Longfin Squid Fishery Information Document

April 2019

This Fishery Information Document provides a brief overview of the biology, stock condition, management system, and fishery performance for longfin squid ('longfin') with an emphasis on 2018. Data sources for Fishery Information Documents are generally from unpublished National Marine Fisheries Service (NMFS) survey, dealer, vessel trip report (VTR), permit, and Marine Recreational Information Program (MRIP) databases and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 landings were 42% higher in 2018 compared to 2017 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 the biomass reference point from a 2010 SAW-SARC benchmark assessment, and an assessment update considering data through 2016 (available at http://www.mafmc.org/ssc-meetings/2017/may-17-18), the longfin squid stock is not overfished and in 2016 was at 174% of

the biomass target. In the assessment, overfishing status was not determined because no overfishing threshold was recommended, though the assessment described the stock as "lightly exploited." The assessment documents are available at: http://www.nefsc.noaa.gov/saw/reports.html.

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 that were recently modified – see https://www.greateratlantic.fisheries.noaa.gov/nr/2018/December/Longfin%20Squid_Butterfish_Moratoriam.html for details. 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 quota was previously recommended by the Council to be 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 1 describes longfin catch 1963-2017 and highlights the early foreign fishery landings before foreign fishing was phased out. Figures 2-4 describe domestic landings, revenues, and prices since 1982. Figure 5 illustrates preliminary 2017 (yellow-orange) and 2018 (blue) landings through the year. Figure 6 illustrates preliminary 2018 (yellow-orange) and 2019 (blue) Trimester 1 landings.

Table 1 describes 2018 longfin landings by state, and Table 2 describes 2018 longfin landings by gear type.

Figure 7 describes the location of recent longfin landings 2013-2016. Table 3 provides preliminary information on longfin landings by statistical area for 2018.

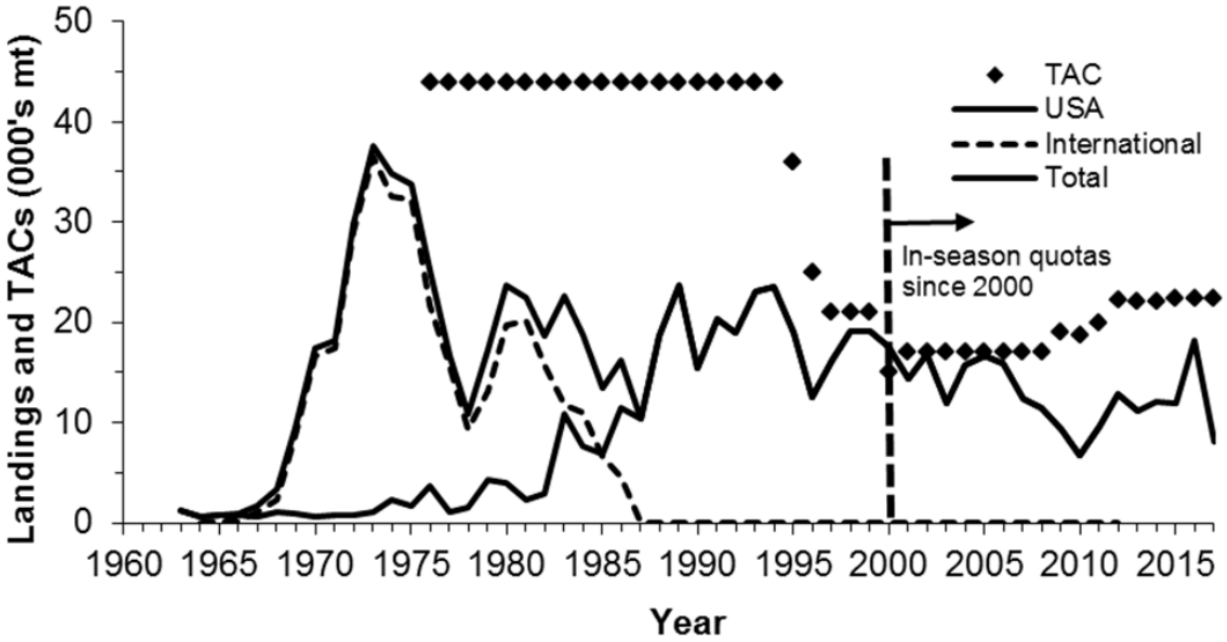

Figure 1. Total annual longfin landings (mt) by the U.S. and other countries for 1963-2017. Source: NEFSC Longfin Data update, available at http://www.mafmc.org/ssc-meetings/2018/may-8-9.

