



New England Fishery Management Council

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John F. Quinn, J.D., Ph.D., *Chairman* | Thomas A. Nies, *Executive Director*

MEMORANDUM

DATE: June 17, 2020
TO: Groundfish Committee
FROM: Groundfish Plan Development Team
SUBJECT: **COVID-19 emergency action requests – possible carryover changes for the commercial groundfish fishery**

The Groundfish Plan Development Team (PDT) met via webinar on May 6, 2020; June 5, 2020; and June 17, 2020 to discuss COVID-19 emergency action requests for the commercial groundfish fishery, and continued its work by correspondence.

Overview

This memorandum summarizes PDT discussion on possible carryover changes for the commercial groundfish fishery in response to the COVID-19 pandemic and incorporates information provided by the National Marine Fisheries Service. The PDT discussed the state of the management system including current carryover provisions, possible management ideas for changes to carryover to provide relief to the fishery from the economic impacts of COVID-19, and a summary of data to help evaluate carryover options. The PDT discussed the available tools to address requests to change carryover for the commercial fishery, and whether the PDT expects these would be beneficial to the commercial groundfish fishery in terms of timing and potential to provide relief.

Background

At the April 2020 Council meeting, the Council discussed the impacts of COVID-19 on the groundfish fishery. Several organizations representing the commercial groundfish fishery - Associated Fisheries of Maine, Northeast Seafood Coalition, Maine Coast Fishermen's Association, and Maine Coast Community Sector - requested relief from certain provisions in the sector program. Specifically, they asked for an increase in the maximum allowable carryover from fishing year 2019 to fishing year 2020. These organizations noted that the commercial fishery is losing money due to low ex-vessel prices as recent sales have plummeted to levels below production costs. Sector vessels face losses from their earlier investments in quota that cannot be landed by the end of the season. This situation has resulted from the national and global disruption in the food supply chain.

After discussing the requests, the Council passed the following motion (16/0/1):

That the Council write a letter to GARFO requesting guidance on mechanisms that could be utilized to enable Northeast Multispecies Sectors to carryover more than 10% of their unused FY 2019 ACE into FY 2020, including approaches that would enable Sectors to have a higher percentage of *de minimis* carryover available to them for use without potential penalty in FY 2020. Also request guidance on possible flexibility for common pool DAS carryover including number of DAS and type of DAS i.e. allocated or leased and the time period for use. Request GARFO provide this information prior to the June Council meeting, ideally at the Groundfish Advisors/Committee meeting, so if appropriate and necessary the Council could consider requesting emergency action to facilitate a solution that would help alleviate the economic and operational implications of COVID-19.

Following the Council discussion, some members of the common pool wrote to the Council requesting flexibility in the type of relief provided. For example, a participant with a Handgear A permit explained he does not fish under DAS, and requested that the Council also consider allowing the common pool to carry over unused quota into the new fishing year.

Sectors

Current ACE carryover provisions

- Groundfish sectors may carry over unused ACE up to 10% of their allocated FY 2019 ACE, provided that the total unused sector ACE carried forward for all sectors¹ from FY 2019 plus the total FY 2020 ACL does not exceed the ABC for FY2020.
- If the total potential catch (total ACL + carryover) would exceed the ABC, then NMFS adjusts the maximum amount of carryover, down from 10%, to an amount that limits the total potential catch to be equal to the ABC of the following fishing year.²
- If an ACL overage occurs and sector catch (including carryover used) exceeds the sector sub-ACL (which does not include carryover), sectors are responsible for a pound-for-pound payback, minus the *de minimis* amount of carryover set by NMFS.
- The *de minimis* amount is 1 percent of the 2020 sector sub-ACL. NMFS has the authority to change the *de minimis* amount.
- State operated permit banks may not carry over unused ACE.

See Appendix for a brief history of carryover actions.

Based on preliminary data provided by GARFO, each sector would be allowed to carry over unused ACE, up to 10-percent of its 2019 allocation, from fishing year 2019 to 2020 for four stocks: Georges Bank (GB) haddock; Gulf of Maine (GOM) haddock; American plaice; and witch flounder. Each sector would be allowed to carry over unused witch flounder ACE, up to 10% of its 2019 allocation because most sectors have less than 10% unused ACE and that would keep total potential catch in 2020 below the ABC. If all sectors had higher amounts of unused ACE, then NMFS would have been required to reduce the maximum carryover. Sectors may not

¹ Excludes state permit banks

² Result of a lawsuit on FW50 provisions: Conservation Law Foundation v. Pritzker, et al. (Case No. 1:13-CV-0821-JEB), April 4, 2014

carry over GB yellowtail flounder. All other allocated stocks would have the maximum carryover reduced below 10 percent to prevent 2020 catch from exceeding the 2020 ABC.

For the four stocks that would not require a reduction in carryover to stay below the ABC, it would be possible to increase each sector’s carryover limit above 10 percent without the new potential catch limit exceeding the ABC (see Table 1). GB haddock carryover could increase approximately 2.6 percentage points. GOM haddock could increase approximately 3.7 percentage points. Plaice carryover could increase approximately 1.0 percentage points. Witch flounder carryover could increase approximately 1.3 percentage points. These estimates are based on preliminary 2019 catch data and account for the prohibition of carryover by permit banks.

Table 1 - Potential sector ACE carryover from FY 2019 to FY 2020

| Stock | Potential revised max carryover (%) | Current max carryover (mt) | Potential increase in max carryover (mt) | Potential revised max carryover (mt) |
|-----------------|-------------------------------------|----------------------------|--|--------------------------------------|
| GOM haddock | 12.6 | 5,241 | 1,357 | 6,598 |
| GB haddock | 13.7 | 812 | 304 | 1,116 |
| American plaice | 11.0 | 141 | 14 | 155 |
| Witch flounder | 11.3 | 64 | 5 | 69 |

Preliminary FY19 carryover data, DMIS, run May 13, 2020; May 20, 2020

All sectors had more than 10% of their ACE of the two haddock stocks available to carryover. Some sectors did not have 10% of their ACE of plaice and witch flounder left to carry over and so would not benefit from raising the 10% cap. For plaice, one sector did not have enough available ACE to carry over the full 10%, and an additional sector did not have enough available ACE to allow additional carry over if the carryover cap is raised. For witch flounder, nine sectors have less than the maximum available ACE to carry over, and an additional two sectors do not have enough available ACE to allow additional carryover under a raised cap.

Table 2 – Number of sectors impacted by a possible raised carry over cap from FY 2019 to FY 2020

| Stock | Number of sectors with available ACE to have 10% cap | Number of sectors with available ACE to have raised cap above 10% |
|-----------------|--|---|
| GOM haddock | 16 | 16 |
| GB haddock | 16 | 16 |
| American plaice | 15 | 14 |
| Witch flounder | 7 | 5 |

Preliminary FY19 carryover data, DMIS, run May 13, 2020; May 20, 2020

Possible sector carryover options

Sector carryover option #1: Maximum ACE carryover

Mechanism: An increase to the maximum permissible ACE carryover would require either a Council action or an emergency action, if justified. There is no existing authority for NMFS to increase ACE carryover beyond 10 percent. The implementing regulations at 50 CFR 648.87(b)(1)(i)(C)(1) require NMFS to adjust the maximum ACE carryover *down* from 10 percent to an amount that prevents total potential catch from exceeding the ABC, but do not authorize any increase.

