

# *Illex* Fishery Information Document April 2021

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 2020. Data sources for Fishery Information Documents include unpublished National Marine Fisheries Service (NMFS) survey, dealer, vessel trip report (VTR), permit, and Marine Recreational Information Program (MRIP) databases and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**

- 2020 was the fourth banner year in a row for *Illex*, with the quota being harvested on a similar timeline as 2019. 2017-2020 represent a unique sequence in the history of the fishery of four consecutive "boom" *Illex* years.
- Prices, and therefore revenues, were down from 2019, and prices are down 26% from 2016.
- 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 and staff has questioned the usefulness of the current NAFO assessment, which is not based on recent data (<a href="https://www.mafmc.org/s/g\_NAFO\_Didden.pdf">https://www.mafmc.org/s/g\_NAFO\_Didden.pdf</a>). 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: <a href="http://www.nefsc.noaa.gov/nefsc/habitat/efh/">http://www.nefsc.noaa.gov/nefsc/habitat/efh/</a>.

#### **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 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 could suggest that adjustments to the *Illex* quota are appropriate, and adjustments upward were made in 2020 based on the SSC's review of the workgroup products (<a href="https://www.mafmc.org/ssc-meetings/2020/may-12-13">https://www.mafmc.org/ssc-meetings/2020/may-12-13</a>), finding that catches up to 30,000 MT¹ should not cause overfishing. An *Illex* research track assessment is underway in 2021 and is extending topics investigated by the Council's work group.

#### **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.fisheries.noaa.gov/new-england-mid-atlantic/resources-fishing/resources-fishing-greater-atlantic-region</a>. A 2020 action to change *Illex* permitting is in the rulemaking process and a proposed rule is expected later in 2021 – see <a href="https://www.mafmc.org/newsfeed/2020/council-approves-changes-to-management-of-illex-fishery">https://www.mafmc.org/newsfeed/2020/council-approves-changes-to-management-of-illex-fishery</a>.

The current quota is 28,644 MT, based on a 30,000 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

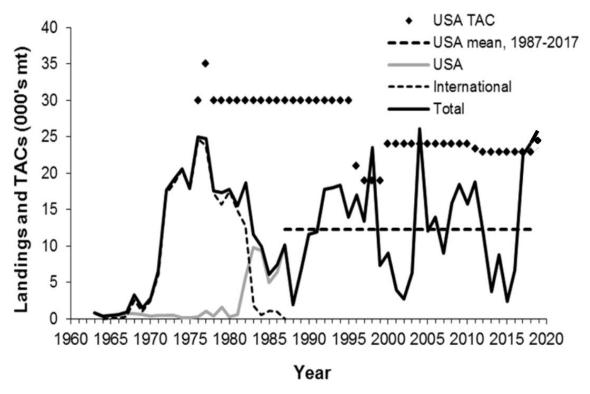
Figure 1, from a recent Science Center data update, describes *Illex* catch 1963-2019 and highlights the early foreign fishery and then domestication of the fishery. Figures 2-3 describe domestic landings, ex-vessel revenues, and prices (inflation adjusted) since 1996. Figure 4 illustrates preliminary 2019 (yellow-orange) and 2020 (blue) landings through the year.

Table 1 describes 2020 *Illex* landings by state, and Table 2 describes 2020 *Illex* landings by gear type. Table 3 provides preliminary information on *Illex* landings by statistical area for 2020.

The Gross Domestic Product Implicit Price Deflator was used to report revenues/prices as "2020 dollars."

