

## New England Fishery Management Council

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#### **MEMORANDUM**

**DATE:** March 12, 2025

**TO:** Monkfish and Skate Committees

**FROM:** Monkfish and Skate Plan Development Teams (PDT)

**SUBJECT:** Joint Monkfish and Skate Analyses on Fishery Performance and Overlaps

In 2025, the Council will be developing fishery specifications for the monkfish and skate fisheries and engaging in a longer-term discussion of the potential for more coordinated management. The relevant 2025 Council work priorities are:

- 1. Monkfish: "Develop 2026-2028 monkfish fishery specifications,"
- 2. Skate: "Develop 2026-2027 skate fishery specifications," and
- 3. Monkfish/Skate: "Coordinate Committee and AP activities and review effectiveness of joint planning (multiyear, initiate in 2025)."

Thus, the only Council actions in 2025 for these fishery management plans will be the setting of monkfish and skate specifications. For these fisheries, this is limited to:

- <u>Monkfish/Skate</u>: Setting acceptable biological catch, annual catch limits and total allowable landings (i.e., the specifications flow chart).
- <u>Skate</u>: Setting wing and bait seasonal possession limits and the trigger for reducing the in-season possession limit to incidental levels. These specifications do not require a framework adjustment (50 CFR 648.320(a)(5)).
- Monkfish: Setting days-at-sea (DAS) and trip limits and revising the ACT for a monkfish stock if it is determined that the ACL was exceeded in a given year. Monkfish specifications must be set via a framework adjustment (50 CFR 648.96(a)(2) and (d)(2i)).

When setting specifications, there is scope to consider what adjustments to the measures listed above may promote efficiency and optimize quota use for both fisheries. This memo is an initial compilation of data on these fisheries, focusing on their overlap. Data have been pulled from prior documents, but a few updates or additional information have been provided, and the PDT has commented on possible analyses (Table 1). The goal is to aid the Committees in considering potential efficiencies that could be gained in the near-term through the specifications actions. The memo serves as a steppingstone for the multiyear review of joint planning in support of the Inflation Reduction Act project focused on joint management across fisheries and regions (NEFMC, p. 11). The PDTs expect to follow up with additional information based on Committee and/or Council tasking.

The priority to coordinate between monkfish and skate management emerged from discussions at recent Monkfish and Skate Advisory Panel and Committee meetings where overlaps between these fisheries were identified. Industry members generally noted an increase in skate catch in recent years, which has

implications for targeting monkfish. Fishermen targeting monkfish can incidentally catch large amounts of skates and reach skate possession limits before monkfish possession limits, ultimately reducing monkfish landings. However, conducting multiple trips per day to achieve landing the full monkfish limit per DAS when skate trip limits are quickly hit is inefficient. As nets fill with skates, monkfish catch declines, and clearing skates from fishing gear is time consuming, increasing soak times or leading fishermen to set fewer nets. Industry has also shared that the prevalence of skates is a disincentive to use Monkfish Research Set-Aside DAS.

To address these concerns, the NEFMC has recommended, and NMFS has approved, increases to skate wing possession limits that were recommended by the Skate AP. For example, skate wing possession limits increased in FY 2024 after the Skate AP noted this would "help reduce live skate discards for the vessels targeting monkfish, avoiding 'wading through skates to get more monk'." (Skate AP meeting summary, August 29, 2023). Despite incremental adjustments, concerns continue. A more holistic approach to effort controls in both fisheries may help to address some of these concerns and improve efficiency in the monkfish and skate fisheries.

# Discussion questions:

- How do monkfish regulations constrain the skate fishery and vice versa?
- Given the scope of the monkfish and skate specifications actions described above, are there potential changes in effort controls that could be implemented through these actions that might improve efficiency and optimize quota use?
- What information beyond that provided in this memo would help inform development of the specifications and longer-term considerations of effective management?

### **OVERVIEW OF FISHERY PERFORMANCE**

Skate: Total skate catch since FY 2018 has been 57-84% of the ACL, with this percentage generally decreasing over this period (Figure 3). Federal commercial landings and dead discards (from all gears) have been roughly equivalent, with minor amounts of catch from state landings, recreational catch, and non-landed bait (Figure 3). Discards are primarily generated from trips using otter trawl and scallop dredge gears. Skate landings and landings relative to the wing and bait TALs have also decreased over this period, from 88% and 77% for wing and bait, respectively, in FY 2018 down to 44% for both in FY 2023 (Table 4). As of March 5, 2025, 62% of the Wing TAL and 52% of the Bait TAL had been used (GARFO monitoring reports; Table 4). In FY 2018, 398 vessels landed skate, decreasing to 267 vessels in FY 2022. Of the 267 vessels in FY 2022, just 58 had skate landings constitute >10% of total revenue (Skate Framework 12). Overall revenue also decreased: \$9.5M in FY 2018 down to \$5.7M in FY 2022, largely due to the drop in landings (Document 7b, Table 15). There are eight primary ports in the skate fishery: Chatham and New Bedford, MA; Little Compton and Point Judith, RI; Montauk, NY; and Belford, Barnegat Light and Cape May, NJ (Skate Framework 12) and 2024 Annual Monitoring Report have more information).

<u>Monkfish</u>: Commercial landings were 60-84% of total monkfish catch in the Northern Fishery Management Area and 14-17% in the Southern Fishery Management <u>A</u>rea in FY 2022 and 2023, respectively. Over time, the northern area has had a higher TAL and higher possession limits than the south. In FY 2023, 100% of the TAL was landed in the north, while only 29% of the TAL was landed in

the south. Discards in both management areas have fluctuated over FY 2017- 2022, however, discards in the northern and southern management areas decreased from FY2022 to FY2023 (~11-13% in the north and ~13-21% in the south). Monkfish discards are primarily from scallop dredges in both monkfish management areas. There is a substantial amount of latent effort in the monkfish fishery; the number of days-at-sea (DAS) used is far below the DAS allocated, though DAS use has increased for every permit category the past three fishing years. There is industry concern that this latent effort could become active and contribute to higher landings, which could have implications for TAL use in both management areas. 22-37% of Permit Category A and B vessels used at least one DAS in FY 2022-2023 and Category C and D vessels was generally lower with 4-10% of vessels using at least one DAS these past two fishing years. For trips where monkfish comprised over 50% of the revenue, total monkfish revenue was \$29.1M in CY 2004 down to \$5.5M in CY 2022. Seasonally, prices tend to be lower in spring to summer months and higher in fall to winter. There are six primary ports in the monkfish fishery: Gloucester, Boston, and New Bedford, MA; Point Judith, RI; Montauk, NY; and Barnegat Light, NJ. Monkfish Framework 13 and the 2024 Monkfish Fishery Performance Report have additional information.

#### OVERVIEW OF THE OVERLAP OF THE MONKFISH AND SKATE FISHERIES

Generally, the overlap of the skate and monkfish fisheries occurs in the skate wing fishery, which is allocated 66.5% of the skate Federal total allowable landings (TAL). Between FY 2012-2018, about 36-45% of skate wing landings were from trips using a Monkfish DAS (41-49% from Northeast multispecies DAS trips and 6-15% undeclared trips landings; March 14, 2020, PDT memo). On trips where a Monkfish DAS was used in FY 2021, 61% of the revenue was from monkfish (~\$2.5 M), 17% from skate (~\$700,000), 13% from groundfish (~\$542,000), and minor components of the revenue from other species (Monkfish Framework 13). This is likely because monkfish commands a higher price given there was a similar magnitude of monkfish and skate live landings in FY 2021. Between FY 2018-2020, skate wing landings were primarily from two statistical areas: to the east of Cape Cod in the Northern Monkfish Management Area, and to a lesser degree, to the south of Rhode Island in the Southern Monkfish Management Area (Skate Framework 12, Map 5).

The skate bait fishery is largely separate from other fisheries. Most trips landing bait skate use a Bait Letter of Authorization (LOA) and occur in a small area south of Rhode Island (in the Southern Monkfish Management Area (Map below). Most skate bait landings were from declared Northeast Multispecies trips and on undeclared trips (March 14, 2020, PDT memo).

#### DATA UPDATES, ANALYSES, AND INFORMATION

Table 1 lists higher-level information for the Joint Monkfish-Skate AP and Committee discussion. Table 2 includes several ideas for potential analyses to describe/demonstrate overlap between the monkfish and skate fisheries. Within each table, Skate and Monkfish PDTs have provided input on the topics. Other background information from prior documents has been compiled into a separate document for the meetings on March 19 and 20.

