Small-Mesh Multispecies Fishery Performance and Prototype Risk Policy Factor Summary

NEFMC - Whiting PDT

Table of contents

1.1 PDT Comments and Recommendations

Comments:

1. The misassignment of whiting trips to fishery group in CAMS for ‘state’, ‘uncategorized’ and ‘whiting’ categories should be investigated and potentially revised.
2. The social sciences branch should investigate the causes for the rapid decline in whiting prices since 2022. These declines may be related to seasonal factors or imports or consumer preference.
3. More granular analysis of individual exemption area fishery characteristics would be useful for evaluating fishery trends and their implications for management.
4. Risk policy factor summaries within this report will be useful to consider risk and advise the Council and SSC about small-mesh multispecies ACL specifications in 2026.

- Management Recommendations:
  1. The southern red hake post-season accountability measure should not be adjusted for an 18% FY 2024 overage.
     - The FY 2024 catch exceeded the official ACL approved by NOAA Fisheries that applied a 25% reduction for rebuilding, but did not exceed the ACL that had been recommended by the SSC and approved by the Council for the 2023-2025 specifications.
     - In 2023 following an assessment update, the SSC said that fishing was an unlikely cause in reductions in biomass
     - Uncertainty in the index-based assessment
     - Existing proxy reference points that define overfishing are inconsistent with more recent assessment information.

1.2 AP Comments and Recommendations

- Comments:

- Recommendation 1 . . .

1.3 Brief Management Background

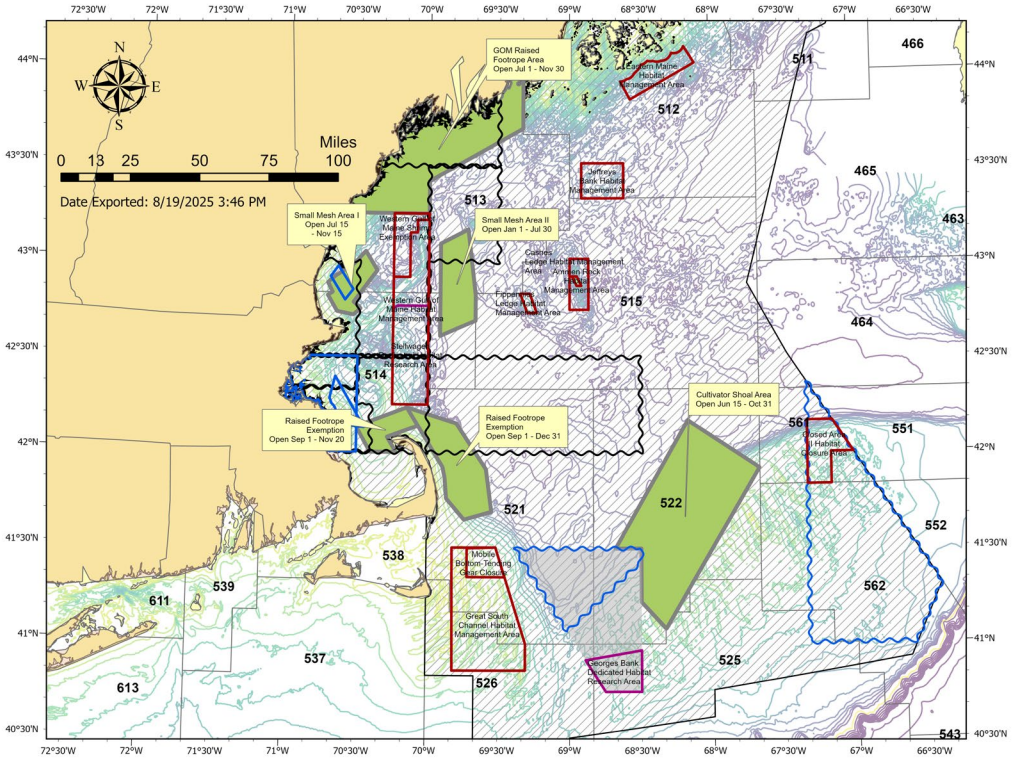
The Small-Mesh Multispecies FMP specifies the management measures for the northern and southern stocks of silver hake (*Merluccius bilinearis*), the northern and southern stocks of red hake (*Urophycis chuss*), and a single stock of offshore hake (*Merluccius albidus*), which primarily co-occurs with the southern stock of silver hake. Catches of silver hake and offshore hake are generally not differentiated in the market and are therefore collectively referred to as “whiting” with the fishery that harvests these species referred to as the “whiting” fishery. Silver hake and red hake are both managed as two distinct stocks, a northern and a southern, based on geographic delineations.

1.4 Brief Management Background

The small mesh multispecies fishery is managed by a collection of exemptions to the NE Multispecies FMP. These exemptions allow a fishery to be exempt from the minimum mesh size provided they catch less than 5% of regulated multispecies. There are currently five exemption areas (Map 1) in the northern management area that are open seasonally (Table 6) with possession limits dependent upon the species and mesh size (Table 7). In the southern management area, small-mesh multispecies fishing is open year-round with certain requirements in the Southern New England and Georges Bank regulated mesh area.

1.5 Brief Management Background

Small-mesh exemption areas in the Gulf of Maine and on Georges Bank shown in green with open season labels. Northern management area statistical areas are shown in light grey shading. The GOM/GB regulated mesh area is hatched. Habitat management areas and groundfish closure areas are also shown as an outlines.



Northern area exemption calendar

	May	Jun	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Cultivator			June 15 – October 31									
GOM* Grate			July 1 – November 30									
Small I			July 15 – November 15									
Small II	– June 30								January 1 –			
Cape Cod RFT†					Sept 1 – Nov 20							
					September 1 – December 31							

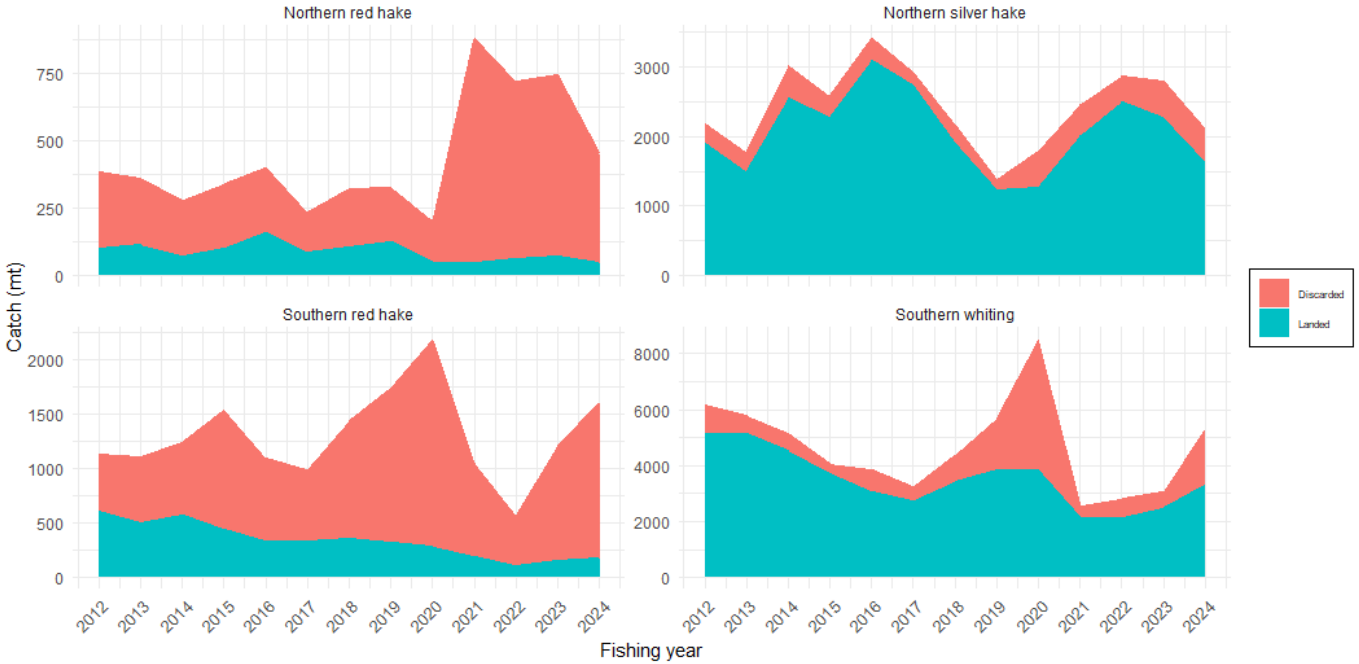
Small-mesh exemption areas with groundfish and habitat management areas

2. Fishery Performance Report

- Updated catch history by stock
- Current year catch estimates by stock
- Catch by fishery trend
- Utilization: Previous fishing year catch vs specifications (All)
- DAS utilization (Monkfish)
- Sector management (for groundfish)
- Common pool performance (for groundfish)
- Bycatch of managed stocks by the fishery
- Bycatch of other stocks in the directed fishery

2.1 Updated catch history by stock

- Full range of reported landings updated via CAMS
- Estimated discards for 2018 to 2024 update via CAMS



Catch history by disposition and stock

2.2 Northern red hake catch summary for FY 2024

- Catch was 15 percent of the ACL, so overfishing is not occurring and accountability measure changes are unnecessary. Utilization declined from 23% of the ACL in 2023.
- Discards were 89 percent of total catch, about the same as 2023

Disposition	Jurisdiction	Catch (lbs)	Catch (mt) 2,973 mt ACL	Percent of ACL	Percent of catch	Trips	Permits	Catch per trip (lbs)
Landed	Federal	107,122.0	48.6	1.6%	10.7%	602	38	177.9
Landed	Research			0.0%	0.0%	6	<3	
Landed	State			0.0%	0.1%	27	<3	
Discarded	Federal	893,975.0	405.5	13.6%	89.2%	245,560	2453	3.6
Total	**All**	**1,001,097.0**	**454.1**	**15.0%**	**100.0%**	**246,162**	**2491**	**4.1**

