

New York Commercial Fishing 2021 Survey Report





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Photo Credit: LICFA

The Suffolk County Department of Economic Development & Planning in collaboration with New York Sea Grant, Cornell Cooperative Extension Marine Program, and the Long Island Commercial Fishing Association developed this survey to create an up-to-date profile of the Long Island commercial fishing industry. The profile is meant to assist with evaluating the needs of local fishermen and characterize the harvesting and processing capacity of the industry, support businesses, and people engaged in this livelihood.

The survey results reported here can be used to better understand the industry and assist, industry, researchers, policy makers, State and Federal Agencies in providing the resources and support necessary to promote a viable and sustainable fishing industry.

Report prepared by: Michael Ciaramella, August Ruckdeschel, Matteo Reiss, Ryan Wolf, Bonnie Brady, Scott Curatolo-Wagemann, Kristin Gerbino, and Tara McClintock

Contact:

Michael Ciaramella, PhD, MSc.
Seafood Safety and Technology St

Seafood Safety and Technology Specialist New York Sea Grant mc2544@cornell.edu



Suffolk County Department of Economic Development and Planning

The Department of Economic Development and Planning's mission is to foster a comprehensive understanding of how to grow, improve and conserve Suffolk County's amazing resources



within both the built and natural environments. Our goal is to implement initiatives and projects to realize a Suffolk County that is modern and sustainable, where ambition, quality of life and economic growth thrive. Suffolk County has a rich agricultural and maritime heritage. These industries are the backbone of the Long Island way-of-life. Not only do our farms, farmstands, vineyards, marinas, fisheries, pack houses, and docks generate the tourism dollars that support our local restaurants and service industries, but they also provide the fresh seafood and produce that feed people both locally and across the globe. The Department of Economic Development & Planning produces an Agriculture & Fishing E-Newsletter which provides updates on important meetings, deadlines, and economic opportunities for farmers and fishermen. You can subscribe to this valuable e-newsletter here.

New York Sea Grant

New York Sea Grant (NYSG), a cooperative program of Cornell University and the State University of New York (SUNY), is one of 34 university-based programs under the



National Oceanic and Atmospheric Administration's National Sea Grant College Program. Since 1971, NYSG has represented a statewide network of integrated research, education and extension services promoting coastal community economic vitality, environmental sustainability and citizen awareness and understanding about the State's marine and Great Lakes resources. Through NYSG's efforts, the combined talents of university scientists and extension specialists help develop and transfer science-based information to many coastal user groups—businesses and industries, Federal, State and local government decision-makers and agency managers, educators, the media and the interested public.

Partner Profiles

Long Island Commercial Fishing Association

The Long Island Commercial Fishing Association represents 11 different gear types of commercial fishermen in 14 ports on



Long Island. It was established in 2001 to educate the public as to the importance of commercial fishing as a heritage industry, and to work with town, county, State and Federal lawmakers to promote and support New York commercial fishing and fishermen.

Cornell Cooperative Extension Suffolk County Marine Program

Cornell Cooperative Extension (CCE) is a non-profit community



Cornell University
Cooperative Extension
of Suffolk County

education agency established in 1917. We are affiliated with Cornell University as part of the national land grant university system started in 1862. CCE Suffolk is a subordinate governmental agency with an educational mission that operates under a form of organization and administration approved by Cornell University as an agent for the State of New York. The association is part of the national cooperative extension system, an educational partnership between County, State, and Federal governments. As New York's land grant university Cornell administers the system in this State. All associations work to meet the needs of the counties in which they are located as well as State and national goals. CCE is one of the only groups on Long Island that works directly with local commercial fisherman. We help to ensure this unique and historical way of life is preserved. We work with local, State and Federal managers to ensure local fishing is sustainable.



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Executive Summary

Faced with environmental, social and economic pressures, the NY commercial fishing industry has endured many challenges to maintain its important position within the Long Island economy. In light of these challenges, the Suffolk County Department of Economic Development, New York Sea Grant, Cornell Cooperative Extension of Suffolk County, and the Long Island Commercial Fishing Association conducted a survey in 2021 to produce data for policy makers to consider in developing approaches to support an environmentally and ecologically sustainable fishing industry. The survey garnered 67 responses from commercial fishermen, who first answered broad questions about their businesses and then later offered insights on the impacts of fisheries, regulations, the environment, infrastructure, business challenges, and COVID-19 on the industry. This report will help guide future efforts to support and grow the commercial fishing industry.



Source: Blue Moon Fish

This report identifies many pressing challenges to the future of fishing here on Long Island. Seventy-one percent of respondents indicated a strong need for additional support from State and Federal Sources. Survey results showed a perception that regulations favored competing interests and competing water users. These interests include non-local fisheries (outof-state and out-of-country) and the recreational fishing industry. Current and future offshore wind projects were called out for particular concern, as commercial fishermen indicated that offshore wind projects will occupy and restrict traditional fishing grounds, limit days at sea (particularly during construction), and pose safety hazards. Fishermen in the survey see a need for increased investment and financial assistance in order to build and sustain new and existing commercial fishing infrastructure, to market and promote local product, and to offset increases in labor, equipment, materials, and repair costs. Infrastructure needs were frequently cited, as fishermen experienced challenges related to a lack of processing facilities for landed species (80%), lack of ice dockside (66%), lack of direct sales opportunities (64%), lack of refrigerated storage space dockside (54%), and lack of facilities to maintain vessels (54%).

The survey also asked fishermen to evaluate environmental challenges within the region. Habitat loss (41.1%) and insufficient dredging (31.5%) received the highest percentages of respondents citing these issues as "extremely challenging." Fifty-seven percent of respondents viewed habitat loss as "very" or "extremely challenging" and only 5% stated that the issue is "not at all challenging." Sixty-nine percent of respondents viewed extreme weather events as at least moderately challenging.



The survey revealed that the COVID-19 pandemic has presented negative impacts and hardship to almost every facet of the commercial fishing industry. Eightyseven percent of respondents experienced a loss of revenue in 2020 due to the pandemic. A majority of respondents reported losses in the sale prices of fish landed, as well as quantity of fish sold, while 47.1% indicated that COVID-19 reduced the number of dealers selling landed fish. Additionally, a high proportion of respondents reported seeing increased costs for both gear and non-gear expenses. Fortunately, a significant percentage, but certainly not all, of the fishermen who responded were able to partially offset lost revenues with some government financial support, including funds from the CARES Act Marine Fisheries Relief Program, the Small Business Administration and Paycheck Protection Program grants and loans.

Perhaps most importantly, many respondents asserted that unfavorable conditions have led to a widespread disinterest by and barriers to entry to the next generation of fishermen. Thus, despite growth in the industry from \$14.1 million in 2005 to \$54.1 million in 2018 (NOAA Fisheries ENOW), survey responses demonstrate how fragile this industry can be in the absence of wise planning, targeted government investment, and well-developed and carefully considered regulation. This report concludes with some specific recommendations about how to invest in the future of commercial fishing and how we can mitigate the impacts of some of the more severe environmental, regulatory, and infrastructure based constraints on commercial fishing on Long Island.

With responses from only about 10% of licensed fishermen, the survey results are not inclusive and can only serve as general insight into some of the challenges and common practices of New York's fishing industry.



Source: Blue Moon Fish

Help increase representation of the 600+ licensed fishermen in New York by sharing the 2022 survey. The survey is linked above and open to all New York Fishermen. Responses will be used to develop the 2022 survey report.





Background and Introduction

The 2021 commercial fishing survey was distributed to fishermen across Long Island online through email and social media platforms and in person at the docks. Sixty seven fishermen completed the survey and their responses are recorded in this report. The team plans to continue to distribute this survey annually and publish an annual report to track changes in the Long Island commercial fishing industry over time.

Economic Impact

Suffolk County's commercial fishing heritage spans more than 400 years, representing a patchwork quilt of inter-related small businesses here on Long Island. Our wild-caught fisheries, ports, fishermen, and support industries all contribute to the production of sustainable fresh fish for consumers locally and beyond, supporting our seafood shops, retail food stores, restaurants, and tourism industries.

Marine employment on Long Island contributes close to 34,000 jobs and nearly one billion dollars in wages. Although commercial fishing employment directly on the water represents only 1.5 percent of that. This is likely due to the limited access entry regulations in place by both the State and the Federal government. Several economic indicators point to growth in the overall sector, which can at least partially reflect new positive market trends of local seafood consumption (NOAA Snapshots). The gross domestic product (GDP) increase from \$14.1 million in 2005 to \$54.1 million in 2018 provides a telling statistic of a growing market for commercial fishing.

In 2018 (ENOW data) nearly 700 small businesses that depended on living marine resources in Suffolk County brought in over \$54 million dollars. That same year Montauk, the State's largest fishing port, was ranked the 57th largest commercial fishing port in the US in pounds landed. Together the ports of Montauk and Shinnecock alone landed over 18 million pounds of fish in 2018 valued at \$23 million dollars. The East End of Long Island has long dominated the regional commercial fishing industry due to its access to a multitude of both local and Federal water fished species that migrate both inshore and offshore along the New York Mid-Atlantic Bight .

Overall, the local economic impact of marine living resources has increased, with several indicators suggesting that the growth has largely resulted from investments in establishments that complement commercial fishing. The number of establishments associated with commercial fishing moderately increased from 87 in 2005 to 110 in 2018, but the number of employees per establishment increased from four to six. While the number of self-employed workers dipped slightly from 757 to 693, the number of workers employed doubled from 307 to 614.

Meanwhile, wages have significantly increased from \$6 million to over \$37 million, and the average wage per employee increased from \$19,400 to \$37,300. These data suggest a growth in higher-end subsectors of the industry, especially as post-COVID-19 Suffolk County once again experiences record levels of tourism.

Regulatory Overview

Fisheries are regulated by the Department of Environmental Conservation (NYSDEC) in New York State and by the National Marine Fisheries Service (NMFS), federally. Fishermen must have the appropriate State and Federal commercial licenses to legally operate. State and Federal quotas on various fish stocks are based on biological values determined by both State and federal scientists. These quotas, which can vary by season, determine how many pounds of each individual species can be landed coastwide, regardles of whether they were caught in State or Federal waters.



In New York State, commercial fishermen are required to have a Marine Commercial Food Fishing License, which covers multiple species, costs \$250 and must be renewed yearly. Additional State issued permits are required for certain highly sought-after species (like fluke and striped bass). The Food Fishing License allows the license holder to take and land food fish harvested from State waters and to land food fish taken from waters outside the State for commercial purposes. The number of food fish licenses issued each year has been limited since 1995. New applicants may need to wait years before an old license is relinquished. Often younger fishermen work on established boats to get experience and income, and then once they meet the income eligibility requirements (averaging \$15,000 in commercial fishing income over three years), they can apply for their own personal permits. Speciesspecific Federal permits are required for most species in Federal waters, and many species have a moratorium on new permits that require the fisherman to purchase an already existing permit.

Commercial Fishing Methods

Commercial fishing methods in Suffolk County remain a mixture of old and relatively new (20th century) fishing and gear types. Baymen may fish using the centuries old method of pound nets or gill-nets in the bays or dig for clams and other shellfish. Inshore State-waters fishermen, (0-3 miles from shore,) and/or offshore Federal-waters-fishermen (3-200 miles from shore), may use gear types which include traps, pots, gill-nets, longlines, otter-trawl nets, and dredges, depending on the State and Federal permits they possess.

The species a fisherman chooses to target will determine how big of a boat is needed to work safely in an ever-changing fisheries environment. A boat's size will depend on the gear type fished and distance necessary to travel for permitted species, whether inshore or offshore. In general, a fishing boat will need to be bigger to fish safely farther from shore in deeper water, in all weather.



Maintenance, upkeep and gear costs, time-of-year travel distances to fish stocks, (in some cases acquiring out-of-state permits so as to travel to other States' ports to land larger quotas of State-by-State regulated species), seasonal weather changes, market demand and the cost of fuel will also impact a fishermen's ability to target, catch, and sell certain species.

