



Longfin Squid Fishery Information Document

April 2022

This Fishery Information Document provides a brief overview of the biology, stock condition, management system, and fishery performance for longfin squid (“longfin” hereafter, formerly known as “Loligo”), with an emphasis on 2021. Data sources for Fishery Information Documents include unpublished National Marine Fisheries Service (NMFS) survey, dealer, vessel trip report (VTR), permit, and Marine Recreational Information Program (MRIP) databases and should be considered preliminary. For more resources, including previous Fishery Information Documents, please visit <http://www.mafmc.org/msb>.

Key Facts

- 2021 landings, revenues, and average price for longfin squid were up in 2021 compared to 2020. Landings have generally been variable and well below the quota in recent years.
- 2022 landings are off to a moderate start – about double last year at this time but are still unlikely to achieve half of the 2022 Trimester 1 quota.
- Longfin had a management track assessment in 2020. Based on 2019 data the fishery was not overfished. Overfishing reference points are not available.
- Considerable variability is expected in abundance, availability, and landings for any squid fishery.

Basic Biology

Longfin squid is a neritic (from the shore to the edge of the continental shelf), semi-pelagic schooling cephalopod species primarily distributed between Georges Bank and Cape Hatteras, NC. The squid, and the fishery, generally occur offshore in the winter and inshore during the summer, with mixing and migrations from one to the other in spring and fall. Spawning/recruitment occurs year-round with seasonal peaks in cohorts. The average lifespan of a cohort is about six months. Individuals hatched inshore during the summer are taken in the winter offshore fishery and those hatched in the winter are taken in the inshore summer fishery. Age data indicate that NEFSC spring surveys (March-April) capture longfin squid that were hatched during the previous six months, in the fall, and those caught in the NEFSC fall surveys (September-October) were hatched during the previous spring. Longfin squid attach egg masses to the substrate and fixed objects. Fishing and spawning mortality occur concurrently inshore during late spring through fall. The locations of spawning sites offshore at other times of the year are not well understood. Additional life history information is detailed in the EFH document for the species, located at: <http://www.nefsc.noaa.gov/nefsc/habitat/efh/>.

Status of the Stock

Based on the last management track assessment, the status of longfin squid in 2019 was not overfished but there are no overfishing reference points available (available at https://apps-nefsc.fisheries.noaa.gov/saw/sasi/sasi_report_options.php). See Figure 1 for trends in biomass from the last assessment. We hope to get an update of Figure 1 before May 2022. The assessment also presented unaveraged trends based on the spring and fall surveys separately representing two dominant cohorts, and solicited input from the reviewers about switching to considering the two dominant cohorts separately. The reviewers supported moving forward with such an approach. Because the median fall biomass is about five times bigger than the median spring biomass, there could be considerable management implications if the surveys are ultimately used to manage two cohorts separately (e.g. consideration of either changes to trimester allotments or changes to the overall seasonal management approach might become warranted).