Table 1. Data and analyses on fishery performance of the monkfish and skate fisheries and fishery overlaps, including main takeaways developed by the Joint Monkfish Skate PDT.

Item	Joint analyses/data	Main takeaways from Joint PDT
		Year-End Accounting and TAL Use
#1	FY 2018-2023 year-end catch accounting for monkfish and skates (Figure 1, Figure 2, Figure 3).	Monkfish: generally declining catch relative to ACL, especially in the Southern area  Skate: generally declining catch relative to ACL.
#2	FY 2018-2024 landings relative to TALs for monkfish (landings by quarter, Table 3, Table 4; Figure 4, Figure 5) and skates (landings by season, Table 5).  Note: Data updated through 2/24/2025.	Monkfish: Northern area - generally peak landings beginning in late fall through winter and high % TAL achieved. Southern area – generally peak landings at the start of the fishing year and low % TAL achieved.  Skate: generally declining wing and bait landings relative to TAL; seasonal TAL use varies.
	Fish	ing Effort: Fishing Locations, DAS use
#3	Heat map of total monkfish, skate bait, and skate wing landings averaged across FY 2018 – 2023 (excluding FY2020 due to the pandemic), by quarter (May-July; August – October; November – January; February – April) and by statistical area (Map 1).	Monkfish: total landings are mostly concentrated in the NFMA (in Statistical Areas 513, 514, 515, 521, 522) and in Statistical Area 537 in the SFMA.  Skate: wing landings are mostly in Area 521, east of Cape, in monkfish NFMA; bait fishery mostly in Area 539, south of RI in monkfish SFMA. Seasonally, in NFMA, skate wing landings peak in May-October (particularly in Area 521); in the SFMA, skate wing landings peak in November-April (particularly in Area 537). Skate bait landings are concentrated in Area 539 throughout the fishing year.
		<ul> <li>Overlap of monkfish, skate bait, skate wing fisheries:</li> <li>Overall: Monkfish and skates are both caught over a broad geographic area in the Gulf of Maine and in Southern New England. Across all four quarters, Statistical Area 537 (in the southern area) consistently has the highest overlap of monkfish, skate wing, and skate bait fisheries while Statistical Areas 539 and 611 (in the southern area) consistently has overlap of skate wing and skate bait, though to a lesser extent monkfish. Statistical Areas 515 and 521 (in the northern area) consistently has moderate overlap of monkfish and skate wing landings.</li> <li>Quarter 1: Statistical Area 537 in the southern area had the greatest overlap of fishing activity for monkfish, skate wings, and skate bait and Statistical Area 539 had the greatest overlap of both skate bait and skate wing landings, though to a lesser extent monkfish landings relative to Statistical Area 537. Statistical Area 613 also</li> </ul>

#4	Number of vessels by monkfish permit category	<ul> <li>had a moderate overlap for all three fisheries. Statistical Areas 515 and 521 in the northern area had moderate overlap of monkfish and skate wings but not skate bait.</li> <li>Quarter 2: Statistical Area 521 (in the northern area) had the greatest overlap of fishing activity for monkfish and skate wings but not skate bait, however, Statistical Area 514 had the highest monkfish landings. Statistical Areas 539 and 611 (in the southern area) had the highest overlap of skate wings and skate bait, though only moderate monkfish landings.</li> <li>Quarter 3: Statistical Areas 515 and 522 (in the northern area) had the highest overlap of monkfish and skate wing activity but not skate bait, however. Statistical Area 537 (in the southern area) had the greatest overlap of fishing activity for monkfish, skate wings, and skate bait, however, skate wing and skate bait landings are highest in Statistical Area 539, which only has moderate monkfish landings.</li> <li>Quarter 4: Statistical Area 537 (in the southern area) had the greatest overlap of monkfish, skate wing, and skate bait fishing activity, while Statistical Area 514 (in the northern area area) had overlap of all three fisheries, though lower to moderate amounts. Statistical Area 515 (in the northern area) had high monkfish landings and lower skate wing landings and no skate bait landings, while Statistical Area 539 (in the southern area) had moderate overlap of skate wing and bait landings, though lower degree of monkfish landings.</li> <li>Monkfish permit categories C and D (monkfish permits that also had either a groundfish or</li> </ul>
π <b>-4</b>	landing only monkfish or only skate for vessels landing > 1 lb and > 10,000 lb of either skate or monkfish, FY 2018 –2023 (Table 6).	scallop limited access permit) accounted for more limited access permits than categories A and B (monkfish permits that did not have a groundfish or scallop limited access permit). Permits A and B generally had more percentage of active permits (landing > 1 lb of monkfish, landing > 1 lb of skates) and permits that landed >10,000 lb of monkfish and landed >10,000 lb of skates (targeting fisheries) than permits C and D.
#5	Number of fishing vessels issued both federal monkfish and skate permits, with number of vessels landing over 1 lb and 10,000 lb, FY 2018-2023 (Table 7).	Of the vessels issued both federal monkfish and skate permits, more land some monkfish than those that land skate (vessels that land > 1 lb) but a similar number appears to target one species or the other (vessels that land > 10,000 lb); about half the number of vessels target both species. There has been an overall slight decline in the number of vessels landing >1 lb and >10,000 lb of both monkfish and skates since FY 2018.
		Monkfish: General decline in number of monkfish limited access permits over time for vessels landing > 1 lb and > 10,000 lb of monkfish.
		Skate: Overall decline in the number of vessels landing >1 lb and >10,000 lb of skates since FY 2018, though the number of vessels landing >10,000 lb of skates has increased slightly after a six-year low in 2021.

#6	Monkfish landings, discards, and total # of vessels and trips by trip declarations (plan code) and DAS used, average across FY 2019 and FY2021 (Table 8).	In the northern area, the greatest number of trips and ~86% of monkfish landings were on trips that did not use a Monkfish DAS (most landings were on trips using a Northeast Multispecies DAS); In the southern area, vessels using a Monkfish DAS accounted for the greatest number of trips and ~73% of the monkfish landings.
#7	Skate quota monitoring figure approximately denoting July 2024 when the increase in skate possession limits was implemented (Figure 6).	Skate: Increase in skate possession limit mid-season did not seem to affect the rate of landings.
#8	Landings by species for trips landing monkfish by northern and southern management areas by gear type for FY 2023 (Table 9).  Landings by species for trips landing skate (by	Monkfish: In the northern area, the greatest overlap in landings is monkfish and skates in gillnet fishery and haddock and monkfish in the otter trawl fishery. In the southern area, the greatest overlap in landings is monkfish and skate in both the gillnet and otter trawl fisheries, though most monkfish and skate landings are caught using gillnet.
	food only, bait only, food & bait) by gear type for FY 2023 (Table 10).	Skate: Bait fishery has little overlap with monkfish. Overlap is mostly in skate food fishery, mostly gillnet, some otter trawl.
		Economic Information
#9	Average percentage revenue of monkfish and skate wing revenues per trip for any trip landing > 1 lb of monkfish or skate wings by FY 2018 – 2023 (Figure 7); average percentage revenue from trips where >50% of revenue is from monkfish (Figure 8); average percentage revenue from trips where >50% of revenue is from skate wings (Figure 9).	Figure 7 – For any trip landing > 1 lb of monkfish or skate, 73-80% revenue was mostly from other species.  Figure 8 – For trips where >50% of revenue is from monkfish landings, 13-19% revenue was mostly from skates, minor other species.  Figure 9 – For trips where >50% of revenue is from skate wing landings, 8-13% revenue was from monkfish, 10-14% other species.
	Note: Monkfish revenue dependence data through FY 2021 where over 50% of revenue is from monkfish and on Monkfish DAS trips is in Table 10 and Table 11. Also have info on the <a href="MEFSC performance metrics">MEFSC performance metrics</a> website.	
#10	Average percentage revenue per Monkfish DAS for FY2018-2023 (excludes trips using both Northeast Multispecies and Monkfish DAS) (Figure 10).	Monkfish: Average percent of monkfish revenue per Monkfish DAS has generally declined over time (71% of revenue in FY 2018 to 46% of revenue in FY 2023).  Skate: Skate wing revenue per Monkfish DAS has generally increased over time (26% in FY 2018 to 49% in FY 2023).