In order to understand fishing in Suffolk County, it is important to understand fish migrations. Many fish species that are landed on Long Island migrate inshore in the spring and then move offshore in the fall and winter. Exceptions to that migration would include winter flounder - they come inshore in the winter and early spring to breed; golden tilefish - which live near the offshore canyons year-round, plus highly migratory species like swordfish and tunas that swim the eddies of the Gulf stream and migrate internationally. New York commercial fishermen catch over 50 species of fish in State and Federal waters.

Fisheries stocks abundance can fluctuate so that fishery management regulations may vary from year to year. The top five species landed by poundage in New York in 2019 were scup, loligo squid, monkfish, tilelfish, and whiting. By dollar value, the top five species were surf clam, loligo squid, tilefish, fluke and scup.



Sea Grant New York

Below are 2019 landings (2020 landings were not used due to COVID-19) ranked by dollar value for Suffolk County's two most productive ports — Montauk and Hampton Bays/Shinnecock. Data was provided by the Atlantic States Marine Fisheries Commission.

Hampton Bays				
Species	Landings (lbs)	Landings (\$)		
SQUID, LONGFIN LOLIGO	1,190,938	\$1,974,640		
TILEFISH, GOLDEN	201,231	\$810,203		
FLOUNDER, SUMMER	186,288	\$661,130		
SCALLOP, SEA	413,670	\$491,667		
GOOSEFISH	746,063	\$465,926		
SCUP	315,340	\$228,630		
BASS, STRIPED	51,875	\$208,313		
BLUEFISH	147,944	\$169,153		
SKATE, WINTER	495,784	\$115,546		
HAKE, SILVER	120,374	\$99,466		

Montauk		
Species	Landings (lbs)	Landings (\$)
SQUID, LONGFIN LOLIGO	2,676,788	\$4,498,688
TILEFISH, GOLDEN	910,326	\$3,196,639
SCUP	2,943,572	\$2,404,338
FLOUNDER, SUMMER	496,096	\$2,050,117
HAKE, SILVER	1,160,785	\$1,075,918
BASS, BLACK SEA	161,321	\$674,504
LOBSTER, AMERICAN	87,863	\$559,242
GOOSEFISH	749,926	\$545,429
SCALLOP, SEA	414,856	\$473,775
BUTTERFISH	331,148	\$394,616

COVID-19 was devastating economically for Suffolk County's commercial fishing communities due to the loss of sales to fish buyers who ultimately sell to local restaurants throughout New York City and to points beyond. Restaurants nationwide were hit hard by closures or had limited sales during the height of the pandemic. However a silver lining for the county's fishermen may be a renewed, and growing, sustainable consumer interest in both fresh and frozen seafood.

According to a recent 2021 seafood sales research report by IRI and 210 Analytics, current seafood sales easily trended ahead of pre-pandemic levels. Frozen seafood sales spiked more than 40 percent ahead of 2019, while fresh seafood sales jumped 33.7 percent compared to 2019. Whether it was due to shortages in other protein sources like beef or chicken, or a newfound interest in underutilized fish species that were reasonably priced, more Americans started eating more seafood.





What You Can Find in This Report

The following report summarizes the demographics, fishing gear, port of landing and other important attributes gathered from 67 Long Island fishermen who answered our survey. These 67 survey respondents vary by gear type. The latest DEC records indicate over 600 food fish licensees in Suffolk County, so this is a small sampling of New York's overall commercial fishermen. With responses from only about 10% of licensed fishermen, the survey results are not inclusive and can only serve as general insight into some of the challenges and common practices of New York's fishing industry.

The partners on this project intend to issue the survey annually, so each year we hope to identify better practices to increase the number of survey respondents and obtain a statistically significant data set. Additionally, the 67 survey respondents may not mirror precisely the scope and scale of Suffolk County commercial fishing. Certain segments of Long Island's commercial fishing industry may be underrepresented. A future determination of how many fishermen belong to each gear type and how it relates to full or part time income may be of interest.

Nevertheless, we believe these initial survey results will help us better understand the future needs of Long Island commercial fishing. By design, the survey was meant to focus on the particular modern-day needs and challenges of commercial fishing here in New York. It was also meant to identify future opportunities for Suffolk County fishermen, and serve the economic development and quality of life interests of both fishermen and Long Island residents and visitors in general.

Finally, this 2021 survey, which was in the field between April 2021 and November 2021, collected data that can be compared to survey results collected, but unpublished, in 2019 (76 respondents). Where available, the reader will find survey results compared to 2019 responses.

This allowed the partners on this report to make important comparisons to a "pre-COVID-19" industry and it will allow readers and invested stakeholders to make recommendations and draw conclusions about future industry needs. This report concludes with some basic recommendations and an invitation to the reader to help us evaluate and explore ways to protect and preserve the economic, ecological, and sustainable future of this essential heritage industry.

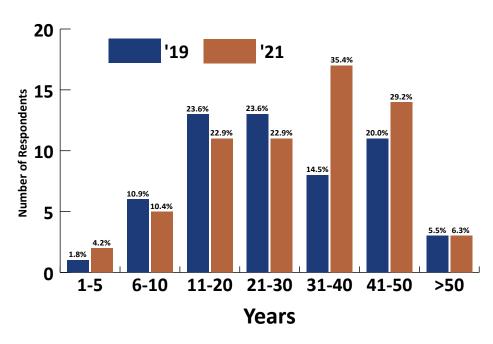


Source: Blue Moon Fish



Survey Participants

Q1. How many years have you been a Commercial Fisherman?

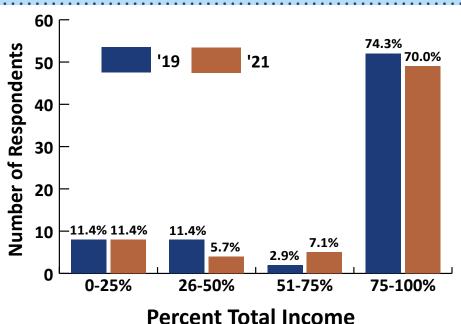


This bar graph represents the length of time in years that respondents been engaged in commercial fishing industry.

Responses anywhere ranged from 1-55 years with the majority between 30-50 years commercial fishermen. This is an increase from the 2019 results which showed a larger number of respondents fishing between 11-30 years.

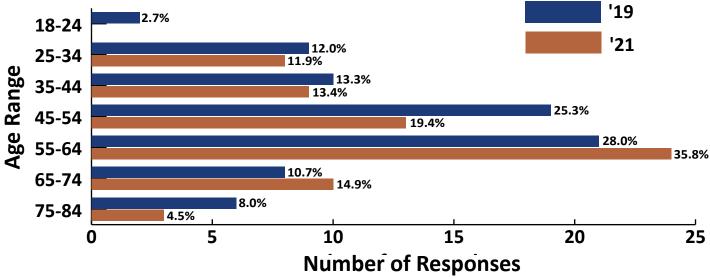
Q2. What percentage of your total income (earned, pensions, investments, etc.) comes from commercial fishing?

The majority of respondents (≥ 70%) received 75% - 100% of their annual income from commercial fishing. This remained consistent between the 2019 and 2021 survey. This is an important data point, as the intent of this survey is to collect information from those individuals who rely on fishing as their primary source of income and could potentially be used as an indicator of community reliance and vulnerability to shocks in the system. These are the individuals most invested in the present and future of their industry.





Q3. What is your age?



The majority of respondents were between 45 and 64 years old. In the 2021 survey, there was a slight increase in respondents in older age ranges (55+) compared to the 2019 respondents. This age breakdown mirrors the demographics of the DEC's food fish licensees who have an average age of 57, ranging from 18-90. It also speaks to the aging demographics within the industry and the need to take steps to identify next generations of American fishermen.

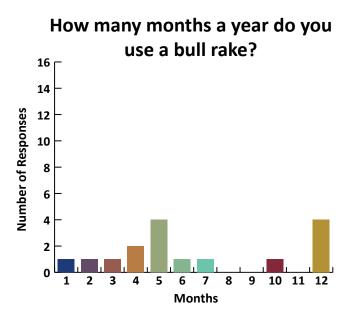


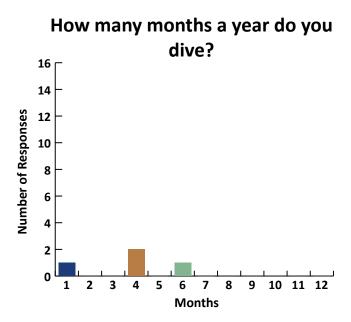
Source: Long Island Commercial Fishing Association



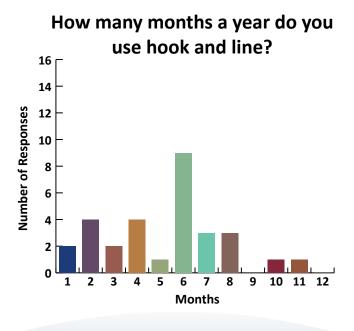
Fishing Practices

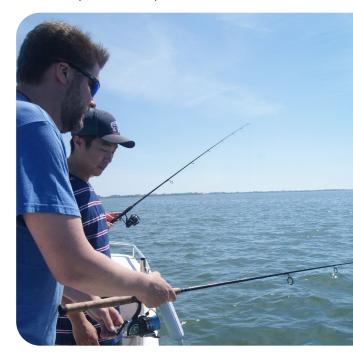
Q4. How many months a year do you use each of the below gear types?



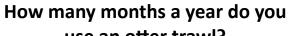


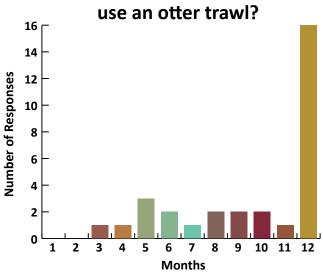
Respondents were asked to indicate how many months each year they utilize different fishing gear types. Bull rakes, diving, and hook and line, shown here were used to varying degrees by respondents with hook and line being used most frequently and by the largest number of respondents. Bull rakes are large metal rakes used to harvest shellfish from the sea bed from a boat or skiff. Diving is traditionally used in New York for shellfish harvest and hook and line is the traditional rod and reel fishing used to catch a variety of finfish species.

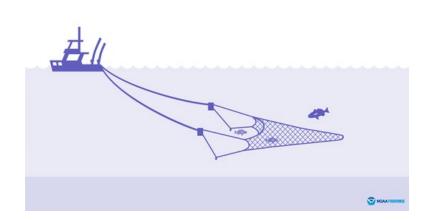






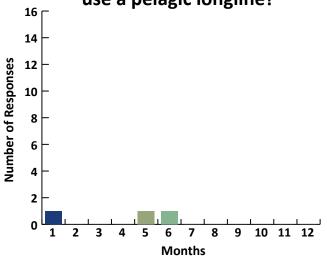


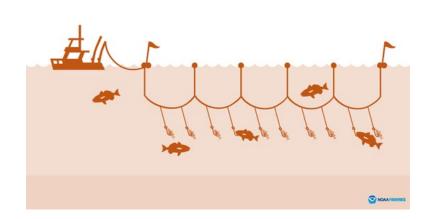




Otter trawls are a type of midwater trawl that utilize large nets that are pulled behind a fishing vessel through the water column to catch a variety of finfish species commonly found in the water column. This is a common gear type for New York fishermen and are used all year long. Pelagic long lines are used far less frequently in New York and consist of a series of baited hooks attached to main line that is buoyed at the surface. This type of gear is more commonly used to catch large game fish like Tunas and Swordfish.

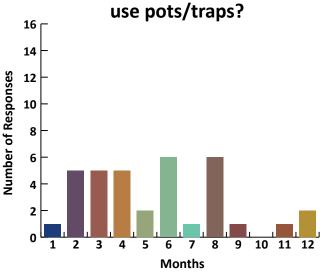
How many months a year do you use a pelagic longline?