2.3 Northern red hake catches

- Most catch is discarded, except in the whiting and squid/whiting fishery groups
- Significant declines of bycatch in the groundfish and lobster/crab fishery groups

Change in northern red hake catch by fishery group

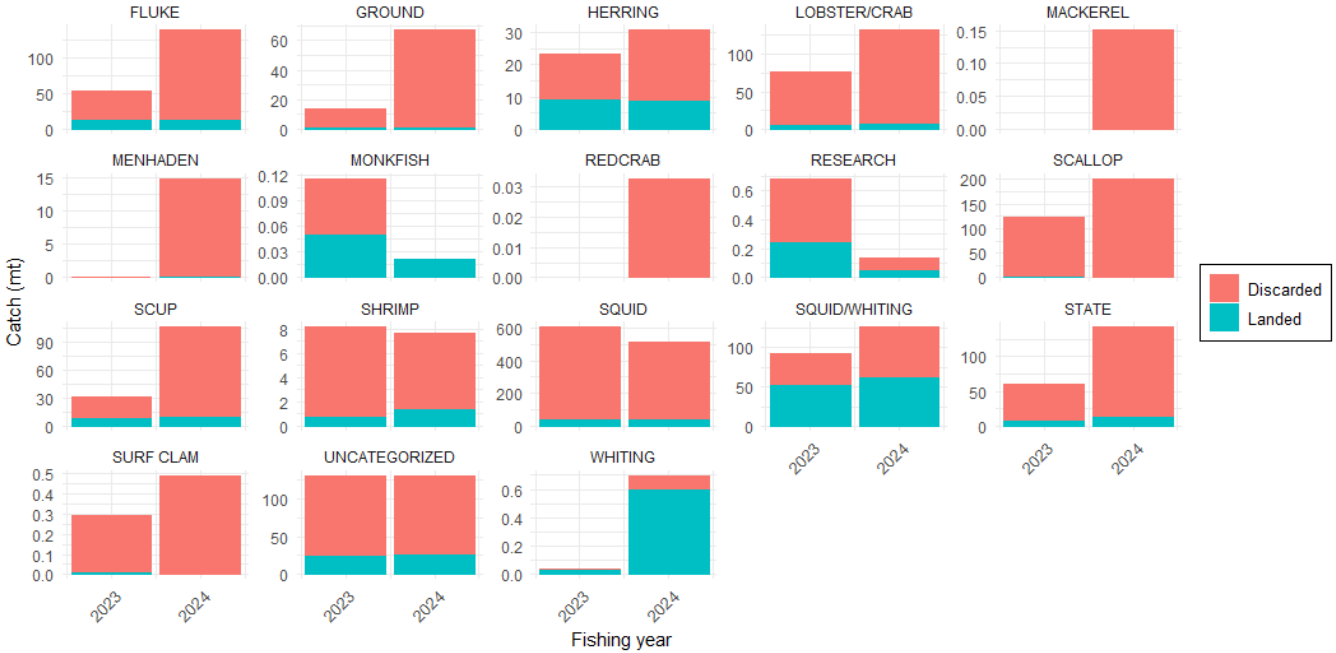
2.4 Southern red hake catch summary for FY 2024

- Catch was 118 percent of the ACL (including a 25% rebuilding adjustment), so overfishing occurred in 2024 (but catch was 99% of an unadjusted ACL approved and submitted by the Council) and accountability measure changes are unnecessary. Utilization increased from 85% of the ACL in 2023.
- Discards were 89 percent of total catch, up slightly from 87% in 2023

Disposition	Jurisdiction	Catch (lbs)	Catch (mt) 1,370 mt ACL	Percent of ACL	Percent of catch	Trips	Permits	Catch per trip (lbs)
Landed	Federal	370,952.0	168.3	12.3%	10.4%	3,113	361	119.2
Landed	Research			0.0%	0.0%	2	<3	
Landed	State	28,122.0	12.8	0.9%	0.8%	668	7	42.1
Discarded	Federal	3,160,885.0	1,433.8	104.7%	88.8%	42,322	1418	74.7
Total	**All**	**3,559,959.0**	**1,614.9**	**118.0%**	**100.0%**	**46,103**	**1786**	**77.2**

2.5 Southern red hake catches

- Most catch is discarded, except in the whiting and squid/whiting fishery groups
- Significant increases in total discards in the fluke, groundfish, lobster/crab, and scallop fisheries. State catch more than doubled.



Change in southern red hake catch by fishery group

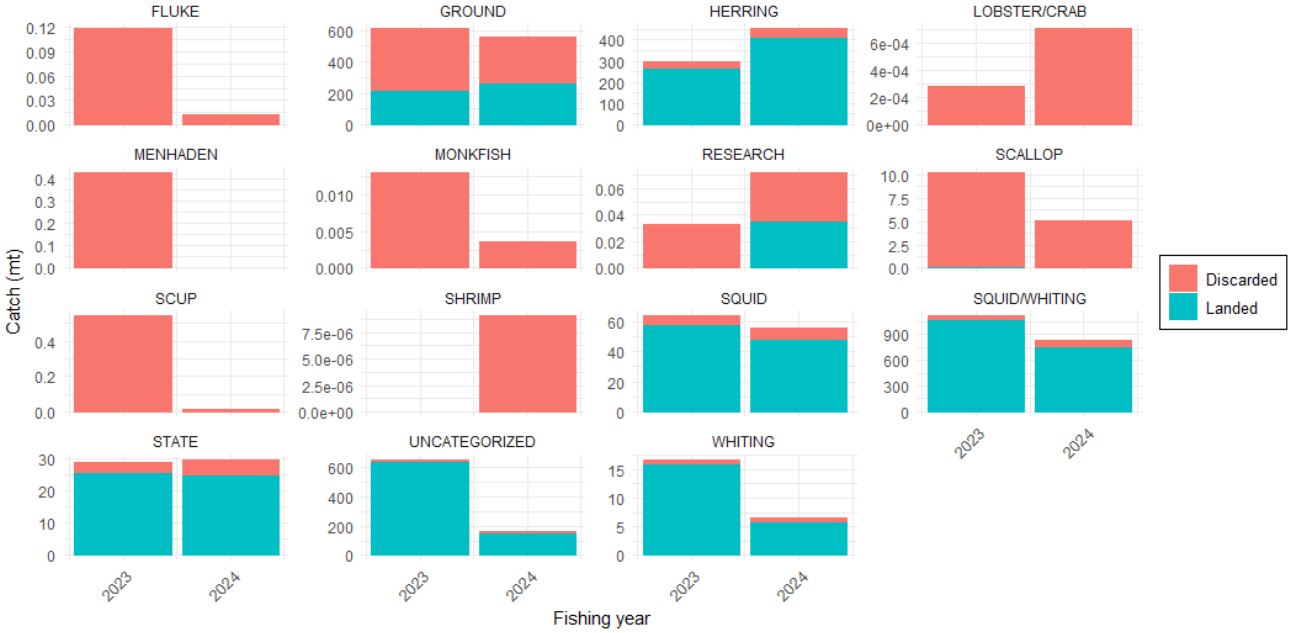
2.6 Northern silver hake catch summary for FY 2024

- Catch was 5 percent of the ACL, so overfishing is not occurring and accountability measure changes are unnecessary. Utilization decreased from 14% of the ACL in 2023.
- Discards were 22 percent of total catch, an increase from 19 % in 2023

Disposition	Jurisdiction	Catch (lbs)	Catch (mt) 38,825 mt ACL	Percent of ACL	Percent of catch	Trips	Permits	Catch per trip (lbs)
Landed	Federal	3,548,778.0	1,609.7	4.1%	76.3%	2,097	118	1,692.3
Landed	Research			0.0%	0.0%	3	<3	
Landed	State	54,443.0	24.7	0.1%	1.2%	129	4	422.0
Discarded	Federal	1,044,915.0	474.0	1.2%	22.5%	13,602	666	76.8
Total	**All**	**4,648,136.0**	**2,108.4**	**5.0%**	**100.0%**	**15,828**	**788**	**293.7**

2.7 Northern silver hake catches

- GARFO should investigate how so much landings are assigned to the ‘uncategorized’ fishery group in CAMS. The ‘state’ fishery group is vessels without a federal fishing permit while fishing in state waters.
- Most catch is retained and landed, particularly in the whiting, herring, squid and squid/whiting fishery groups.
- Significant increase in herring landings - resulting from higher possession limit while using less than 3-inch mesh trawls?



Change in northern silver hake catch by fishery group

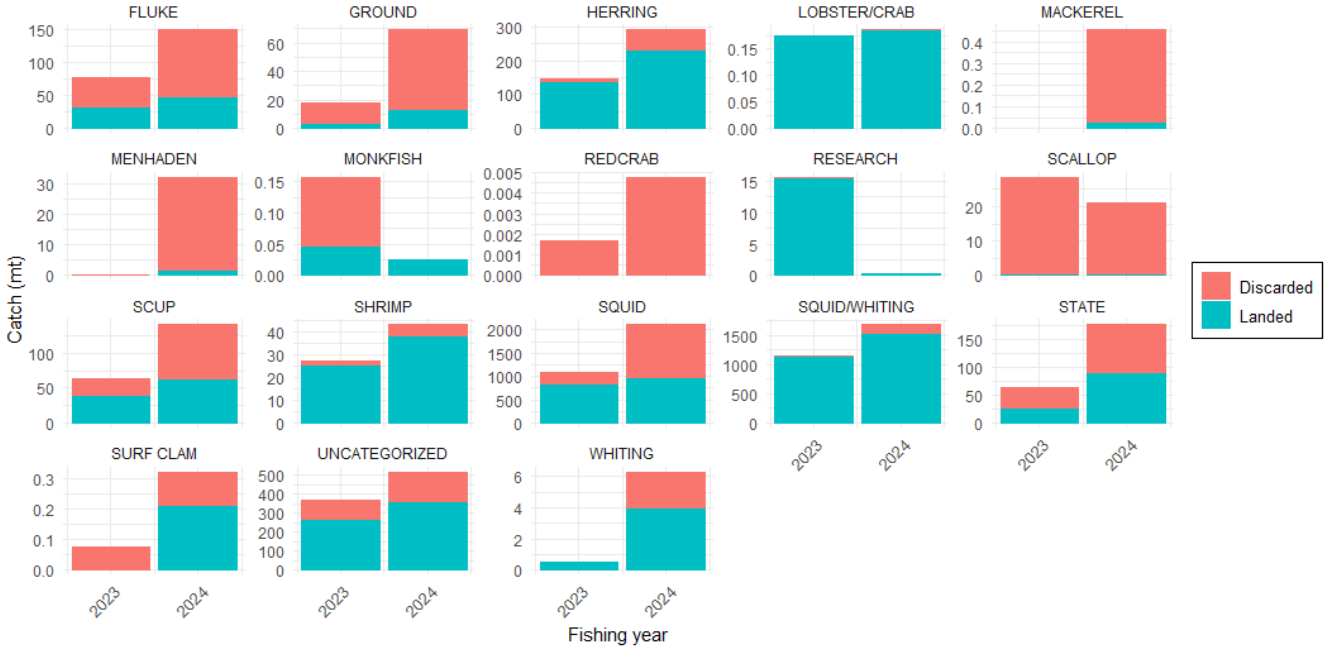
2.8 Southern whiting catch summary for FY 2024