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#11	For trips landing >1 lb of both monkfish and	Figure 11 – there is seasonal variability in proportion of monkfish, skate, and other species
	skates, average percentage of monkfish and	revenue per trip, with other species accounting between 25% and 80% of trip revenue
	skate wing revenue by calendar year 2018 –	depending on the month. Monkfish revenue per trip seems to peak at the start of the fishing
	2023 and by month (Figure 11).	year and in late fall. The proportion of trip revenue from skates appears to peak during the
	For trips landing > 1 lb of both monkfish and	middle of the summer. Other species' revenue generally accounts for half of trip revenue.
	skate wings, average percentage of monkfish	Figure 12 – Average percent revenue of monkfish for trips landing > 1 lb of both monkfish

and skate wing revenue by month (averaged

across FY 2018 – 2023) (Figure 12).

Figure 12 – Average percent revenue of monkfish for trips landing > 1 lb of both monkfish and skate wings by month is highest in May and June (start of fishing year) with a peak again in January; skate revenue peaks in summer (July through September); other species revenue accounts for the majority of average trip revenue every month (ranging from 50% to 75% per trip).

Table 2. Potential additional analyses/data to be provided by the Joint PDT in spring through summer 2025.

#	Ideas for analyses/data	Purpose	Prioritization (high, medium, low, don't do) and comments		
			Joint AP	Joint Committee	
	ing Effort: Permit Activity, DAS Use				
#1	Update the total Monkfish DAS used by monkfish permit category and by fishing year. Show the total Monkfish DAS allocated for comparison and/or the % used.  Note: have table for FY 2021 – 2023 (Other Fishery Background Data, Table 7).	Help identify effects of changes in DAS use after Monkfish FW13 was implemented (35 DAS for the NFMA and 37 DAS for the SFMA; removal of Southern area DAS usage restriction, added overall usage restriction of 46 DAS).			
#2	Total Monkfish Research Set-Aside DAS used and associated monkfish and skate landings per RSA DAS	Help provide a more comprehensive evaluation of monkfish DAS use and contribution to monkfish and skate landings.			
#3	History of regulatory changes in effort controls between the two fisheries over time.  Note: Tables of recent possession limits for monkfish and skates (Other Fishery Background Data, Tables 2-6); would have to compile more info depending on level of detail necessary.	Help understand the regulatory context for the data.			
#4	Update Table 8 with FY 2022-2023 data on monkfish landings, and total number of vessels and trips by trip declarations (plan code) and DAS used; add monkfish discards to the table.  Add similar table for skate landings and discards, showing skate landings on a MNK DAS, Northeast MULT DAS, and 'Other'.	Shows amount of monkfish and skate activity that is within the fishery components.			
#5	Scatter plot of the percent of monkfish and skate possession limits landed on each trip (e.g., a trip achieved 80% of skate possession limit and 15% monkfish possession limit). Separate charts by different trip declarations (MNK only, MNK-MULT DAS, etc.)	Shows the amount of theoretical 'missed' landings and differences in achieving possession limits for both fisheries (difference between realized landings relative to possession limit)			

	and by NFMA and SFMA, skate season, and/or gear		
Eigh	type.	na Diaganda	
	ing Effort: Fishing Locations, Possession Limits, Landing		
#6	<ul> <li>Maps of fishing locations (in addition to Map 1):</li> <li>Align seasons with skate seasonal possession limits; show average landings per trip relative to possession limits (% of limit achieved), caution as trip limits have varied through time.</li> <li>Landings by gear type (gillnet, otter trawl, other).</li> <li>Incorporate effort metrics (e.g., DAS, trips).</li> </ul>	Show geographic distinctions in achieving possession limits and the gear used.	
#7	Tables/figures of monkfish and skate landings by gear type.  Note: FY 2023 landings for all species by gear for trips landing skate food, bait, and mixed in Table 10.  Monkfish landings by gear type/fishing year through CY 2021 in Other Fishery Background Data (Table 11).	Show the proportion of landings caught using each gear type. Could show which gear types may have more co-occurrence of species.	
#8	Two tables: 1) Monkfish DAS trips landing skate wings. Show number of trips landing skates below 75% of possession limit, 75-100% of possession limit and >100% of possession limit for each wing season and total for FY; have separate column of monkfish landings relative to possession limits on the same trips; and 2) same for Monkfish-Northeast Multispecies DAS trips. Could break out data by region, quarter/season, and/or gear type in separate figures.	To understand if/how skates constrain monkfish landings. MNK only DAS trips pertain to SFMA, MULT-MNK pertain to NFMA. Focus on Statistical Area 521 Quarters 1 (May – July) and 2 (August – October) where there is high skate landings and moderate monkfish landings, which could be an indication that this is a time/area where skate is constraining monkfish. Consider higher spatial resolution of landings data (by quarter degree squares vs statistical areas?)	
#9	Overall trends in monkfish and skate discards relative to trips below and $\pm 10\%$ of possession limits across both fisheries and any seasonal differences over time.	For vessels targeting monkfish, could show how skate discards vary and vice versa.	 
	Note: Have table of skate wing and bait TALs by season and DAS trips landing skate wings relative to DAS seasonal possession limits FY2018-2022 (Other		

	Fishery Background Data, Tables 5-6); could be used as template for this analysis. FY18 might be an anomaly in discards because there was a monkfish spawning event in 2015 that could have caused a large amount of discards because they were small and not marketable.		
#10	Monkfish and skate landings and discards by gear type in NFMA and SFMA (for monkfish) and by fishery (bait, wing for skate) and by fishing year, including total number of trips.	Could indicate degrees of co-occurrence of species in different areas/ using different gear types	
	Note: have monkfish discards by gear type and management area CY 2012-2023 (Other Fishery Background Data, Tables 9-11); have skate discards by gear type CY 2012-2021 in FW12 (not split out by bait/wing). Could do by statistical area.		
#11	For trips using a Monkfish DAS, by management area, number of unique vessels using a MNK DAS, number of trips with both monkfish and skate landings (> 1 lb of each monkfish and skate), average monkfish landings/trip, average skate landings/trip, average monkfish discards per trip, and average skate discards per trip, by fishing year for FY 2018 - 2023.  OR could look at discards of adult monkfish and skate instead of average discards per trip?	To help characterize the degree of monkfish and skate discards on monkfish declared trips in each monkfish management area; Quantify directed fishing effort first and foremost (using a MNK DAS).	
#12	For trips using a Monkfish DAS, show skate and monkfish discards when landings are shown relative to possession limits, FY 2018 – 2023.	To help characterize the degree of monkfish and skate discards on monkfish declared trips – alternative to previous idea?	
#13	Frequency of trip discards per Northeast Multispecies DAS by permit category.  Note: FY 2021 data available for monkfish (Other Fishery Background Data, Figure 5); none for skates.	To evaluate any changes relative to incidental trip limits. Less central to identifying overlap with skates but could be helpful for broader fishing and discarding activity.	
	nomic Information		
#14	Monkfish landings from trips that hit the skate wing limit vs those that do not – by season or month – could build out analysis for differences in revenue.	Quantify potential fishing opportunity/ income lost/not realized by hitting the skate limit before hitting the monkfish limit.	

#15	Revenue of monkfish, skate and other species revenue per vessel by fishing year/calendar year.  Note: Data through 2023 available on NOAA Fisheries Performance Measures site (Other Fishery Background Data, Figures 7-10, Tables 13-14).	Shows trends in revenue coming from each species over time. Could show impact of catching/landing more skates or monkfish on vessel revenues.	
#16	Overall trends in monkfish and skate average monthly prices over time; monthly monkfish and skate prices per live pound by calendar or fishing year.  Note: have skate landings revenues and average prices through FY 2022; have monkfish monthly price through 2021 (Other Fishery Background Data, Table 14, Figures 12-13). Data through 2023 are on NOAA Fisheries Performance Measures site by FMP.	Additional context for prices and revenues over time; could better highlight seasonal differences in monkfish and skate prices and any overlap with peak landing of skates and monkfish.	
#17	Monkfish and skate wing revenue/revenue dependence on trips where over 50% of revenue is from monkfish only, skate only, and monkfish/skate, by fishing year for FY 2018-2023; by season or sub-annual breakdown.	More detailed analysis than Table 1 items.	
18	Gross revenue per vessel per Monkfish DAS (not groundfish-MNK combo) for FY 2018-3023, breakdown by different skate trip limits (i.e., skate wing season) (more detailed analysis than what's in Table 1).	Could reveal a declining income per trip due to the skates.	
#19	For trips landing >100 lb of both monkfish and skates, average percentage of monkfish and skate wing revenue by monkfish management area, and gillnet gear type, by CY 2018-2023 and month.	Would replace item #12 in Table 1, using a higher landings threshold (100 lb versus 1 lb, to capture more directed effort). Would demonstrate differences in average revenues by monkfish management area and by gear	
	For trips landing >100 lb of both monkfish and skate wings, average percentage of monkfish and skate wing revenue by monkfish management area and by gillnet gear type, by month (averaged across FY 2018-2023).	type.	
	nan Communities		
#20	Skate and monkfish fishing community engagement and reliance indicators with delineation of primary and secondary ports.	Identify overlaps in ports identified as primary and secondary for these fisheries.	