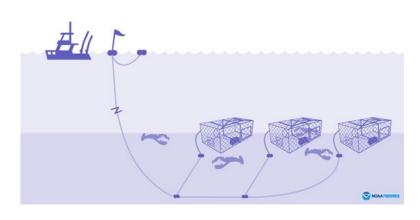






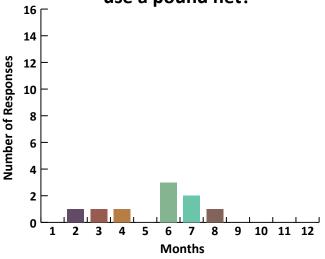
How many months a year do you

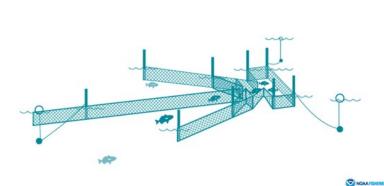




Pots and traps are used regularly by New York fishermen and are submerged three dimensional devices made of wood or wire that are baited to entice target species to enter and are designed to be difficult to escape. This gear type is most commonly used to catch crustaceans and mollusks such as crabs, lobster, and whelk. Pound nets, while not as common, are also used to varying degrees in New York. Pound nets use mesh fences and tunnels to interrupt fish movements and funnel the fish into a trap or pound at the end that limits opportunities for escape. The fish can then be harvested from the trap/pound by net. These can be used for finfish species such as bluefish, menhaden, and flounder.

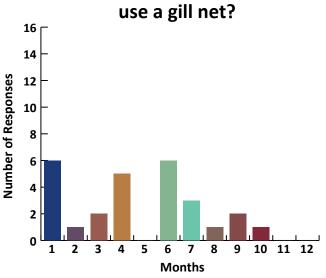
How many months a year do you use a pound net?

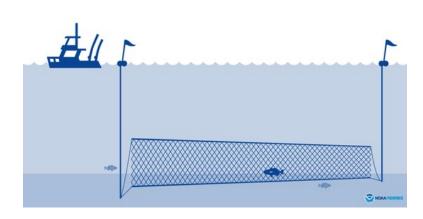






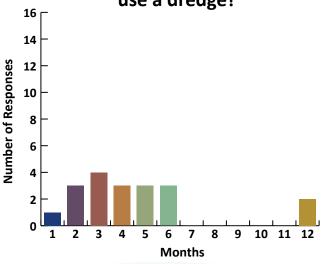
How many months a year do you

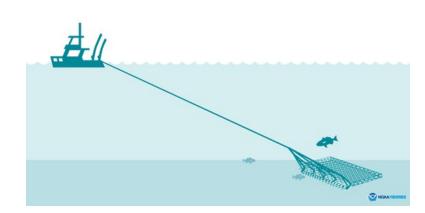




Gill nets are regularly used by New York fishermen and consists of a wall of netting that is suspended in the water column. The mesh size of the netting is designed to specifically allow the head but not the body of a target finfish species to pass through. Once the head passes through the fish's gills, they get caught in the mesh. This method can be optimized to target a variety of different finfish species. Dredging is another method used by New York fishermen. This method relies on a metal frame attached to a collection bag that is dragged along the sea floor to collect bottom dwelling species of shellfish such as clams, mussels, oysters, scallops, crabs and whelk.

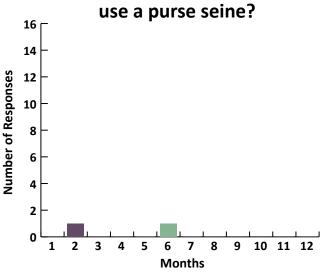
How many months a year do you use a dredge?

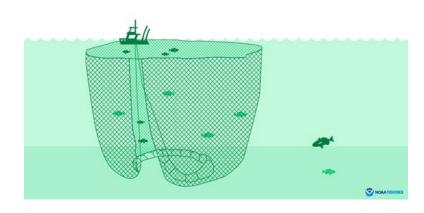






How many months a year do you use a purse seine?





Purse seines are not commonly used in New York but can be used by a couple fishermen up to six months a year. Purse seines are large nets that are deployed around a school of fish in the water column and then closed at the base before being lifted out of the water to trap any fish in the vicinity. This method is commonly used for schooling finfish species and squid. New York fishermen also use haul seines and beach seines to capture near shore species and hand gather shellfish in the bays across Long Island. More information on fishing gear and practices can be found on the NOAA Fisheries website.

number of Responses Number of Responses Not Specified Haul Seine Beach Seine And Gather Hand Gather

5

Months

10 11

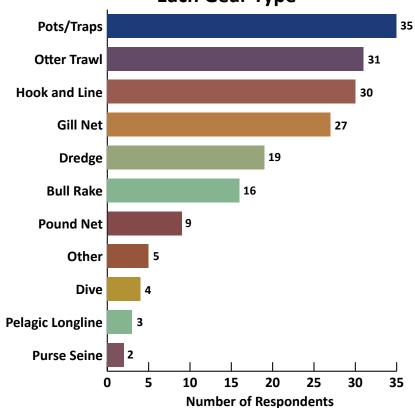
How many months a year do you



Source: Long Island Commercial Fishing Association



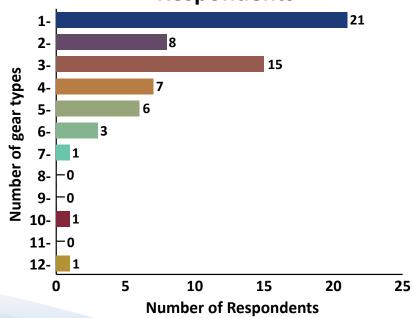
Number of Respondents Using Each Gear Type



Respondents were not limited to choosing a single gear type. This allowed for multiple gear types to be identified by a respondent. The most common gear types employed were pots/traps (35), otter trawl (31), hook and line (27), and gill nets (27).

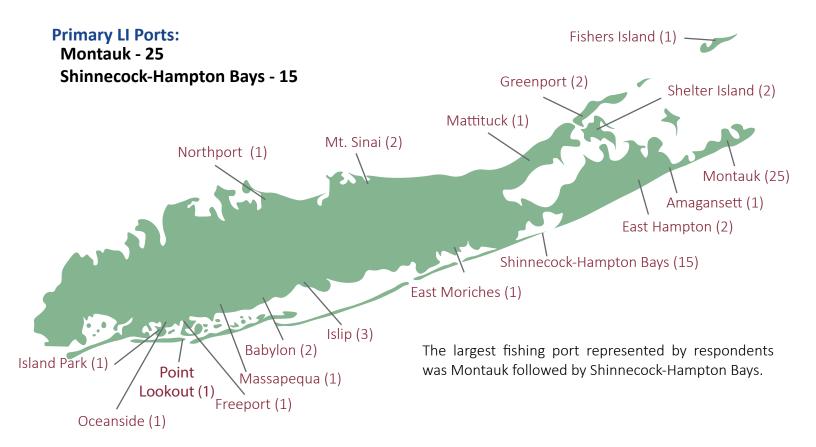
Number of Gear Types Used by Respondents

A majority of respondents (44 of 63) indicated that they used three or fewer different gear types when conducting commercial fishing activities. One third of all respondents only used a single gear type.



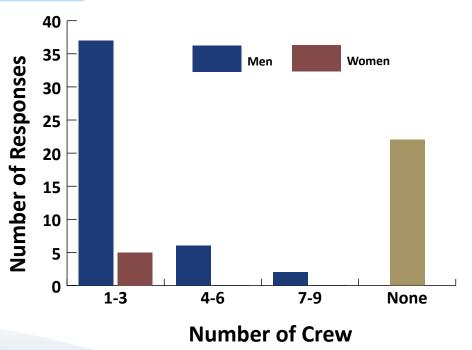


Q5. Where is your primary port of landing?



Q6. How many crew work on your vessel?

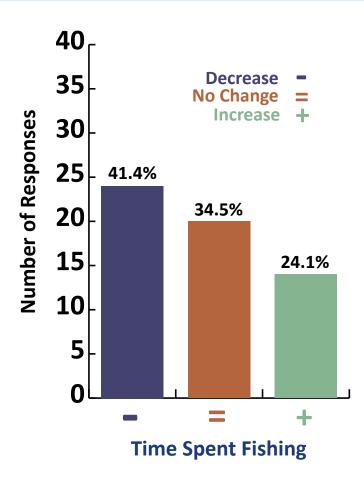
Of the 67 responses, 45 indicated they had at least one crew. The majority of boats have between one and three crew, with a few reporting as many as eight crew members.





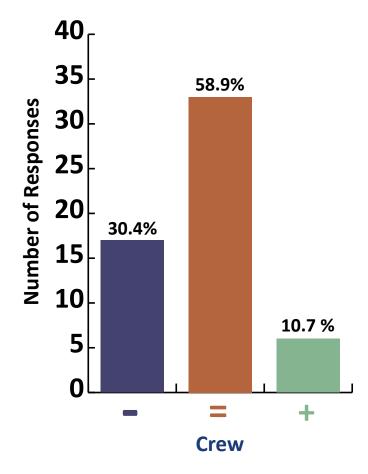
Fishing Efforts

Q7. How have your fishing efforts changed over the last year?

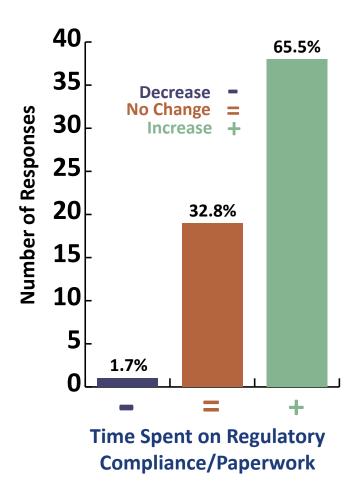


Fifty-six respondents answered the question of how their crew size changed over the past year. More than half (33 responses) of these responses indicated that respondents' crew levels stayed the same over the past year. Thirty percent reported that their crew levels have decreased over the past year and 10% indicated that crew levels had increased from the year before.

Of the 58 respondents who answered this question, 41% (24 responses) indicated that the time in which they spend fishing has decreased over the last year. Thirty-four percent indicated that their time spent fishing had not changed since last year and 24% indicated that their time spent fishing increased from the year before.

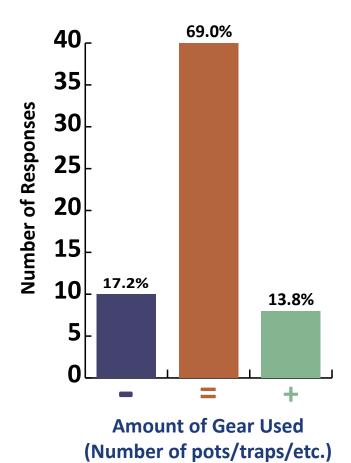






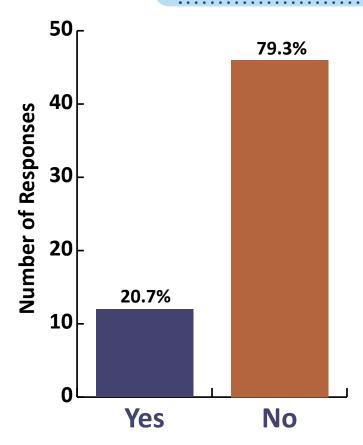
Among those 58 respondents indicating how the amount of gear used has changed over the past year nearly 70%, or 40 respondents, indicated that the amount of gear they used had not changed since 2020. Nearly 14% indicated that the amount of gear they used had increased (eight responses) and 17% said the amount of gear decreased from last year.

Fifty-eight respondents, in total, provided a response to the question of how the time spent on compliance with regulatory procedures and paperwork has changed over the past year. A majority – 38 responses (65%) – indicated that the time spent on regulatory compliance and paperwork had actually increased over the past year. Nearly all other respondents (19 responses) indicated that the time spent on regulatory compliance had stayed the same, with only one respondent indicating that time spent on regulatory compliance had decreased.





Q8. Has the TYPE(s) of fishing gear you use changed over the past year?



More than three-quarters (79%) of the 58 respondents providing a response to this question indicated that the type of fishing gear that they use had not changed over the past year. However, a total of twelve respondents (21%) answered "yes." Some specific changes to gear that individual respondents referenced in their survey responses involved the addition of more traps and nets, the addition of crab pots, the decision to work in different fisheries, and switching from lobstering to scallop dredging. While the sample size is small, roughly one out of five respondents indicating a change in gear type from year-to-year is noteworthy.