- Catch was 16 percent of the ACL, so overfishing is not occurring and accountability measure changes are unnecessary. Utilization increased from 8% of the ACL in 2023.
- Discards were 19 percent of total catch, the same percent as they were in 2023

Disposition	Jurisdiction	Catch (lbs)	Catch (mt) 19,142 mt ACL	Percent of ACL	Percent of catch	Trips	Permits	Catch per trip (lbs)
Landed	Federal	5,374,682.0	2,437.9	12.7%	80.0%	4,274	482	1,257.5
Landed	Research			0.1%	0.5%	6	<3	
Landed	State	68,998.0	31.3	0.2%	1.0%	578	8	119.4
Discarded	Federal	1,241,005.0	562.9	2.9%	18.5%	43,810	2290	28.3
Total	**All**	**6,684,685.0**	**3,032.1**	**16.0%**	**100.0%**	**48,662**	**2780**	**137.4**

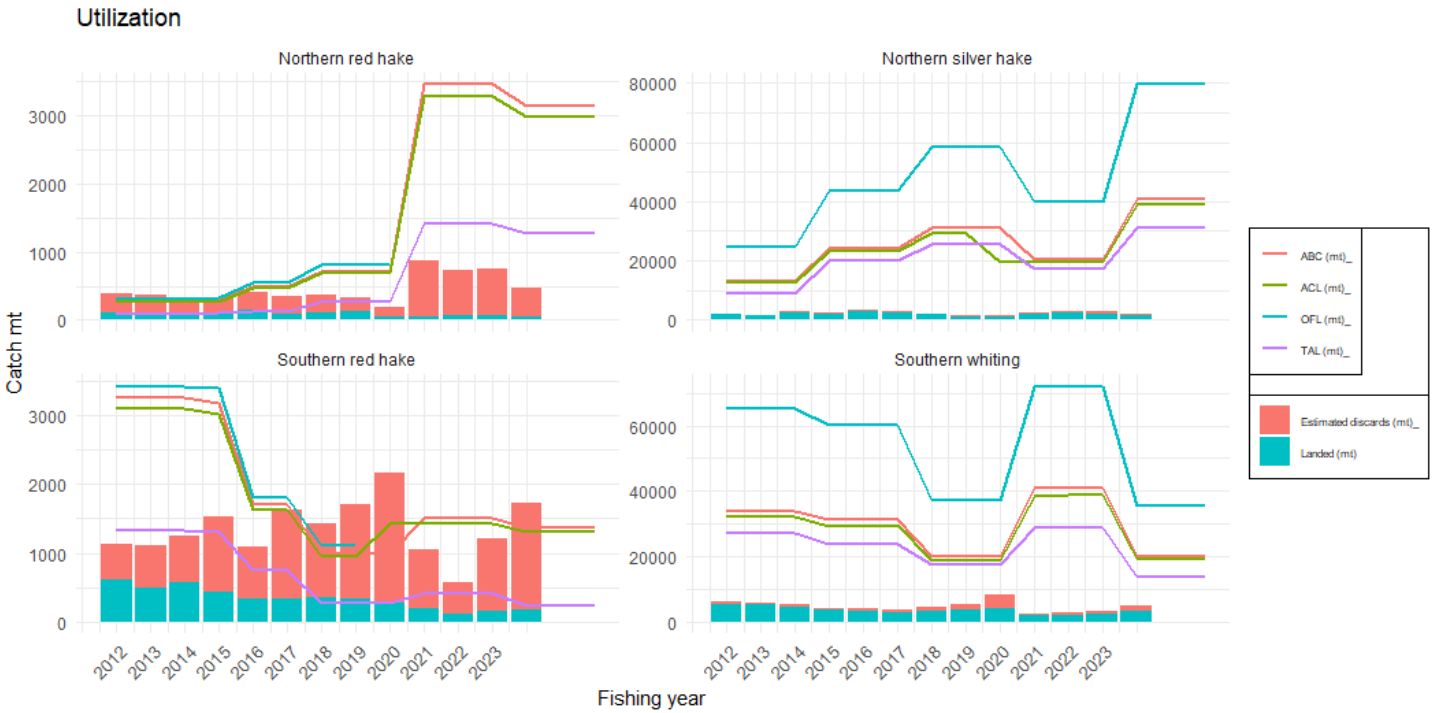
2.9 Southern whiting catches

- GARFO should investigate how so much landings are assigned to the ‘uncategorized’ and ‘state’ fishery group in CAMS. The ‘state’ fishery group is categorized as vessels without a federal fishing permit while fishing in state waters.
- Most catch is retained and landed, particularly in the whiting, herring, squid, the squid/whiting, and the uncategorized fishery groups
- State catches nearly tripled, compared to FY 2023. Significant increase in catch in the fluke, groundfish, and scup fishery groups.