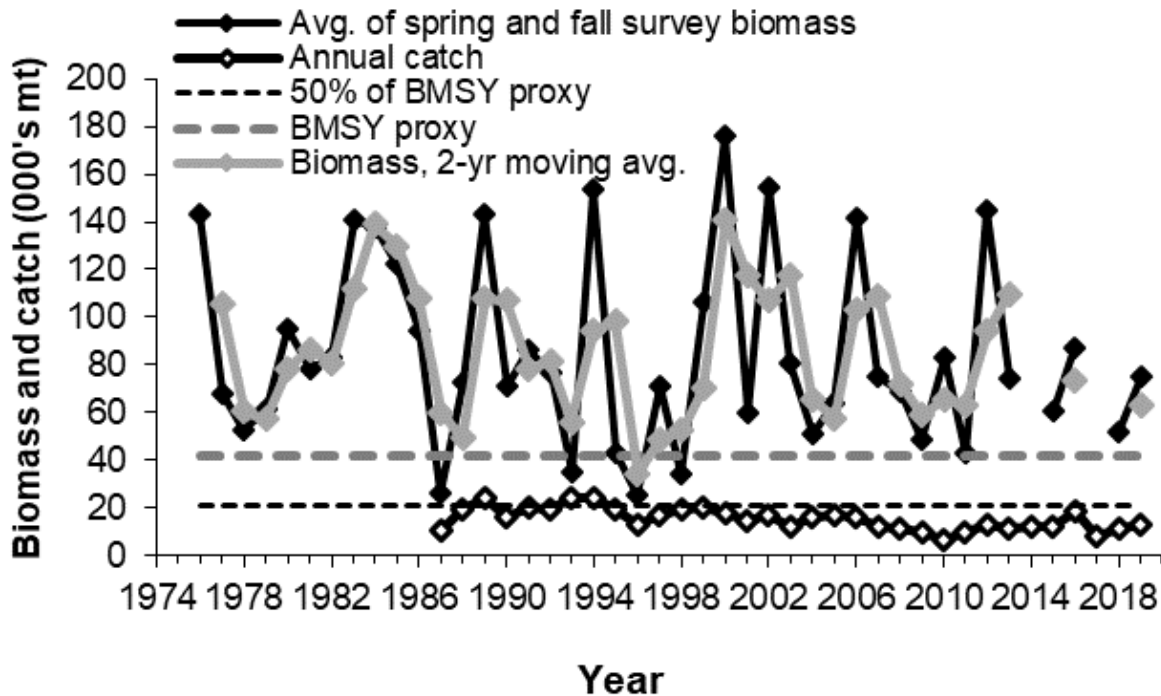


Figure 1. Annualized biomass estimates (annual averages of the NEFSC spring and fall survey biomass estimates in mt) of longfin in relation to the existing BMSY proxy (42,205 mt) and annual catches during 1987-2019 (when fishing was solely conducted by the USA fleet). The grey line represents the annualized biomass two-year moving averages which are used to determine stock status. Some years near the end are missing due to missing survey data.

Management System and Fishery Performance

Management

The Council established management of longfin in 1978 and the management unit includes all federal East Coast waters.

Access is limited with several moratorium permit categories. The quota is divided into three, 4-month Trimesters (T) - 43% (T1 Jan-Apr), 17% (T2 May-Aug), and 40% (T3 Sept-Dec). Unused quota can roll over into later trimesters within a year depending on the amount of longfin landed. Underages from T1 that are greater than 25% are reallocated to Trimesters 2 and 3 (split equally between both trimesters) of the same year. However, the T2 quota may only be increased by 50% via rollover and the remaining portion of the underage is reallocated to T3. Any underages for T1 that are less than 25% of the T1 quota are applied only to T3 of the same year. Any overages for T1 and T2 are subtracted from T3 of the same year as needed.

The 2022 longfin squid ABC is 23,400 MT, with a commercial quota of 22,932 MT. The 2023 quota is projected to be the same.

Recreational catch of longfin is believed to be negligible relative to commercial catch. There are no recreational regulations except for party/charter vessel permits and VTR reporting. MRIP does not collect information on invertebrates, but social media indicates a recreational fishery (private and for-hire) does occur.

Commercial Fishery

Figure 2 below from the last assessment describes longfin landings 1963-2019. We hope to get an update of Figure 2 before May 2022. Figures 3-4 describe domestic landings, ex-vessel revenues (2021 dollars), and prices (2021 dollars) since 1996. Figure 5 illustrates preliminary landings throughout the year for 2020 and 2021. Figure 6 illustrates preliminary landings for Trimester 1 for 2021 and 2022. The Gross Domestic Product Implicit Price Deflator was used to report revenues/prices as “2021 dollars.”

Table 1 describes 2021 longfin landings by state. Table 2 describes 2020 and 2021 longfin landings by NMFS Statistical Areas. Almost all landings that have gear identified are bottom trawl.