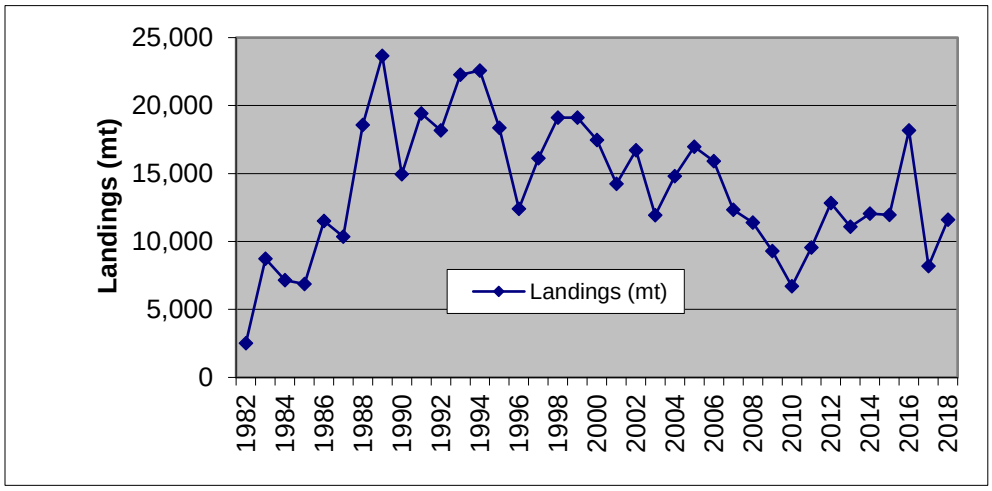

Figure 2. US longfin landings 1982-2018. Source: NMFS unpublished dealer data.

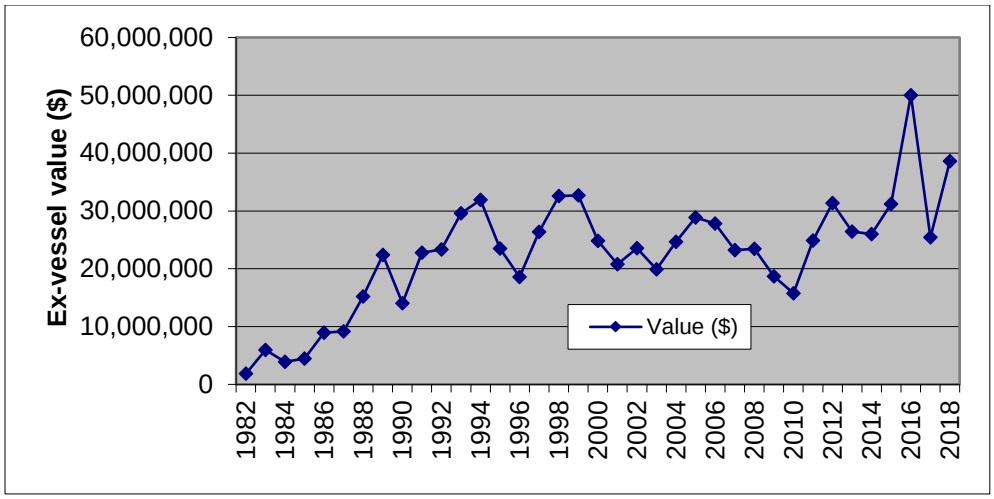

Figure 3. US Longfin landings nominal ex-vessel revenues 1982-2018. Source: NMFS unpublished dealer data.

