVE ENROLLED AND I DIDN'T WANT TO BE LEFT OUT	5%
No other choice; felt forced into it	46%
The lesser of two evils	8%
Won't be able to make a living if I stay in the common pool; too many limitations	15%
Regret joining; feel I was lied to about benefits	3%

How satisfied are you with -	VERY DISSATISFIED	DISSA	TISFIED	NEUTRAL	SATISFIED	VERY SATISFIED	DON'T KNOW OR DIDN'T ANSWER
job safety in the groundfish fishery?	10	%	23.0%	11.4%	50.5%	2.5%	6 2.8%
the predictability of earnings from groundfish?	43	%	38.2%	5.0%	9.5%	.6%	6 3.5%
the actual earnings from groundfish?	39	%	38.8%	5.4%	13.2%	1.3%	6 2.5%
the time spent away from home due to fishing for groundfish?	7	%	29.7%	16.7%	42.0%	1.6%	6 3.2%
the physical fatigue of fishing for groundfish?	12	%	18.9%	17.4%	47.3%	1.6%	6 2.8%
the adventure of fishing for groundfish?	7	%	16.1%	8.8%	54.6%	9.1%	6 4.1%

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