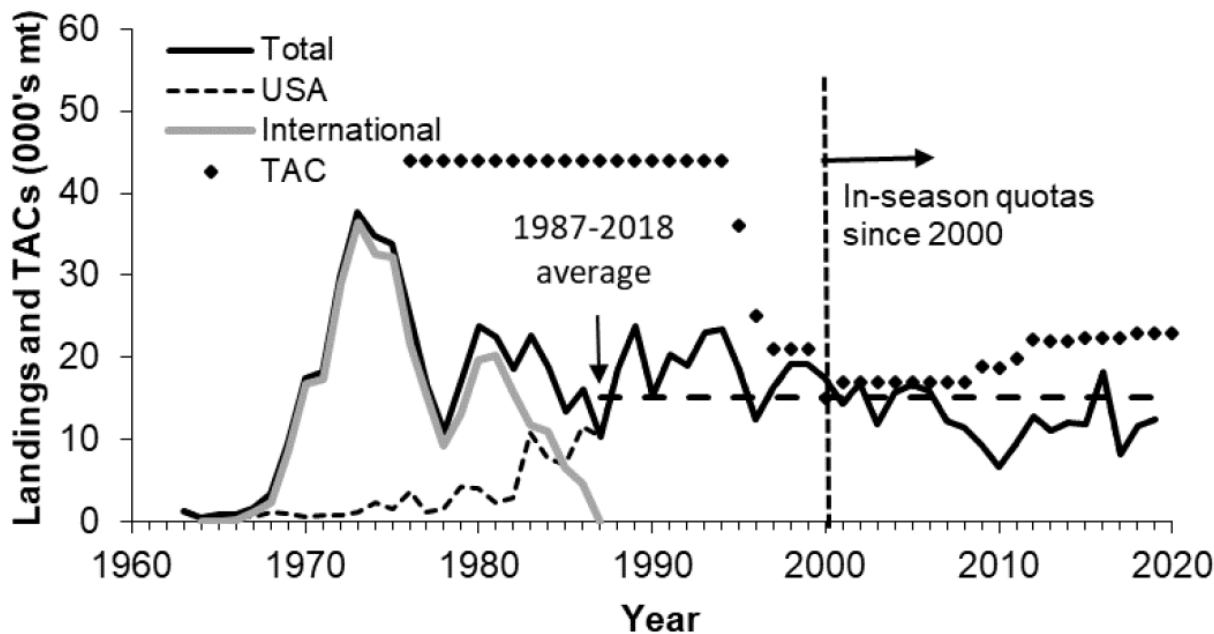


Figure 2. Landings (000s mt) of *Doryteuthis pealeii*, by USA and international fleets, on the Northeast USA continental shelf during 1963-2019 and annual TACs during 1974-2020. In-season quotas were quarterly-based during 2001-2006 and trimester-based during 2000 and 2007-current.