#21	Note: Monkfish primary and secondary ports (engagement index for 2016-2020); skate primary and secondary ports (engagement and reliance indicators for 2018-2022) (Other Fishery Background Data, Tables 16-20). Need SSB support to provide same 5- year average.  Fishing revenue and total number of active monkfish and skate vessels in top monkfish and skate ports by	Identify degree of fishing activity in ports.		
	revenue by calendar year.  Note: have monkfish revenue and total active vessels by port through 2019 and by state through 2021; skate average revenues, active vessels and active dealers through 2022; average revenue by state for wing and bait fisheries, CY 2018-2022; skate revenue by disposition and port for CY 2018-2022 (Other Fishery Background Data, Tables 21-24). Total active vessels by port for 2018-2022 (in FW12).			
#22	Skate and monkfish revenue/landings by port – combine tables to show overlapping ports.	Identify degree of revenue overlap in ports.		
	Note: Revenue by port available for monkfish through 2020 and skates through 2022; have monkfish landings by state through CY 2021 and skate revenue by state, last 5-year average (Other Fishery Background Data, Tables 24, 25, 31, 33).			
#23	Number of dealers reporting skate and monkfish revenue relative to total for each.  Note: have total active skate dealers by port for 2018-2022; federal skate dealers by skate disposition and fishing year through FY 2022, number of dealers by state and disposition in FY 2022 (Other Fishery Background Data, Tables 26-27).	Identify number of dealers with both skate and monkfish, revenue and degree of dependence on these fisheries.		
Othe			T	
#24	Identify how fishery performance aligns with the onset of offshore wind development including Geological and Geophysical (G&G) surveys.	Could help provide context for when offshore wind survey activity began.		

Monkfish Catch Relative to ACL in NFMA, FY 2018-2023 10000 Metric tons 5000 0 2018 2020 2021 2022 2023 2019 Fishing Year Recreational catch (MRIP landings & discards) Estimated discards State commercial landings Federal commercial landings —ACL

Figure 1. Year-end monkfish Northern FMA ACL accounting (mt), FY 2018-2023.

*Note:* FY2018 – FY2021 data are from Monkfish Framework 13 (data source: dealer, NEFOP, and Marine Recreational Information Program) and FY2022 – FY2023 data are from 2024 Monkfish Fishery Performance Report.

Source: CAMS and Marine Recreational Information Program.

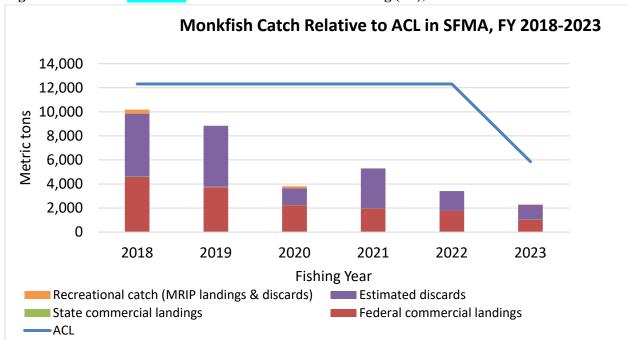


Figure 2. Year-end monkfish Southern FMA ACL accounting (mt), FY 2018-2023.

*Note:* FY2018 – FY2021 data are from Monkfish Framework 13 (data source: dealer, NEFOP, and Marine Recreational Information Program) and FY2022 – FY2023 data are from 2024 Monkfish Fishery Performance Report.

Source: CAMS and Marine Recreational Information Program.

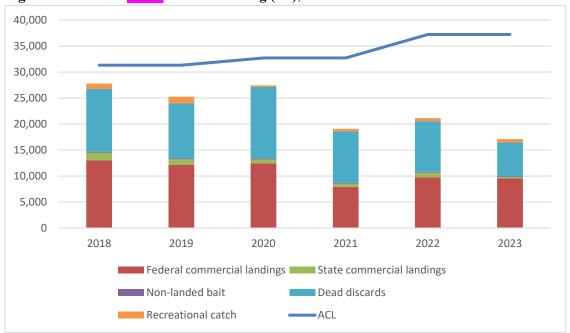


Figure 3. Year-end skate ACL accounting (mt), FY 2018-2023.

Source: Skate FW12 (FY 2018-2022) and 2024 Skate Annual Monitoring Report (FY 2023).

Table 3. Monkfish landings (whole/live weight, mt) by quarter in the NFMA and SFMA compared to TAL, FY 2018-2024. Total DAS used are included by quarter and by fishing year as a metric of fishing effort for all trips landing monkfish (not just trips using a Monkfish DAS); due to data confidentiality reasons, it is likely not possible to further break down data by management area, declaration type, and by quarter for all fishing years.

(next page)

FY	Quarter	Total	Northern Management Area			Souther	n Manager	nent Area	
		DAS	Monkfish	TAL	Percent		Monkfish	TAL	Percent
		Used	Landings (mt)	(mt)	TAL		Landings (mt)	(mt)	TAL
	May-Jul	14,374	1,222	6,338	19%		2,020	9,011	22%
	Aug-Oct	9,772	1,612	6,338	25%		198	9,011	2%
2018	Nov-Jan	12,271	1,403	6,338	22%		1,210	9,011	13%
2018	Feb-Apr	14,486	1,785	6,338	28%		1,189	9,011	13%
	TOTAL	50,903	6,022	6,338	95%		4,617	9,011	51%
	May-Jul	11,870	1,443	6,338	23%		2,064	9,011	23%
	Aug-Oct	9,361	1,503	6,338	24%	-	131	9,011	1%
2010	Nov-Jan	10,868	1,539	6,338	24%		977	9,011	11%
2019	Feb-Apr	11,964	1,720	6,338	27%		583	9,011	6%
	TOTAL	44,063	6,206	6,338	98%	-	3,755	9,011	42%
	May-Jul	10,953	1,046	6,624	16%		1,317	5,882	22%
	Aug-Oct	9,365	1,173	6,624	18%		70	5,882	1%
2020	Nov-Jan	10,087	1,580	6,624	24%		444	5,882	8%
2020	Feb-Apr	10,793	1,434	6,624	22%		459	5,882	8%
	TOTAL	41,198	5,233	6,624	79%		2,289	5,882	39%
	May-Jul	10,048	1,085	6,624	16%		1,003	5,882	17%
	Aug-Oct	7,920	1,043	6,624	16%		38	5,882	1%
2021	Nov-Jan	9,428	1,364	6,624	21%		346	5,882	6%
2021	Feb-Apr	10,901	1,544	6,624	23%		550	5,882	9%
	TOTAL	38,297	5,036	6,624	76%		1,937	5,882	33%
	May-Jul	8,839	917	6,624	14%		1,012	5,882	17%
	Aug-Oct	6,061	1,225	6,624	18%		9	5,882	0%
2022	Nov-Jan	7,117	1,307	6,624	20%		264	5,882	4%
	Feb-Apr	11,009	1,621	6,624	24%		482	5,882	8%
	TOTAL	33,026	5,070	6,624	77%		1,767	5,882	30%
	May-Jul	8,573	1,362	5,309	26%		594	3,481	17%
	Aug-Oct	6,389	1,430	5,309	27%		4	3,481	0%
2023	Nov-Jan	8,278	1,260	5,309	24%		163	3,481	5%
	Feb-Apr	10,272	1,228	5,309	23%		276	3,481	8%
	TOTAL	33,512	5,280	5,309	99%		1,037	3,481	30%
	May-Jul	9,113	1,178	5,309	22%		468	3,481	13%
	Aug-Oct	8,120	1,223	5,309	23%		29	3,481	1%
2024	Nov-Jan	7,861	1,294	5,309	24%		135	3,481	4%
2024	Feb-	2,527	275	5,309	5%		27	3,481	1%
	Apr*	27.624	4 224	F 200	000/		603	2.404	200/
11	TOTAL*	27,621	4,224	5,309	80%		693	3,481	20%

<sup>\*</sup> Data from GARFO Quota Monitoring, data reported through March 5, 2025, accessed March 7, 2025.

Source: CAMS, accessed February and March 2025.