Change in southern whiting catch by fishery group

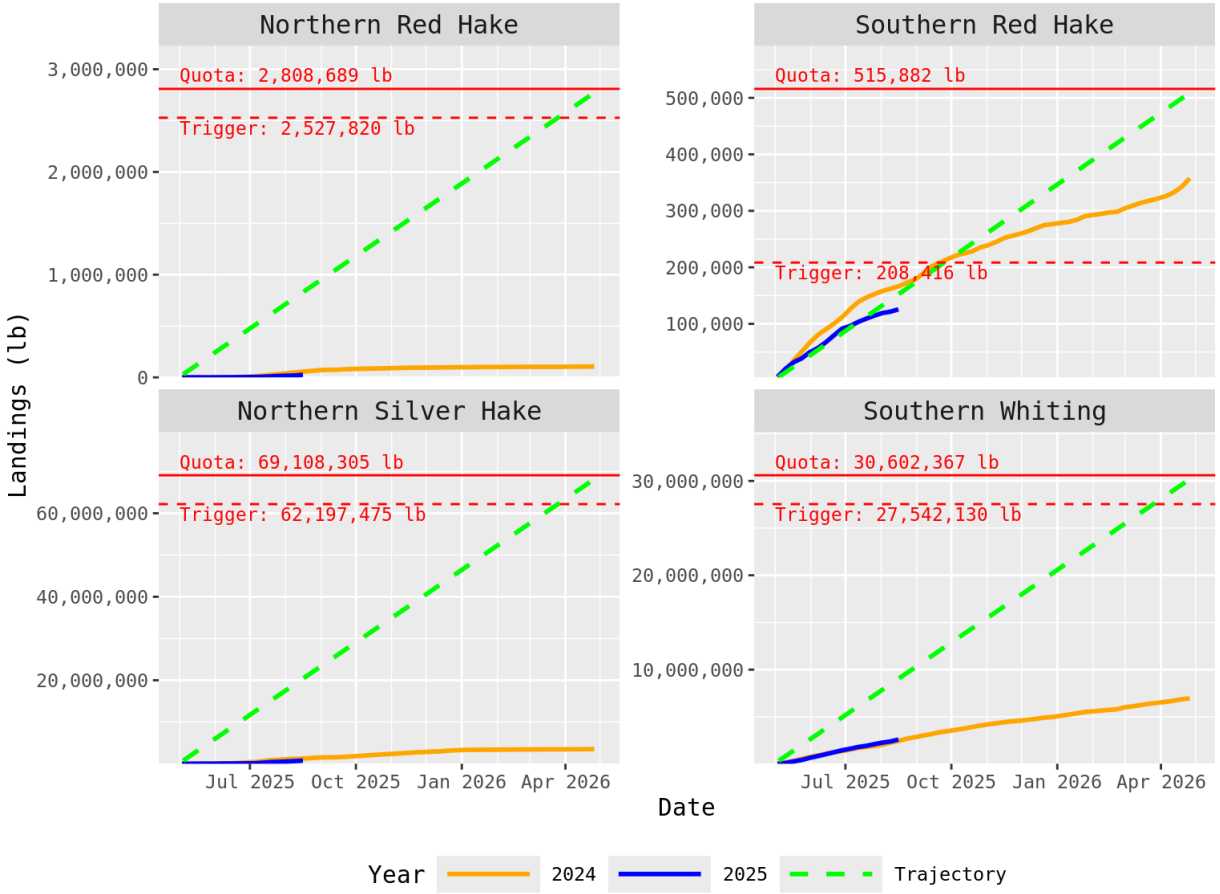
2.10 Utilization, 2012-2024



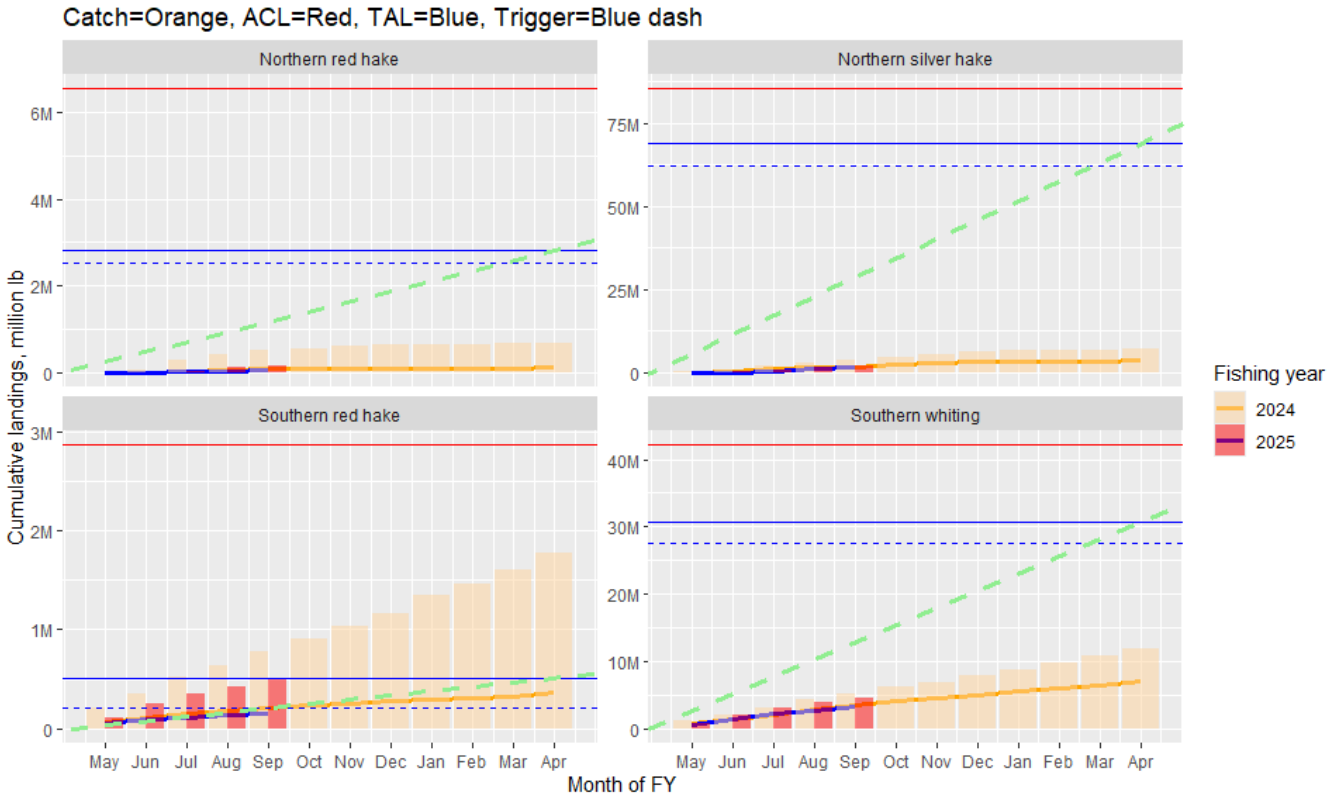
Trend in specifications, catch, and utilization by stock

2.11 2025 Fishery Performance

- YTD landings are running about the same as they were in fishing year 2024
- Except southern red hake landings are tailing off and remain below the TAL trigger.



Current year quota plot



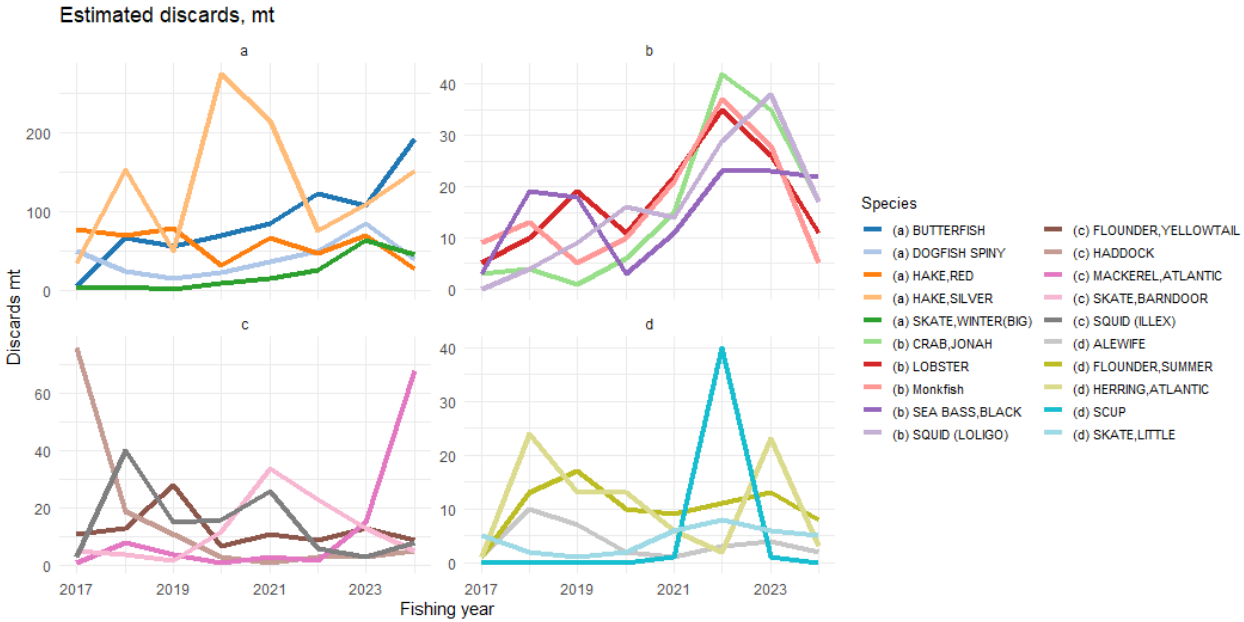
Current year catch plot

2.12 Finfish bycatch in the fishery

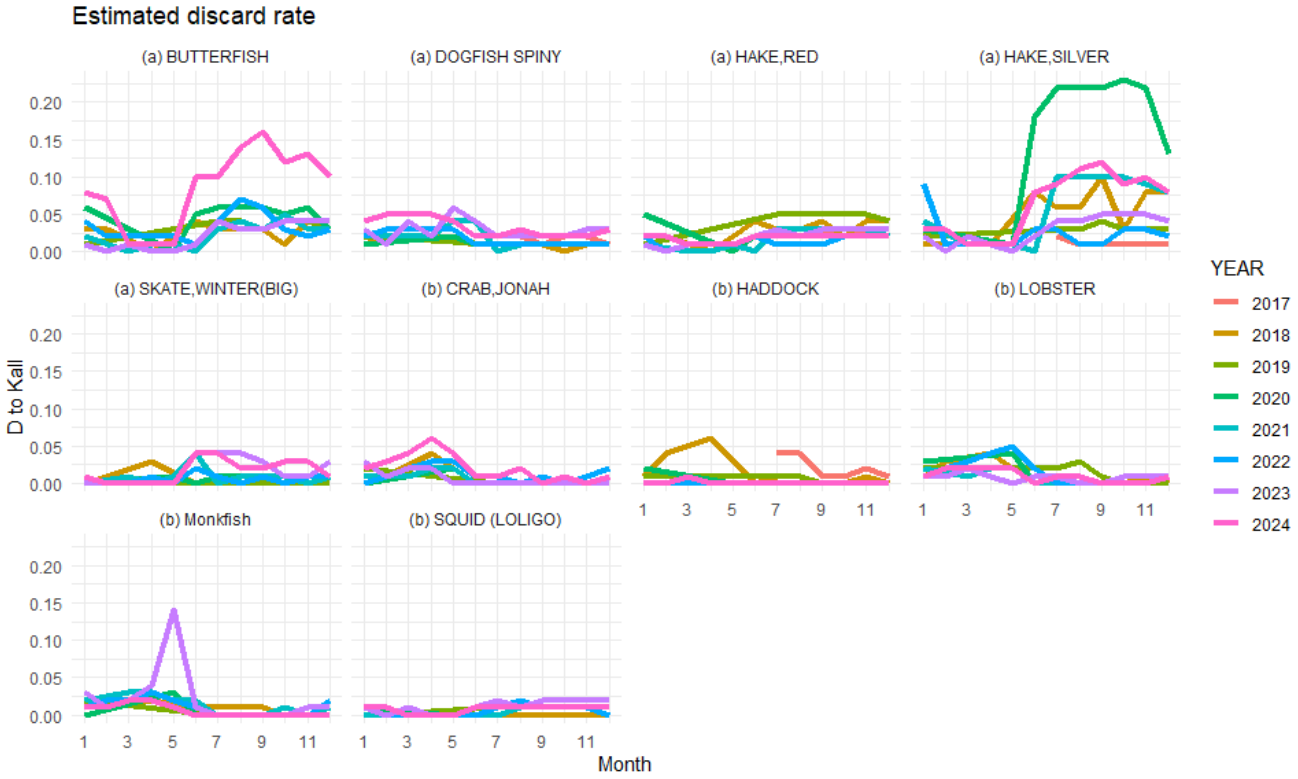
- Trends in most common finfish bycatch
- Trips landing > 2000 lb whiting OR 400 lb red hake

2.12.1 Northern management area bycatch

- Top species by weight in FY 2024: Haddock, silver hake, winter skate, spiny dogfish, red hake
- ‘Angler’ = ‘Monkfish’