Q9. If yes, how has the type(s) of gear you use changed over the past year?

"Experimenting with gear to maximize catching."

"Increase in price."

"Same methods, just more traps/nets."

"Need to use multiple gear types in the same day."

"More effective, less bycatch."

"I had to change some of my fishing methods."

"More types."

"Need to use multiple gear types in the same day."

"Needed to work different fisheries to make income."

"Crab pots."

"I have made modifications to my gear."

"I've switched from lobstering to scallop dredging . I intend to start trawling in 2022."



Q10. What species have you landed in the past year?

	Percentage of
Species Landed	Respondents
Black Sea Bass	71.6%
Bluefish	67.2%
Striped Bass	65.7%
Scup/Porgy	62.7%
Dogfish	58.2%
Tautog	58.2%
Weakfish	53.7%
Skate	49.3%
Summer Flounder (Fluke)	49.3%
Butterfish	44.8%
Goosefish (Monkfish)	38.8%
Longfin Squid	38.8%
Conch	35.8%
Lobster	29.9%
Atlantic Mackerel	26.9%
Clams (Quahog)	28.4%
Silver Hake (Whiting)	28.4%
Winter Flounder	28.4%
Blue Crab	26.9%
Menhaden (Bunker)	26.9%
Red Hake	26.9%
Eel	23.9%
Golden Tilefish	20.9%
Cod	19.4%
Oysters	19.4%
Atlantic Herring	14.9%
Sea Scallops	14.9%
Jonah Crab	13.4%
Tilefish	13.4%
Bluefin Tuna	9.0%
Yellowfin Tuna	9.0%
Surf Clams	1.5%
Horshoe Crabs	0.0%

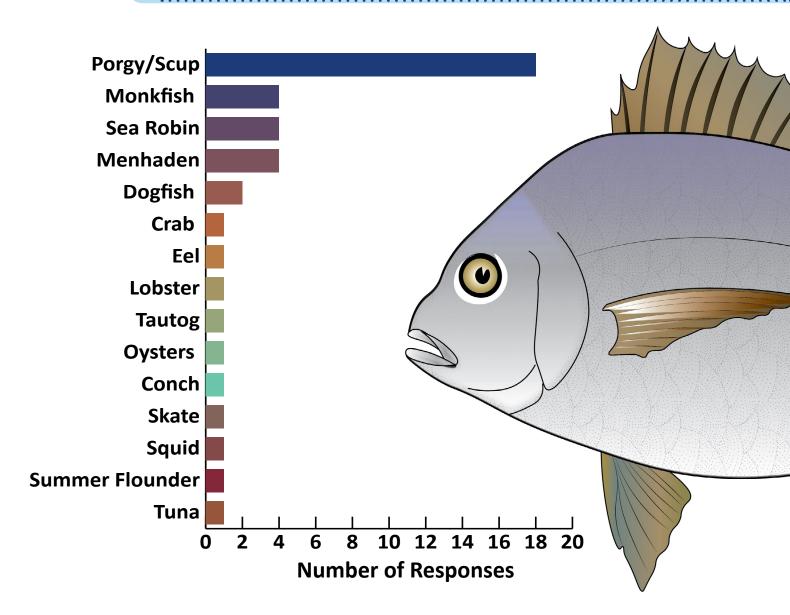
Among the 67 respondents who completed the survey, over 71% were landing Black Sea Bass, over 67% were landing Bluefish, over 65% were landing Striped Bass, over 62% were landing Scup/ Porgy, and over 58% were landing Dogfish and Tautog. These represent the top six species landed by respondents but does not fully reflect NY landings as a whole, as there are over 600 licensed commercial fishermen in New York. The landings data reflected here is highly dependent on permits held, geography, and gear types utilized by the respondents.

The survey team hopes to increase participation over time to more accurately represent the New York commercial fishing industry as a whole. For more complete statewide fisheries landing data see: www.accsp.org

13.4% of respondents indicated that they caught other species such as: blowfish chubb mackerel, kingfish, sanddab, spot, silversides, croaker, mantis shrimp, swordfish and welk.



Q11. In your opinion, which locally abundant species are most difficult to sell?



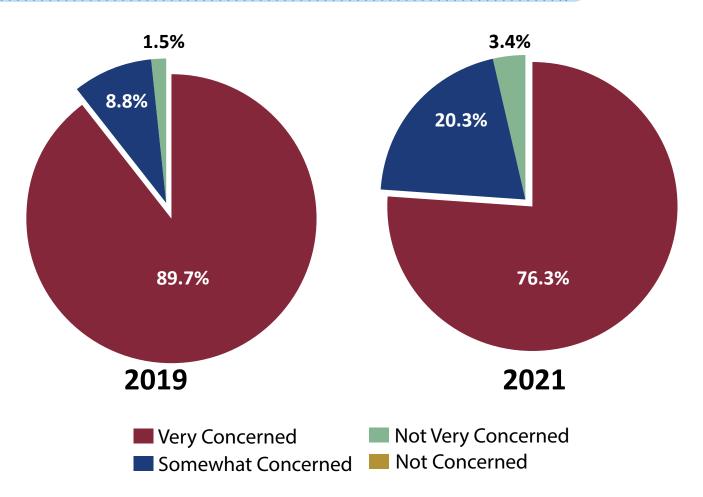
Long Island fishermen find Porgy/Scup to be the most difficult to sell, with fifteen other species identified by at least one fishermen.

While respondents did identify several species that were difficult to sell, many noted that the real challenge was getting a reasonable price for their catch, not just selling it.



Fishery Challenges

Q12. How concerned are you about the future profitability of your business?



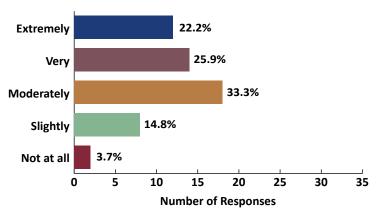
Fifty-nine of the 67 survey respondents offered their insight into concern over the future profitability of the fishing business. Ninety-seven percent of respondents (57 responses) indicated that they are at least "somewhat" or "very concerned" about the future profitability of their business. Specifically, 76% of respondents alone reported being "very concerned" about the future of their business, with an additional 21% being only "somewhat concerned." Only two respondents were not very concerned about the future of their business' profitability. Interestingly, the percentage of fishermen who said they were "very concerned" about future profitability actually decreased between 2019 to 2021 from 87% to 76%.



Regulatory Challenges

Q13. How challenging are the following regulatory issues are for you as a commercial fishermen?

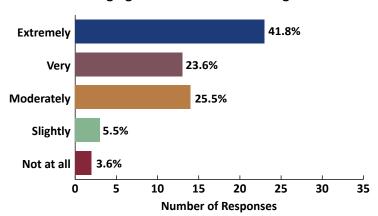
How challenging is the availability of real-time quota tracking?



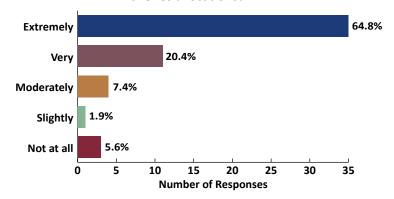
Responses to the question on the challenge of the availability of real-time quota tracking were collected from 54 of the 67 participating survey respondents. Among these responses, 22% characterized the availability of real-time quota tracking as "very" challenging. A total of 60% viewed the availability of real-time quota tracking either as "very" or "moderately" challenging.

Fifty-five of the 67 total individuals responding to the survey answered this question on Federal and State regulations. Nearly 42% of question respondents indicated that they felt Federal and State regulations were "extremely" challenging. Nearly half of the 55 question respondents (27 responses) said that Federal and State regulations were either "very" or "moderately" challenging.

How challenging are Federal and State regulations?



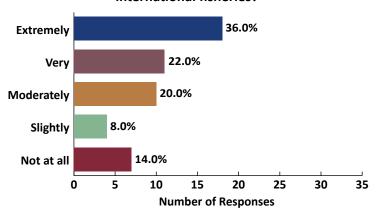
How challenging are innapropriate state-by-state fisheries allocations?



Fifty-four respondents to the survey responded to the question of the challenge of inappropriate state-by-state fisheries allocations, with 13 respondents not providing a response. Sixty-five percent of these 54 respondents characterized inappropriate state-by-state fisheries allocations as "extremely" challenging. An additional 27% of respondents characterized these allocations as "very" or "moderately" challenging.



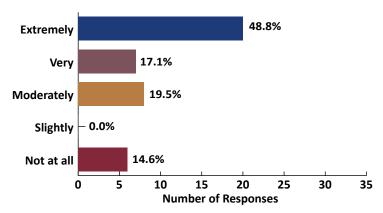
How challenging is insufficient regulation of international fisheries?



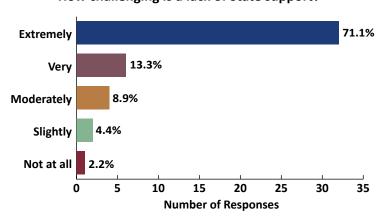
Fifty individual responses from the survey's 67 total respondents were collected for this question. Overall, 36% of these 50 respondents indicated that insufficient regulation of international fisheries was "extremely" challenging. Forty-two percent of respondents reported that they felt the insufficient regulation of international fisheries to be either "very" or "moderately" challenging.

Nearly half (20 responses) of the 41 total respondents to this question stated that the lack of Federal support was "extremely" challenging. An additional 36% of these respondents chose "very" or "moderately" challenging to describe the lack of Federal support. Six of the 41 respondents (nearly 15%) said that the lack of Federal support was not at all challenging. No respondents used "slightly challenging" as a way to describe the lack of Federal support.

How challenging is a lack of Federal support?



How challenging is a lack of State support?



Of the 45 respondents providing responses to this question, 71% identified a lack of State support as extremely challenging. "Very" or "moderately" challenging were used to describe the lack of State support by 22% of question respondents. Few (3 responses) respondents reported finding a lack of State support as either only slightly challenging or not at all challenging. Of all challenges identified under "Regulatory Challenges" sub-category, the "lack of State support" actually received the greatest proportion of respondents indicating that this issue was extremely challenging. Some respondents provided additional open-ended feedback and cited issues associated with license transfers, the inability to transfer permits, and fishing quotas.



Respondents indicating that there was a lack in State and Federal support for their industry and/or business were asked to specify what support was lacking. The quoted text on this page represents the support that respondents felt was lacking at the State and Federal level.

Specify what type of state support is lacking:

"Lack of ability to transfer NYS food fish permits makes it impossible to shift fisheries."

"Little to no communication."

"No regulation on homes built along waterfront negatively impacting water quality, thus restricting baymen's harvesting grounds."

"They don't support the fisherman in New York. We fish under the smallest quota on the east coast. We don't have processing in the State. Shipping costs are extremely high to get our fish where they need to go."

"Limited promotion of local industry."

Specify what type of federal support is lacking:

"Unfair fishery allocations" & "Too many permits."

"Federal agencies should not be able to lease areas directly on or adjacent to significant fishing grounds."

> "If Federal regulations prevent us from earning a living, we should be compensated much like the farm industry."

"If they have a say in waterfront development they haven't been helpful for the Bayman."

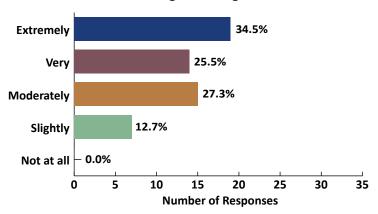
"Poor promotion of national industry."

"Regulations that limit what we fish for are business killers. If we are restricted by limits and seasonal closures, we should be compensated much like the farm industry."

"Too many licenses."



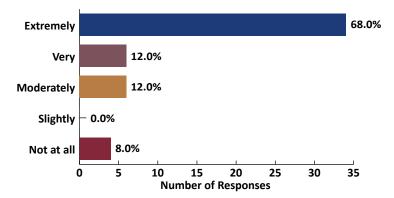
How challenging is the cost of compliance with fisheries management regulations?