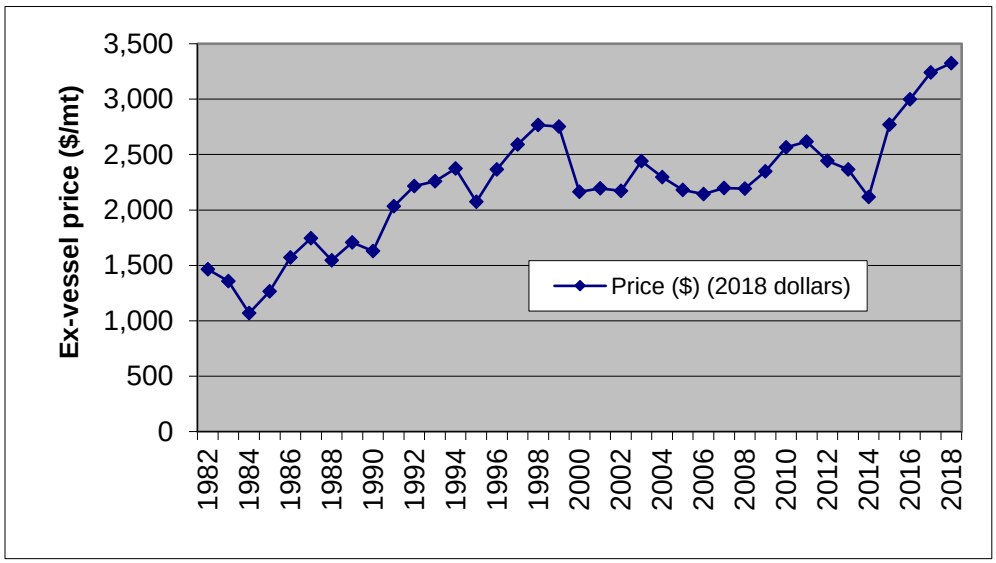

Figure 4. US Longfin landings ex-vessel prices 1982-2018 (adjusted to 2018 "real" dollars using the producer price index (PPI), Federal Reserve data). Source: NMFS unpublished dealer data.

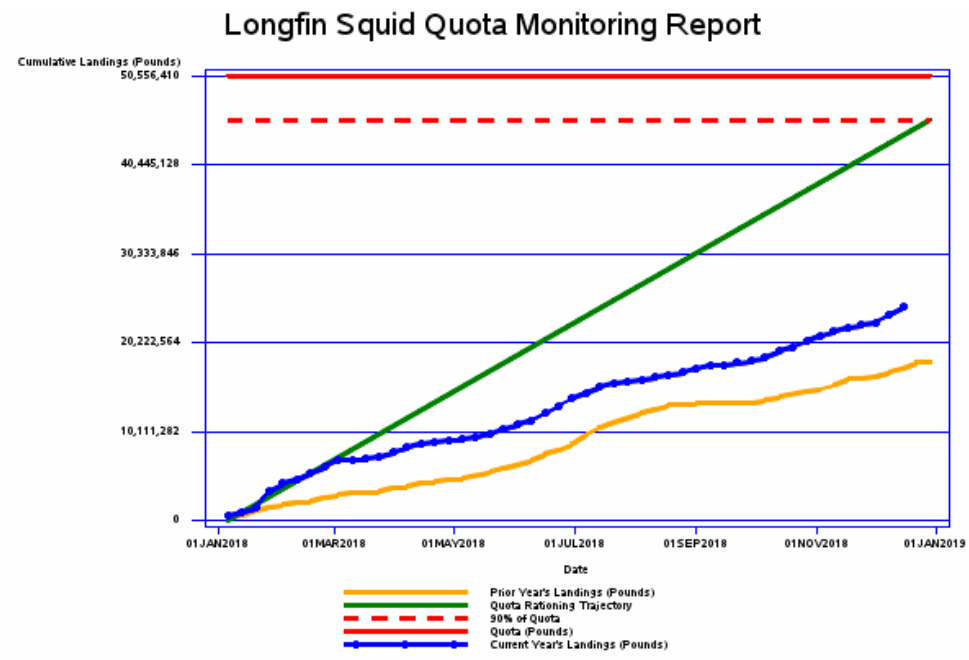

Figure 5. US Preliminary Longfin landings; 2018 in blue, 2017 in yellow-orange. Source: https://www.greateratlantic.fisheries.noaa.gov/aps/monitoring/atlanticLongfin.html.