Timing: Increased ACE carryover could provide benefits to industry through the potential for increased catch, revenue, and flexibility. There could be an immediate benefit for vessels or stocks that have high effort before the worsening winter weather, and for any sector that transferred in ACE during 2019 that it was not able to harvest. Announcing any plan to increase ACE carryover could allow industry to plan their operations around the increased ACE.

Final carryover numbers will not be available for the June Council meeting - sector ACE carryover is generally ready by the end of July. This is due to delayed reports (dealer, VTR, eVTR) that come in after the last week of the fishing year, followed by reconciliation, any necessary post-year trading window (only if there are overages), then freezing the 2019 data set before calculating final carryover.

Risk: Allowing additional carryover could increase the risk of an ACL overage, or that overfishing could occur. If an ACL overage occurs and sectors have caught above the sector sub-ACL (which does not include carryover), sectors are responsible for a pound-for-pound payback, minus the *de minimis* amount of carryover. For each stock, management uncertainty is estimated using the following criteria: enforceability and precision of management measures, adequacy of catch monitoring, latent effort, and catch of groundfish in non-groundfish fisheries. The management uncertainty buffer is set at 5 percent for the four stocks that do not require a reduction in carryover. That buffer has not changed since 2013, but the Groundfish Plan Development Team has recently documented that data generated on observed trips are not representative of the whole fleet and reflects differences in discarding of legal-sized fish on unobserved trips relative to observed trips. Thus, it is possible the existing uncertainty buffer is not sufficient to account for true uncertainty. GB haddock, GOM haddock, and American plaice are healthy stocks, but witch flounder is overfished with unknown overfishing status and is currently in a rebuilding program.

Sector carryover option #2: De minimis carryover

Mechanism: NMFS could change the *de minimis* carryover using the authority granted to the Regional Administrator at 50 CFR [648.87\(b\)\(1\)\(i\)\(C\)\(2\)\(ii\)](#).

Timing: *De minimis* carryover is triggered only if Year-2 catch of a stock exceeds both the sector sub-ACL and the total ACL catch. We will not know if *de minimis* carryover is triggered until after the conclusion of FY2020 and reconciliation sector catch data. Given that a change to *de minimis* would only be useful if there were overages in FY2020, it is possible that this change could be incorporated into an action to retroactively set the *de minimis* for FY2020.

Risk: For each stock, management uncertainty is estimated using the following criteria: enforceability and precision of management measures, adequacy of catch monitoring, latent effort, and catch of groundfish in non-groundfish fisheries. The management uncertainty buffer is set at 5 percent for the four stocks (GB haddock, GOM haddock, plaice, and witch flounder) that do not require a reduction in carryover. That buffer has not changed since 2013, but the Groundfish Plan Development Team has documented that data generated on observed trips are not representative of the whole fleet and reflects differences in discarding of legal-sized fish on unobserved trips relative to observed trips. Thus, it is possible the existing uncertainty buffer is not sufficient to account for true uncertainty under the current monitoring system and reducing that buffer by increasing *de minimis* carryover might not be justified. However, three of these stocks (GOM haddock, GB haddock, and plaice) are healthy and experiencing strong recruitment that may balance the potential risk of overfishing posed by an increased *de minimis* carryover. Witch flounder, however, is overfished with unknown overfishing status and is currently in a rebuilding plan.

PDT Discussion

GARFO staff shared that they have completed initial analysis on possible carryover options, and from this identified four stocks that have the possibility of allowing greater than 10% sector carryover and still remain under the ABC – GOM haddock, GB haddock, American plaice, and witch flounder. GARFO staff explained that more detailed information on sector carryover is included in the response to the Council’s request for guidance on carryover ahead of the June Groundfish Advisory Panel and Groundfish Committee meetings. The PDT discussed recent utilization of these stocks, questioning whether increasing carryover of these stocks is likely to provide much relief to sectors, given low utilization (see Table 3 below). There was some discussion that an increase in plaice carryover may be helpful to individual vessels but maybe not benefit all sectors, as well as consideration of how increasing carryover of plaice might impact permit holders who primarily lease quota. Witch flounder has a higher predicted utilization (see Table 3).

The PDT noted that there are potential impacts from the current lack of monitoring data with observer waivers and questioned what this might mean with respect to management uncertainty. The PDT discussed a need to look into whether there have been recent effort changes, as anecdotally the PDT has heard vessels are not fishing due to a lack of market from restaurants closing, but also hearing that some vessels are fishing as they are finding new markets (e.g. frozen, direct to consumer). See summary and figures below.

The PDT discussed sector carryover in recent years, noting that carryover has not been utilized at high levels in the past (see for example, FY 2018 carryover report: https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/Sector_Monitoring/FY18%20Year%20End%20Carryover_for_HTML.htm). However, the PDT recognizes that the current COVID-19 pandemic is an unprecedented event, and carryover could have more utility for sectors to help cope with the economic impacts of COVID-19.

Summary of data

- See the 2019 fishing year to date catch information for sectors for in-season catch information by stock:
https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports//Sectors/Sector_Summary_2019.html
- The figures below denote the “COVID-19” period as beginning in March. This is when the pandemic began to impact the U.S. East Coast - following the COVID-19 Emergency Declaration widespread social distancing and stay at home orders were put in place beginning March 16, with the requirements varying by state. Mid-March is also when restaurants closed regionally, causing a sharp market disruption, and causing the supply chain for the groundfish fishery to shift to home-based, direct-to-consumer markets.
- Total revenue from groundfish stocks in FY19 was \$2.4 million less (\$46.7 million) than the average from the previous three fishing years (\$49.1 million, Figure 1), while landings were 4.7 million pounds higher than the previous three years (Figure 2), reflecting decreases in average groundfish prices (Figure 5).
- Average groundfish price was generally lower in all months of FY 2019, but dropped more during COVID-19 crisis months than observed in recent FY (Figure 5). Some decline in average groundfish price was also seen in the months just prior to the COVID-19 period, which may be reflective of disruptions in markets both globally and in other regions of the U.S (e.g. West Coast) due to the pandemic.
- Prices for cod, haddock, winter flounder and yellowtail flounder appear to have decreased most during the COVID-19 period (Figure 8).
- Strongest impacts from COVID-19 may have occurred in the month of April:
 - Total groundfish landings and revenue decreased in April of FY 2019, a deviation from previous fishing years trends where these metrics have generally increased (Figure 4, Figure 6), following high effort, which did not occur in FY 2019 (Figure 3).
- Utilization appears to have deviated for several stocks, while many appear similar (Figure 7):
 - Utilization appears to have deviated most for American plaice, which did not increase in the last quarter of the FY as observed in recent FYs.
 - The utilization trend for GB cod west also appears to be lower, with a much slower increase in utilization than in previous FYs.
 - GOM cod utilization in April is slightly lower than the previous three FYs, despite being similar to previous FYs in all previous months.

Common Pool

Current DAS carryover provisions

- Vessels in the common pool can carry over up to 10 Days At Sea (DAS). There is no carryover of leased DAS or C DAS. Carryover of DAS is prioritized (A, then B regular, then B reserve) and carried-over DAS are used first in the new year.
- The common pool does not have any provision for sub-ACL carryover between fishing years, but may carry over trimester total allowable catch (TAC) between trimesters within a fishing year.

