



Longfin Squid Fishery Information Document

July 2020

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 2019. Data sources for Fishery Information Documents include unpublished National Marine Fisheries Service (NMFS) survey, dealer, vessel trip report (VTR), permit, and Marine Recreational Information Program (MRIP) databases and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

- Longfin had a management track assessment in 2020. Based on 2019 data the fishery was not overfished. Overfishing reference points are not available.
- Longfin landings were 7% higher in 2019 compared to 2018 but still substantially below the quota; there were no seasonal trimester closures in 2018.
- Substantial variability is to be expected with squid species.

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 a recent management track assessment, the status of longfin squid is 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 assessment. 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 moving to considering the two dominant cohorts separately. The reviewers supported moving forward with such an approach - Since 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.

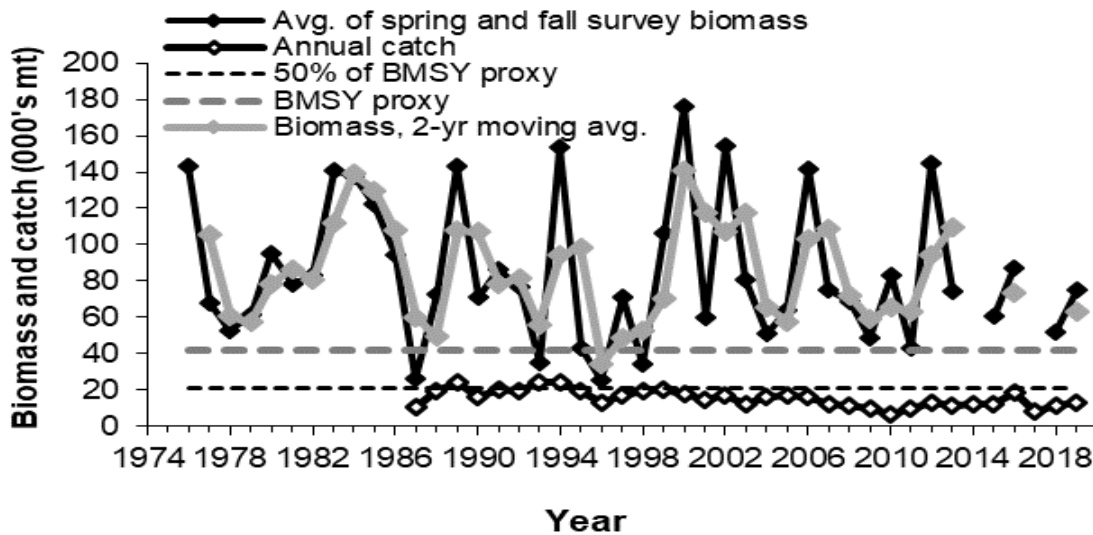


Figure 1. Annualized biomass estimates (annual averages of the NEFSC spring and fall survey biomass estimates in mt) of longfin in relation to the existing BMSY proxy (42,205 mt) and annual catches during 1987-2019 (when fishing was solely conducted by the USA fleet). The grey line represents the annualized 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 - 43% (Jan-Apr), 17% (May-Aug), and 40% (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 2018-2020 longfin squid ABC is 23,400 MT, with a commercial quota of 22,932 MT.

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 reporting.

Commercial Fishery

Figure 2 describes longfin landings 1963-2019. Figures 3-4 describe domestic landings, ex-vessel revenues (nominal), and prices (inflation adjusted) since 1996. Figures 5-6 illustrate preliminary landings throughout the year for 2018-2020.

Table 1 describes 2019 longfin landings by state, and Table 2 describes 2019 longfin landings by gear type. Table 3 describes 2019 longfin landings by NMFS Statistical Areas.

