

**MEMO**

**To:** Tom Nies, Executive Director, New England Fishery Management Council  
**From:** New England groundfish sector managers  
**Date:** August 22, 2022  
**Re:** Georges Bank cod catch data, and fishing effort indices

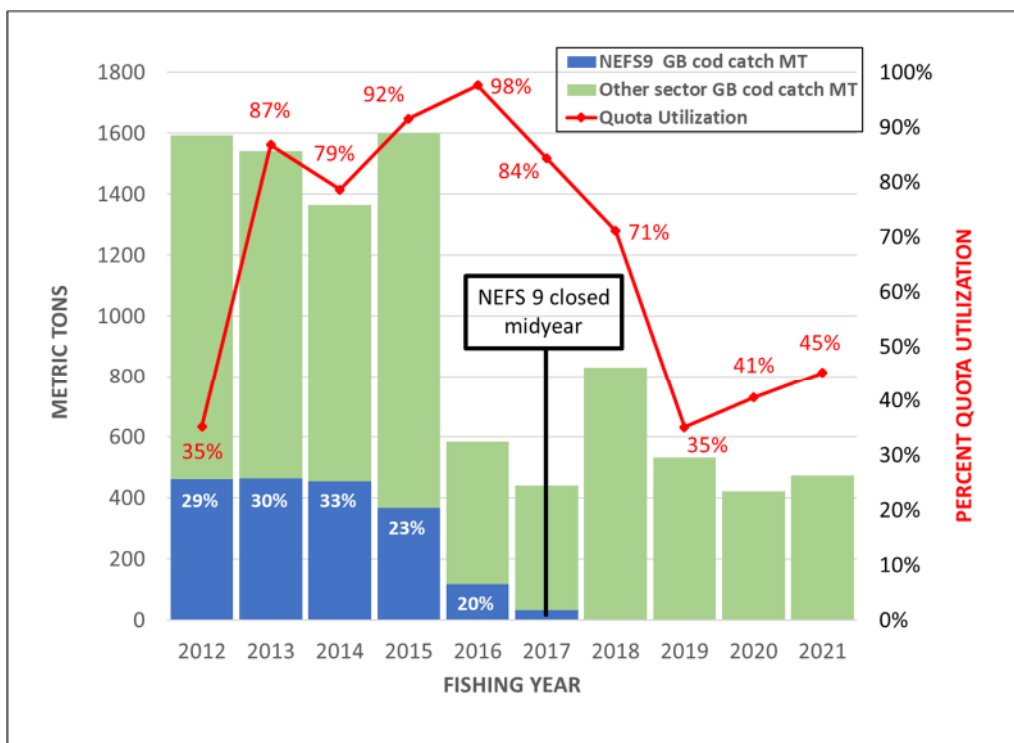
At its August 25 meeting, the SSC is to review additional relevant information concerning Georges Bank cod catch and economic indicators. Managers of New England’s groundfish sectors gathered information on several indices, some that may not be yet available from GARFO for the Groundfish PDT but that the sectors have ready access to.

**Historical GB Cod (East + West) Catch Information**

Generally, in FYs 2012-2017, GB cod (East + West) quota utilization was high, ranging from about 80% to nearly 100%, except in FY 2012. In FYs 2018-2021, utilization fell to 35%-45%.<sup>1</sup>

Much of that decline may be attributable to GARFO’s barring the Carlos Rafael fleet from fishing, which occurred in the middle of FY 2017. Rafael’s fleet was enrolled in Northeast Fishery Sector IX (NEFS 9). Nearly all of NEFS 9’s annual catch was harvested by Rafael vessels, thus NEFS 9’s catch records are a reasonable proxy for the Rafael fleet’s catch. Figure 1 shows the decline in GB cod quota utilization after NEFS 9 was closed and the Rafael fleet ceased harvesting:

Figure 1: NEFS 9 and Other Sector GB Cod (East + West) Catch, FY2 2012-2021<sup>2</sup>



The Rafael fleet and permits were sold, but their directed fishing effort on Georges Bank cod was never fully replaced. Several of the vessels did not re-engage in groundfishing, and the firm which acquired most of the assets does not target GB cod.<sup>3</sup>

