In April 2020, NOAA Fisheries prepared its first national report on the regional impacts of COVID-19 on the commercial, recreational and aquaculture sectors. This report updates that initial assessment, capturing economic changes experienced by the fishing industry as the country began its phased reopening along with infusion of Federal funding through the CARES Act. NOAA Fisheries will continue to use this information to identify economic hardship where it exists and identify pathways for enhancing the resilience of the U.S. seafood and fisheries industries.

Northeast Fisheries Impacts from COVID-19

Commercial Fisheries Landings Trends and Impacts through June 2020

From 2015 to 2019 an average of approximately 13,500 commercial fishing vessels operated in the Northeast region, accounting for an average of $1.82 billion in ex-vessel revenue. Of these vessels, about 3,400 held permits issued by the Greater Atlantic Regional Fisheries Office (GARFO), which accounted for 69% of region-wide harvest revenue while the remaining 31% of regional fishing revenue was landed by 10,100 vessels that either fished in state waters or fished in the EEZ for species that are not regulated by a Federal Fishery Management Plan (FMP) or held federal permits for Highly Migratory Species (HMS) (e.g. tunas, swordfish, and sharks) that are not issued by GARFO. The Northeast has a variety of commercial fisheries, with lobsters and scallops alone averaging just over $1 billion (64%) of total landings revenue from 2015 to 2019 (see Figure 1). Important fisheries for blue crab, squids, groundfish, menhaden, surfclams, ocean quahogs, summer flounder, black sea bass, scup, monkfish, and Jonah crab accounted for an additional $392 million. These fisheries combined with lobster and scallops accounted for an average of 86% of landings revenue.

Figure 1. Inflation adjusted ex-vessel revenue for the top 10 Northeast region fisheries.
Although most Northeast fisheries are prosecuted year-round, there are seasonal differences among fisheries that have implications for the timing and magnitude of potential market disruptions resulting from COVID-19. For many fisheries, 40 to 60% of annual revenue is earned during the months from January to June. Figure 2 plots the 2015-2019 January-Dec baseline monthly average revenue from lobster and species that are regulated by the Regional Councils (New England and Mid-Atlantic) and 2020 Jan-Jun revenues. Calendar year 2020 revenues exceeded baseline revenue during January and February but have been below baseline March to June for a cumulative difference of -$126 million. The majority of the cumulative reduction in 2020 revenues occurred in April and May (70%) of which $79 million was associated with reduced revenue from American lobster ($21 million) and sea scallops ($58 million) (see Figure 3). The reduction in sea scallop revenue was partly due to a 17% reduction in the scallop quota from 2019 levels that took effect at the start of the scallop fishing year on April 1, 2020. Based on 2015-2019 average share of landings for April (10.7%) and May (15.4%) expected 2020 landings for a 51.6 million pound quota would be 5.5 and 7.9 million pounds in April and May respectively. Actual landings were 4.4 million pounds in April and 5.3 million pounds in May for an aggregate reduction of 3.7 million pounds. Note that June scallop landings were 7.3 million pounds, which is nearly equal to what would be expected based on 14% of a 51.6 million pound quota and is similar to the baseline average landings for June. However, June scallop prices were nearly 13% below the 2015-2019 average resulting in 2020 June revenues $8.7 million below baseline. In fact, lower prices have been a general trend for many species throughout the Northeast region. Across nearly all species, month over month prices have been well below baseline 2015-2019 prices (see Figure 4) even as landings have been down. For example, lobster prices were initially 13% above baseline average prices in January but declined by 39.6% to $4.82 per pound in March, 2020 compared to an average of $7.99 per pound during March, 2015-2019. In June 2020 the average price per pound fell to $3.82 from a 2015-2019 June price of $5.29 per pound. Surfclam and ocean quahog prices per bushel were one of the few species where 2020 prices have remained at or slightly above 2015-2019 baseline prices.