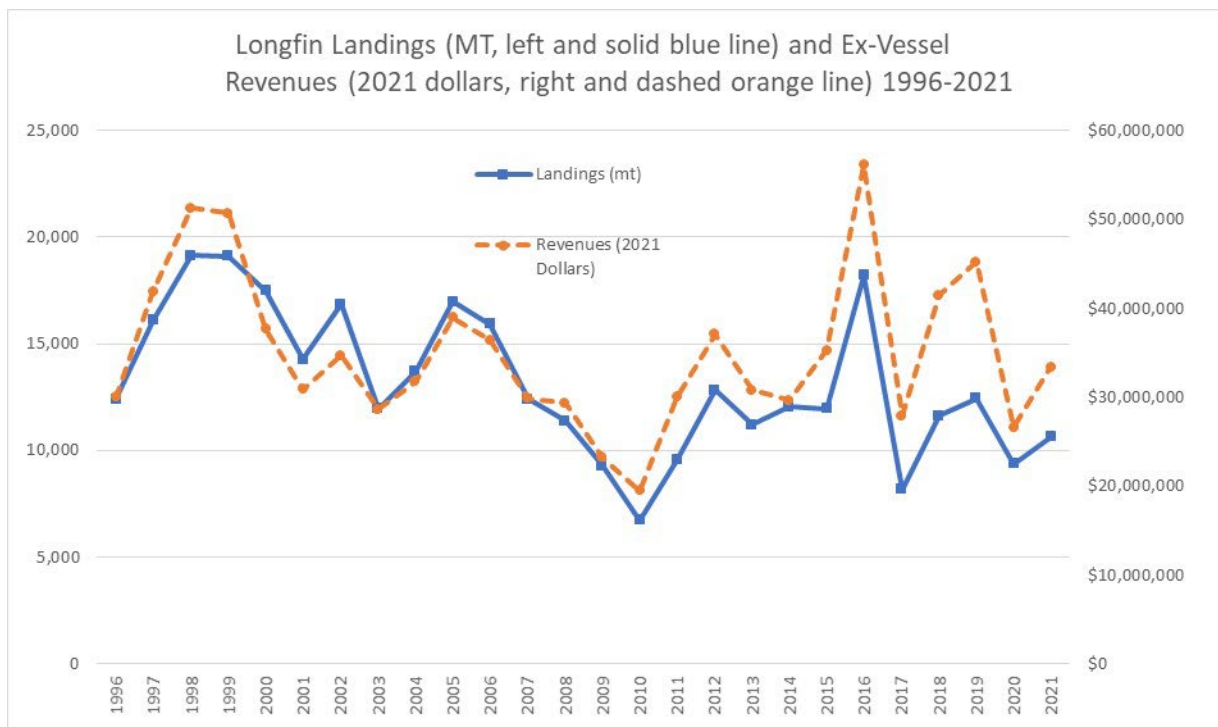


Figure 3. U.S. Longfin Landings and Longfin Ex-Vessel Values 1996-2021. Source: NMFS unpublished dealer data.

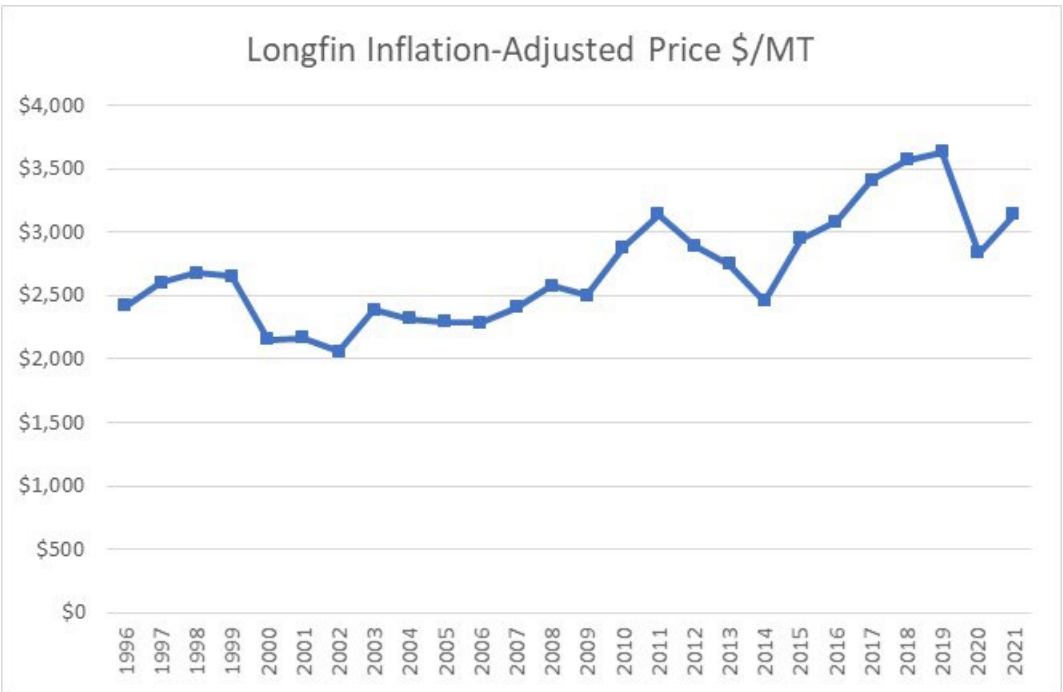


Figure 4. Ex-Vessel Longfin Prices 1996-2021 Adjusted to 2021 Dollars Source: NMFS unpublished dealer data.