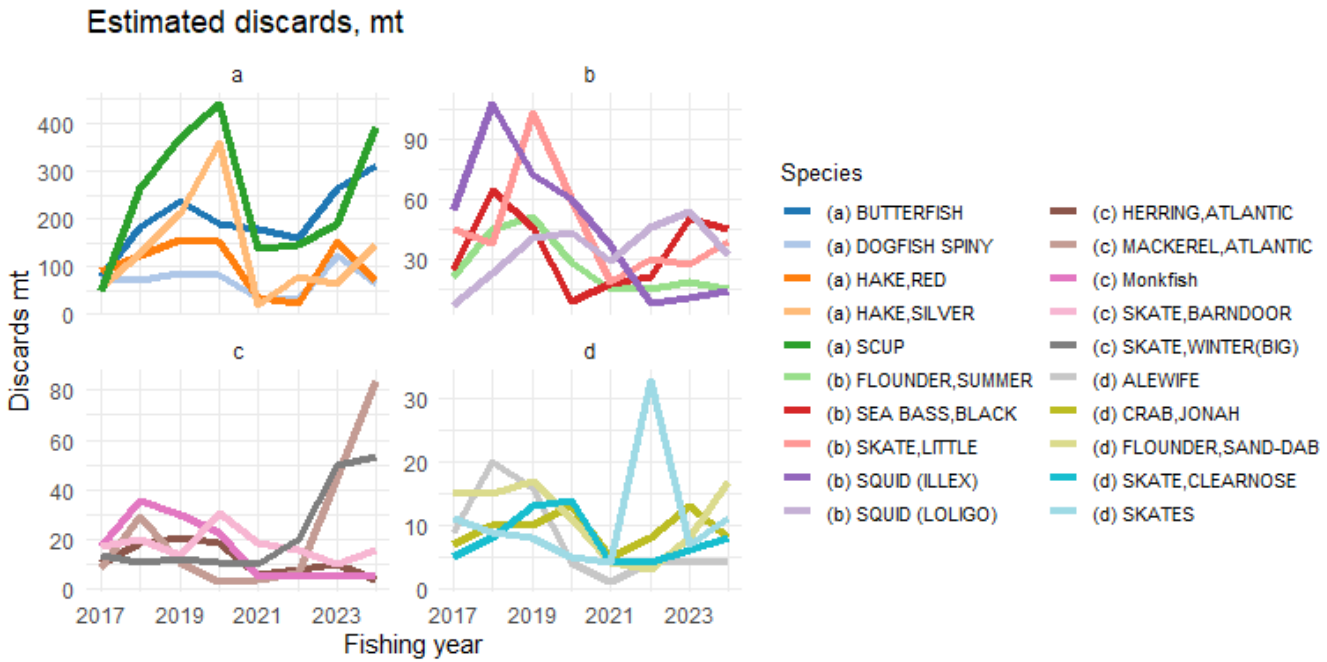
Top 20 finfish estimated discards by fishing year, northern management area, grouped by total weight



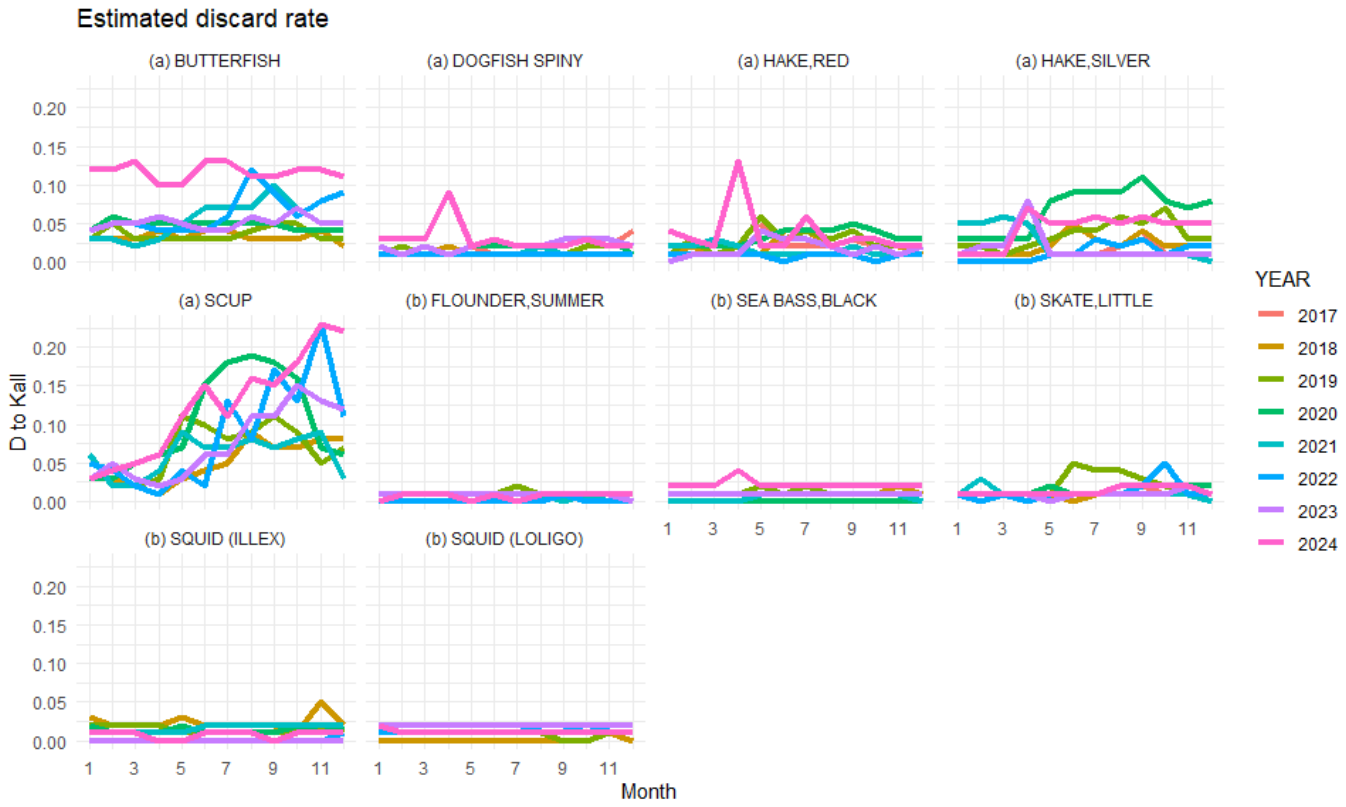
Seasonal discard rate, northern management area

2.12.2 Southern management area bycatch

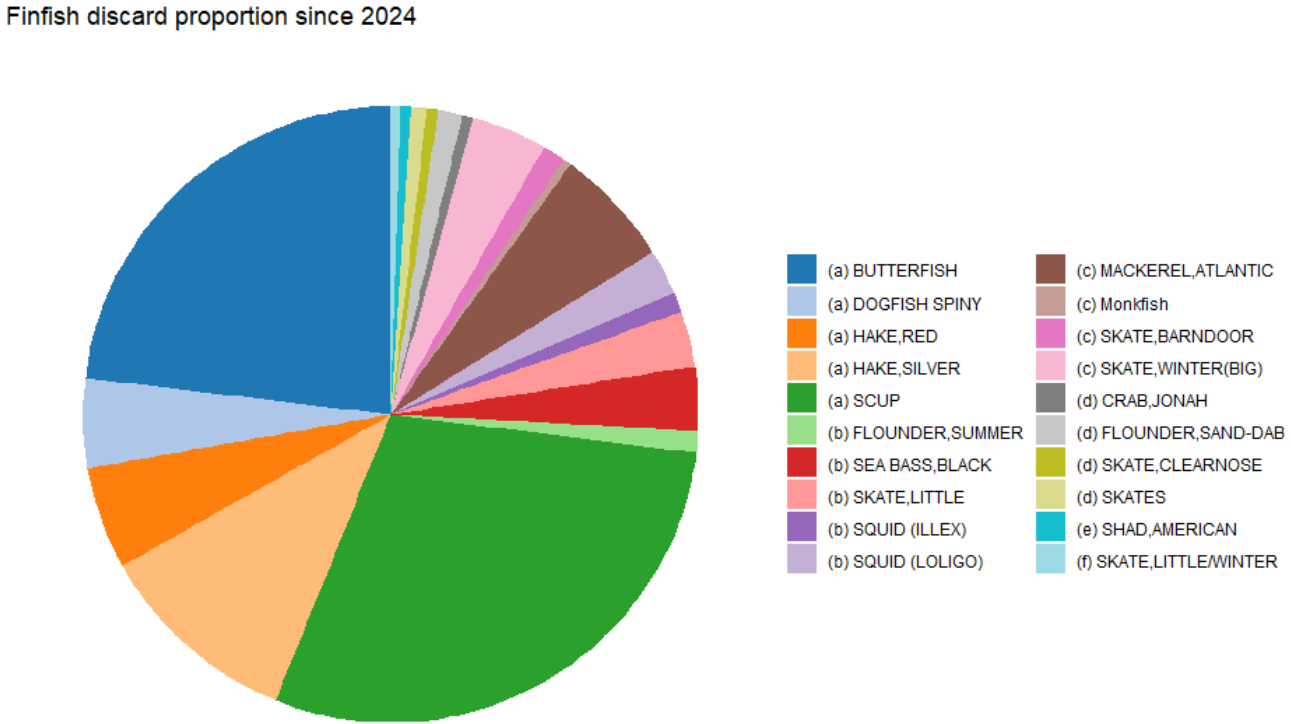
- Top species by weight in FY 2024: Atlantic herring, butterfish, silver hake, red hake, spiny dogfish



Top 20 finfish estimated discards by fishing year, southern management area, grouped by total weight