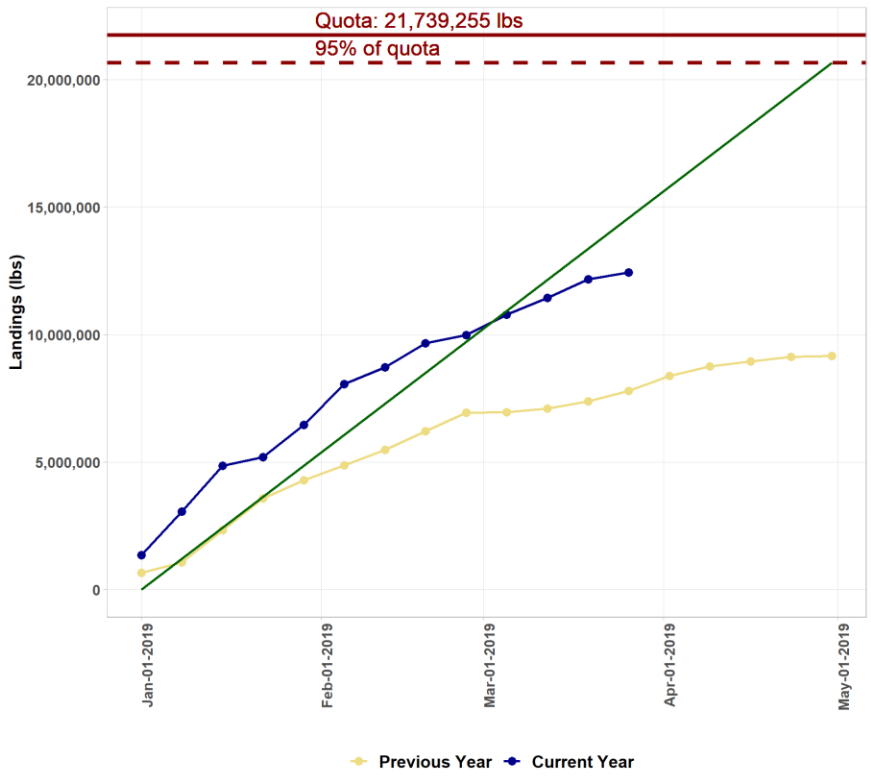

Figure 6. US Preliminary Trimester 1 Longfin landings; 2019 in blue, 2018 in yellow-orange. Source: https://www.greateratlantic.fisheries.noaa.gov/aps/monitoring/atlanticLongfin.html.

Table 1. Commercial Longfin landings (live weight) by state in 2018. Source: NMFS unpublished dealer data.

State	Metric_Tons	Percent
RI	6,371	55%
NY	2,223	19%
NJ	1,585	14%
MA	730	6%
CT	621	5%
Other	80	1%

Table 2. Commercial Longfin landings (live weight) by gear in 2018. Source: NMFS unpublished dealer data.

GEAR	Metric Tons 2018	Percent
TRAWL,OTTER,BOTTOM,FISH	10,061	87%
Other/Unknown	1,549	13%

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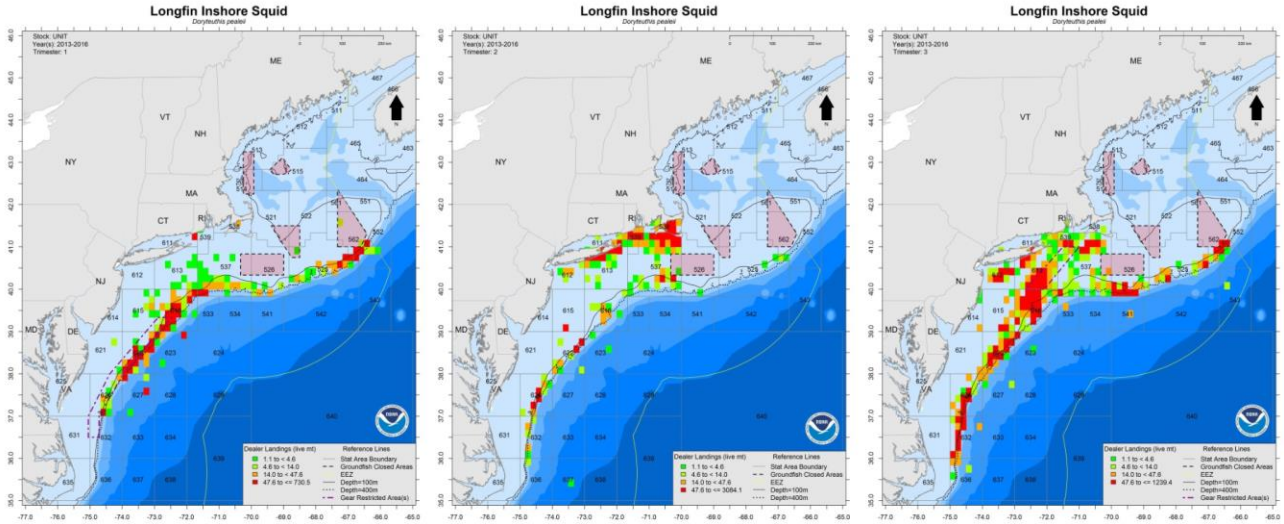

Figure 7. Distribution of longfin landings (mt) from bottom trawl trips with longfin landings greater than 2,500 pounds by trimester and ten-minute square, during 2013- 2016.

Table 3. Commercial Longfin landings by statistical area in 2018. Source: NMFS unpublished VTR data.

Stat Area	Metric Tons 2018	Percent
616	3,240	29%
622	2,605	24%
613	1,069	10%
537	975	9%
612	651	6%
538	522	5%
539	409	4%
611	355	3%
Other	1,237	11%

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