Table 4. Total Monkfish DAS used by quarter for FY 2018-2024. Total Monkfish DAS used is included as an indicator of more targeted monkfish fishing effort (this includes any trip where a Monkfish DAS is used including Monkfish only DAS and monkfish-groundfish combination trips); this is different from Table 3 which includes all DAS used for all trips landing monkfish.

FY	Quarter	Total Monkfish DAS Used		FY	Quarter	Total Monkfish DAS Used
	May-Jul	1,116			May-Jul	409
	Aug-Oct	311			Aug-Oct	276
2018	Nov-Jan	1,219		2022	Nov-Jan	564
	Feb-Apr	1,169			Feb-Apr	811
	TOTAL	3,815			TOTAL	2,060
	May-Jul	952		2023	May-Jul	562
	Aug-Oct	226			Aug-Oct	227
2019	Nov-Jan	947			Nov-Jan	396
	Feb-Apr	883			Feb-Apr	497
	TOTAL	3,008			TOTAL	1,682
	May-Jul	536			May-Jul	421
	Aug-Oct	233			Aug-Oct	176
2020	Nov-Jan	513		2024	Nov-Jan	403
	Feb-Apr	276			Feb-Apr*	120
	TOTAL	1,558			TOTAL*	1,120
	May-Jul	351				
	Aug-Oct	145				
2021	Nov-Jan	241				
	Feb-Apr	408				
*, , ,	TOTAL	1,145				

<sup>\*</sup> Incomplete data for Fishing Year 2024.

*Note:* Total Monkfish DAS used differ from Monkfish FW13 Table 25 which was derived from Allocation Management System (AMS) database (versus CAMS, which calculates the trip length independently) and only included A, B, C, and D permit categories (versus all permit categories). *Source:* CAMS, accessed March 2025.

Note: The following two figures are the same data as Table 3, however, the data are depicted as figures to help visually depict changes in landing and TAL use over time.

Figure 4. Monkfish landings (whole/live weight, mt) by quarter in the Northern FMA compared to TAL, FY 2018-2023

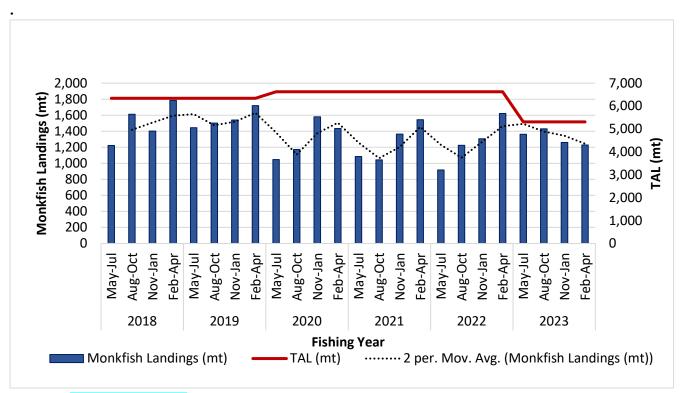


Figure 5. Monkfish landings (whole/live weight, mt) by quarter in the Southern FMA compared to TAL, FY 2018-2023.

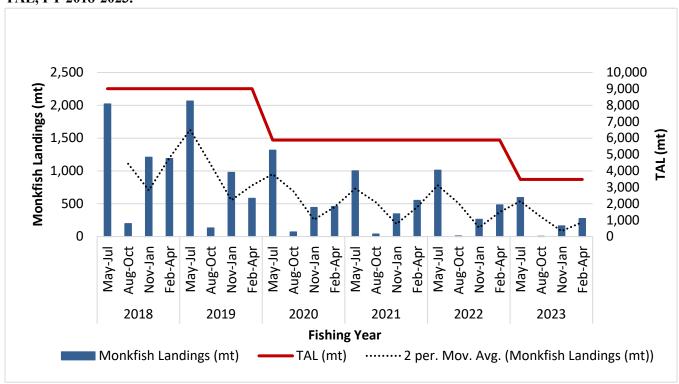


Table 5. Skate landings (mt) relative to wing and bait TALs, FY 2018-2024.

Table 5. Skate landings (int) relative to wing and balt TALS, FY 2016-						Annual	Percent		
FY	Season	TAL	Landings	Percent TAL	TAL	Landings	TAL		
				Skate Wings		<b>3</b> -			
2040	Wing 1	4,987	4,533	91%	40.000	0.404	0001		
2018	Wing 2	6,009	4,568	76%	10,996	9,101	83%		
2019	Wing 1	5,984	3,768	63%	10.400	0.420	000/		
	Wing 2	4,515	4,671	103%	10,499	8,439	80%		
2020	Wing 1	6,771	5,157	76%	11.070	0.462	770/		
	Wing 2	5,108	4,006	78%	11,879	9,163	77%		
2021	Wing 1	6,771	2,638	39%	11,879	5,002	42%		
	Wing 2	5,108	2,364	46%	11,079	3,002	42/0		
2022	Wing 1	8,014	2,790	35%	14,059	5,845	42%		
2022	Wing 2	6,045	3,055	51%	14,039	3,043	42/0		
2023	Wing 1	8,014	3,082	38%	14,059	6,283	45%		
2023	Wing 2	6,045	3,201	53%	14,033	0,263	43/0		
2024*	Wing 1	5,958	3,750	63%	10,453	6,489	62%		
2024	Wing 2	4,495	2,586	57%	10,433	0,469	02/0		
				Skate Bait					
	Bait 1	1,358	1,569	116%					
2018	Bait 2	1,962	1,543	79%	6,080	4,543	75%		
	Bait 3	2,760	1,432	52%					
	Bait 1	1,629	1,344	82%					
2019	Bait 2	1,962	1,228	63%	5,289	9 4,074	77%		
	Bait 3	1,698	1,503	88%					
	Bait 1	1,843	857	47%					
2020	Bait 2	2,220	854	38%	5,984	5,984	5,984	3,420	57%
	Bait 3	1,921	1,709	89%					
	Bait 1	1,843	769	42%					
2021	Bait 2	2,220	913	41%	5,984	2,809	47%		
	Bait 3	1,921	1,127	59%					
	Bait 1	2,181	1,085	50%					
2022	Bait 2	2,627	1,302	50%	7,082	3,832	54%		
	Bait 3	2,274	1,445	64%					
	Bait 1	2,181	677	31%					
2023	Bait 2	2,627	1,064	40%	7,082	3,159	45%		
	Bait 3	2,274	1,418	62%					
	Bait 1	1,622	751	46%					
2024*	Bait 2	1,954	852	44%	5,266	2,745	52%		
	Bait 3	1,690	997	59%					

Source: CAMS, accessed 2/12/2025. Note: Wing landings include landings by federally permitted skate vessels; Bait landings include all landings reported as bait or personal use. Wing season 1: May 1- Aug. 31. Bait Season 1: May 1- July 31; Season 2: Aug 1- Oct 31. \*FY 2024 data as of 3/7/2025.

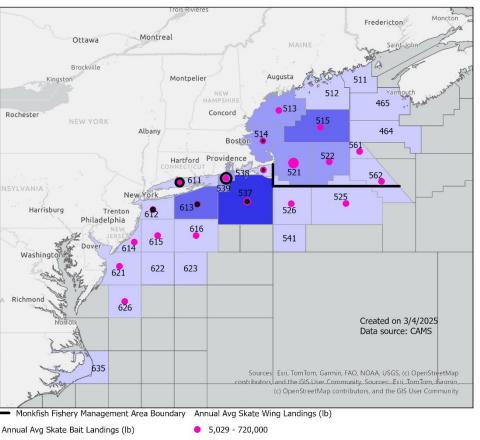
### Fishing Effort: Fishing locations, DAS use

Map 1. Quarter 1 (May – July), Quarter 2 (August – October), Quarter 3 (November – January), and Quarter 4 (February – April): Total monkfish and skate landings averaged across FY 2018 – 2023, excluding FY 2020 due to the global pandemic, by statistical area by quarter. Data with fewer than either three vessels and/or dealers were removed from analysis due to data confidentiality (these are included in the gray shading below with statistical areas of zero monkfish landings). *Source*: CAMS, accessed February 24, 2025.

# (next page)

Note: the purpose of these maps is to show a first cut description of how the monkfish, skate wing, and skate bait fisheries overlap in space and to help discuss and inform any additional analysis exploring finer scale temporal/spatial resolution (such as evaluating the feasibility of parsing the landings data by quarter degrees versus statistical areas and overlaying with data showing the proportion of trips reaching skate trip limits but not monkfish trip limits, for example).