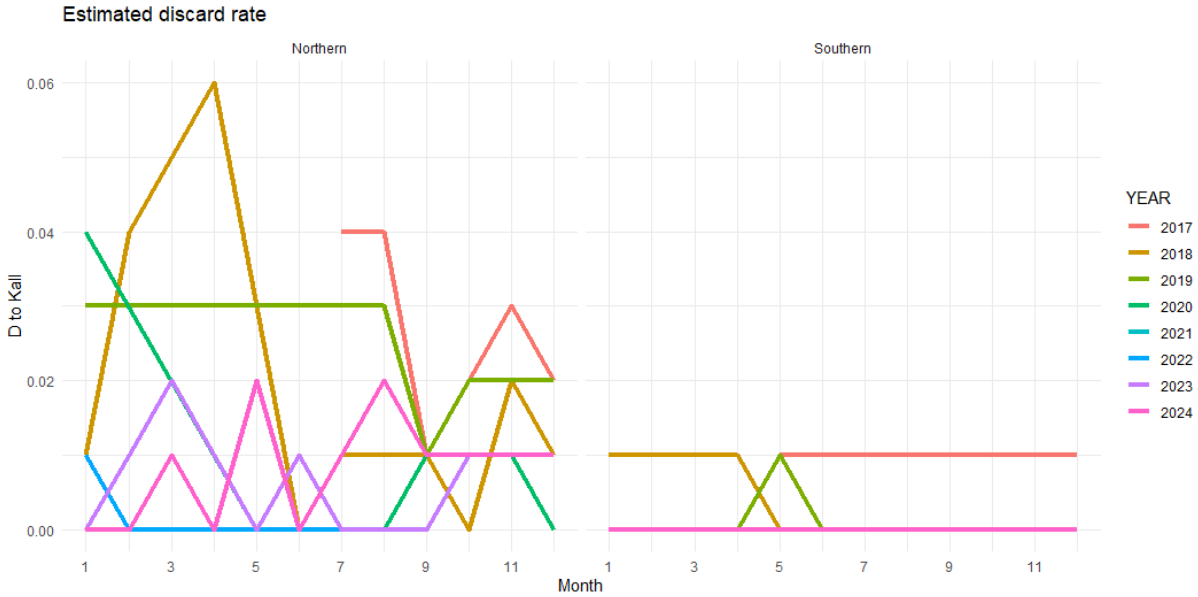
Seasonal discard rate, southern management area



Top 20 finfish discards by weight since 2024, all areas

2.12.3 Large-mesh multispecies bycatch

- Except for March 2018 in the northern area, multispecies bycatch has been consistently below 5% of landings on small-mesh trips.



Groundfish discard rate by area

3. Risk Policy Factors

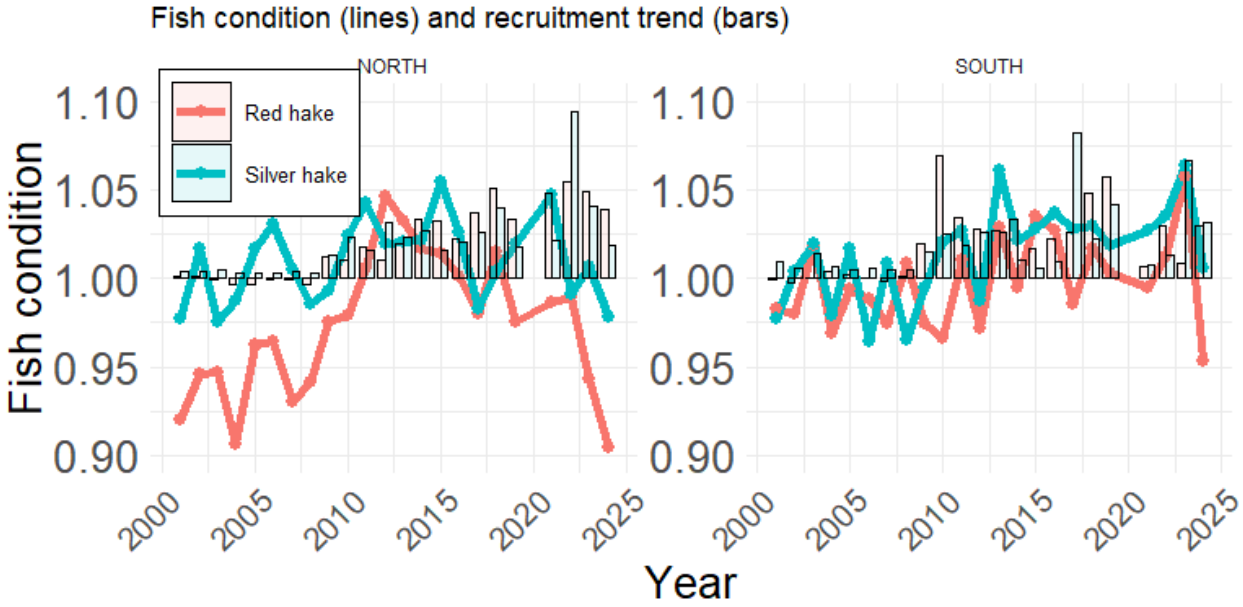
- Matrix
- Stock status and uncertainty
  - Status determination and rebuilding progress (if applicable)
  - SSB estimate compared to estimated referenced point
  - Trends in survey biomass (mean stratified weight per tow)
- Assessment description, uncertainty and retrospective pattern
- Climate and Ecosystem Considerations
- Economic and Community Importance
  - Commercial fishery characteristics
  - Recreational fishery characteristics

3.1 Climate and Ecosystem Considerations

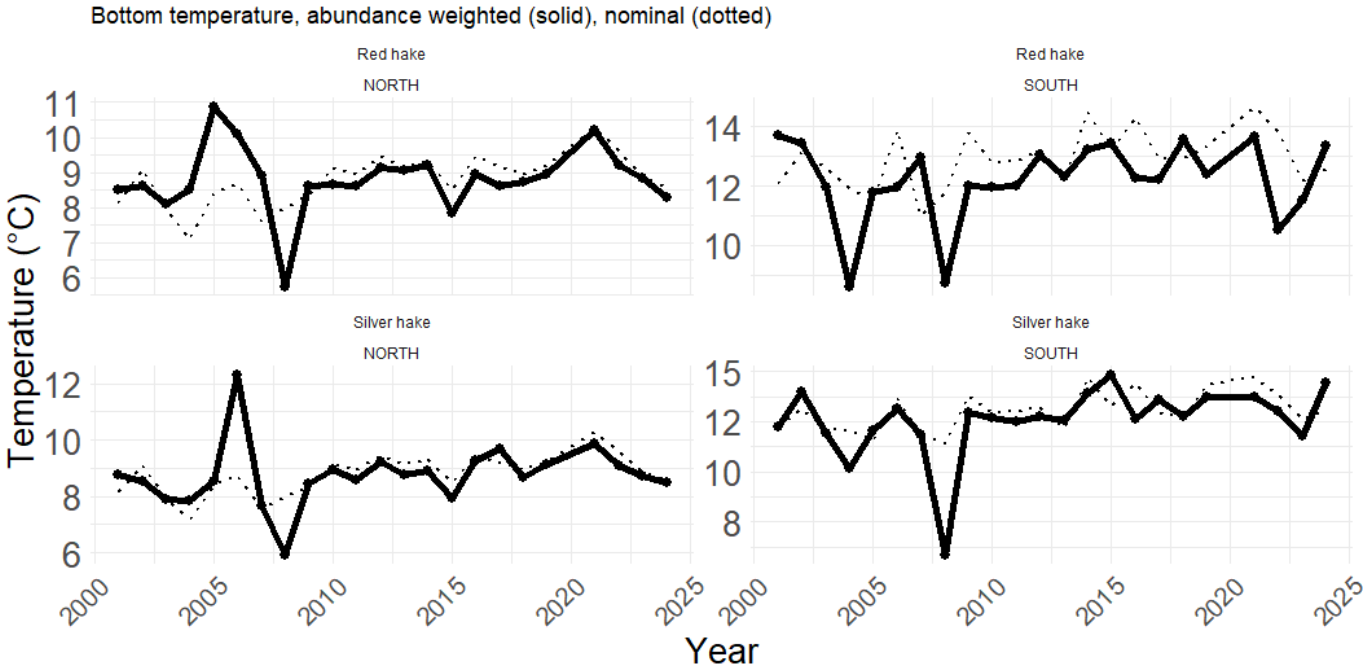
- Climate vulnerability of managed stocks
- Important trophic interactions
- Productivity: fish condition and recruitment trends
  - Managed stocks
  - Ecosystem

3.2 Fish Condition

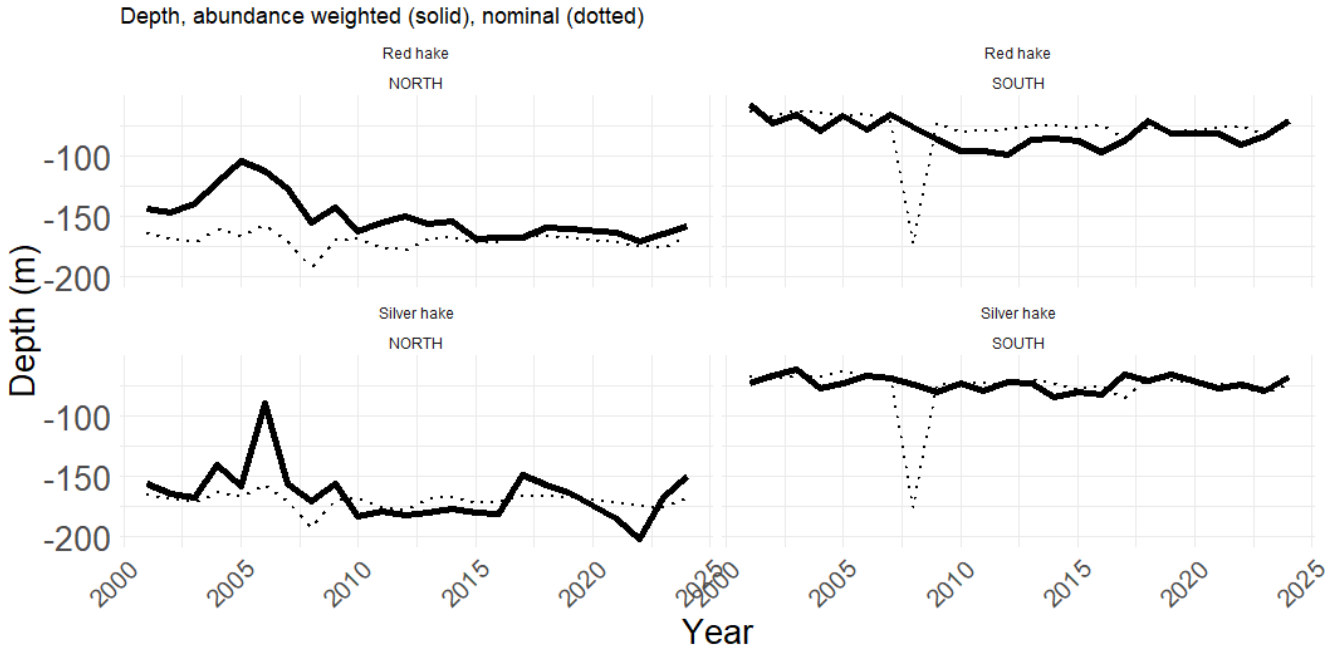
- Fish condition varies, sometimes related to prey abundance but also may vary due to predator abundance
- Fish condition may also vary due to changes in distribution and the effects of temperature on digestion