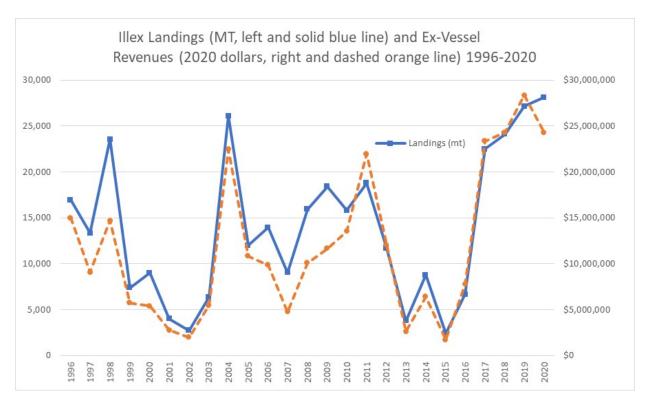
2

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



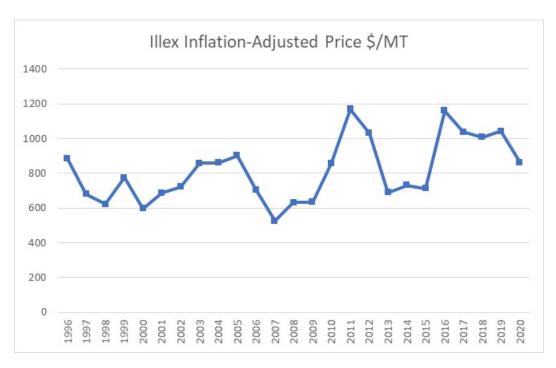
**Figure 1.** Total annual *Illex* landings (mt) by the U.S. and other countries for 1963-2019. Sources: NEFSC *Illex* Data update, available at <a href="http://www.mafmc.org/ssc-meetings/2018/may-8-9">http://www.mafmc.org/ssc-meetings/2018/may-8-9</a> and NMFS unpublished dealer data.

THIS SPACE INTENTIONALLY LEFT BLANK



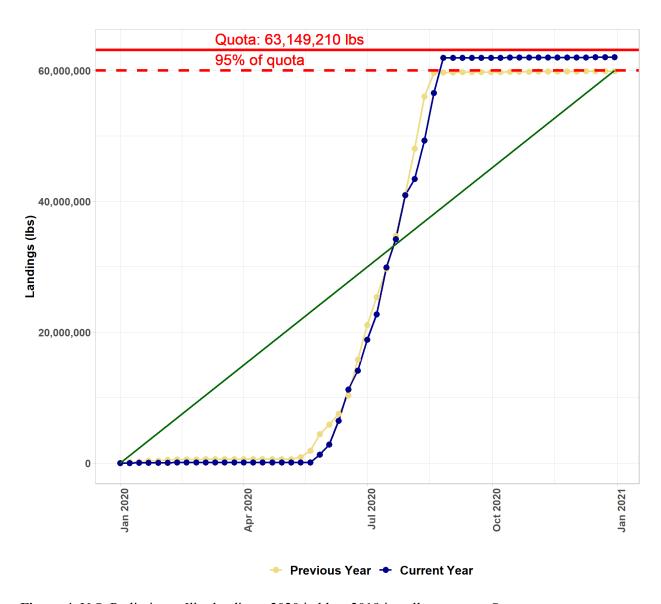
**Figure 2.** U.S. *Illex* Landings and *Illex* Ex-Vessel Values 1996-2020. Source: NMFS unpublished dealer data.

### THIS SPACE INTENTIONALLY LEFT BLANK



**Figure 3.** Ex-Vessel *Illex* Prices 1996-2020 Adjusted to 2020 Dollars Source: NMFS unpublished dealer data

# THIS SPACE INTENTIONALLY LEFT BLANK



**Figure 4.** U.S. Preliminary *Illex* landings; 2020 in blue, 2019 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 2020. Source: NMFS unpublished dealer data.

Most *Illex* landings occurred in NJ, RI, and MA, but further breakdown may violate data confidentiality rules (in spirit if not to the letter).

Table 2. Commercial *Illex* landings (live weight) by gear in 2020. Source: NMFS unpublished dealer data.

GEAR	Metric_Tons
TRAWL,OTTER,BOTTOM,FISH	27,459
UNKNOWN	584
POTS + TRAPS,OTHER	53
PURSE SEINE, OTHER	39
Other	0
Total	28,135

Table 3. Commercial *Illex* landings by statistical area in 2020. Source: NMFS unpublished VTR data.

Stat Area	Metric_Tons
622	11,751
526	10,064
626	2,163
537	907
616	455
623	331
627	321
525	238
Other	229
Total	26,458

THIS IS THE END OF THE DOCUMENT