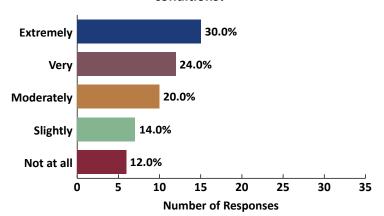
Of the 50 survey respondents to this question, 68% of respondents found that the permitting of offshore wind turbines was "extremely challenging" to their livelihood. Twelve (24%) respondents indicated that this permitting was either "very" or "moderately" challenging. The remaining four respondents to this question all indicated that the permitting of wind turbine lease areas in traditionally productive and viable fishing waters was "not challenging at all".

Of the 55 out of 67 survey respondents answering this question, 34% said that the cost of compliance with fisheries management regulations was "extremely challenging." More than a quarter of respondents separately characterized the cost of compliance as "very challenging" (25% of respondents) and "moderately challenging" (27% of respondents). The remaining 13% of respondents indicated that this cost of compliance was "slightly challenging", with no respondents saying that complying with fisheries management regulations is "not challenging at all."

How challenging is the permitting of wind turbine lease areas in traditionally productive and viable fishing waters?



How challenging are the COVID-19 regulatory conditions?



Responses for this question on the challenge of COVID-19 regulatory conditions were collected from 50 of the 67 individuals participating in this survey. Overall, 30% or 15 of these respondents characterized COVID-19 regulatory conditions as "extremely challenging" to their business. An additional 44% of respondents indicated that they found COVID-19 regulatory conditions to be "very" or "moderately" challenging. The remaining 26% of respondents were nearly evenly divided between thinking COVID-19 regulatory conditions were either "slightly challenging" (seven responses) or "not at all challenging" (six responses).

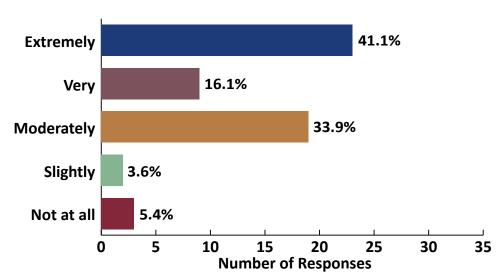


Environmental Challenges

Q14.Please indicate how challenging the following environmental issues are for you as a commercial fishermen?

Fifty-six of the total 67 survey respondents provided insight on the challenges associated with environmental pollution and the loss of fishery habitat. Forty-one percent of these respondents characterized pollution and

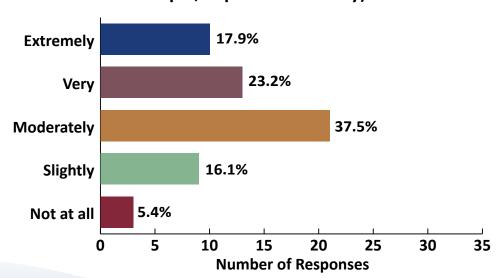
How challenging is environmental pollution and the loss of fisheries habitat?



fisheries habitat loss as extremely challenging. Half of the respondents used "very challenging" or "moderately challenging" to describe the issue of environmental pollution and the loss of fisheries habitat. Five respondents reported that these issues were either only slightly challenging (2 responses) or not challenging at all (3 responses). Among the issues incorporated under category of "Environmental Challenges", environmental pollution and the loss of fisheries habitat received the highest proportion of respondents indicating that they felt "extremely challenged" by this issue.

Among the 56 respondents (out of 67 total participating individuals) for this question, the most commonly provided answer was that extreme weather events are moderately challenging, with 37.5% of these individuals characterizing extreme weather in this fashion. 17% of respondents indicated that extreme weather events were "extremely challenging" and 23% reported that they were "very challenging" to their livelihood. An additional 16% of the question's respondents found extreme weather events to be "slightly challenging," with only three respondents characterizing this issue as" not at all challenging."

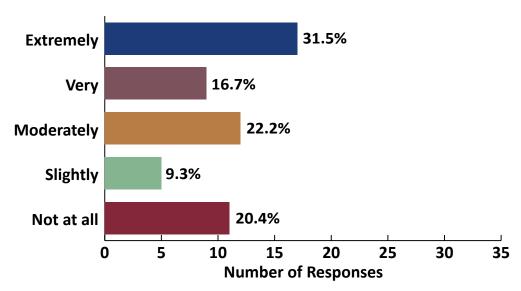
How challenging are extreme weather events (For Example, Super Storm Sandy)?





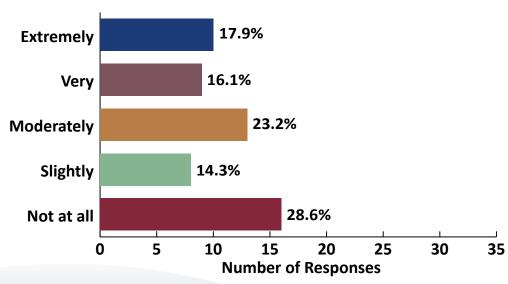
Of the 54 individuals responding to this question, 17 or 31% thought that the issue of insufficient dredging was "extremely challenging". More than 38% of respondents indicated that this issue was either "very" or "moderately challenging" to them and their business. An additional 20% believed that insufficient dredging was "not a challenge at all."

How challenging is insufficient dredging?



Out of the survey's 67 participants, 56 respondents offered insight into the issue and challenges of global climate change. Among these individuals, nearly 18%, indicated that global climate change is "extremely challenging" to their profession. Thirty-nine percent of these respondents indicated that global climate change was either "very or "moderately challenging". Out of the remaining 24 respondents for this question, 14% indicated that global climate change was "slightly challenging" and 29% believed that global climate change was "not at all challenging" for their livelihoods.

How challenging is global climate change?



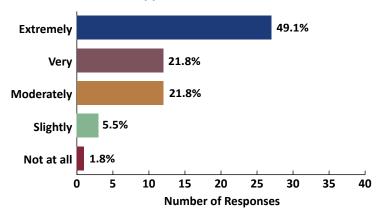


Infrastructure Challenges

Q15. Please indicate how challenging the following user and infrastructure issues are for you as a commercial fishermen?

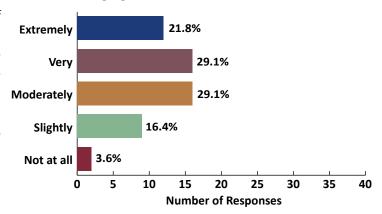
Responses to this question were collected from 55 of the total 67 participating respondents. Of these 55 individuals, the most common characterization of the challenge of conflicting water uses and users were "very challenging" and "moderately challenging," both of which were equally selected by 29% of respondents. Nearly 22% said that conflicts with other water users was "extremely challenging" to them, while 16% said that this issue was only "slightly challenging."

How challenging is the lack of local infrastructure and support industries?



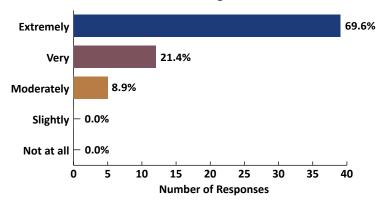
Nearly 70% of answering respondents (56 out of 67 total survey respondents) characterized the issue of rising costs associated with fishing as "extremely challenging." The remaining 30% of respondents to this question either indicated that this issue was "very" or "moderately challenging" to them. Among the surveyed infrastructure challenges, rising costs associated with fishing received the greatest proportion of respondents viewing the issue as an extremely significant challenge.

How challenging are conflicts with other water users?



Fifty-five respondents answered this question, with the most common characterization of the lack of local infrastructure and support industries being "extremely challenging." In total, 49% of respondents said that this issue was "extremely challenging" to their industry and profession. An even number of respondents answered that they believed the lack of local infrastructure and support industries to be "very" or "moderately challenging," with 12 responses received for each. Only four respondents (7%) indicated that they felt this issue was either "slightly" or "not at all challenging."

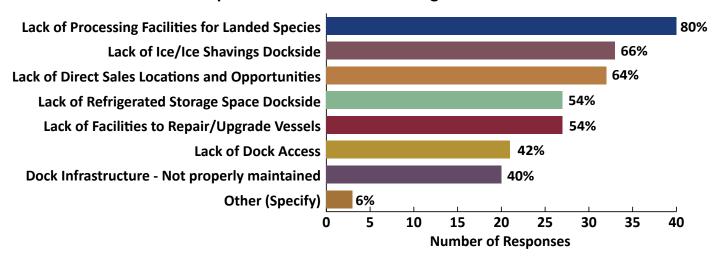
How challenging are the rising costs associated with fishing?





Q16. What specific infrastructure challenges do you face (Check all that apply)?

Specific infrastructure challenges



A total of 50 survey respondents offered insights into this question pertaining to specific infrastructure challenges within the commercial fishing industry. The most commonly identified infrastructure challenge was the lack of processing facilities for landed species, with 80% of respondents (40 out of 50 individuals) finding this to be a challenge within the industry. The second most common infrastructure challenges were a lack of ice/ice shavings dockside (66%) and a lack of direct sales locations and opportunities (64%). Both a lack of refrigerated storage space dockside and a lack of facilities to repair and upgrade vessels were identified by 54% of the 50 question respondents.

"Dock space is available, but costs are challenging."

"That I have to truck my fish 30 miles east to have them shipped 100 miles west much of which is then shipped back to where they came from. Ludicrous."

"No new recruits to industry."

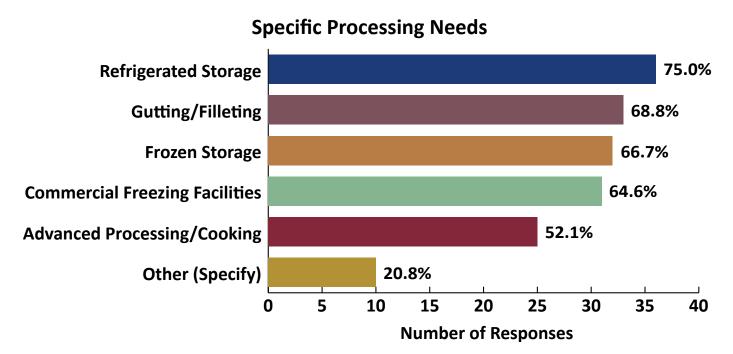


Source: Long Island Commercial Fishing Association



Infrastructure Needs

Q17. If new processing facilities could be constructed, please indicate which capabilities would be necessary (Check all that apply).



In a scenario where new process facilities are constructed, survey respondents most commonly identified refrigerated storage as being necessary for processing. Of the 48 total respondents, 75% (36 respondents) indicated refrigerated storage as being needed. Gutting/filleting, frozen storage and commercial freezing facility capabilities were all also identified as being necessary by more than 80% of respondents. Advanced processing and cooking was the least identified capability, with only 25 respondents viewing this feature as a challenge to the fishing industry. Additional capabilities that individual respondents identified as being necessary for a potential new processing facility would be scallop opening and shucking, squid processing, wet storage for fish and shellfish, ice, and packing and trucking/distribution.

"Packing & Trucking."

"Design a Long Island market...keep it local...many dealers travel daily to Hunts Point and drive back to Long Island."

"Scallop openning shop \ sea scallops and being able to open scallops in the bay."

"Wet storage for fish and shellfish."

"Shucking."

"Labor!!! Its a huge issue on Long Island..housing for labor..."

"Ice."

"Needs to be available to fishermen - not middlemen."

"Squid processing."

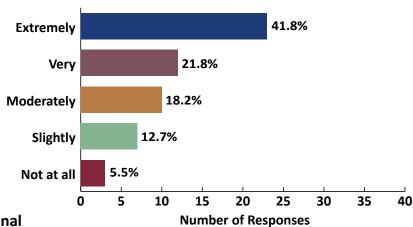


Business and Marketing Challenges

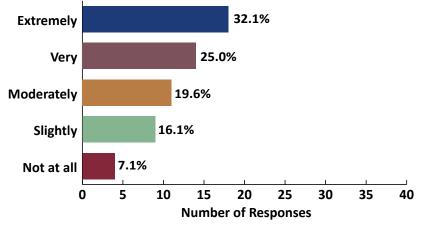
Q18. Please indicate how challenging the following business and marketing issues are for you as a commercial fishermen?

