

# *Illex* Fishery Information Document March 2020

This Fishery Information Document provides a brief overview of the biology, stock condition, management system, and fishery performance for *Illex* squid 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 Data sources for Fishery Information Documents include unpublished National Marine Fisheries Service (NMFS) survey, dealer, vessel trip report (VTR), permit, and Marine Recreational Information Program (MRIP) databases and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 <a href="http://www.mafmc.org/msb">http://www.mafmc.org/msb</a>.

#### **Key Facts**

- 2019 was the third banner year in a row for *Illex*, with the quota being harvested on a similar timeline as 2018. 2017-2019 represent the first sequence in the history of the fishery of three consecutive boom *Illex* years.
- Substantial variability is to be expected with any squid species.

## **Basic Biology**

Illex squid is a semi-pelagic/semi-demersal schooling cephalopod species distributed between Newfoundland and the Florida Straits, and lives less than one year. Illex is a semelparous, terminal spawner whereby spawning and death occur within several days of mating. The northern stock component, located north of the USA-Canada border in NAFO Subareas 3 and 4, is assessed annually and is managed by the Northwest Atlantic Fisheries Organization (NAFO), though landings have been low in recent years. The NAFO assessment is not based on recent data. The southern/U.S. stock component is located in NAFO Subareas 5 and 6 between the Gulf of Maine and Cape Hatteras, NC and is managed by the Mid-Atlantic Fishery Management Council (the Council or MAFMC). 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

The status of *Illex* is unknown with respect to being overfished or not, and unknown with respect to experiencing overfishing or not. Results from the NEFSC Trawl surveys are highly variable and without apparent long-term trend. The Council has established a working group (<a href="http://www.mafmc.org/actions/illex-working-group">http://www.mafmc.org/actions/illex-working-group</a>) to investigate if current information

suggests that adjustments to the *Illex* quota are appropriate, and if there are ways to make the quota more responsive to real-time conditions. There is also a benchmark *Illex* assessment planned for 2021. At this time, the outcome of these endeavors is uncertain. Some short-term results of the workgroup will be known by June 2020 and may influence SSC discussions regarding short-term ABCs, but there are also longer-term tasks that may be in progress beyond 2020.

## **Management System and Fishery Performance**

#### Management

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

Access is limited with moratorium permits. Trip limits are triggered when the quota is approached. Incidental permits are limited to 10,000 pounds per trip. Additional summary regulatory information is available at <a href="https://www.fisheries.noaa.gov/new-england-mid-atlantic/resources-fishing/resources-fishing-greater-atlantic-region">https://www.mafmc.org/newsfeed/2020/msb-illex-public-hearing-webinars</a>.

The current quota is 24,825 MT<sup>1</sup>, based on a 26,000 MT Acceptable Biological Catch (ABC) and a 4.52% discard rate (the mean plus one standard deviation of the most recent 10 years of observed discard rates in the last assessment). Recent SBRM discard rates have been similar.

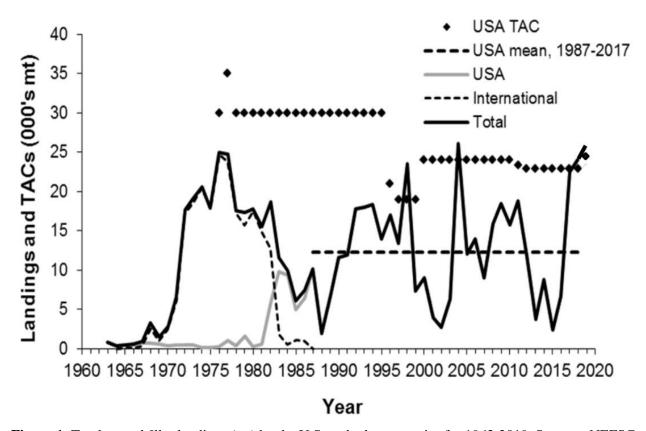
Recreational catch of *Illex* is believed to be negligible. There are no recreational regulations except for party/charter vessel permits and reporting.

#### Commercial Fishery

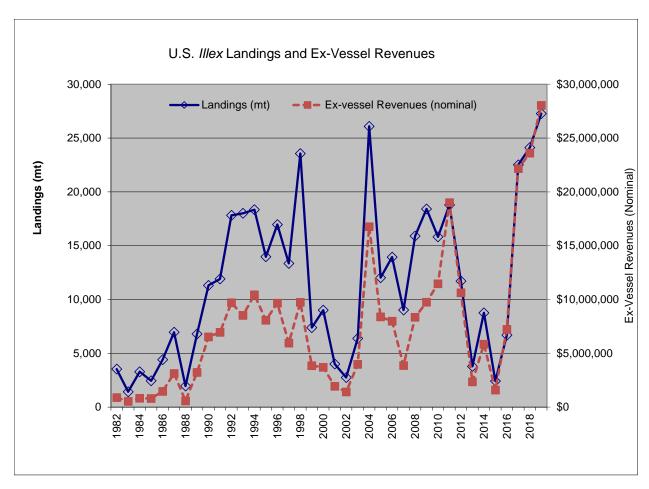
Figure 1 describes *Illex* catch 1963-2019 and highlights the early foreign fishery and then domestication of the fishery. Figures 2-3 describe domestic landings, ex-vessel revenues (nominal), and prices (inflation adjusted) since 1982. Figure 4 illustrates preliminary 2018 (yellow-orange) and 2019 (blue) landings through the year.