THIS SPACE INTENTIONALLY LEFT BLANK

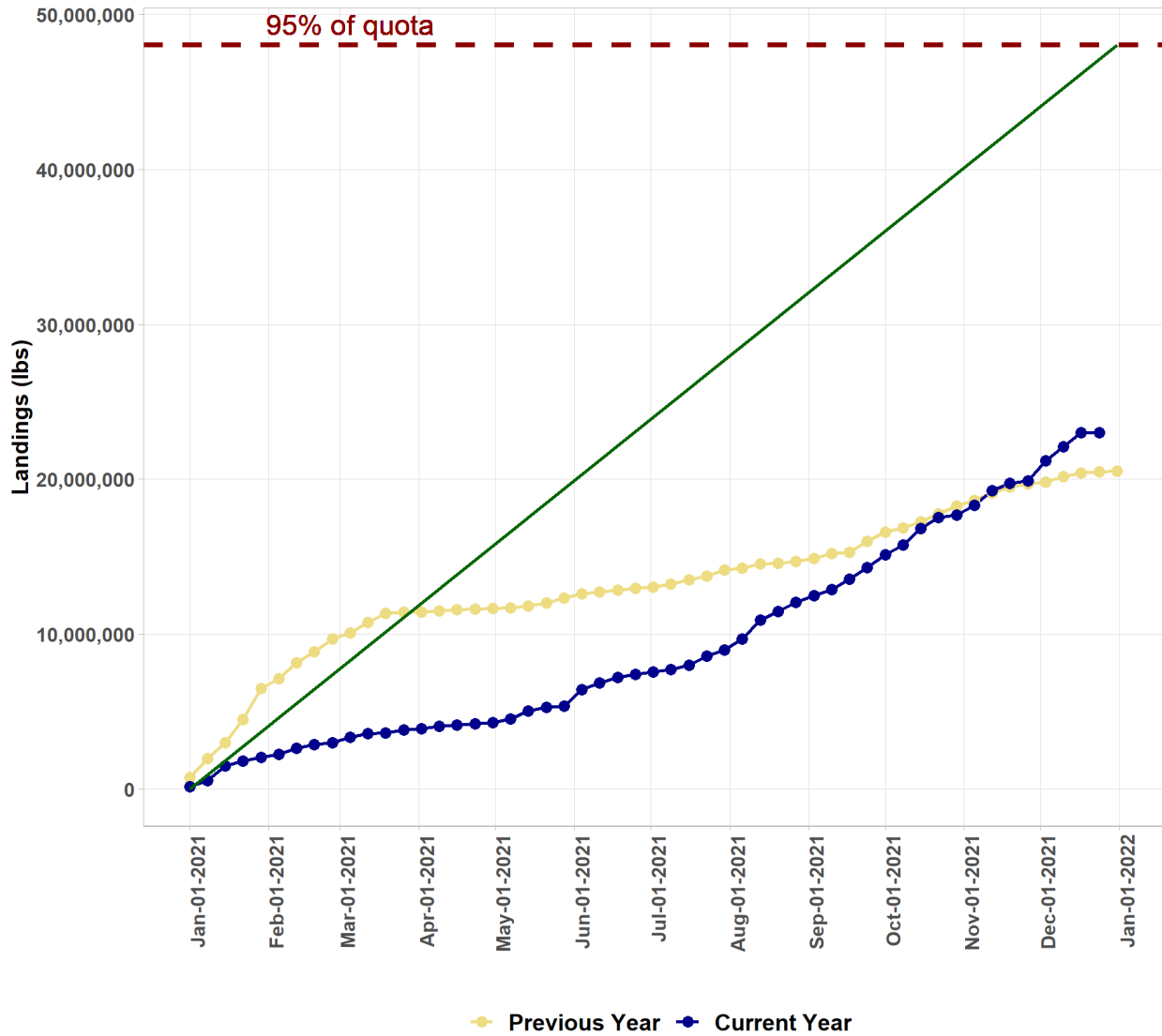


Figure 5. U.S. Preliminary Longfin landings; 2021 in blue, 2020 in yellow-orange. Source: <https://www.fisheries.noaa.gov/new-england-mid-atlantic/commercial-fishing/quota-monitoring-greater-atlantic-region>.