Possible common pool carryover options

Common pool carryover option #1: DAS carryover

Mechanism: A change to the maximum permissible DAS carryover or the types of DAS (e.g., allocated or leased) that may be carried over would require either a Council action or an emergency action, if justified. There is no existing regulatory authority for NMFS to increase DAS carryover.

Timing: Increased DAS carryover could provide benefits to industry through the potential for increased catch, revenue, and flexibility. There could be an immediate benefit for vessels or stocks that have high effort before the worsening winter weather, and for any vessel that leased in DAS during 2019 that it was not able to use.

Risk: If no change is made to allow common pool trimester TACs to carry over from 2019 to 2020, then the biological impact should be negligible. An increase in the number of DAS available for use by the common pool without an increase to the quotas could increase the rate at which the common pool reaches its quota. However, the common pool does not appear to be limited by available DAS. Several permit categories that are more prevalent in the common pool (Handgear A and B, small-vessel category) do not use DAS and would not benefit from increased DAS carryover. Allowing leased-in DAS to carryover would potentially have greater effect for vessels that leased in DAS and subsequently did not use them, but this is likely to be an even smaller segment of the industry.

Common pool carryover option #2: Common pool sub-ACL carryover (Trimester TAC carryover between fishing years)

Mechanism: A change to allow sub-ACL carryover for the common pool would require either a Council action or an emergency action, if justified. The FMP does not include sub-ACL carryover for the common pool and there is no existing authority for NMFS to allow sub-ACL carryover.

Timing: Allowing sub-ACL carryover could provide immediate benefit to industry to allow them to plan their operations around the increased sub-ACL. This is particularly true for members of the common pool who do not fish under DAS and would not benefit from an increase in DAS carryover. Allowing sub-ACL carryover would minimize the risk that an increase in the number of DAS available would result in an increase in the rate at which the common pool reaches its quota, should a change to the maximum DAS carryover occur.

Risk: Allowing sub-ACL carryover could increase the risk of a sub-ACL or ACL overage. If a sub-ACL overage occurs (i.e., the common pool catch of a particular stock exceeds all three trimester TACs for that stock combined), the sub-ACL for that stock that is allocated to common pool vessels is reduced by the amount equal to the overage for the following fishing year, regardless of whether the ACL is also exceeded. The risk of a sub-ACL overage is of greatest concern for those stocks in rebuilding plans. If carryover of common pool sub-ACL were to be allowed, the total FY 2020 ACL, plus sector carryover, plus any common pool carryover cannot exceed the FY 2020 ABC.

PDT Discussion

The PDT discussed some consideration of whether increasing DAS carryover would help the common pool, as they might still be limited by quota, and particularly by trip limits on GOM cod. For example, if the DAS effort controls are liberalized too much then additional effort controls (changes in trip limits, area closures) may need to be implemented later in the fishing year by Regional Administrator to ensure that the common pool catch remains under the TAC. It was noted that the B DAS program is closed for FY 2020 and no B DAS have been used in the other special access programs since 2015. Thus, carryover of additional B DAS would not provide any relief for the common pool. The PDT discussed both DAS and quota utilization by the common pool, considering whether the common pool is limited by either. GARFO staff explained that there is a lot of fluctuation in common pool effort from year to year, being such a small group of vessels, that it can be difficult to track utilization patterns. The PDT also noted that some portion of the common pool, such as Handgear A permits, do not fish under DAS, and so increasing DAS carryover would not provide relief to these common pool participants (see Tables 7-9 below). Additionally, the PDT noted that DAS are used by the common pool on trips for other target fisheries, such as monkfish and dogfish.

Summary of data

- See the 2019 fishing year to date catch information for common pool for in-season catch information by stock:
https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports//common_pool/Common_Pool_Summary_2019.html
- Patterns in groundfish landings, revenue, price, and days absent were similar as those of sectors, except that groundfish landings and revenue in the common pool did not decrease in April of FY 2019 (Figure 4 and Figure 5).
- DAS carry over usage in the common pool has been consistent in recent years (FY 2015 to FY 2019) (Table 4).
- DAS leasing activity in the common pool has declined slightly from FY 2015 to FY 2019 (Table 4).
- Common pool vessels have leasing restrictions based on vessel horsepower (HP) and length – described below in Table 5 and Table 6. In considering how many common pool vessels are being constrained by DAS available to lease for FY 2019, the most constrained MRI had 129.3 A DAS available to lease from eight other MRIs based on its HP baseline, and for vessel length the most constrained MRI had 444.9 A DAS available to lease from 23 other MRIs based on its length baseline.
- In FY 2019, six MRIs leased in 177.8 DAS (all category A permits) (Table 4). Some leases (about 60 DAS) occurred between permits held by the same individual. Of those six MRIs leasing in DAS, three MRIs had a total of 9.3 unused leased DAS. A fourth MRI with unused leased DAS joined a sector for FY 2020.
- In FY 2019, nine MRIs leased out 177.8 DAS (Table 4). Of those, four MRIs were in CPH as of 4/30/20. None of the remaining five took a groundfish trip in FY 2019.

Tables and Figures

Table 3 - Stock-level catch and utilization predictions for FY 2020 from the Quota-Change Model. Subset from Table 111 in Framework 59. The four stocks that could have greater than 10% sector carryover are highlighted.

| Stock | Sub-ACL (mt) | Predicted Catch (mt) | Predicted Utilization |
|----------------------------|-----------------|-------------------------|--------------------------|
| GB Haddock West | 103,849 | 4,426 | 4.3% |
| GOM Haddock | 11,918 | 2,734 | 22.9% |
| Redfish | 11,173 | 4,894 | 43.8% |
| Plaice | 2,889 | 1,105 | 38.4% |
| Pollock | 23,830 | 2,935 | 12.3% |
| White Hake | 2,004 | 1,839 | 91.8% |
| GB Winter Flounder | 501 | 498 | 99.4% |
| GB Cod West | 851 | 826 | 97.0% |
| Witch Flounder | 1,275 | 872 | 68.4% |
| SNE Winter Flounder | 462 | 314 | 67.9% |
| GOM Cod | 267 | 267 | 99.9% |
| GB Haddock East | 16,084 | 692 | 4.3% |
| GB Cod East | 185 | 132 | 71.7% |
| GOM Winter Flounder | 272 | 95 | 35.0% |
| CC/GOM Yellowtail Flounder | 651 | 178 | 27.3% |
| GB Yellowtail Flounder | 93 | 27 | 29.1% |
| SNE/MA Yellowtail Flounder | 12 | 12 | 99.8% |