**Figure 2.** Ex-vessel monthly revenue for the baseline (2015-2019), CY2020, and the cumulative CY2020 revenue change.

**Figure 3.** CY2020 monthly revenue minus the baseline monthly average monthly revenue.
The general decline in landings and prices, hence revenues has affected the number of federally permitted vessels that have landed fish with a federally permitted dealer in the Northeast region. During 2015-2019, the number of vessels was at its lowest during February (1,314) then increased through July to 2,657 vessels before tapering off throughout the rest of the year. The number of vessels reporting sales through a Northeast region dealer was above the 2015-2019 baseline average in both January and February but began to fall to 15.3% below the baseline in March and continued to run about 25% below the baseline in both April and May (see Figure 5). A survey was conducted to ascertain how commercial harvesters may have been affected by COVID-19. Key findings from that survey are as follows:

**83% OF COMMERCIAL HARVESTERS WERE AFFECTED BY THE COVID-19 PANDEMIC**

- Fishing was the primary source of income for 63% of commercial harvesters. On average, responding commercial harvester operators had owned a vessel for 32 years.
- Compared to business operations from January to June of 2019:
  - 17% had reduced the number of trips.
  - 14% had difficulty finding supplies.
  - 60% experienced lack of markets; low prices; limited access to marinas.
- 78% of commercial harvest operators stopped fishing for some period of time.
  - 21% stopped fishing for less than 1 month.
  - 48% stopped fishing for 1 to 3 months.
  - 11% stopped fishing for more than 3 months.
  - 15% had stopped fishing indefinitely with plans to resume.
  - Less than 1% had gone out of business.
- On average, responding commercial harvester operators are operating at 50% of trips compared to June/July of 2019.
- 76% of responding commercial harvester operators had not reduced the number of employees.
- 91% of responding commercial harvester operators had reduced revenue, 3% had increased revenue.
  - Average reduction in revenue was 51%.
  - Average increase in revenue was 73%.
The top three COVID-19 pandemic factors having the largest impact on the business were:

- Instructed not to fish by dealer/processor (30%).
- Low prices for fish (30%).
- Lack of markets or buyers (8%).

Seafood Dealers/Processors

During 2015-2019 an average 640 federally permitted seafood dealers reported purchase of fish and/or shellfish from a fishing vessel in the Northeast Region. Although some seafood products that are primarily exported have a high volume of exports (e.g., lobster and monkfish), much of the Northeast region’s seafood product is consumed domestically. There are a mix of species that are primarily sold fresh to restaurants with limited processing, and these had sizable price and revenue declines due to closures of restaurants. Changes in seafood consumption habits have shifted to frozen shelf-stable products and value added processing to meet increased demand for preparation at home, which has been noted as a significant change in seafood consumption from away-from-home to at-home consumption. The changes in seafood wholesale and retail markets have resulted in a decline in the number of federally permitted dealers that have purchased seafood by a month-over-month average of nearly 11% from January to June 2020 compared to 2015-2019 baseline January to June monthly average (see Figure 6).

NOAA Fisheries conducted a survey of seafood dealers to ascertain the impacts of the COVID-19 pandemic on business operations over the January to June, 2020 period. Key findings from that survey are as follows:

SEAFOOD DEALER/PROCESSORS — 91% OF RESPONDENTS WERE IMPACTED

- Most common impacts were:
  - Reduced operations or business hours (35%).
  - Reduced sales to restaurants, retail, or grocery stores (35%).
- 35% of dealer/processors closed their business operations for some period of time.
  - 29% were closed for less than 1 month.
  - 48% were closed for 1 to 3 months.
  - 6% were closed for more than 3 months.
  - 16% have closed indefinitely with plans to reopen.
- On average, responding dealer/processors were operating at 58% of business activity compared to June/July of 2019.
- Average number of on-site employees was 15. 37% of businesses had reduced the number of on-site employees by an average of 3 people. By contrast, 10% of businesses increased the number of employees by an average of 10 people.
- 85% of dealer/processors reported reduced sales since January 2020 while 8% reported increased sales.
  - Of those having increased sales, revenues increased an average of 15%.
  - Of those with reduced sales, revenues decreased by an average of 44%.
The top three COVID-19 pandemic factors having the largest impact on the business were:

- Dealer/processors listed low seafood prices (29%).
- Loss of markets or buyers (19%).
- Loss of employees (12%).