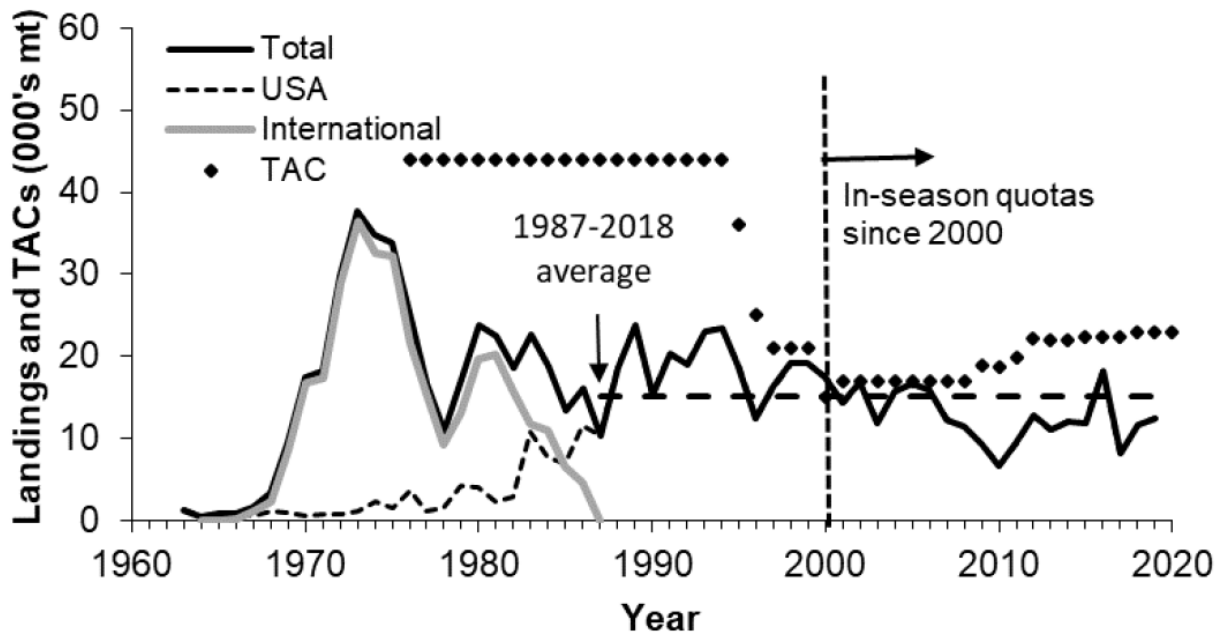


Figure 2. Landings (000s mt) of *Doryteuthis pealeii*, by USA and international fleets, on the Northeast USA continental shelf during 1963-2019 and annual TACs during 1974-2020. In-season quotas were quarterly-based during 2001-2006 and trimester-based during 2000 and 2007-2019.

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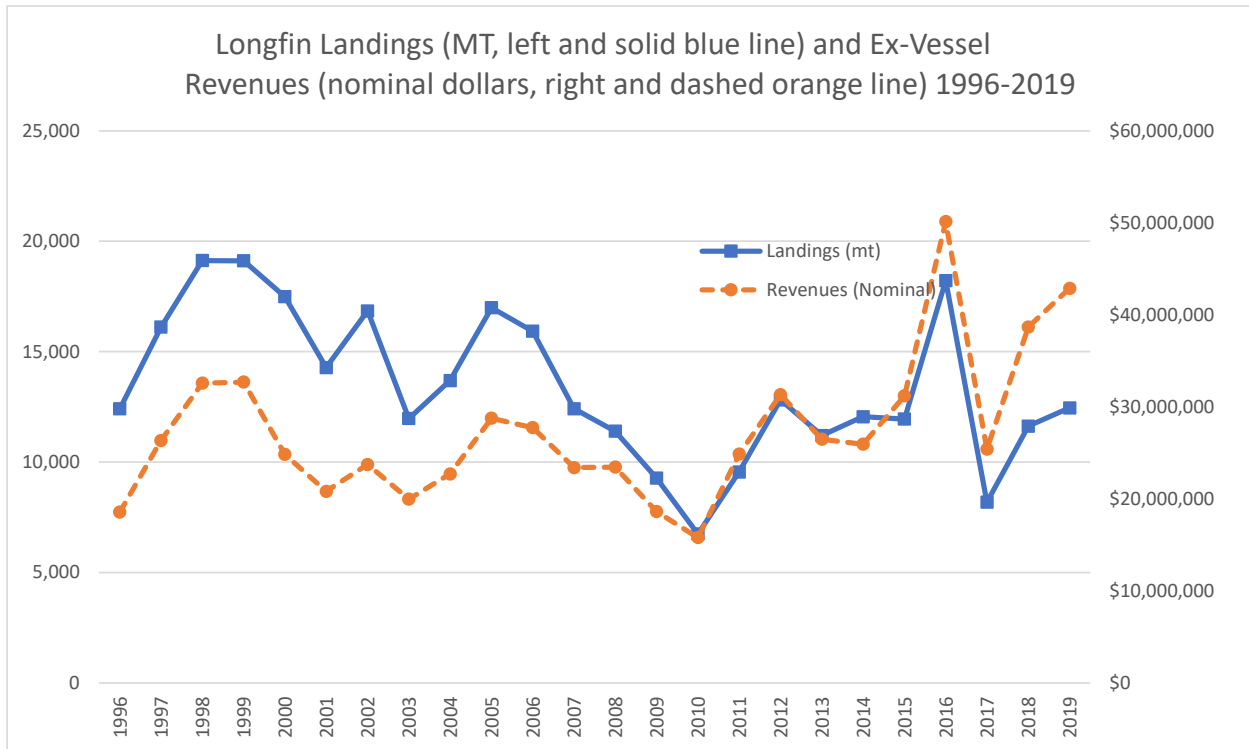