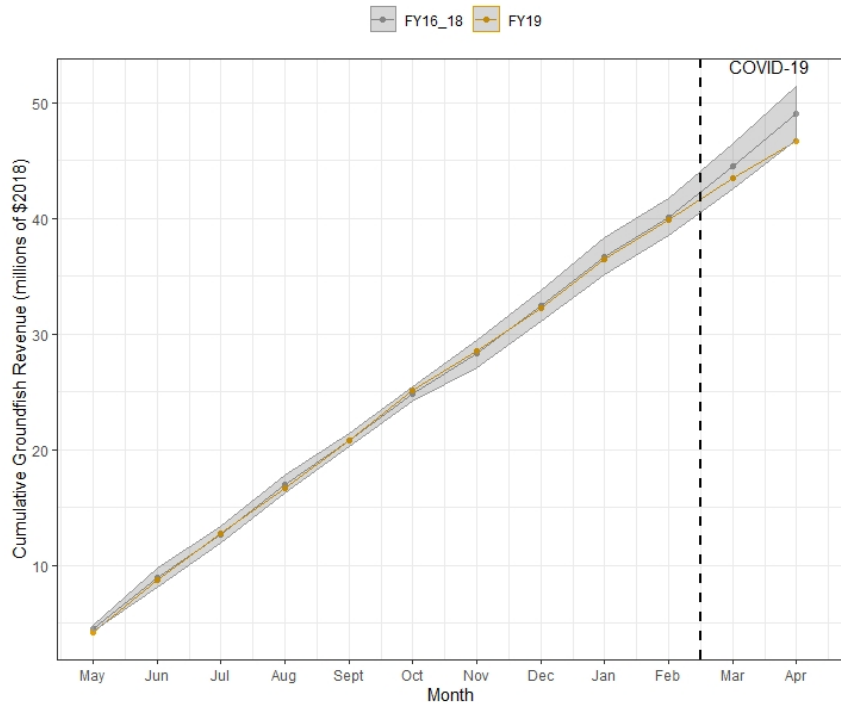


Figure 1 - Cumulative groundfish revenue (millions of \$2018) on all commercial (sector and common pool) groundfish trips by month during the fishing year. Revenue standardized to the year 2018. Average monthly cumulative revenue from Fishing Years 2016-2018 shown in grey (mean +/- one standard deviation), while total cumulative revenue from FY 2019 are shown in orange. The start of the COVID-19 crisis on the U.S. East Coast is denoted by the dotted line.

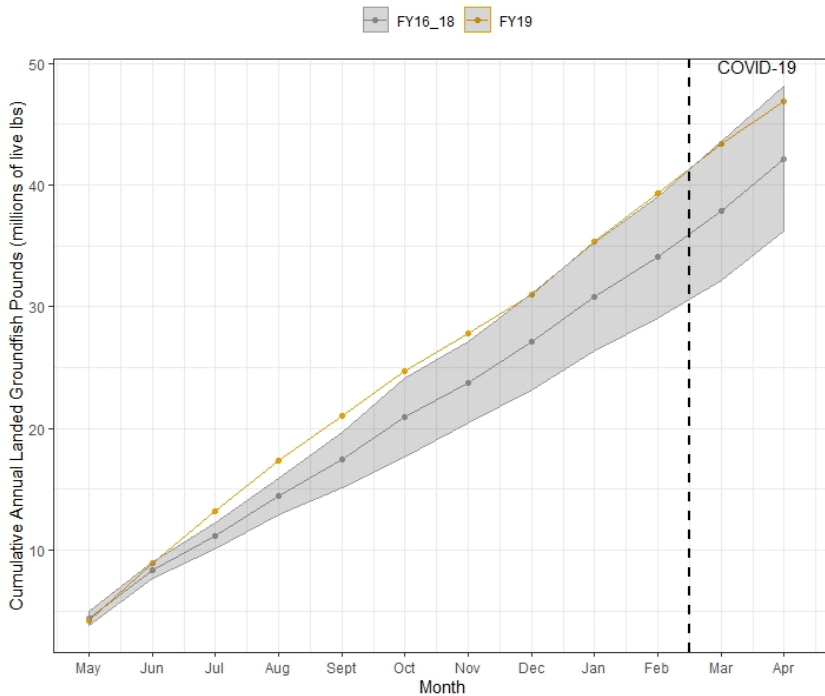


Figure 2 - Cumulative groundfish landings (millions of live lbs) on all commercial (sector and common pool) groundfish trips by month during the fishing year. Average monthly cumulative landings from Fishing Years 2016-2018 shown in grey (mean +/- one standard deviation), while total cumulative landings from FY 2019 are shown in orange. The start of the COVID-19 crisis on the U.S. East Coast is denoted by the dotted line.

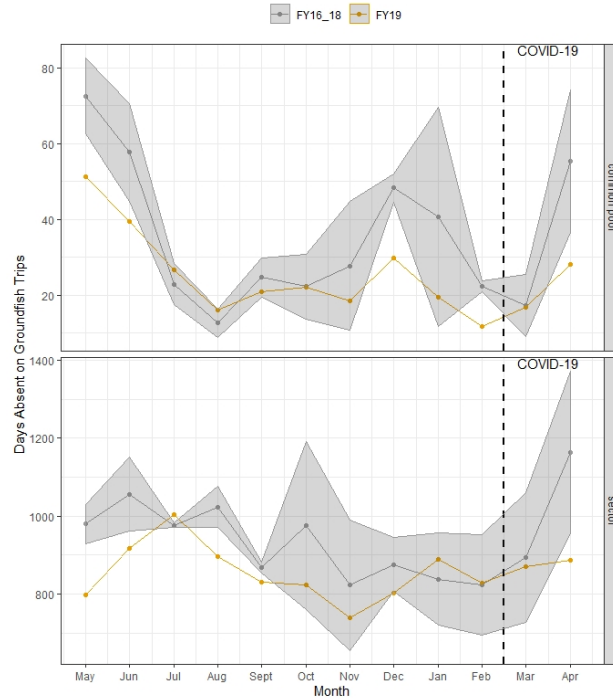


Figure 3 - Monthly days absent (DA) spent on common pool (top) and sector (bottom) groundfish trips by month. Mean DA per month over the last three fishing years (FY 2016-FY2018) are shown in grey while total DA for FY 2019 is shown in orange. Pre- and Post- COVID-19 crisis periods are shown by the dotted line. Note y-axis scales vary across panels.

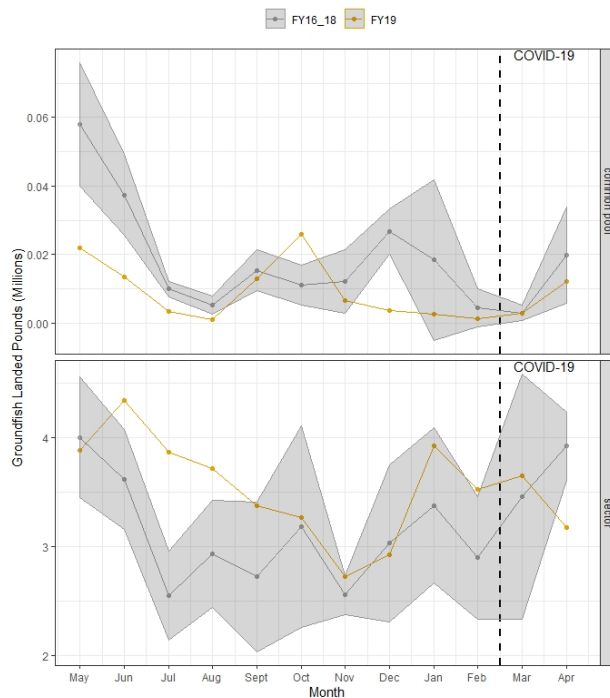


Figure 4 - Monthly common pool (top) and sector (bottom) groundfish landed pounds on groundfish trips. Mean landings per month over the last three fishing years (FY 2016-FY2018) are shown in grey while total monthly landings for FY 2019 is shown in orange. Pre- and Post- COVID-19 crisis periods are shown by the dotted line. Note y-axis scales vary across panels.