Fifty-five of the 67 commercial fishermen responded to the question of how much of a challenge imported seafood presents to their businesses. The majority, 64%, found imported seafood to be either "very" or "extremely challenging" with "extremely challenging" being the most common answer. Only three respondents viewed seafood imports as non-threatening.

How challenging is competition from imported seafood?



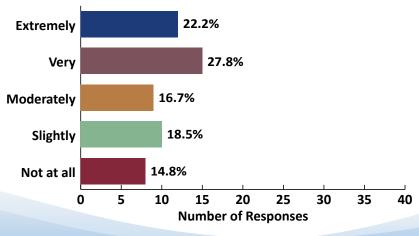
How challenging is competition from recreational fisheries?



Of the 55 respondents to this question, 57% believed the competition from recreational fisheries to be either "very" or "extremely challenging" with 18 respondents responding as "extremely challenging' as the most common answer (n=18; 32%). Only four fishermen found no competition from recreational fisheries.

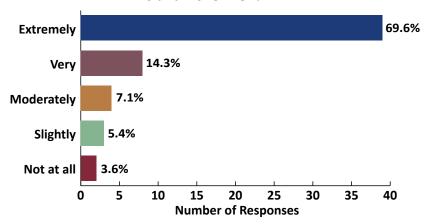
How challenging is access to capital?

Out of the 54 survey participants who responded to this question, a total of 22% found accessing capital to be "extremely challenging." Twice as many respondents (44%) characterized access to capital as either "very" or "moderately challenging." The final one-third of respondents found this issue to be only "slightly challenging."





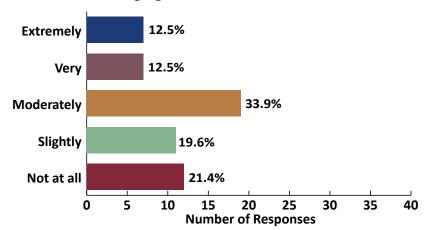
How challenging is finding the next generation of Long Island Fishermen?



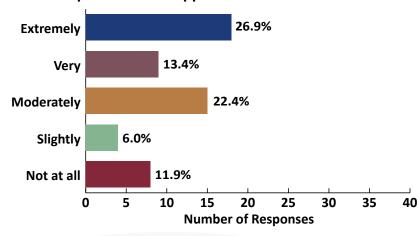
Of these 56 respondents, 39 (70%) found it to be "extremely challenging" to find the next generation of Long Island fishermen. An additional 14% cited it as extremely challenging. Only two respondents did not believe there would be a problem finding the next generation of commercial fishermen.

Fifty-six fishermen responded to this question and, unlike with most of the other questions related to business challenges, the most frequent response was "moderately challenging" with 34% of the respondents. Much fewer respondents viewed lack of demand as "extremely" or "very challenging," with each response receiving seven votes.

How challenging is a lack of consumer demand?



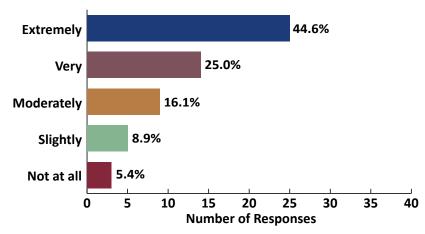
How challenging is a lack of marketing and promotional support for local seafood?



The perception of the challenges associated with the lack of marketing and promotional support for seafood is much more evenly distributed than other questions related to the business challenge sub-category. The most common answer was 'extremely challenging' with 18 of 54 (33%). The second most common answer was "moderately challenging" with 28% of the responses while 15% of respondents found no issue with marketing.



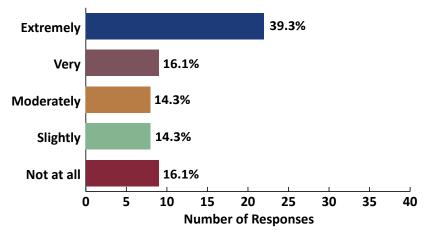
How challenging are the COVID-19 market conditions?



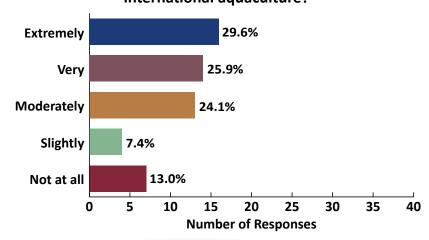
Fifty-six of 67 commercial fishermen assessed the level of challenge that the COVID-19 market presented to their businesses. Seventy percent viewed the market shift as either "very" or "extremely challenging" with "extremely challenging" as the most common answer (45%).

Fifty-six of the 67 total survey respondents provided feedback on the issue of access to labor. Slightly over 39% of these respondents reported finding access to labor to be "extremely challenging." An additional 30% found the issue to be either "very" or "moderately challenging". An equal amount (30%) of respondents found access to labor to either be only "slightly" or "not at all challenging."

How challenging is access to labor?



How challenging is competition from domestic and international aquaculture?

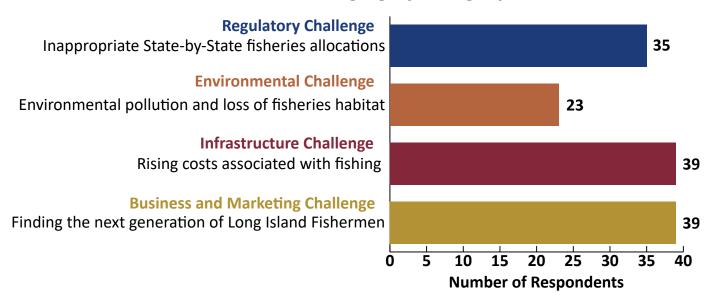


Fifty-four responses were collected from among the survey's 67 total participant respondents on the issue of competition from domestic and international aquaculture. Nearly 30% (equal to 16 respondents) found this competition to be "extremely challenging." The largest portion of respondents indicated that this issue was "very" or "moderately challenging," with exactly half choosing one of these two characterizations. The remaining 20% of responses identified this competition as only "slightly challenging" or "not a challenge at all."



Other Challenges

Most Challenging by Category



The most challenging by category was identified as the challenge receiving the most respondents selecting "Extremely Challenging."





Other Challenges Identified by Respondents:

"Able to follow regs and regs are different with each officer."

Respondents were given the opportunity to share more specifically what challenges they faced. These represent direct quotes with minor grammatical corrections, when necessary, from survey respondents.

"Yes shore side packing facility..."

"Crew."

"The extreme bias towards the recreational sector shown by State and Federal policies. The fact that New York is the only State that does not allow private held limited access licenses to be sold by the holders."

"Being priced out of area, no affordable dockage, lack of infrastructure, no new blood/recruits coming into industry."

"Dock space and commercial fishing waterfront protection."

"Affordable work space suitable for processing seafood for direct marketing purposes."

"Lack of infrastructure. Municipalities allowing commercial waterfront property to become condos."

"Lack of infrastructure on Long Island. We need a local fish processing plant to stay competitive in the market. Rhode Island, New Jersey and Massachusettes all have processing in their States."

"Dockage and available real estate to rent is very challenging, too expensive."

"Lack of promotion of our local harvesting tradition."

"Better opportunity to obtain fishing permits."

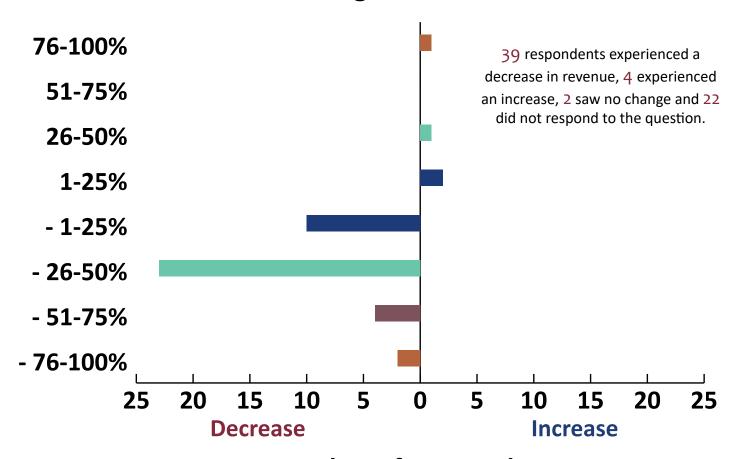
"If and when retirement comes, NYS commercial permits despite the \$25,000 maintenance cost cannot be transferred to new entrants unless they are blood, most States permits are transferrable."



Impacts of COVID-19

Q19. Did your revenues increase or decrease in 2020 as a result of COVID-19?

2020 Revenue Changes Due to COVID-19



Number of Respondents

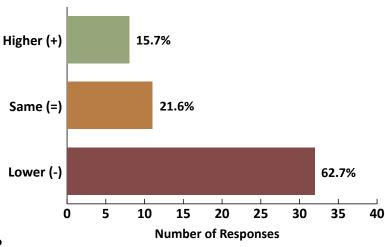
Overall, most fishermen in this survey experienced a decrease in revenue in 2020 as a result of the COVID-19 pandemic. More than half (51%) of these 45 responding fishermen reported revenue losses of between 25-50% in 2020, compared with the year before. 13% of respondents indicated losses of greater than 50% of their revenue in 2020. Additionally, two fishermen indicated a loss of revenue greater than 99%.



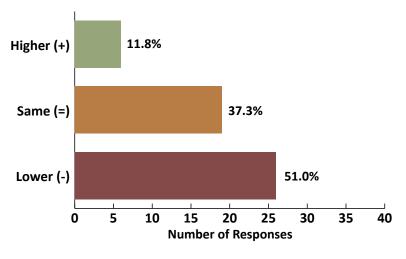
Q20. How would you compare the following regarding your commercial fishing business to before COVID?

How has COVID impacted the sale price of fish landed?

Out of 51 provided responses, most reported a negative impact from COVID-19 on the sales price of fish they landed. Nearly 63% found that the sales price of fish landed was lower than before COVID-19. Only 16% experienced higher prices during the pandemic and 22% saw no change compared with the period before COVID-19.



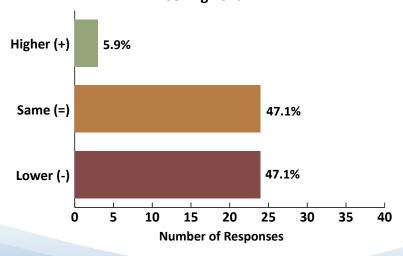
How has COVID impacted the quantity of fish sold?



Of the 51 survey respondents to this question, 51% reported lower sale prices for fish landed during the COVID-19 pandemic, rather than before COVID-19. Eleven respondents did not notice any changes in sale prices. Eight respondents (12%) actually reported higher prices than during the COVID-19 pandemic rather than before.

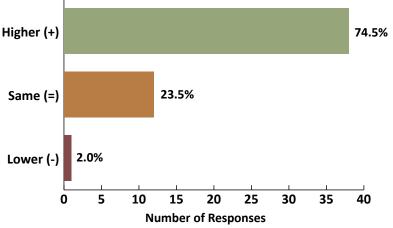
Fifty-one commercial fishermen commented on changes in the number of dealers selling fish. Twenty-four fishermen observed a lower numbers of dealers, while a different 24 fishermen did not notice a change in the number of dealers before and during the pandemic. Three fishermen (6%) believed there was an increase in the number of dealers during the on-going pandemic.

How has COVID impacted the number of dealers selling fish?





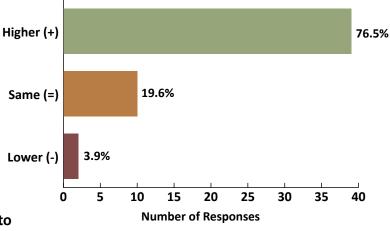
How has COVID impacted the cost of gear (pots, traps, nets, hoods, etc.)?



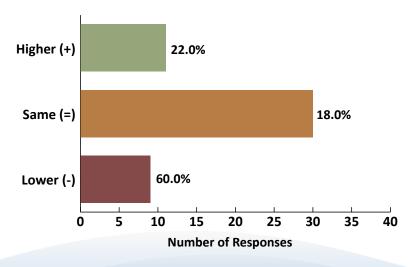
Fifty-one commercial fishermen weighed in on the cost of fishing gear before and during the pandemic. Exactly three-quarters of the respondents believed that the price of gear increased. Twenty four percent of fishermen believed that the price has stayed the same and just one fishermen believed the cost of gear decreased.