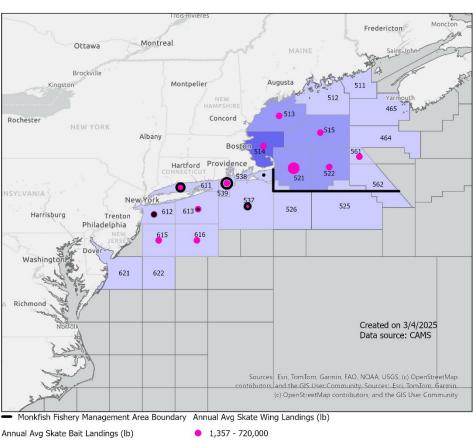
# Quarter 1: May - July





No landings / confidential data

Quarter 2: August - October



- 49,061 120,000
- 120,001 250,000
- O 250,001 500,000
- **O** 500,001 750,000
- 750,001 1,370,000

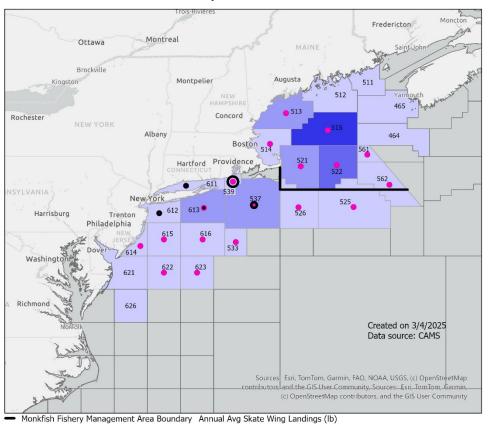
- 720,001 1,440,000
- 1,440,001 2,160,000
- 2,160,001 2,880,000
- 2,880,001 3,620,000
- Annual Avg Monkfish Landings (lb)
- **540 300,000**
- **300,001 600,000**
- **600,001 900,000**
- 900,001 1,200,000
- **1,200,001 1,500,000**
- No landings / confidential data



0 30 60 120 Miles

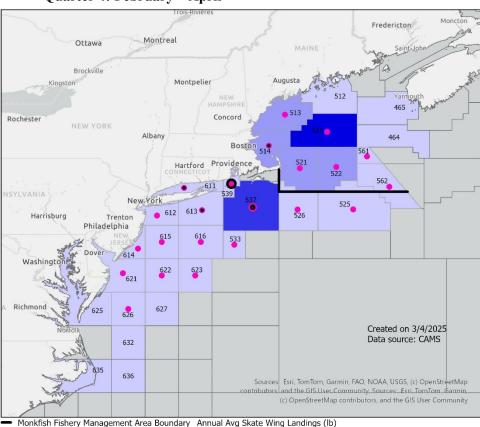
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Quarter 3: November - January





Quarter 4: February – April



Annual Avg Skate Bait Landings (Ib) 280 - 720,000 • 17,889 - 120,000 720,001 - 1,440,000 120,001 - 250,000 1,440,001 - 2,160,000 **O** 250,001 - 500,000 2,160,001 - 2,880,000 **O** 500,001 - 750,000 2,880,001 - 3,620,000 750,001 - 1,370,000 Annual Avg Monkfish Landings (lb) 320 - 300,000 300,001 - 600,000 **600,001 - 900,000** 

900,001 - 1,200,000

**1,200,001 - 1,500,000** 

No landings / confidential data

0 30 60 120 Miles 

Table 6. Number of vessels landing monkfish (> 1lb and > 10,000 lb) and skate (> 1 lb and > 10,000 lb), by monkfish permit category and fishing year (FY 2018 – FY 2023).

Monkfish Permit	# Monkfish Permits	>1 lb Monkfish	>10,000 lb Monkfish	>1 lb Skate	>10,000 lb Skate		
Category	remits	Landing	monkfish	Landin	Landing skate		
		FY 2	018				
Α	20	14	14	14	13		
В	39	27	25	27	23		
С	268	166	78	60	34		
D	227	143	69	108	68		
E	1534	283	23	128	49		
F	17	15	5	13	6		
Н	7	6	3	6	4		
		FY 2	019				
А	21	12	10	13	12		
В	39	27	24	27	24		
С	273	138	60	53	26		
D	238	132	66	100	66		
Е	1,518	256	11	127	46		
F	16	14	4	12	6		
Н	7	5	2	5	3		
		FY 2	020				
А	15	10	7	11	10		
В	37	25	20	24	21		
С	268	126	58	59	29		
D	229	127	56	89	58		
E	1511	229	11	110	36		
F	16	12	3	10	4		
Н	7	3	0	2	1		
		FY 2	021				
Α	18	8	6	9	7		
В	39	17	14	21	14		
С	256	115	52	49	23		
D	229	118	55	82	44		
E	1508	201	11	100	34		
F	14	12	1	10	3		
Н	8	2	0	0	0		
		FY 2	022				
А	18	8	7	9	7		
В	39	17	12	18	15		
С	251	98	40	45	26		
D	212	109	49	75	42		
E	1473	163	9	87	40		
F	15	12	1	10	5		

Н	7		2	0		2	0	
FY 2023								
Α	16		9	7		9	8	
В	35		13	5		14	11	
С	259		88	34		43	22	
D	215		116	60		84	55	
E	1436		134	9		83	40	
F	17		12	0		10	6	
Н	7		2	0		1	0	

### Permit Categories:

- A, B Limited access DAS permit that does not have a groundfish or scallop limited access permit
- C, D Limited access DAS permit that also has a groundfish or scallop limited access permit
- E Open access incidental permit
- F Limited access permit for offshore monkfish fishery
- H Limited access DAS permit for use in the Southern Fishery Management Area only

### Example of how to interpret data:

- In FY2018, there were 20 Monkfish A permits, 14 of which landed at least 1 lb of monkfish, all of which landed over 10,000 lb of monkfish; 14 out of 20 monkfish permits landed at least 1 lb of skates, 13 of which landed over 10,000 lb of skates.

*Notes:* live pounds used for thresholds; only federal monkfish and skate permits included in counts. This is consistent with GARFO Quota Monitoring methods (which uses live pounds), though is inconsistent with the data in the 2024 Monkfish Fishery Performance Report Table 3 (which used landed pounds).

Source: CAMS, accessed February 24, 2025.

Table 7. Number of vessels issued both federal monkfish and skate permits, categorized by the number of vessels landing monkfish and skate, FY 2018 – 2023. The percentages in parentheses are the percentage of vessels landing monkfish only, skate only, and both monkfish and skate relative to the total monkfish and skate permits issued by fishing year

	Monkfish	Vessels Landing	g Monkfish	Vessels Lar	nding Skate	Vessels Landing Both		
Fishing and Skate Year Permits Issued		>1 lb	>10,000 lb	>1 lb	>10,000 lb	>1 lb	>10,000 lb	
		626	215	354	196	326	115	
2018	1,848	(34%)	(12%)	(19%)	(11%)	(18%)	(6%)	
		561	176	337	183	310	98	
2019	1,854	(30%)	(9%)	(18%)	(10%)	(17%)	(5%)	
		522	154	306	162	290	93	
2020	1,832	(28%)	(8%)	(17%)	(9%)	(16%)	(5%)	
		468	138	273	128	252	70	
2021	1,801	(26%)	(8%)	(15%)	(7%)	(14%)	(4%)	
		405	117	250	138	230	60	
2022	1,722	(24%)	(7%)	(15%)	(8%)	(13%)	(3%)	
		371	114	247	143	229	55	
2023	1,678	(22%)	(7%)	(15%)	(9%)	(14%)	(3%)	

*Notes:* Live pounds used for thresholds. Only federal skate and monkfish permits included in counts. Columns are not additive.

### Example of how to interpret data:

- In FY 2018, of the 1,848 vessels issued both federal monkfish and skate permits, 626 vessels landed at least 1 lb of monkfish during the fishing year (34% of vessels) and 215 of those vessels landed at least 10,000 lb of monkfish during the fishing year. For vessels landing monkfish, those are the monkfish permitted vessels that landed monkfish (these vessels could or could not have also landed skate); for vessels landing skate, those are the skate permitted vessels that landed skate (these vessels could or could not have landed monkfish). Also, there were 326 vessels with monkfish and skate permits that landed at least 1 lb each of monkfish and skates and 115 of these vessels landed at least 10,000 lb each of monkfish and skate.

Source: CAMS, accessed February 24, 2025.

Table 8. Monkfish landings and total number of vessels and trips by trip declarations (plan code) and DAS used, average across FY 2019 and FY 2021. Red highlights indicate trips where monkfish was landed without a monkfish DAS.