Fish condition by stock



Temperature weighted by abundance by stock



Depth weighted by abundance by stock

3.3 Economic and Community Importance

3.3.1 Commercial fishery characteristics

- Economic and effort trends - Small-mesh multispecies
  - Landings and revenue by species
  - Trips and active vessels
  - Prices by species
  - Trips and vessels by pounds landed group
  - Landings and price by pounds landed group
  - Finfish price trends
  - Fishery reliance
    - Percent of annual revenue derived by vessels from the fishery, grouped by ???
  - Catch per effective area swept

- Landings for all stocks have declined. More stable in recent years, but were lowest in FY2024.
- Most silver hake landings were caught in the southern area, the proportion shifts to the north in recent years.
- Red hake landings come primarily from the southern area.

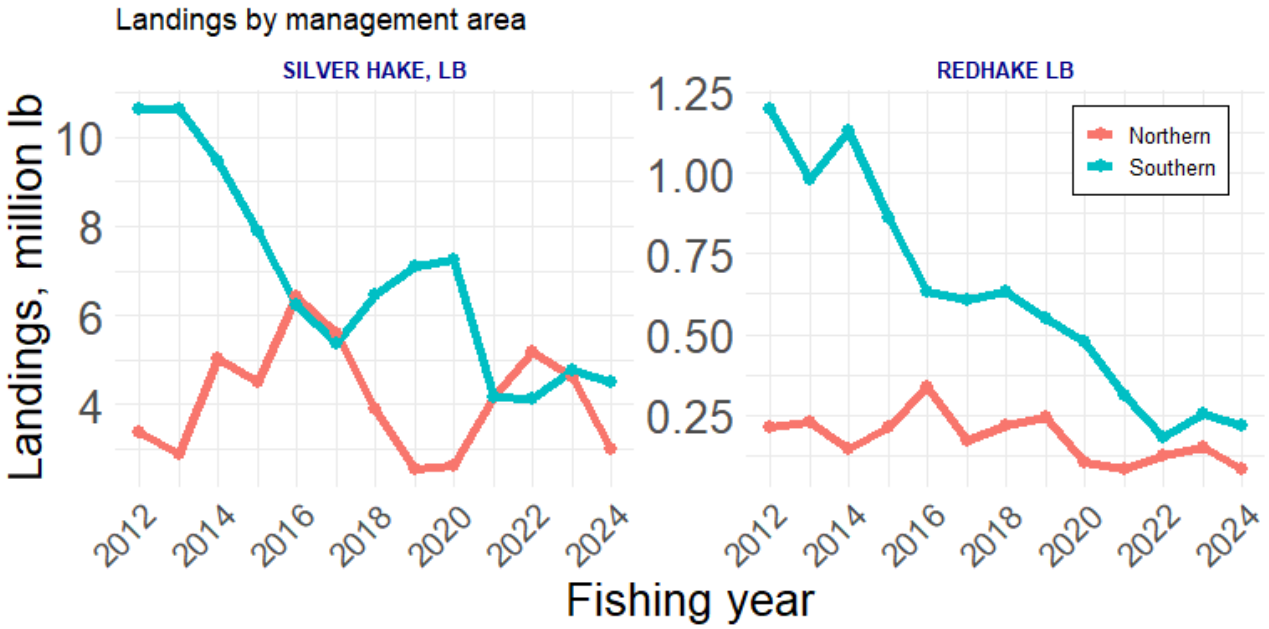


Figure 1: Landings by management area (Silver hake LEFT, Red hake RIGHT)

- Continuous declines in silver and red hake revenues
- Compared to 2012-2015, a greater proportion of silver hake revenue comes from northern area landings.
- 80% or more of red hake revenue comes from southern area landings

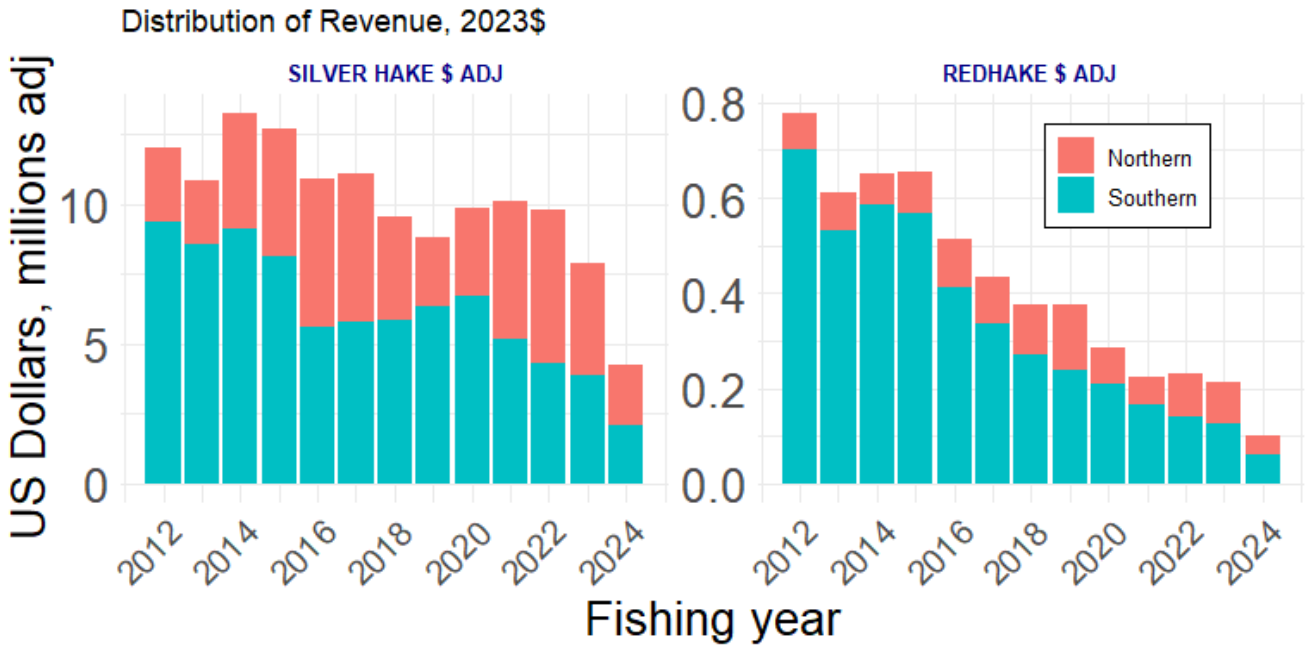


Figure 2: Revenue trends by species (Silver hake LEFT, Red hake RIGHT)

- Considerable decline in southern area trips and vessels targeting whiting since 2020, possibly related to relative squid abundance and price for vessels that are in both fisheries.
- Higher targeted fishing effort in the northern area since 2020, possibly vessels that targeted whiting in the southern area now fishing more often on Cultivator Shoals.

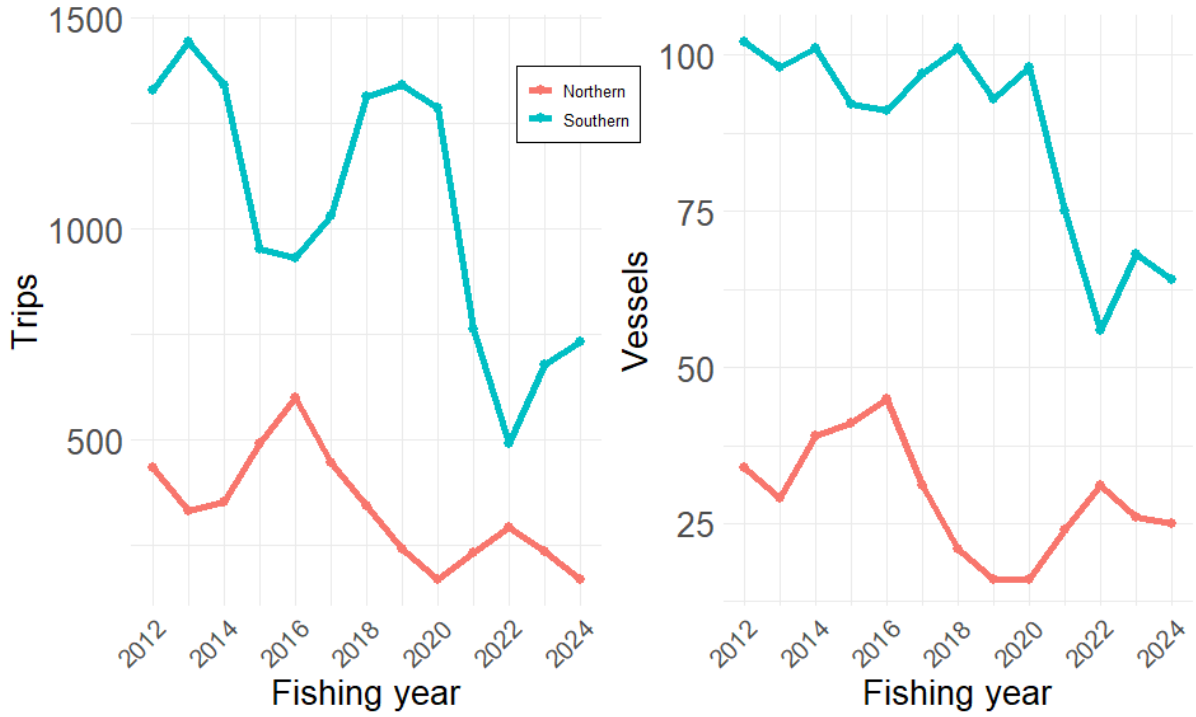


Figure 3: Trends in small-mesh multispecies trips > 2000 lb silver hake or > 400 lb red hake

- Considerable decline in whiting and red hake price since 2021.