Fifty-one commercial fishermen provided insight on the change in cost of non-gear expenses. Similar to the perceptions of gear cost expenses, the overwhelming majority of respondents (76%) said that the cost of non-gear expenses increased during the pandemic. Ten respondents believed that prices stayed the same while only two thought the price lowered.

How has COVID impacted the the cost of non-gear expenses (ice, bait, fuel, fishing tackle, boxes/packaging, etc.)?



How has COVID impacted your ability to sell direct to consumers?



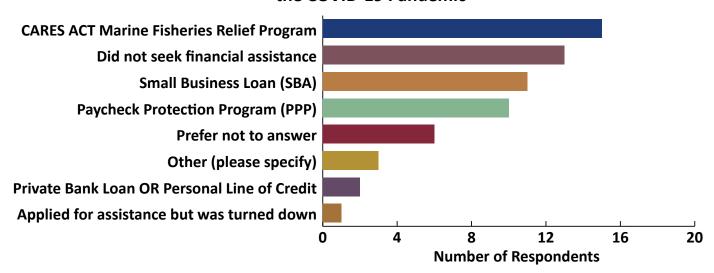
Fifty commercial fishermen provided feedback on the ability to sell direct to consumers during the COVID-19 pandemic. Sixty percent believed that direct sales opportunities remained unchanged. Twenty two percent saw in increase in direct sales opportunities and 18% felt a decrease in direct sales opportunities.



COVID-19 Support

Q21. Has your commercial fishing business received funds from any of the following sources to deal with the effects of the COVID-19 Pandemic (select all received)?

Financial Assistance Received to Deal with the Effects of the COVID-19 Pandemic



Of the total 67 survey participants, 47 responded to the question related to receiving government or private financial support made available to commercial fishermen. Thirteen respondents indicated they "sought no financial assistance" and six indicated they "preferred not to answer." Of the remaining 28 fishermen who received some form of pandemic financial assistance, 15 received CARES Act Marine Fisheries Relief Program funding, 11 received Small Business Loans, 10 received assistance through the Paycheck Protection program, two received private bank loans or personal lines of credit, and one was turned down for assistance. Three other received some alternate form of financial assistance. In many instances, receiving financial assistance from one financial resource (e.g. a PPP grant), would not necessarily preclude a fishermen from receiving financial assistance from other sources (e.g. CARES Act Marine Fisheries Relief Program funding). In most cases, support is predicated on ensuring that all combined monies received could not make the harvester "more than whole."





Fisheries Investments

Q22. In your opinion, what is the best investment that can be made in the commercial fishing industry to sustain the long-term health and economic viability of this important heritage Long Island industry?



Thirty-seven commercial fishermen offered their valuable perspectives on which aspects of the industry are most in need of investment. To synthesize responses, a word cloud generator extracted the most common words used by the fishermen. The size of each word in the cloud is proportional to the number of times it is mentioned in the responses. Each word appeared at least two times in the responses.

Several opportunities for investment emerged – the need for processing facilities and infrastructure, the need for dock access, and overall market conditions, including dockside prices and consumer demand. Some of the concerns, such as permitting, quota limits, and allocations, are explored more deeply in the conclusion of this report.

"Need for more processing facilities... Other than sending products to Hunts Point, it's becoming extremely difficult to get seafood off Long Island. There are only so many markets to be developed on the Island. This was a problem long before COVID-19."

"Processing space for direct marketers. I feel that after our grounds are shifted to use for wind plants, direct marketing will be the only viable course for small boat fishermen."



Conclusion

The timing of our surveys provides an important snapshot of the commercial fishing industry before COVID-19, and during COVID-19. Unsurprisingly, an industry that was broadly challenged before the pandemic continues to be challenged two years into the pandemic. Our survey results mirror real-world realities. The U.S. Department of Commerce National Oceanic and Atmospheric Administration released a report in December of 2021 titled "U.S. Seafood Industry and For-Hire Sector Impacts from COVID-19: 2020 in Perspective." The report showed an across-the-board 22% decline in commercial landings revenue during 2020 compared to the previous five-year average. Northeast fisheries suffered slightly less, suffering 18% decreases.

However, the same report contains a silver lining. While fishermen were hit hard with loss of business and landings revenue, seafood retail sales surged during 2020 as consumers stayed home, stocking their own freezers and pantries. The report notes another study, conducted by the Food Industry Association which tracked U.S. seafood retail sales and found they "increased significantly in 2020 across all seafood categories: frozen, up 36 percent; fresh, up 25 percent; and grocery (canned, pouches, etc.), up 21 percent." This aligns with the report's other notable findings, that high-value and export products were hit hardest, especially in the early months of the pandemic. When restaurants closed and/or went into lockdown, the market for restaurant sourced seafood collapsed. The foodservice sector is our commercial fisheries' most high-value market, both nationally and locally. When that industry suffers, Long Island fishermen suffer.

"I have no packing facilities less than two hours and have to drive in congested traffic after fishing to deliver."



Source: Blue Moon Fish

Interestingly, according to U.S. Bureau of Labor Statistics Occupational Outlook Handbook, the national employment of fishing and hunting workers is actually projected to grow 11 percent from 2020 to 2030, faster than the average for all occupations. On average, about 5,300 openings for fishing and hunting workers are projected each year over the decade. However, many of these openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as retirement. So how do we find and create opportunities for the next generation of fishermen? How do we tackle existing challenges and problems as identified and prioritized by Long Island fishermen in this survey? Below, is a short and incomplete list of potential solutions to existing challenges and opportunities within the industry. These recommendations should be considered a launching point for future investigation. We hope this report will generate new, more in-depth and thoroughly vetted discussions and detailed plans to address issues of concerns within the commercial fishing industry.



Challenges and Potential Solutions

The Challenge: Lack of State Support

The Solution: Create a New York State Supported

Marketing Campaign

New York's 2020 Budget included \$33.2 million in local assistance funding to grow New York's agriculture industry and \$5.8 million of that funding was earmarked specifically for agricultural development programs. A dedicated New York State marketing campaign is needed to highlight locally-landed seafood. To be sufficient, the effort should be similar in intent, but much larger in scale, to the New York Agriculture and Markets "Pride of New York Seafood Campaign" which received \$50,000 in the 2000s.

The Challenge: Lack of Federal Support

The Solution: Resurrect the National Seafood Council

Between 2019-to-2023, the United States has appropriated \$235 million towards agricultural trade, promotion and facilitation. There is no equivalent energy behind the promotion of American seafood. USDA-Local Farmers Promotion Program and Farmers Market Promotion grants can fund seafood marketing, but does so infrequently. NOAA's Saltonstall-Kennedy grants also fund seafood efforts, seafood marketing and promotion exclusively. However the funding tends to be isolated and segmented, typically funding regional, but not national campaigns. This can result in unnecessary competition amongst regional marketing campaigns and be discouraging to consumers being pulled in different directions. A national industry-supported "Buy American Seafood" campaign is needed to educate consumers on the economic, environmental and ethical advantages of buying local seafood.

There has been some recent proven success with seafood marketing campaigns in the United States. The "Eat Seafood America!" marketing campaign, launched in 2020 by the Seafood Nutrition Partnership (SNP) and

the Seafood4Health Coalition, achieved an 800 percent return on investment, according to SNP. The campaign, which was launched as a rapid response to the COVID-19 public health crisis with the dual goals of helping Americans stay healthy and boosting the U.S. seafood sector, has already shown to have increased seafood consumption in the U.S. The campaign reached four million households and, according to the SNP, every dollar spent on campaign ads resulted in a US \$9 increase in seafood purchases.

Recent Examples of Federally Funded Seafood Marketing Campaigns

USDA Farmers Market Promotion Program (FMPP): In 2019, Cornell Cooperative Extension of Suffolk County (CCE) secured a three year grant for \$144,000 in USDA-FMPP funding to provide marketing and promotion for the "Choose Local F.I.S.H" program. The F.I.S.H project (Fresh, Indigenous, Sustainable, Healthy) is a unique initiative offered by CCE that helps to increase the consumption of local seafood through improved consumer awareness and education. CCE has created and distributed effective promotional materials to increase demand for local seafood in retail outlets and at relevant events.

Local Seafood Locator



Cornell Cooperative Extension of Suffolk County has developed a seafood locator to assist consumers in finding New York Seafood.

www.localfish.org/locator

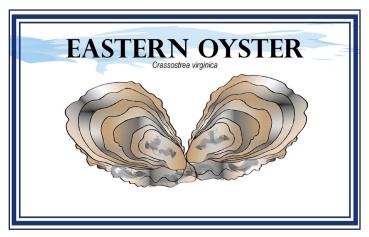


NOAA Saltonstall-Kennedy: In 2021, in response to the COVID-19 pandemic, CCE, in partnership with the East End Food Institute, and Rhode Island based Eating with Ecosystems, secured \$64,000 in NOAA Saltonstall-Kennedy funding to continue and expand the "Choose Local F.I.S.H" program. This funding was used to produce a series of videos to cook and prepare local, sustainable fish species. CCE is also producing fifteen online "Demo and Dialogue" local seafood cooking demonstration/ education events. These interactive experiences led by expert chefs and CCE fisheries specialists are designed to teach home cooks how to prepare local seafood in their own kitchen. They are intended to provide local fishing industry knowledge and education and to increase interest and demand for local seafood. The proceeds generated from these events will be spent on local seafood to feed community members in need in the States of New York and Rhode Island. Importantly, this project helps a) fill the need for increased at-home cooking instruction for local seafood; b) allows project partners to leverage the bounty of the Northeast region to provide healthy food for our neighbors in need; and c) provides economic support for local fishermen by increasing demand for local seafood.



New York Sea Grant provides Seafood HACCP training opportunities for seafood businesses.

www.nyseagrant.org/seafood



New York Sea Grant has free customizable seafood marketing resources for a variety of seafood species available online.

www.nyseagrant.org/seafoodmarketing

NOAA Sea Grant 2020-2021 Special Projects "E" -Addressing COVID Impacts to Seafood Resources (NOAA-OAR-SG-2020-2006435): In 2021, New York Sea Grant and Cornell Cooperative Extension of Suffolk County secured \$198,301 to assist in enhancing the market for New York farmed and fished seafood. These efforts will include the development of a seafood sales/purchase incentives program, additional local seafood marketing resources to assist producers and retailers in marketing products, and educational opportunities to engage communities on New York's seafood products.

NOAA Sea Grant FY2020 and 2021 COVID-19 Response (NOAA-OAR-SG-2021-2006818): In 2020 and 2021, New York Sea Grant leveraged \$56,000 of COVID-19 rapid response funds from the National Sea Grant Office to assist New York seafood producers in accessing different markets. This included the development of regulatory and technical guidance documents and free seafood HACCP trainings for New York producers interested in exploring new markets. Four regulatory guides and ten additional technical resources were created to help producers understand the regulatory framework around getting seafood and seaweed products to different markets in the State. Free food safety training opportunities are being offered to assist producers in transitioning to processing and marketing their seafood products.



The Challenge: Lack of Waterfront Port Access

The Solution: Spend Community Preservation Funds to Preserve Remaining Waterfront Access

Encourage Suffolk County's East End Towns with Community Preservation Funds to utilize a portion of that funding on "preservation of lands necessary to protect fisheries and water dependent uses essential to maintain and enhance maritime heritage" as permitted per the legislative amendment approved in 2020. The program is voluntary, so in practice this means that if a fishing pier, pack house, gear storage, or a boatyard were to come on the market, the Town's CPF funds now have the ability to acquire the properties or the development rights for those properties and keep them available for the traditional industry. While this solution will not be able to create new waterfront access, it can help preserve crucial existing access and infrastructure.