Figure 3. U.S. Longfin Landings and Nominal Longfin Ex-Vessel Values 1996-2019. Source: NMFS unpublished dealer data.

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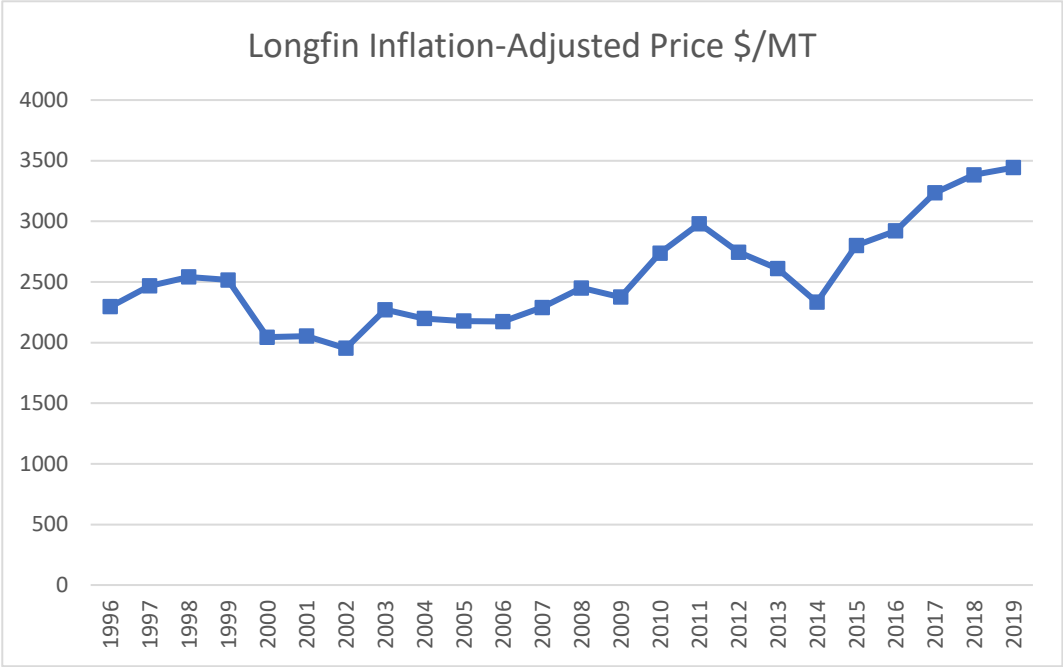


Figure 4. Ex-Vessel Longfin Prices 1996-2019 Adjusted to 2019 Dollars Source: NMFS unpublished dealer data.