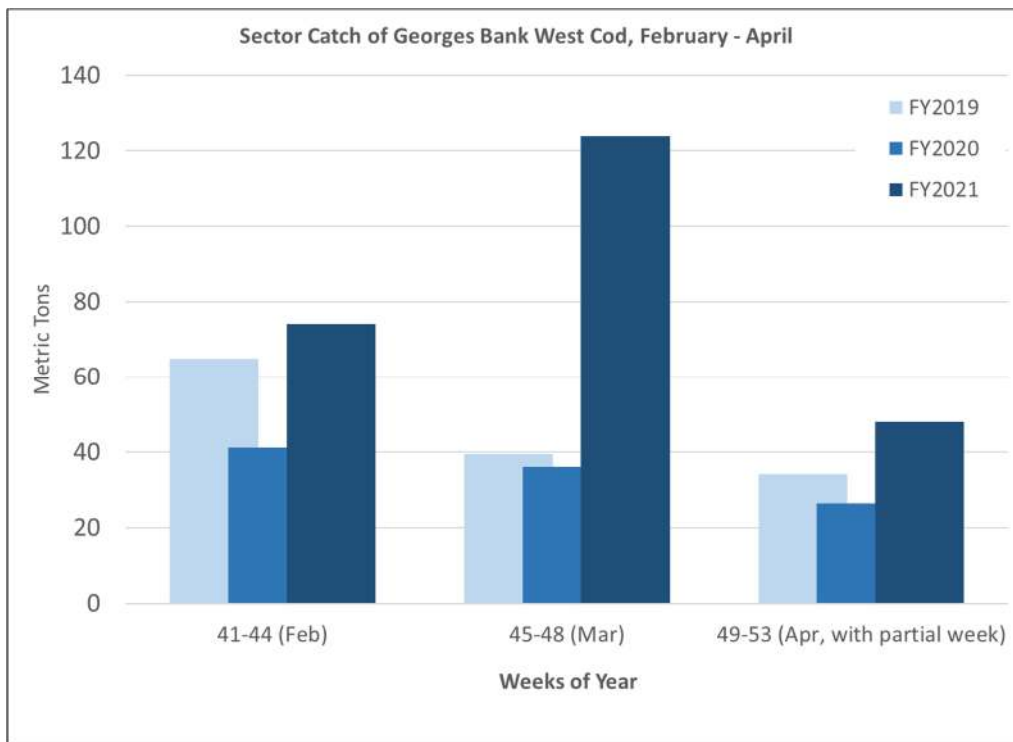
Some measure of decline could also be attributable to the broader reduction in the offshore groundfish fleet since inception of the sector system. Some vessels operating from ports in Southern New England that fished seasonally for groundfish have modified their fishing plans away from groundfish.

**In-Season Catch Utilization**

**FY 2021**

We understand the most recent spring bottom trawl survey’s GB West cod catch was low. However, the sector fleet had a markedly different experience, with FY 2021 end of year spring catch rates substantially higher than in the previous two years:

**Figure 2: Sector Catch of GB West Cod, Spring FYs 2019-2021<sup>4</sup>**



**FY 2022**

Total GB cod (East + West) quota utilization for the first three months of FY 2022 largely reflects the roughly 75% reduction in quota from last year (Table 1, next page):

Table 1: First Quarter (May-July) Sector GB Cod (East + West) Catch, FY2021 vs. FY2022<sup>5</sup>

<b>Fishing Year</b>	<b>Cumulative Catch MT</b>	<b>Pct Quota Caught</b>
<b>2021</b>	130.8	12.5%
<b>2022</b>	31.1	13.1%
<i>Reduction</i>	<i>(76%)</i>	

This reduction in catch should not be portrayed as an indicator of abundance, but primarily a combination of GB cod avoidance behaviors, high fuel prices, and high quota prices as discussed below. It is critical that this reduction is understood and characterized appropriately.