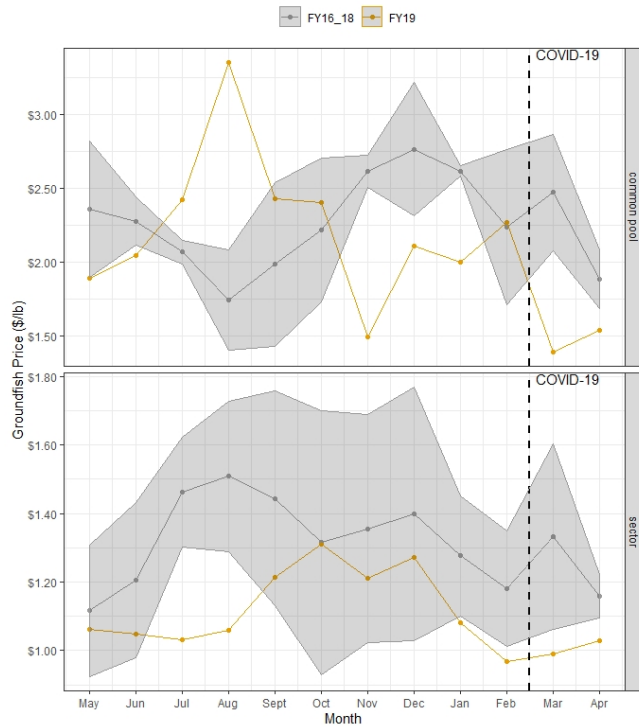


Figure 5 - Monthly common pool (top) and sector (bottom) aggregate groundfish price across all landed stocks. Average price per month over the last three fishing years (mean +/- one standard deviation) are shown in grey while average monthly price for FY 2019 is shown in orange. Pre- and Post- COVID-19 crisis periods are shown by the dotted line. Note y-axis scales vary across panels.

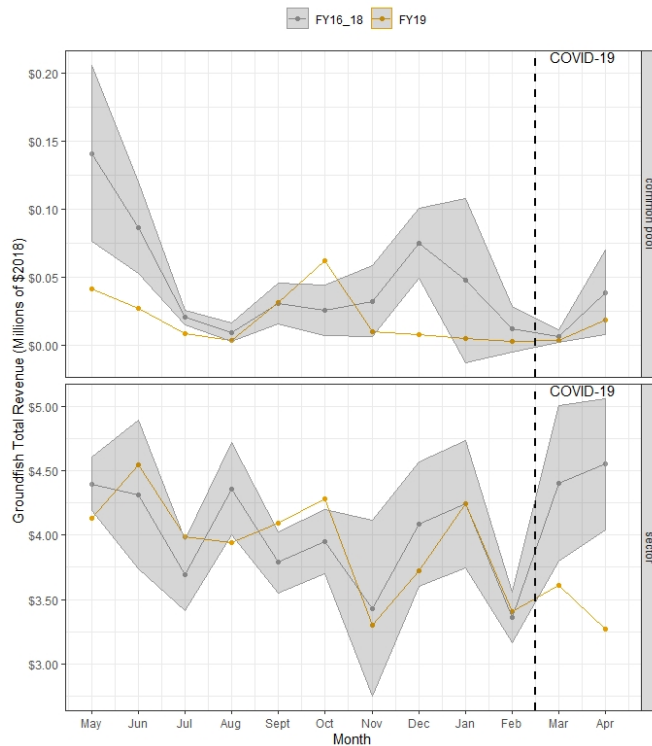


Figure 6 - Monthly common pool (top) and sector (bottom) landed revenue from all groundfish stocks on groundfish trips. Average revenue per month over the last three fishing years (mean +/- one standard deviation) are shown in grey while total monthly revenue for FY 2019 is shown in orange. Pre- and Post- COVID-19 crisis periods are shown by the dotted line. Note y-axis scales vary across panels.

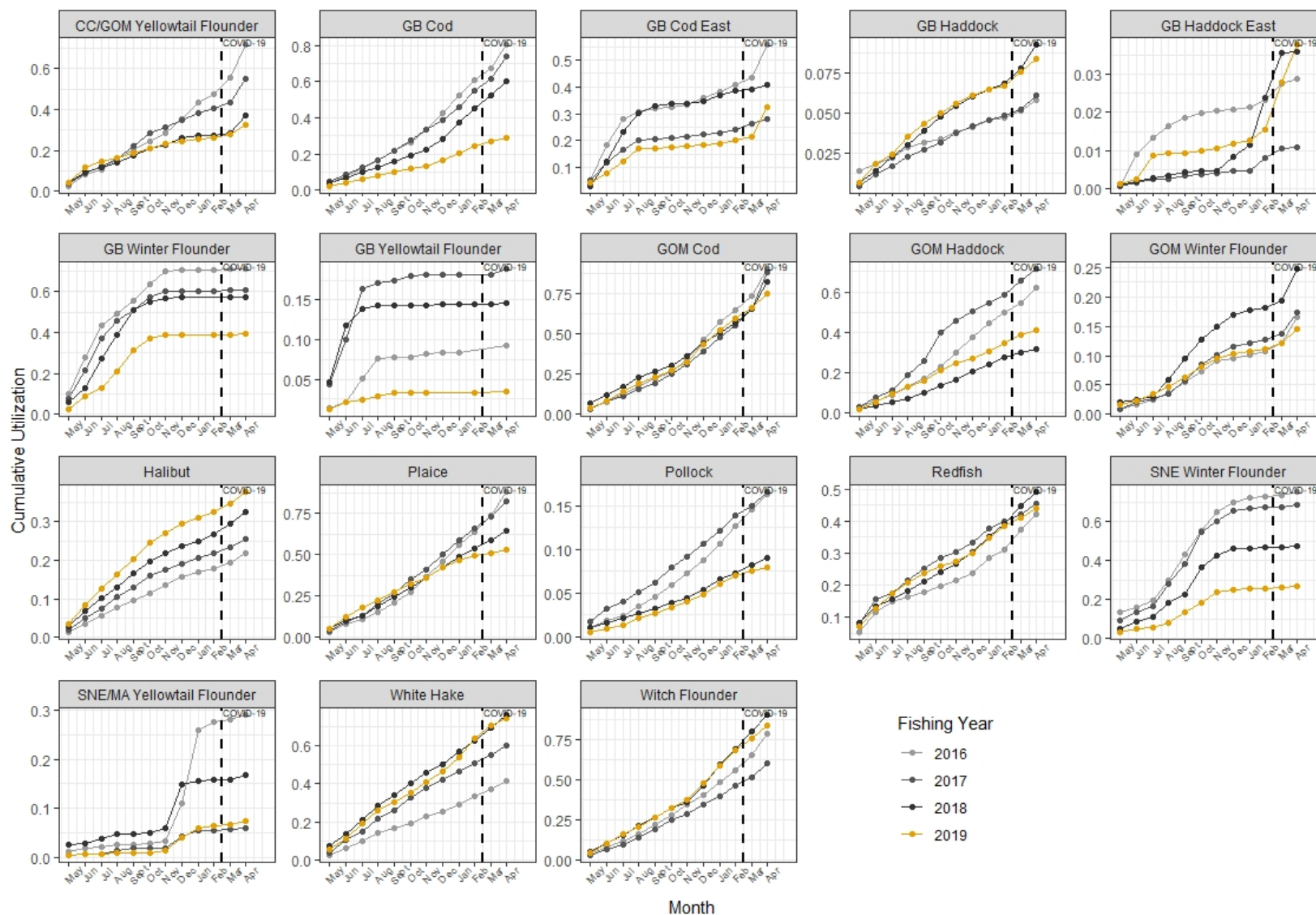


Figure 7 - Cumulative utilization by month (total live landed pounds as a proportion of the commercial sub-ACL) and fishing year. Utilization does not include discards. Pre- and Post- COVID-19 crisis periods are shown by the dotted line. Note y-axis scales vary across panels.