Table 1 describes 2019 *Illex* landings by state, and Table 2 describes 2019 *Illex* landings by gear type. Figure 5 describes the location of 2018 *Illex* landings. Table 3 provides preliminary information on *Illex* landings by statistical area for 2019.

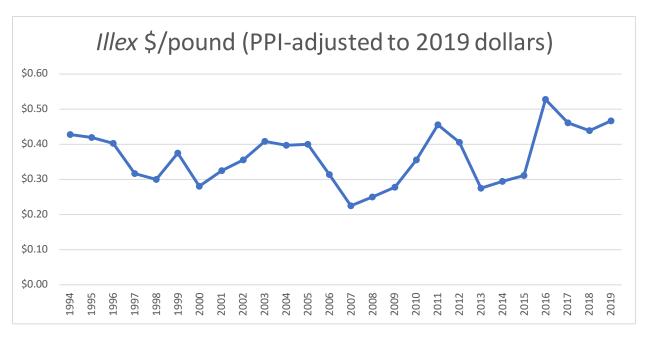
<sup>&</sup>lt;sup>1</sup> 1 metric ton = approximately 2,204.62 pounds



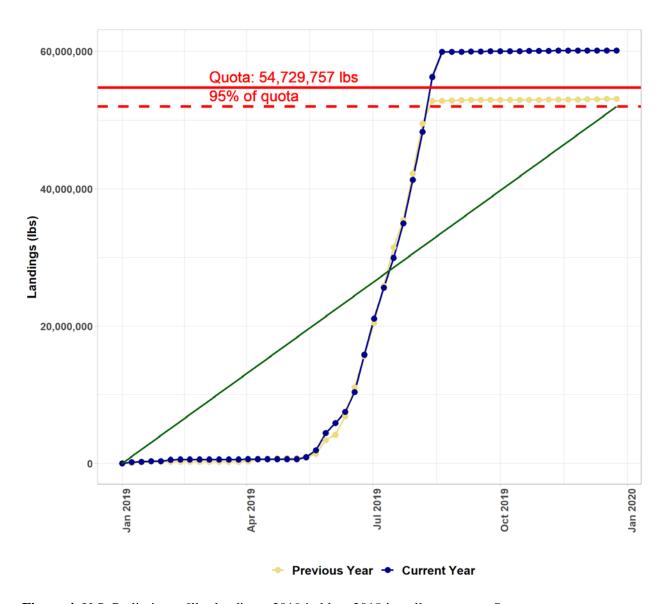
**Figure 1.** Total annual *Illex* landings (mt) by the U.S. and other countries for 1963-2019. Sources: NEFSC *Illex* Data update, available at <a href="http://www.mafmc.org/ssc-meetings/2018/may-8-9">http://www.mafmc.org/ssc-meetings/2018/may-8-9</a> and NMFS unpublished dealer data.



**Figure 2.** U.S. *Illex* Landings and Nominal *Illex* Ex-Vessel Values 1982-2019. Source: NMFS unpublished dealer data.



**Figure 3.** Ex-Vessel *Illex* Prices 1994-2019 Adjusted to 2019 Dollars Based on Producer Price Index (PPI). Source: NMFS unpublished dealer data.



**Figure 4.** U.S. Preliminary *Illex* landings; 2019 in blue, 2018 in yellow-orange. Source: <a href="https://www.fisheries.noaa.gov/new-england-mid-atlantic/commercial-fishing/quota-monitoring-greater-atlantic-region">https://www.fisheries.noaa.gov/new-england-mid-atlantic/commercial-fishing/quota-monitoring-greater-atlantic-region</a>.

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

State	Metric Tons	Percent of Total
NJ	9,910	36%
RI	8,480	31%
MA	8,146	30%
Other	740	3%
Total	27,276	100%

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

GEAR	Metric Tons	Percent
TRAWL,OTTER,BOTTOM,FISH	24,276	89%
TRAWL,OTTER,MIDWATER	1,213	
PAIRED		4%
TRAWL,OTTER,MIDWATER	488	2%
Other/Unknown	1,300	5%
Total	27,276	100%

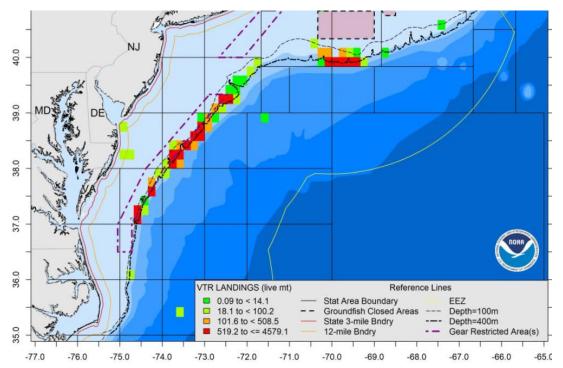


Figure 5. Approximate Primary 2018 *Illex* Catch Locations (from dealer and VTR data)

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

Stat Area	Metric Tons 2019	Percent
622	12,474	47%
526	8,801	33%
537	2,135	8%
525	1,211	5%
616	985	4%
Other	1,161	4%
Total	26,766	100%