### **GB Cod ACE Lease Prices**

Sectors communicate regularly with each other and their members concerning availability of ACE to lease. Lease prices and actual or expected quota utilization generally rise and fall in tandem. Following is a sector’s data table showing median annual asking prices for leased GB cod (East + West) ACE compared to year-end quota utilization. We then matched the calendar year average ex-vessel price of codfish in New England (expressed in dollars per live/ACE pound) to the fishing year:

Table 3: GB Cod (East + West) ACE Lease Price vs. Quota Utilization, and ex-vessel cod price, FYs 2016-2022 YTD<sup>6</sup>

<b>Fishing Year</b>	<b>Median Lease Asking Price</b>	<b>Quota Utilization</b>	<b>Calendar Year</b>	<b>New England cod Ex-vessel price</b>
2022 YTD	\$4.38	13%	2022	Unknown
2021	\$0.30	45%	2021	\$2.23
2020	\$0.43	41%	2020	\$2.20
2019	\$0.55	35%	2019	\$2.26
2018	\$1.03	71%	2018	\$2.22
2017	\$1.25	84%	2017	\$2.39
2016	\$1.50	98%	2016	\$1.90

The FY 2022 YTD lease asking median price of \$4.38 – easily the highest seen for any stock over the duration of the groundfish catch share program – reflects concern that this year’s low GB cod quotas could force individual vessels or entire sectors to cease fishing in the GB stock areas midyear. Some sectors have implemented cod catch hotspot reporting systems to help their members avoid concentrations of codfish.

Outlandish lease prices may serve as a ‘canary in the coal mine’ that fishermen’s observations of abundance do not gybe with population assessments. At the start of FY 2022, the GB West cod quota was cut by about 90% - immediately after the over 100% surge in year-over-year catch at the end of FY 2021 as shown in Figure 2.

Other stocks with record-low quotas do not show this signal. For example, the SNE yellowtail quota is just 12.2 MT. Yet quota is available in the marketplace for \$0.10-\$0.25 – versus a calendar year 2021 New England ex-vessel yellowtail flounder price of about 90 cents.<sup>7</sup>

**Fuel Prices**

We know of no publicly available source for historical marine diesel fuel prices in New England. Instead, we gathered first quarter (May through July of the fishing year, for the three most recent fishing years) diesel fuel price data from three sources as indices of change:

- The U.S. Energy Information Administration’s (EIA) New England monthly average diesel fuel prices.<sup>8</sup> We deducted the Massachusetts excise tax (24.0 cents/gal.) and federal fuel tax (18.3 cents/gal.) from the EIA’s prices to try to approximate a non-road use sales price.
- The Pacific States Marine Fisheries Commission’s monthly survey of West Coast marine diesel fuel prices.<sup>9</sup> Prices are usually before tax.
- The U.S. EIA’s New York Harbor monthly Ultra-Low Sulfur No. 2 Diesel Spot Price,<sup>10</sup> which is a wholesale price.

Table 4: Sample Diesel Fuel Prices, First Quarter FYs 2020-2022

<u>Calendar Month/Year</u>	<u>US EIA NE Retail Price</u>	<u>PSMFC Marine Diesel Survey</u>	<u>US EIA NY Harbor Spot</u>
May 20	2.209	2.287	0.887
Jun 20	2.207	2.228	1.124
July 20	2.217	2.362	1.24
<b>Avg 2020 Q1</b>	<b>2.21</b>	<b>2.29</b>	<b>1.08</b>
May 21	2.710	2.925	2.024
Jun 21	2.786	3.010	2.121
July 21	2.825	3.365	2.127
<b>Avg 2021 Q1</b>	<b>2.77</b>	<b>3.10</b>	<b>2.09</b>
May 22	5.871	5.108	4.646
Jun 22	5.695	5.571	4.362
July 22	5.320	5.833	3.696
<b>Avg 2022 Q1</b>	<b>5.63</b>	<b>5.50</b>	<b>4.23</b>

**May-July avg price increase**

2020>2021	25%	35%	93%
2021>2022	103%	78%	103%

Anecdotally we understand the actual prices groundfishermen paid were somewhere between the bounds of the figures in Table 4. The near doubling in price from 2021 to 2022 is probably the most valuable takeaway. Fuel is by far the highest non-wage cost of goods sold of a fishing trip.<sup>11</sup> Its cost is either split in some fractional manner between the vessel owner and the crew, or deducted entirely from the crew share.<sup>12</sup> In either case,

absent offsetting increases in per-trip revenue (which sectors are unable to measure), high fuel prices have been a disincentive to catching expensive quota during the summer of 2022.