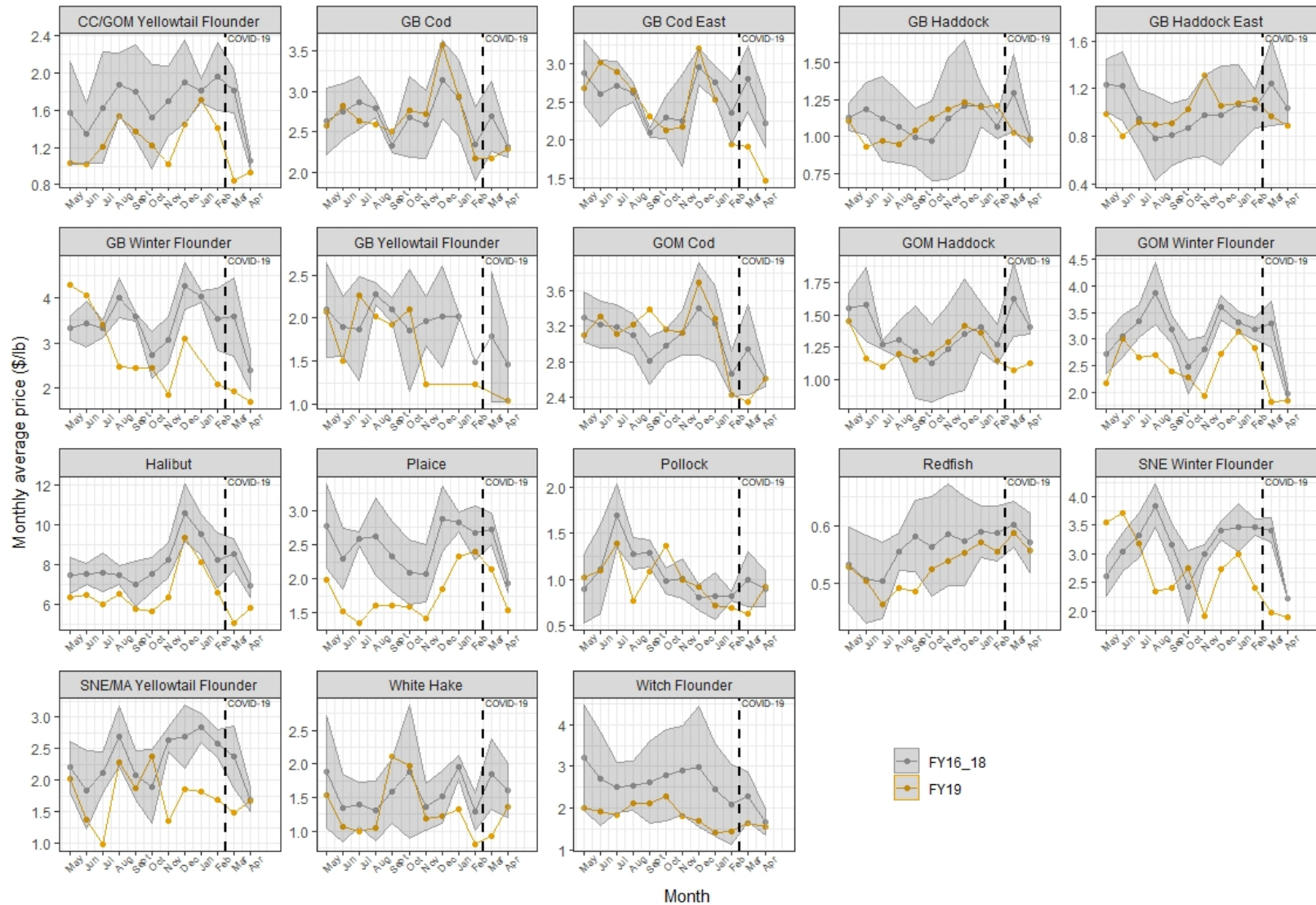


Figure 8 - Average monthly price by stock. Average price per month over the last three fishing years (mean +/- one standard deviation) shown in grey while total monthly revenue for FY 2019 shown in orange. Pre- and Post- COVID-19 crisis periods are shown by the dotted line. Note y-axis scales vary across panels.