The Challenge: Lack of Local Institutional Market Demand

The Solution: Create Middle-Tier Processing to Provide Institutions with Local Processed Fish Products

Create local processing infrastructure to provide large Long Island institutions with processed (gutted, filleted, vacuum sealed, and frozen, etc.) fish products. Schools, universities, hospitals, and food banks may wish to source nutritious, sustainable, and locally abundant products, but products may not currently be available in a format needed by on-site staff, such as cafeteria workers in schools and hospitals, or end-users, such as food bank recipients who are inexperienced dealing with a whole-fish product. Specifically in the case of food banks, several States and local municipalities have implemented "sea-to-plate" food bank initiatives that could serve as successful models in New York. In fact, this recent NOAA Fisheries article, released in November, highlighted some of the more successful models. See the next section for some additional exploration on the need for local processing infrastructure.

The Challenge: Lack of Processing Infrastructure

The Solution: Tax Credits and Grant Incentives for Seafood Processing

Use appropriate tax incentives and zoning mechanisms to bring commercial fishing processing back to Long Island in appropriate locations. Historically, Suffolk County was home to dozens of finfish and shellfish processing facilities, all of whom have either shuttered or vacated the region. In its absence, roughly 95 percent of the raw catch caught on the East End goes into processing facilities in New York City, where it enters the New York City market, with some of the catch returning east at a higher retail price. If fishermen had a local Suffolk County facility, preferably on the East End where most catch is landed, the fishermen and the local fishing industry could benefit from higher prices for a processed catch. Unfortunately, locating a fish processing facility is difficult under most existing zoning, land acquisitions costs, and neighbor concerns and objections.

Local fillet houses, or even leasable HACCP approved commercial kitchens, could also service the fishing communities. These services could be located in a static location or repurposed as a mobile, on-demand facility, similar to a very large catering/food truck. These facilities could assist innovative fishermen looking to do their own value-added processing. Alternatively, they could create opportunities for mid-tier entrepreneurs to fill the void, offering a processing service to local fishermen who could in-turn sell to consumers directly. This kind of direct "harvester-to-consumer" retail connection has become a staple of Suffolk County agriculture and has proven to be very successful and economically lucrative.

Potential Grant Funding and Financing Sources: Suffolk County IDA, Empire State Development, United States Department of Transportation Maritime Infrastructure Grants, USDA Value Added Producer Grant, USDA Local Food Promotion Program Grant, US Economic Development Administration Public Works and Economic Adjustment Assistance Programs, Long Island Development Corporation.



The Challenge: Offshore Wind

The Solution: Investments in Commercial Fishing

With the continued push for offshore wind, the commercial fishing industry is losing both productive fishing grounds and working waterfront to support businesses. In 2022, Governor Kathy Hochul announced the intention to earmark \$500 million for the creation of offshore wind port-side jobs. Yet there has never been a commercial fisheries-equivalent NY State spending campaign for the support and promotion of New York's commercial fishing industry. As the Federal government makes available, and the State of New York grants private rights to public waters for commercial wind production, some portion of those revenues could be devoted to supporting and permanently preserving existing commercial fishing waterfront and to create new areas in port towns for gear storage. In support of greater energy efficiency initiatives, grants could be made available to upgrade engines in fuel efficiencies, which would help cut fishing costs AND protect the environment. Funds could also be earmarked to make investments into NEW fish processing facilities for the processing of underutilized and sustainable fish species in Long Island waters including porgy/scup, bluefish, sea robin, menhaden, skate, sea bass, and spiny dogfish.

These investments could be accommodated with a fisheries compensation program. A portion of lease revenues, acquired through auctions and operating fees, could seed an investment fund for commercial fisheries. The compensation program could cover costs including, but not limited to, navigation system upgrades, new vessels, fishing equipment, gear modification or gear upgrades, insurance premiums or training and loss of fishing revenue. Importantly, funds could be invested in technologies that would allow fishermen to operate SAFELY within the wind farms.

"Keep fishing docks modern and efficient."

The Challenge: Helping Grow the Next Generation of Long Island Fishermen

The Solution #1: Implement 2019 Report Recommendations

In 2019, the New York State DEC commissioned a report of recommendations to revise and improve New York State Commercial Fishing licensing system. The commercial fishing community has raised specific concerns on several issues including limited entry, license transferability, latent licenses, allowing new participants, too many participants (overcapitalization), participant qualification and flexibility due to health concerns, to name a few. The report considered the matters including but not limited to, latent licenses, license qualifications through income verification, part time versus full-time fisherman, license transfers (within family and outside), new entrants to the fishery, vessel licenses, gear and geographic diversity, and allowing the lease of licenses and permits. Unfortunately, none of the report's recommendations has been advanced at this time.

The Solution #2: Trade Skills

There are sets of traditional trade skills that are needed to succeed in commercial fishing. These include, but are not limited to, engine mechanics, gear knowledge and gear repair, electronics and welding. An effort to create a Suffolk County commercial fishing trade certificate would help more people who may become, or are already interested in, a career in commercial fishing. Suffolk County BOCES is an ideal partner in this effort and is currently working on developing additional curriculum and enhancing its offerings in this space. The Young Fishermen's Development Program, through NOAA Sea Grant, can be leveraged to support these efforts.

"Make it easier for young people to get permits."

"New access to permits for younger people."

"Fair and appropriate regulations, necessary facilities, no industrialization of the ocean."



The Challenge: Environmental Pollution and Loss of Fisheries Habitat

The Solution: Investing in Water Quality Preservation and Restoration/Minimizing Future Environmental Degradation

Excess nitrogen can stress habitat and watersheds, overwhelm native species, lead to harmful algal blooms, degrade traditional protective fish habitat grounds, and cause fish kills. Town, County, and the New York State government are all investing money in water quality preservation and restoration efforts for surface and groundwaters on Long Island (groundwaters too can ultimately end up in our bays and oceans). The five East End towns on Long Island all have Community Preservation Funds that can be tapped for water quality improvement and restoration efforts. Passed in 2017, the amended Community Preservation Fund allows towns to utilize up to 20% of their CPF funds for water quality improvement projects. Continued investment in water quality improvement and research to ensure the most effective methods are used is crucial to ensure progress continues to be made to support a healthy coastal ecosystem.



Source: Long Island Commercial Fishing Association

The Challenge: State-by-State Fisheries Allocations

The Solution #1: Enhanced Support for Commercial Fisheries in New York

Fishing allocations have been a challenge for New York fishermen for decades. The best approach to addressing this challenge would be to increase financial support for the NYS DEC Division of Marine Resources to engage stakeholders and Federal and regional planners to address concerns with the current practices for determining quotas and fisheries allocations. It is also important for locally-elected officials to take a more intense interest in their commercial fishing industry as an economic engine for their communities. Recreational fisheries have recently benefited from such attention, while New York commercial fisheries have not received the same attention.

The Solution #2: Fund Research to Correct Historical Fluke Landings Data

Summer flounder, known as fluke, is a flatfish iconic to Long Island. In the past, millions of pounds of New Yorklanded fluke fed the nation. In the 1970s and 80s, States from Massachusetts to North Carolina would send tractor trailers to New York ports to pack fluke caught in federal waters off Long Island and drive back to their States' processing facilities to add to their landings. These practices led to a distorted understanding and appreciation of New York landed fluke. New York State could hire a full-time staffer or outside consultant to research a historical recount of the state-by-state landed fluke during the historical qualifying time period. A more complete, historically accurate, analysis would demonstrate more substantial landings records from that time period. This analysis could review past data and more accurately match New York fishermen's fish returns from the subject time period. Matching catch to ports would likely discover landings previously unaccounted for. This data collection could then arm and empower New York representatives to appeal to the National Marine Fisheries Service (NMFS) and the Mid-Atlantic Fishery Management Council (MAFMC) for more appropriate, and fair, New York State allocation.



The Challenge: Rising Costs Associated with Fishing

The Solution: Investments in Commercial Fishing

Commercial fishing on Long Island is expensive. Boats are expensive, gear and equipment is expensive, dock rental fees are expensive, labor is expensive, and fuel and energy costs are expensive. In fact, the rising costs associated with fishing was identified by respondents as one of the greatest challenges to the commercial fishing industry. Given these financial challenges, fishermen need access to capital and financing to expand and diversify their businesses. As mentioned previously, grants for fuel efficient engines are an ideal government supported opportunity in this space. But grants, not loans, are needed to support infrastructure and gear including, but not limited to, ice machines in ports, refrigerated sea water systems, navigational systems, gear modifications, bycatch reduction technologies, and equipment and gear needed to safely navigate between proposed offshore wind infrastructure.

While fishermen may be able to occasionally access funding though commercial banks, or specialty banks like Farm Credit East, these funding sources are frequently insufficient to the task. Fishermen need access to the capital funds and the tax credits we afford other industries. The Federal government has financial assistance for farmers through the Farm Services Agency and cost share for equipment through the United States Department of Agriculture-Natural Resources and Conservation Services. Both NY State and Suffolk County have farmland preservation programs that can provide the working capital needed to make major investments in the future of farming. The State has also made funding available through their "New Farmers Grant Fund" program and in 2015 even invested \$1,000,000 in Long Island agriculture through a "Farmers for the Future Agriculture Capital Equipment" grant award through the Long Island Regional Economic Development Council (LIREDC). However, attempts to

secure funds through the LIREDC, in the form of a "Fisheries Future Fund", which focused on supporting the Long Island fishing industry, have not been successful. New York State could put more funding into industry informed, impactful commercial fishing projects and enhance efforts to communicate the value of this essential heritage industry to New York State.



Source: Long Island Commercial Fishing Association





Consumers and foodservice professionals can support New Yorks commercial fishermen by sourcing and buying local. Purchasing locally caught seafood ensures that the product you are buying is sustainably harvested and in compliance with strict U.S. fishing and food regulations. Choosing local seafood benefits local economies by creating and maintaining jobs for fishermen, processors, and wholesalers. Locally caught seafood has a low carbon footprint when compared to imported seafood, which also results in a fresher and a better tasting product. Consuming seafood at least twice per week also contributes to a healthier diet.

Educating consumers and culinary professionals on the sustainability of local fish creates a value ethic by which they purchase, prepare, consume, and serve fish. Overseas imports of seafood comprise a majority (62-65%) of seafood consumption in the United States (Gephart et al., 2019). These unregulated and often mislabeled imports compete unfairly with local products, depressing their price and value.

In 2016, with funding from the New York Farm Viability Institute (NYFVI), Cornell Cooperative Extension of Suffolk County (CCE) launched the "Choose Local F.I.S.H." marketing campaign to brand and promote LI seafood as Long Island "F.I.S.H. — Fresh, Indigenous, Sustainable, Healthy". The project helped increase consumption of local seafood through improved consumer awareness and integrated supply-side ability to support demand. In 2020, funding awarded by the USDA's Farmers Market Promotion Program extended and expanded this program.

In the spring of 2020, CCE partnered with a well-known culinary nutritionist to create a series of 11 local seafood recipes and <u>cooking demonstration videos</u> to encourage consumers to cook local seafood at home.

Ways to Support

CCE has held tasting events, collaborating with local restaurants and chefs to offer tasting events of locally caught fish and provide diners with an opportunity to experience and enjoy the bounty of our local waters. Restaurant events can have varying levels of involvement, including full restaurant "take-over" events with multiple chefs, tastings of passed appetizers offered during happy hour with CCE staff providing info on the project to patrons, or chef's inclusion of one or more local seafood dishes on the menu with project info available. The CCE Fisheries Team helps source local fish and works with collaborators to focus on lesser known, underutilized, less expensive fish options (porgy, dogfish, skate, sea robin) which help create markets for fishermen and increase profits for restaurants.

If your business or organization is interested in partnering with Cornell Cooperative Extension of Suffolk County on a "Choose Local F.I.S.H" event, please contact Kristin Gerbino at kk334@cornell.edu.



New York Sea Grant, organizes an annual "NY Seafood Summit" to convene a group of enthusiastic professionals with vested interest in seafood to build active communications between the various sectors of New York's seafood industry. Each year at the summit New York's bountiful seafood supply is highlighted and participants are introduced to the delicious, diverse, and versatile seafood's available locally. Get involved or support the summit activities by learning more online at www.nyseagrant.org/seafoodsummit or contact Dr. Michael Ciaramella at mc2544@cornell.edu