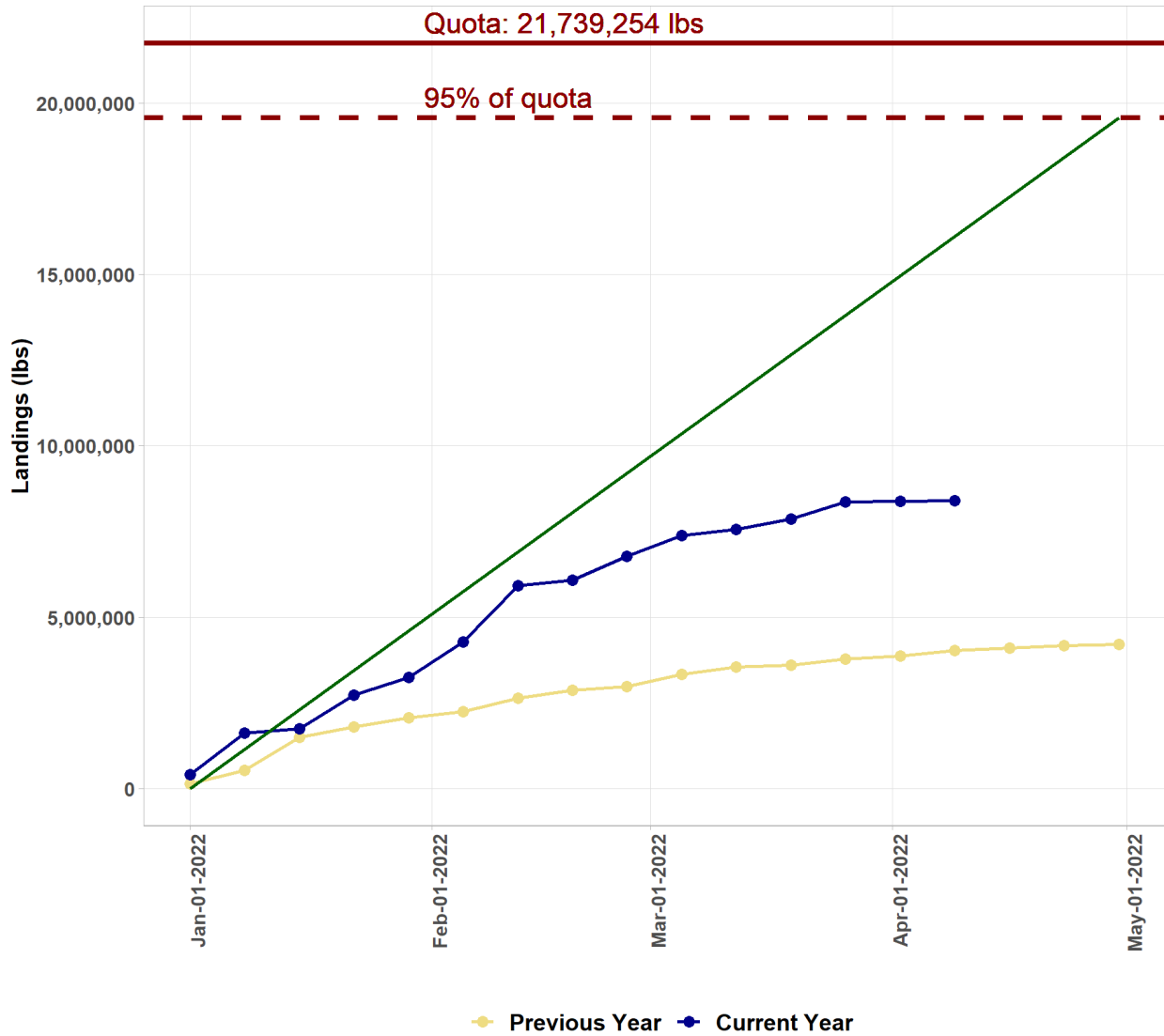


Figure 6. U.S. Preliminary Longfin landings; 2022 Trimester 1 in blue (through 4/14/22), 2021 Trimester 1 in yellow-orange. Source: <https://www.fisheries.noaa.gov/new-england-mid-atlantic/commercial-fishing/quota-monitoring-greater-atlantic-region>.

Table 1. Commercial Longfin landings (live wt) by state in 2021. Source: NMFS unpublished dealer data.

State	Metric Tons
RI	6,682
NY	2,111
MA	772
NJ	661
CT	356
Other	68
Total	10,650

Table 2. Commercial longfin landings by statistical area in 2020 and 2021. Source: NMFS unpublished VTR data.

2020		2021	
Stat Area	Metric_Tons	Stat Area	Metric_Tons
622	1,784	537	2,030
616	1,770	613	1,983
613	1,038	616	1,660
626	777	622	1,157
525	748	626	462
537	534	526	316
612	396	539	309
526	323	538	288
611	227	611	260
562	216	525	191
538	206	627	131
539	197	562	123
623	191	632	114
632	76	167	100
615	57	615	69
627	53	612	65
Other	219	166	62
Total	8,812	623	51
		Other	165
		Total	9,535

Note: Expected to be lower than dealer database due to state landings.

THIS IS THE END OF THE DOCUMENT