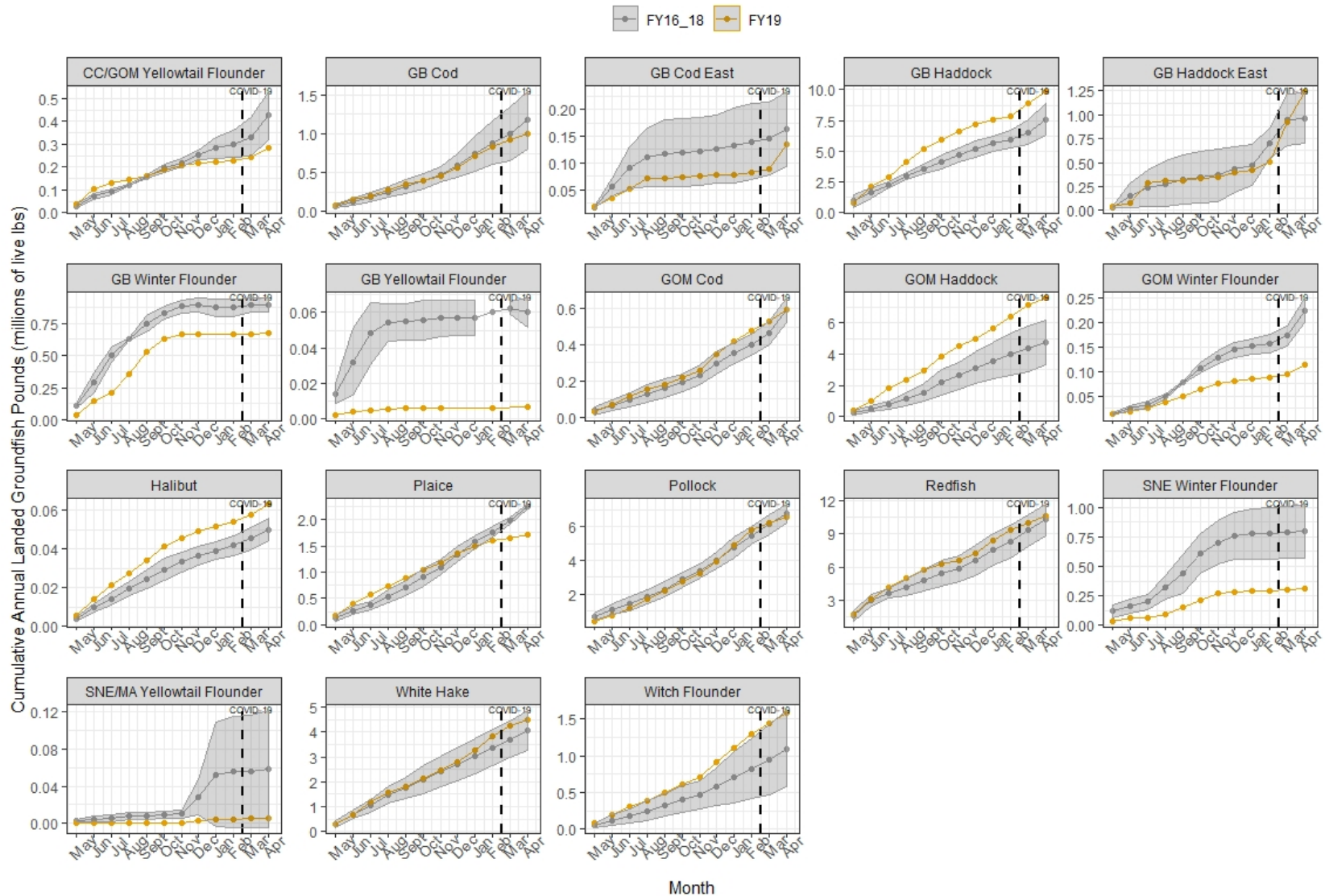


Figure 9 - Cumulative landed pounds by month (total live landed pounds as a proportion of the commercial sub-ACL) and fishing year. Average landings per month over the last three fishing years (mean +/- one standard deviation) are shown in grey while total monthly landings for FY 2019 is shown in orange. Pre- and Post- COVID-19 crisis periods are shown by the dotted line. Note y-axis scales vary across panels.

Table 4 – Summary of common pool DAS carryover and leasing by fishing year.

| FY | Number of MRIs with Base Allocation | Number of MRIs with Carryover | Number of MRIs with Lease In | Number of MRIs with Lease Out | DAS Base Allocation | DAS Carryover | DAS Lease In | DAS Lease Out |
|------|-------------------------------------|-------------------------------|------------------------------|-------------------------------|---------------------|---------------|--------------|---------------|
| 2015 | 413 | 151 | 10 | 20 | 1,989.1 | 1,143.6 | 318.3 | -318.3 |
| 2016 | 397 | 142 | 13 | 20 | 1,871.3 | 1,064.1 | 329.1 | -329.1 |
| 2017 | 397 | 148 | 8 | 13 | 1,965.2 | 1,112.7 | 191.8 | -191.8 |
| 2018 | 393 | 150 | 8 | 10 | 1,940.6 | 1,150.5 | 179.0 | -179.0 |
| 2019 | 387 | 141 | 6 | 9 | 1,896.1 | 1,095.8 | 177.8 | -177.8 |

Source: GARFO, run on May 15, 2020

Table 5 - Common pool DAS available to be leased, number of MRIs with DAS to lease, and active MRIs charged DAS - A DAS by vessel horsepower (HP)* for FY19.

| Vessel HP Category | DAS Available | MRI Count | Active MRIs* |
|--------------------|---------------|-----------|--------------|
| 1 - 399 | 2,006 - 2,992 | 94 - 146 | 21 |
| 400+ | 0 - 2,006 | 0 - 94 | 7 |

*A vessel may only lease DAS from vessels with baseline HP greater than or equal to 80% of their own baseline HP.

Source: GARFO, run on June 3, 2020

Table 6 - Common pool DAS available to be leased, number of MRIs with DAS to lease, and active MRIs charged DAS - A DAS by vessel length* for FY19.

| Vessel Length Category | DAS Available | MRI Count | Active MRIs* |
|------------------------|---------------|-----------|--------------|
| 1 - 29 | 2,983 - 2,992 | 144 - 146 | 0 |
| 30 - 49 | 2,079 - 2,983 | 98 - 144 | 18 |
| 50 - 79 | 411 - 2,079 | 18 - 98 | 10 |
| 80+ | 0 - 411 | 0 - 18 | 0 |

*A vessel may only lease DAS from vessels with baseline length greater than or equal to 90% of their own baseline length.

Source: GARFO, run on June 3, 2020

Table 7 – Common pool trips, vessels, landings (live mt), and groundfish landings (live mt) by charge type; all commercial groundfish permit categories; FY 2016-2019.

| FY | DAS (Categories A, D, F) | | | | Non-DAS (C, HA, HB) | | | | Total | | | |
|------|--------------------------|---------|--------------------|-------------------------------|---------------------|---------|--------------------|-------------------------------|-------------|---------------|--------------------------|-------------------------------------|
| | Trips | Vessels | Landings (live mt) | Groundfish Landings (live mt) | Trips | Vessels | Landings (live mt) | Groundfish Landings (live mt) | Total Trips | Total Vessels | Total Landings (live mt) | Total Groundfish Landings (live mt) |
| 2016 | 546 | 37 | 1,531.9 | 114.9 | 601 | 91 | 70.1 | 51.7 | 1,147 | 128 | 1,601.9 | 166.6 |
| 2017 | 440 | 39 | 1,121.1 | 70.7 | 478 | 103 | 59.0 | 44.8 | 918 | 142 | 1,180.1 | 115.5 |
| 2018 | 436 | 40 | 1,144.7 | 55.9 | 420 | 78 | 69.3 | 45.6 | 856 | 118 | 1,214.0 | 101.5 |
| 2019 | 398 | 30 | 973.8 | 48.3 | 320 | 75 | 32.2 | 17.5 | 718 | 105 | 1,006.0 | 65.8 |

Permit and DMIS data as of 5/29/20; GARFO; run on June 17, 2020

Table 8 - Common pool trips, vessels, landings (live mt), and groundfish landings (live mt) by charge type; commercial groundfish permit categories excluding Handgear B; FY 2016-2019.

| FY | DAS (Categories A, D, F) | | | | Non-DAS (C and HA) | | | | Total | | | |
|------|--------------------------|---------|--------------------|-------------------------------|--------------------|---------|--------------------|-------------------------------|-------------|---------------|--------------------------|-------------------------------------|
| | Trips | Vessels | Landings (live mt) | Groundfish Landings (live mt) | Trips | Vessels | Landings (live mt) | Groundfish Landings (live mt) | Total Trips | Total Vessels | Total Landings (live mt) | Total Groundfish Landings (live mt) |
| 2016 | 546 | 37 | 1,531.9 | 114.9 | 303 | 24 | 46.6 | 38.8 | 849 | 61 | 1,578.4 | 153.8 |
| 2017 | 440 | 39 | 1,121.1 | 70.7 | 177 | 16 | 21.0 | 15.4 | 617 | 55 | 1,142.2 | 86.2 |
| 2018 | 436 | 40 | 1,144.7 | 55.9 | 176 | 15 | 17.9 | 12.7 | 612 | 55 | 1,162.6 | 68.6 |
| 2019 | 398 | 30 | 973.8 | 48.3 | 147 | 17 | 14.8 | 6.4 | 545 | 47 | 988.5 | 54.6 |

Permit and DMIS data as of 5/29/20; GARFO; run on June 17, 2020

Table 9 - Common pool trips, vessels, landings (live mt), and groundfish landings (live mt) by charge type; non-DAS permits; FY 2016-2019.