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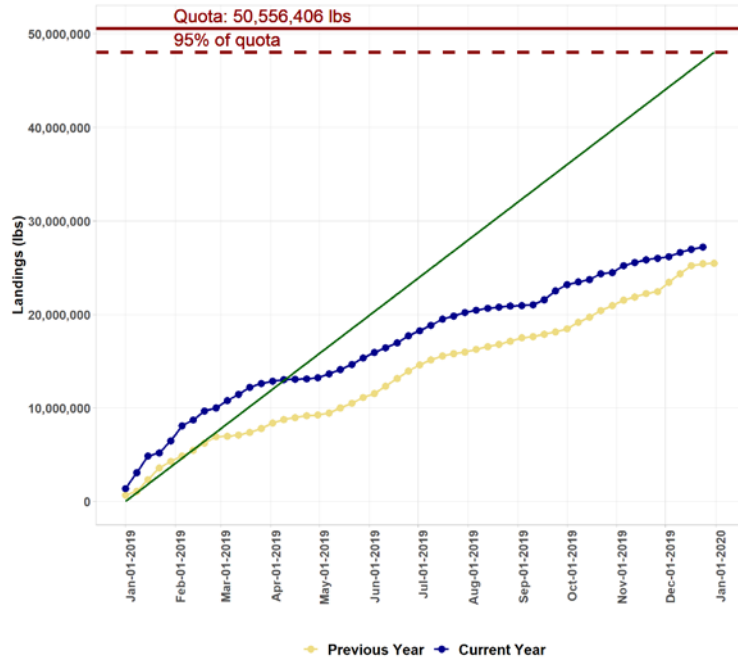


Figure 5. U.S. Preliminary Longfin landings; 2019 in blue, 2018 in yellow-orange. Source: <https://www.fisheries.noaa.gov/new-england-mid-atlantic/commercial-fishing/quota-monitoring-greater-atlantic-region>.

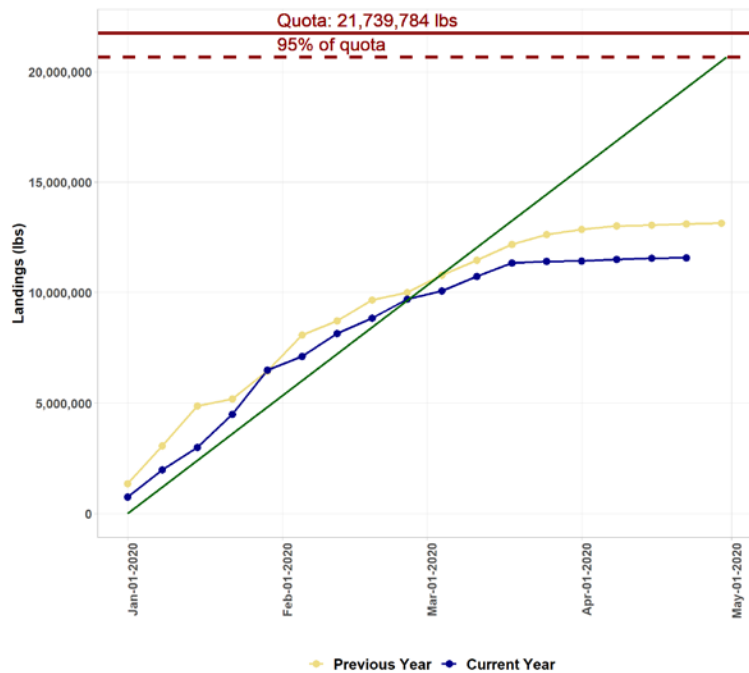


Figure 6. U.S. Preliminary Longfin landings; 2020 Trimester 1 in blue, 2019 Trimester 1 in yellow-orange. Source: <https://www.fisheries.noaa.gov/new-england-mid-atlantic/commercial-fishing/quota-monitoring-greater-atlantic-region>.

Table 1. Commercial Longfin landings (live weight) by state in 2019. Source: NMFS unpublished dealer data.

State	Metric_Tons
RI	6,040
NJ	2,203
NY	1,828
MA	1,188
CT	980
Other/Unknown	216
Total	12,457

Table 2. Commercial Longfin landings (live weight) by gear in 2019. Source: NMFS unpublished dealer data.

GEAR	Landings (MT)
TRAWL,OTTER,BOTTOM,FISH	10,582
UNKNOWN	1,290
TRAWL,OTTER,BOTTOM,OTHER	380
DREDGE, OTHER	187
Other	19
Total	12,457

Table 3. Commercial longfin landings by statistical area in 2019. Source: NMFS unpublished VTR data.

Stat Area	Metric_Tons
616	3,182
622	2,502
537	1,616
613	771
626	747
538	552
623	493
612	316
562	196
611	178
539	177
627	141
525	106
Other	600
Total	11,577

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