Declaration/ Plan Code	Program Code Description	DAS used	Total monkfish whole weight, live Ib (mt in parentheses)	# of Vessels	# of Trips
		NORTH			
	Monkfish Northern	Monkfish and	С	С	С
	Management Area	Northeast			
	<u>Common Pool</u> Vessel Trip	Multispecies			
	Monkfish Northern	Monkfish and	1,347,155 (611)	21	222
Monkfish	Management Area <u>Sector</u>	Northeast			
IVIOTIKIISII	Vessel Trip	Multispecies			
	Monkfish Northern	Monkfish	26,851 (12)	6	20
	Management Area				
	<u>Monkfish-Only</u> Vessel				
	Trip				
	Multispecies Common	Northeast	EE 3EE /3E\	5	100
Northeast	Pool Vessel Trip	Multispecies	55,255 (25)	Э	100
Multispecies	Multispecies Sector	Northeast	0.200.062./2.760\	99	2,992
	Vessel Trip	Multispecies	8,289,963 (3,760)	99	2,992
	Special Access Area	Scallop	43,979 (20)	20	28
Scallop	Limited Access General Category	Scallop	17,145 (8)	19	223
	Limited Access	Scallop	12,611 (6)	7	11
Other	Herring; undeclared; surfclam, ocean quahog, mussel; squid, mackerel, butterfish	-	61,447 (28)	22	469
Declared	Declared out of Fishery (DOF)		10,820 (5)	11	32
	NORTH Landings Total			26 (4,475)	

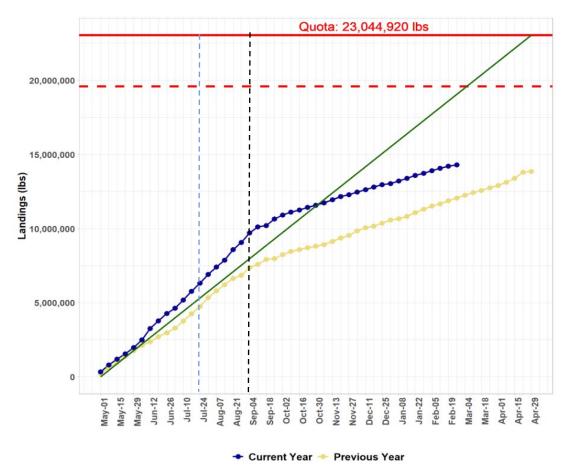
	SOUTH							
	Monkfish Southern	Monkfish and						
	Management Area	Northeast	62,203 (28)	5	25			
	<u>Common Pool</u> Vessel Trip	Multispecies						
	Monkfish Southern	Monkfish and						
Monkfish	Management Area <u>Sector</u>	Northeast	493,536 (224)	15	178			
I I I I I I I I I I I I I I I I I I I	Vessel Trip	Multispecies						
	Monkfish Southern	Monkfish						
	Management Area		3,200,563 (1,452)	50	1,183			
	<u>Monkfish-Only</u> Vessel	5,200,000 (2,102,4		30	1,100			
	Trip							
	Multispecies Common	Northeast	50,555 (23)	14	145			
Northeast	Pool Vessel Trip	Multispecies	30,333 (23)		1.0			
Multispecies	Multispecies Sector	Northeast	100,963 (46)	27	482			
	Vessel Trip	Multispecies	200,303 (10)		.02			
	Special Access Area	Scallop	168,319 (76)	91	210			
Scallop	Limited Access General	Scallop	87,994 (40)	56	986			
	Category	Caallan						
	Limited Access	Scallop	145,156 (66)	69	106			
Other	Herring, undeclared, surfclam/ocean quahog/mussel and squid/mackerel/butterfis h	-	575,484 (261)	243	2,195			
	DOF	•	293,271 (133)	152	2,094			
	so	5,178,044	4 (2,349)					

### Notes:

- C = confidential, < 3 vessels. The 'Total' number of vessels is not the sum of the columns but the sum of the unique vessels.
- In the "Other" rows, data for undeclared trips include incidental landings, which do not require any declaration.
- Data do not include RSA trips; DOF includes scientific and other research trips.

Source: CAMS database. Accessed November 2022.

Figure 6. Skate wing quota monitoring for FY 2023 (yellow) and FY 2024 (blue). Black dashed vertical line approximates the Season 1-2 boundary; blue vertical line is implementation date of FY 2024 possession limit change.



Source: GARFO quota monitoring reports, accessed March 7, 2025.

*Note:* FY 2023 wing quota was 30.99M lb, wing possession limits were 3,000 lb (Season 1) and 5,000 lb (Season 2). FY 2024 limits were 3,000 lb (Season 1 through July 16), 4,000 lb (Season 1 after July 16), 6,000 lb (Season 2). Red dashed line is 85% of the FY 2024 quota; reaching this level could trigger implementing an incidental possession limit.

Table 9. Landings by species for trips landing monkfish by northern and southern management areas by gear type for FY 2023.

	NFMA	Area (live lb)	SFMA Are	ea (live lb)
	Gillnet	Otter Trawl	Gillnet	Otter Trawl
AMERICAN LOBSTER	3,169	21,054	297	С
AMERICAN PLAICE	С	105,218	0	С
ATLANTIC HALIBUT	2,316	486	0	0
ATLANTIC MACKEREL	484	0	13	0
ATLANTIC POLLOCK	8,318	116,667	0	С
BLACK SEA BASS	0	0	4,075	С
BLUEFISH	С	0	4,383	0
BUTTERFISH	0	0	С	0
COD	6,843	0	118	С
DOGFISH	51,873	0	21,276	0
HADDOCK	150	170,859	0	С
ILLEX SQUID	0	0	0	0
LOLIGO SQUID	0	С	0	С
MONKFISH	109,3735	642,041	1,656,767	14,790
SCUP	0	0	1,174	С
SEA SCALLOP	0	С	0	С
<mark>SKATE</mark>	348,468	С	4,780,425	34,721
SMALL MESH HAKE	1,720	6,290	212	С
STRIPED BASS	0	0	0	0
SUMMER FLOUNDER	0	С	17,936	С
WHITE HAKE	24,895	125,266	0	С
WINTER FLOUNDER	126	3,942	С	С
WITCH FLOUNDER	13	136,338	0	С
YELLOWTAIL	62	С	0	0
OTHER	1,971	155,584	4,496	35,196

*Notes:* 'C' indicates confidential data; these amounts are included in the 'OTHER' in addition to other species not listed. Shaded cells represent >10% of the total landings.

Source: CAMS, accessed February 27, 2025.

Table 10. Landings by species for trips landing skate (by food only, bait only, food & bait) by gear type, FY 2023.

	FOOD ONLY (live lbs)			BAI	T ONLY (live lb	s)	FOOD AND BAIT (live lbs)		
	Gillnet	Otter Trawl	Other	Gillnet	Otter Trawl	Other	Gillnet	Otter Trawl	Other
AMERICAN LOBSTER	29,414	269,156	162	0	2,939	0	С	С	0
AMERICAN PLAICE	1,232	607,856	С	0	1,443	0	0	С	0
ATLANTIC HALIBUT	2,564	8,014	С	0	С	0	С	0	0
ATLANTIC MACKEREL	843	169,925	С	С	1,137	0	0	373	0
ATLANTIC POLLOCK	22,305	959,888	0	0	С	0	С	С	0
BLACK SEA BASS	4,433	788,375	7,720	С	59,564	0	0	3,396	0
BLUEFISH	28,691	39,969	С	С	13,054	0	С	772	0
BUTTERFISH	С	340,912	С	0	8,703	0	0	846	0
COD	29,042	217,892	С	С	5,707	0	С	18,316	0
DOGFISH	1,353,712	111,354	35,202	С	108,921	0	С	7,753	0
HADDOCK	3,735	1,522,789	С	0	11,913	0	С	С	0
ILLEX SQUID	0	1,287	С	0	0	0	0	С	0
LOLIGO SQUID	С	2,519,781	С	0	38,819	0	0	2,135	0
MONKFISH	2,733,246	2,235,397	692	С	27,156	0	144,616	3,813	0
SCUP	5,096	4,229,359	210	С	316,550	0	0	34,365	0
SEA SCALLOP	0	16,820	С	0	34,198	0	0	С	0
SKATE	9,374,510	2,813,380	15,886	С	6,702,488	0	С	429,414	0
SMALL MESH HAKE	9,498	3,245,526	819	0	36,466	0	С	5,543	0
STRIPED BASS	8,761	10,202	0	С	437	0	0	175	0
SUMMER FLOUNDER	15,432	3,333,672	270	С	626,182	0	С	42,388	0
WHITE HAKE	47,078	414,169	0	0	1,645	0	С	36	0
WINTER FLOUNDER	2,436	452,162	С	0	12,068	0	С	12,335	0
WITCH FLOUNDER	880	501,014	С	0	6,345	0	0	С	0
YELLOWTAIL	5,176	133,390	С	0	680	0	С	С	0
OTHER	10,311	1,102,431	40,248	18,483	102,339	0	2,031,809	53,392	0

*Note:* Data only include disposition codes for bait and wing and exclude VTR only, unknown, and other codes which should be analyzed separately. The 'other' species combines all species not itemized in the tables. Shaded cells represent >10% of the total landings.