Recreational Fishing — For-Hire

The recreational for-hire sector in the Northeast region includes a range of services from trips that carry six or fewer passengers that may focus on large game (e.g., tunas or sharks) or small game (e.g., bluefish or striped bass), to operations that carry a large number of anglers that focus on bottom fishing for species such as groundfish, black sea bass, scup, and summer flounder. During 2015 to 2019 for-hire operators in the New England and Mid-Atlantic regions combined collected passenger fees averaging $123.5 million (2020 $) providing recreational fishing services on an average of 1.2 million angler trips. Of these angler trips 888 thousand (73%) were taken in Mid-Atlantic states from NY to VA and 315 thousand angler trips were taken in the New England region. Demand for party/charter services is seasonal with the majority of trips taken from May to August in both New England (84%) and Mid-Atlantic MRIP regions (74%) although the season is longer in the Mid-Atlantic (see Figure 7).

Given the close proximity within which for-hire recreational fishing occurs and guidance for social distancing had a large effect on angler trips as restrictions on gathering and closures of non-essential business were implemented in New England and Mid-Atlantic states particularly during March and lasting through much of May and into June for some states. The timing and relative severity of the restrictions on gatherings is measured as an index rating from 0 to 4 where 0 is no restrictions at all and 4 would be limitations of 5 to 10 or fewer (see Figure 8). With the exception of VA with an index value of 3, all other states were at a 2; allowing gatherings ranging from 50 to 250. By the end of Match Maine

Figure 7. Average number of for-hire angler trips by wave for New England and Mid-Atlantic MRIP regions for a 2015 to 2019 baseline.

Figure 8. Gathering Restriction Index for March 1, 2020 and Index Value on the last day of the month for March to June, 2020.

Figure 9. Number of for-hire angler trips taken during 2020 wave 2 and wave 3 compared to the baseline average (2015-2019).
and Virginia were at a 3 but all other states had implemented much more restrictive limits on gathering. In most states these limits remained in place during April and May with easing of restrictions in many states by the end of June.

Even though statewide restrictions may not necessarily apply to for-hire businesses specifically they may have a dampening impact on the demand for party/charter fishing trips. During wave 2 (March and April) when limits on gatherings were most restrictive the number of for-hire angler trips in the New England and Mid-Atlantic regions combined fell from a 2015-2019 baseline average of about 26.7 thousand to 714. (see Figure 9). With some easing of the restrictions on gatherings the number of for-hire angler trips during wave 3 (May and June) increased to 212 thousand but was still 35% lower than the baseline average of 327.5 thousand angler trips.

To obtain more information on impacts on the for-hire sector NOAA Fisheries conducted a survey of for-hire operators in the New England and Mid-Atlantic regions to get their perspectives on the impact of the response to COVID-19 has had on their business over the January to June, 2020 period compared to their business over the same period from 2019. Key for-hire interview findings include:

**91% OF PARTY/CHARTER OPERATORS WERE AFFECTED BY THE COVID-19 PANDEMIC**

- For 35% of responding fishing was their primary source of income.

- Compared to business operations from January to June of 2019:
  - 45% had reduced the number of trips.

13% had difficulty finding supplies.
- 6% had difficulty obtaining bait.
- 87% of responding party/charter operators stopped fishing for some period of time.
  - 9% stopped fishing for less than 1 month.
  - 63% stopped fishing for 1 to 3 months.
  - 11% stopped fishing for more than 3 months.
  - 16% had stopped fishing indefinitely with plans to resume.
  - 2% went out of business.
- On average party/charter operators are operating at 42% compared to June/July of 2019.
- 75% of responding party/charter operators had not reduced the number of employees.
- 87% of responding party/charter operators had reduced revenue.
  - Average reduction in revenue was 58%.

**Endnotes**

1 Fisheries that take place exclusively in State waters, or nearly so, were excluded from Figure 2 because available data were incomplete.

2 All for-hire data were based on Marine Recreational Information Program (MRIP) regions, which includes North Carolina in the South Atlantic region. For this reason, trends and impacts on the for-hire sector in North Carolina are reported in the Southeast Region section of this report.