**FY 2022 Cumulative Effects**

The combination of high fuel and quota costs, along with concerns about abundance levels seen in the spring but not reflected in the spring survey, led to a significant reduction in sector fishing effort in the first quarter of FY 2022 compared to recent prior years:

Table 5: First Quarter (May-July) Sector Fishing Effort, FYs 2020-2022<sup>13</sup>

<u>May-July</u>	<i>Count</i>			<i>Year over year change</i>		
	<u>Sector trips</u>	<u>Sector days fished</u>	<u>Unique vessels</u>	<u>Sector trips</u>	<u>Sector days fished</u>	<u>Unique vessels</u>
2020	3,054	3,781	151	--	--	--
2021	2,468	3,211	117	-19%	-15%	-23%
2022	1,607	2,340	107	-35%	-27%	-9%

Other reasons cited by managers for this year’s reduced effort include declining ACE catch in the SNE stock area, better fishing opportunities in other fisheries, lack of crew, and infrastructure.

**A Note Concerning FY 2022 Catch of GB East Cod**

The sector fleet has already caught over a third of its GB west cod ACE, and will very likely convert substantial quantities of GB East to GB West cod to continue fishing in most of the Georges Bank and all of the Southern New England stock areas. These conversions may translate to lost U.S. fishing opportunities in the eastern area, and we do not want this to negatively impact US fishermen in future analytical assessments or allocation negotiations.

We hope this additional information provides some value and context to the SSC.

Sincerely,

John Haran  
Northeast Fishery Sectors 10,13

David Leveille  
Northeast Fishery Sectors 2, 6

Linda McCann  
Northeast Fishery Sector 8

Amy Morris  
Fixed Gear Sector

Dan Salerno  
Northeast Fishery Sectors 5, 11

Hank Soule  
Sustainable Harvest Sectors

cc: Northeast Seafood Coalition

## References

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- <sup>1</sup> GARFO cumulative multispecies catch reports at <https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/h/nemultispecies.html>
- <sup>2</sup> GARFO annual multispecies catch reports at <https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/h/nemultispecies.html>  
GARFO's "Sector End of Year Accounting of NE Multispecies Catch" reports.
- <sup>3</sup> Personal communication with sector manager.
- <sup>4</sup> GARFO cumulative multispecies catch reports at <https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/h/nemultispecies.html>. These reports are updated weekly, and users can capture each update to construct weekly and monthly tallies of catch. Report data are very preliminary and can be based on estimates of catch which are later corrected with actual weights.
- <sup>5</sup> Ibid.
- <sup>6</sup> GARFO cumulative multispecies catch reports at <https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/h/nemultispecies.html>  
Lease prices from personal communications with sector managers.  
Ex-vessel prices available at <https://www.fisheries.noaa.gov/foss/f?p=215:200:17497534508690:Mail:NO::>
- <sup>7</sup> Ibid.
- <sup>8</sup> [https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=EMD\\_EPD2DXL0\\_PTE\\_R1X\\_DPG&f=M](https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=EMD_EPD2DXL0_PTE_R1X_DPG&f=M)
- <sup>9</sup> <https://www.psmfc.org/efin/data/fuel.html>. Four-state monthly average (AK, CA, OR, WA).
- <sup>10</sup> [https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=EER\\_EPD2DXL0\\_PF4\\_Y35NY\\_DPG&f=M](https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=EER_EPD2DXL0_PF4_Y35NY_DPG&f=M)
- <sup>11</sup> NOAA Technical Memorandum NMFS-NE-227 "Northeast Trip Cost Data - Overview, Estimation, and Predictions," p12, at <https://repository.library.noaa.gov/view/noaa/4636>
- <sup>12</sup> NOAA Technical Memorandum NMFS-NE-227 "An Overview of the Annual Cost Survey Protocol and Results in the Northeast (2007 to 2009), p8, at <https://repository.library.noaa.gov/view/noaa/4635>
- <sup>13</sup> Data contributed by all managers of active fishing sectors. "Sector trips" are all trips declared under a sector fishing code. "Sector days fished" is sum of hours outside the VMS demarcation line, converted to days. "Unique vessels" is count of individual vessels making a sector trip.