Source: CAMS, accessed 2/13/2025.

## **Economic Information**

Table 11. Monkfish revenue and revenue dependence on trips where over 50% of revenue is from monkfish, CY 2011 – 2021.

Calendar	Vessels	Monkfish F	Revenue	Non-Monkfis	h Revenue	Total Bayanya	0/ Mankfish
Year	Vessels	Total	Per vessel	Total	Per vessel	Total Revenue	% Monkfish
2011	206	\$16,517,143	\$80,180	\$3,354,458	\$16,284	\$19,871,601	83%
2012	196	\$15,138,030	\$77,235	\$3,339,764	\$17,040	\$18,477,794	82%
2013	164	\$8,994,464	\$54,844	\$2,414,798	\$14,724	\$11,409,262	79%
2014	173	\$9,307,800	\$53,802	\$3,042,854	\$17,589	\$12,350,654	75%
2015	140	\$9,319,537	\$66,568	\$2,286,111	\$16,329	\$11,605,648	80%
2016	127	\$9,654,776	\$76,022	\$1,957,503	\$15,413	\$11,612,280	83%
2017	135	\$9,471,858	\$70,162	\$2,545,266	\$18,854	\$12,017,124	79%
2018	108	\$7,001,537	\$64,829	\$1,660,777	\$15,378	\$8,662,314	81%
2019	96	\$7,021,724	\$73,143	\$1,912,752	\$19,924	\$8,934,476	79%
2020	70	\$2,700,687	\$38,581	\$995,332	\$14,219	\$3,696,019	73%
2021	76	\$3,611,791	\$47,524	\$1,057,492	\$13,914	\$4,669,283	77%

Note: Revenues adjusted to 2021 USD.

Source: NEFSC SSB.

Table 12. Monkfish landings and revenue dependence from monkfish and other fisheries on trips where a Monkfish DAS was used, FY 2021.

	Live pounds	Revenue	
Monkfish	3,507,169	\$2,464,974	61%
Skate	3,382,423	\$699,805	17%
Groundfish	270,948	\$542,289	13%
Dogfish	75,295	\$21,890	1%
Other	70,806	\$308,774	8%
Total	7,306,641	\$4,037,732	100%

*Note:* Includes trips where only a monkfish DAS is used and trips where a monkfish DAS and other DAS are used.

Source: GARFO/APSD, accessed January 2023.

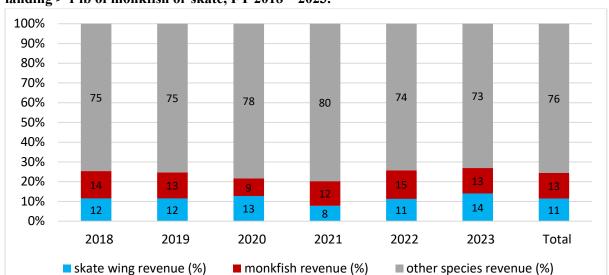
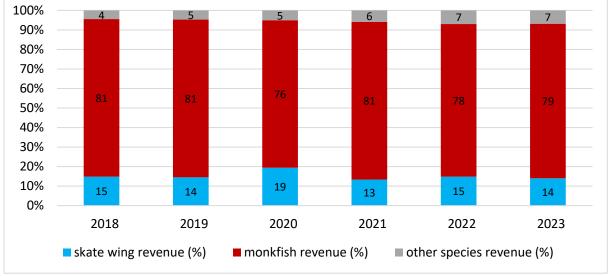


Figure 7. Average percent revenue of monkfish and skate wing revenue per trip for any trip landing > 1 lb of monkfish or skate, FY 2018 – 2023.

*Note:* includes only vessels with a federal monkfish and/or skate permit.

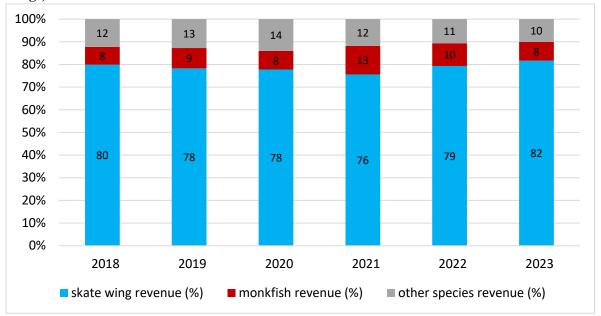
Source: CAMS LAND and CAMS SUBTRIP, accessed February 2025.





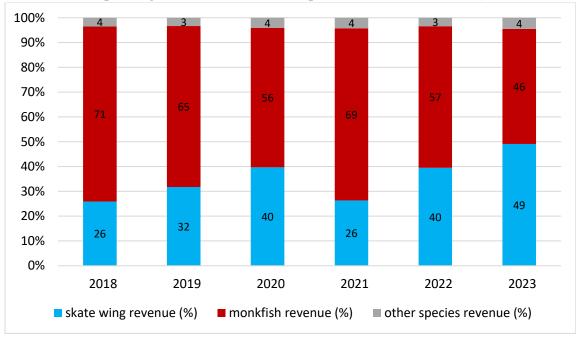
Source: CAMS LAND and CAMS SUBTRIP, accessed February 2025.

Figure 9. Average percent revenue of monkfish and skate wing revenue per trip from trips where >50% of revenue is from skate wing landings, FY 2018 – 2023 (i.e., revenue dependence from skate wings).



Source: CAMS\_LAND and CAMS\_SUBTRIP, accessed February 2025.

Figure 10. Average percent revenue of monkfish and skate wing revenue per trip from Monkfish only DAS trips, FY 2018 - 2023 (i.e., only includes "MNK-NAM" and "MNK-SAM" activity codes and excludes trips using both a Northeast Multispecies and a Monkfish DAS).



Source: CAMS\_LAND and CAMS\_SUBTRIP, accessed February 2025.

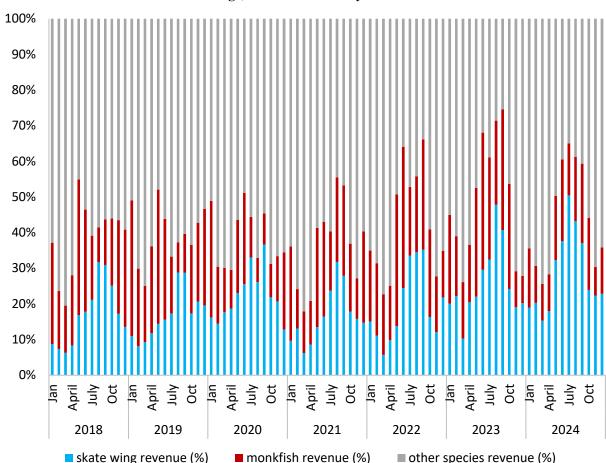
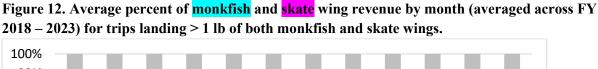
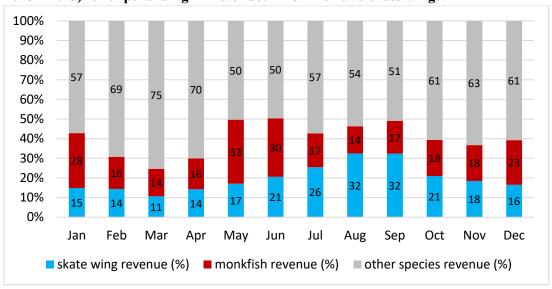


Figure 11. Average percent revenue of monkfish and skate wing revenue per trip for trips landing >1 lb of both monkfish and skate wings, CY 2018 - 2024 by month.

Source: CAMS\_LAND and CAMS\_SUBTRIP, accessed February 2025.





Source: CAMS\_LAND and CAMS\_SUBTRIP, accessed February 2025.