| FY | C | | | | HA | | | | HB | | | |
|------|------------|---------|--------------------|-------------------------------|----------------|---------|--------------------|-------------------------------|-------|---------|--------------------|-------------------------------|
| | Trips | Vessels | Landings (live mt) | Groundfish Landings (live mt) | Trips | Vessels | Landings (live mt) | Groundfish Landings (live mt) | Trips | Vessels | Landings (live mt) | Groundfish Landings (live mt) |
| 2016 | 25 | 3 | 4.7 | 2.7 | 278 | 21 | 41.9 | 36.1 | 298 | 67 | 23.5 | 12.8 |
| 2017 | Trips: 177 | | Vessels: 16 | | Landings: 21.0 | | GF Landings: 15.4 | | 301 | 87 | 38.0 | 29.4 |
| 2018 | 61 | 3 | 8.3 | 4.5 | 115 | 12 | 9.6 | 8.2 | 244 | 63 | 51.4 | 32.8 |
| 2019 | 60 | 3 | 11.0 | 3.5 | 87 | 14 | 3.8 | 2.8 | 173 | 58 | 17.5 | 11.2 |

Permit and DMIS data as of 5/29/20; GARFO; run on June 17, 2020

Appendix: History of carryover actions

Sector ACE carryover

Amendment 16 implemented ACE carryover (in conjunction with ACE transfers) to increase the flexibility of fishermen to adapt when allocated ACE is not aligned with catch rates. The Council noted that the ability to carry forward small amounts of ACE into the next allocation period would reduce incentives to fish right up to the maximum allowed amount. The biological effects analysis highlighted that allowing carryover increases the risk that mortality targets could be exceeded, but indicated that the risk is limited because maximum carryover is limited to ten percent of the ACE for each stock and carryover does not accumulate over time.

During the Council's development of FY 2013 measures, Council staff and NMFS recognized that the maximum carryover (10 percent of FY 2012 sector ACE), if used in conjunction with the much lower catch limits being put in place, could cause overages of the ACL, ABC, and, for GOM cod, the OFL. An emergency action concurrent with the Framework 50 final rule limited maximum carryover of GOM cod (only), to prevent the potential carryover plus ACL from exceeding the OFL. In the same action, NMFS used its authority under 305(d) to clarify the carryover accounting process for future years. That change created a *de minimis* amount of carryover that would not be subject to the pound-for-pound payback accountability measure (AM). The actual *de minimis* amount was not determined in that action but would be low enough to prevent the possibility of catch exceeding ACL. Therefore, only catch above ACL would require payback. A subsequent rulemaking (79 FR 31050; May 30, 2014) set the *de minimis* amount to 1 percent of the Year 2 sector sub-ACL.

In 2014, the U.S. District Court for the District of Columbia vacated the portion of Framework 50 and its associated rule allowing carryover that would allow total potential catch that exceeds the ABC. In response to the Court's order, NMFS implemented an emergency action (79 FR 36433; June 27, 2014) that revised carryover measures for FY 2013. A two-tiered accountability evaluation was adopted that required any sector that used FY 2012 carryover ACE in FY 2013 to pay back the carryover used, except for a *de minimis* amount. This accountability measure was triggered only if catch exceeded both the total ACL and the sector sub-ACL for the stock.

In Framework 53 (80 FR 25110; May 1, 2015), the Council revised the ACE carryover provisions to reduce the maximum carryover available if the total available catch (carryover plus ACL) for the upcoming fishing year would exceed the ABC. The final adjustment to the maximum carryover possible for each sector is based on final fishing year catch for the sectors and each sector's total unused allocation; and is proportional to the cumulative PSCs of MRIs participating in the sector. Framework 53 retained the 2-tiered evaluation. If an ACL overage occurs and sectors have caught above the sector sub-ACL (which does not include carryover), sectors are responsible for a pound-for-pound payback, minus the *de minimis* amount of carryover set by NMFS. Currently, the *de minimis* amount is 1 percent of the sector sub-ACL. NMFS has the authority to change the *de minimis*. While the regulations do not specify a limit to the *de minimis* amount, the rulemaking that set the current level of 1 percent provided justification that a 1-percent *de minimis* would be within the management uncertainty buffer that is used to reduce the ABC to the ACL. These carryover provisions remain in effect today.

DAS carryover

Framework 24 implemented DAS carryover provisions in 1998. Due to a concern that unforeseen circumstances may result in either forfeiture of DAS or fishing under unsafe circumstances, such as bad weather conditions or mechanical breakdowns near the end of the year, the Council developed a measure to allow vessels to carry over up to 10 unused multispecies DAS from one fishing year to the next. The Council implemented DAS carryover to promote safety by reducing risk and increasing planning flexibility, while not compromising the conservation impact of the DAS program. DAS-sanctioned vessels carry over unused DAS based on their DAS allocation minus total DAS sanctioned.

The Council began the DAS reduction program in 1994 with the implementation of Amendment 5. The final stages of the reduction program took place under Amendment 7 in 1996 and 1997. By 1997, as allocations became broadly restrictive, vessel owners were developing annual fishing strategies that would maximize their economic benefit from a limited fishing opportunity. For many owners, that meant reserving some DAS for the end of the fishing year when other vessels would have run out of DAS. If weather, mechanical breakdown, or other circumstance prevented the vessel from using all its allotted DAS, those valuable DAS would be lost. These restrictions incentivized some vessels into fishing under unsafe conditions rather than lose the fishing time. In response, the Council allowed the 10-DAS carryover, to promote safety by reducing the vessel owners' risk and increasing their planning flexibility without compromising the conservation impact of the DAS program.

Framework 24 asserted DAS carryover would not result in any measurable biological impact because it would not result in any increase in the overall DAS allocated. Positive economic impacts were expected to be limited to vessels that were able to use DAS they would otherwise have lost, but most vessels (<20%) at that time did not fish their DAS allocations to within 10 DAS of the total. The social impact was predicted to be positive, but very small.

Timeline/History of ACE Carryover Actions

| Date | Cite | Summary |
|-----------------|---|--|
| March 29, 2013 | 78 FR 19368 | FW 50 proposed rule. |
| May 3, 2013 | 78 FR 26172 | FW 50 Interim Final Rule and 3 parallel emergency actions, including one to modify the maximum carryover of GOM cod from FY 2012 to FY 2013. Used 305(d) to clarify how to account for sector carryover for FY 2013 and for FY 2014 and beyond to reconcile conflicts between the sector carryover program and the conservation objectives of the FMP and how to account for carryover catch consistent with the national standards. |
| August 29, 2013 | 78 FR 53363 | FWs 48 and 50; and FY13 Sector Ops Final rule. |
| March 17, 2014 | 79 FR 14635 | Carryover proposed rule. Proposed <i>de minimis</i> carryover level for 2014 to complete the process laid out under 305(d) in conjunction with the FW 50 final rule. |
| April 4, 2014 | Conservation Law Foundation v. Pritzker, et al. (Case No. 1:13-CV-0821-JEB) | Court Order to vacate the portion of Framework 50 and its associated rule allowing carryover catch. Court determined sector carryover combined with the total ACL for the upcoming fishing year could not exceed the ABC. |
| June 27, 2014 | 79 FR 36433 | Temporary Rule; Emergency Action to revise carryover in response to the court order. Revised carryover from 2012 to 2013 and required payback for any sector using carryover if both the sector sub-ACL and the total ACL for a stock were exceeded. |
| March 9, 2015 | 80 FR 12394 | FW 53 proposed rule; Sector Carryover. Proposes to reduce the maximum available carryover down from 10 percent to ensure that total potential catch does not exceed the ABC. |
| May 1, 2015 | 80 FR 25110 | FW 53 final rule; Implemented sector carryover changes as proposed. Created current system. |