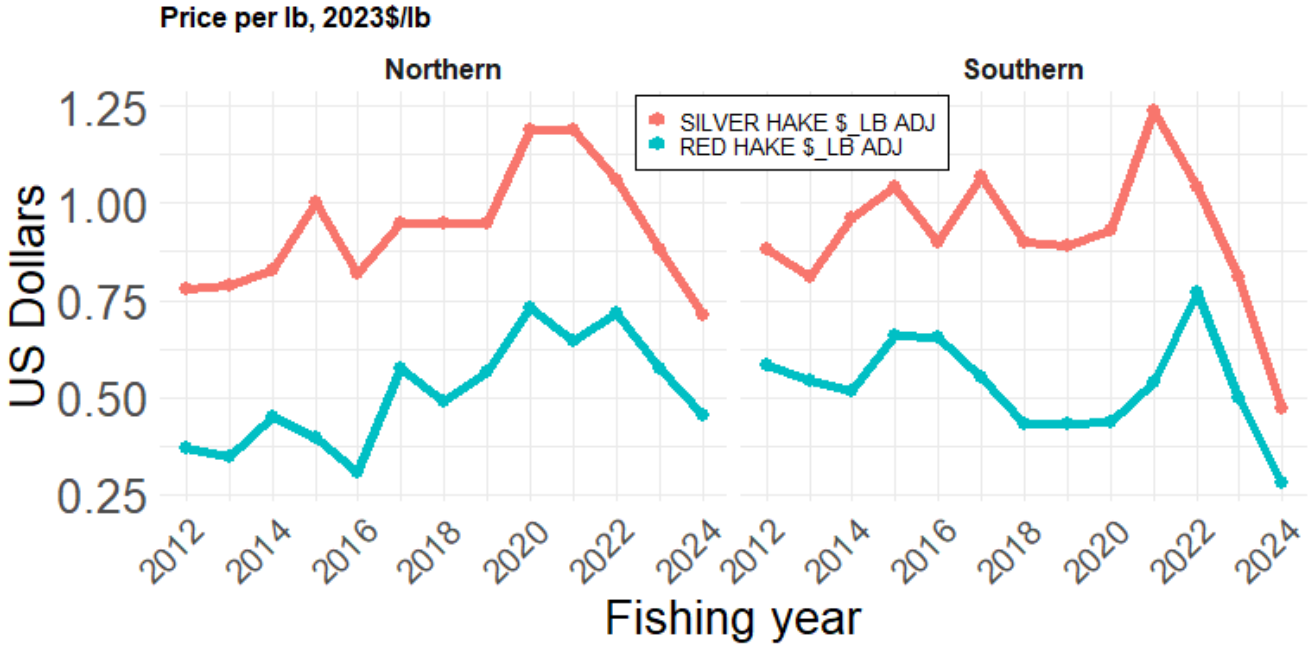


Figure 5: Small-mesh multispecies price trends

3.4 Number of trips and vessels binned by total landings of silver hake

- Orange = Trips landing between 10,000 and 15,000 lb silver hake
- Green = Trips landing between 15,000 and 30,000 lb silver hake
- Blue = Trips landing more than than 30,000 lb silver hake
- Steady decline of trips and vessels targeting whiting in the southern area
- Recent spike in trips and vessels landing between 10,000 and 15,000 lb whiting in 2024 (related to recent increase in possession limit?).
- Trips landings 15,000 to 30,000 lb (the possession limit) predominate in the northern area

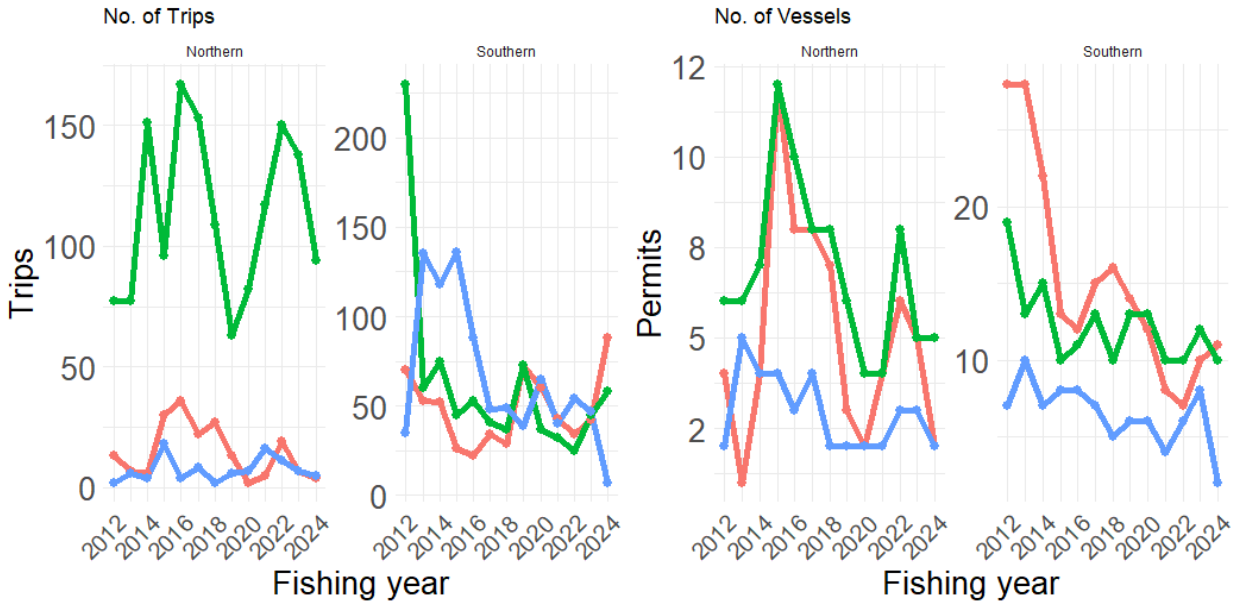


Figure 6: Trends in small-mesh multispecies trips by trip category, North (left) & South (right)

- General decline in southern whiting landings for all trip categories.
- Slight increase in trips landing < 10,000 lb.
- Northern area landings varies between 2 and 4 million lb for trips landing between 15,000 and 30,000 lb, which contributes to the majority of the silver hake landings in this area.

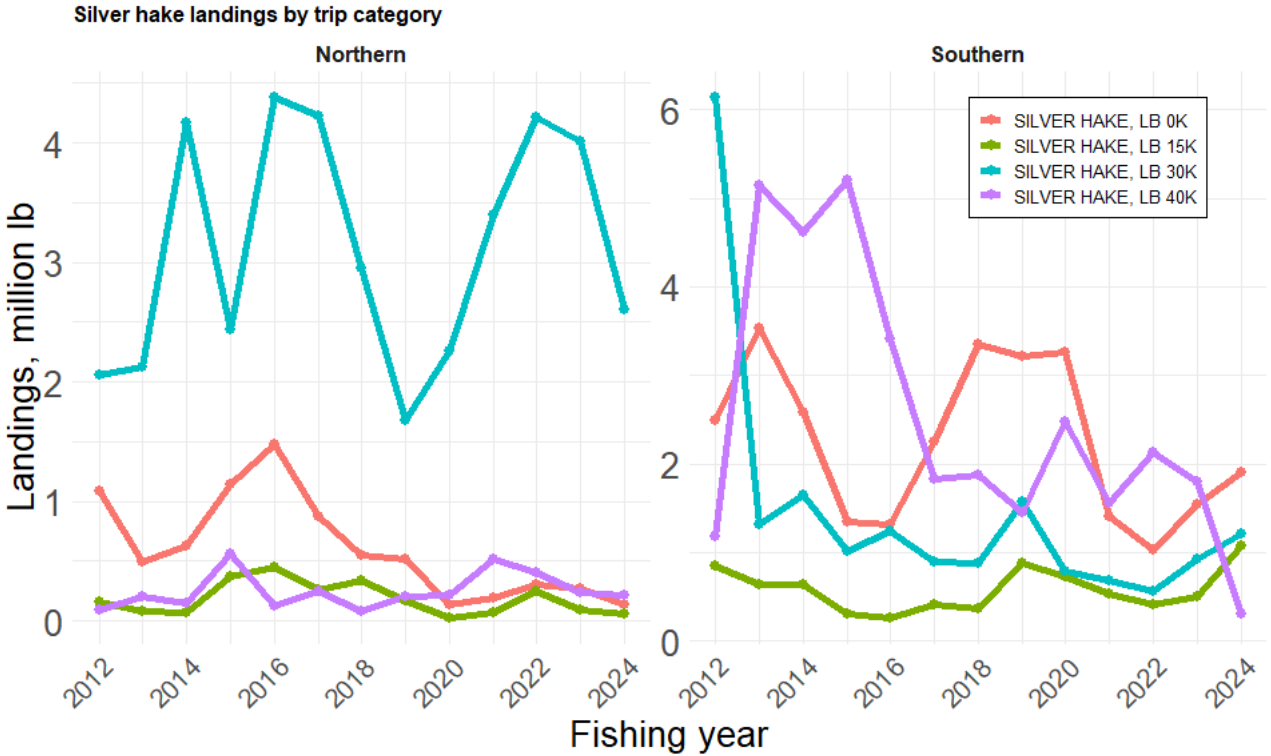


Figure 7: Trends in silver hake landings by trip category: Trip categories: 0 to 10k, 10-15k, 15-30k and > 30k lb silver hake landings.

- Considerable declines in whiting prices since 2021 for all trips classified by landings category in both management areas.

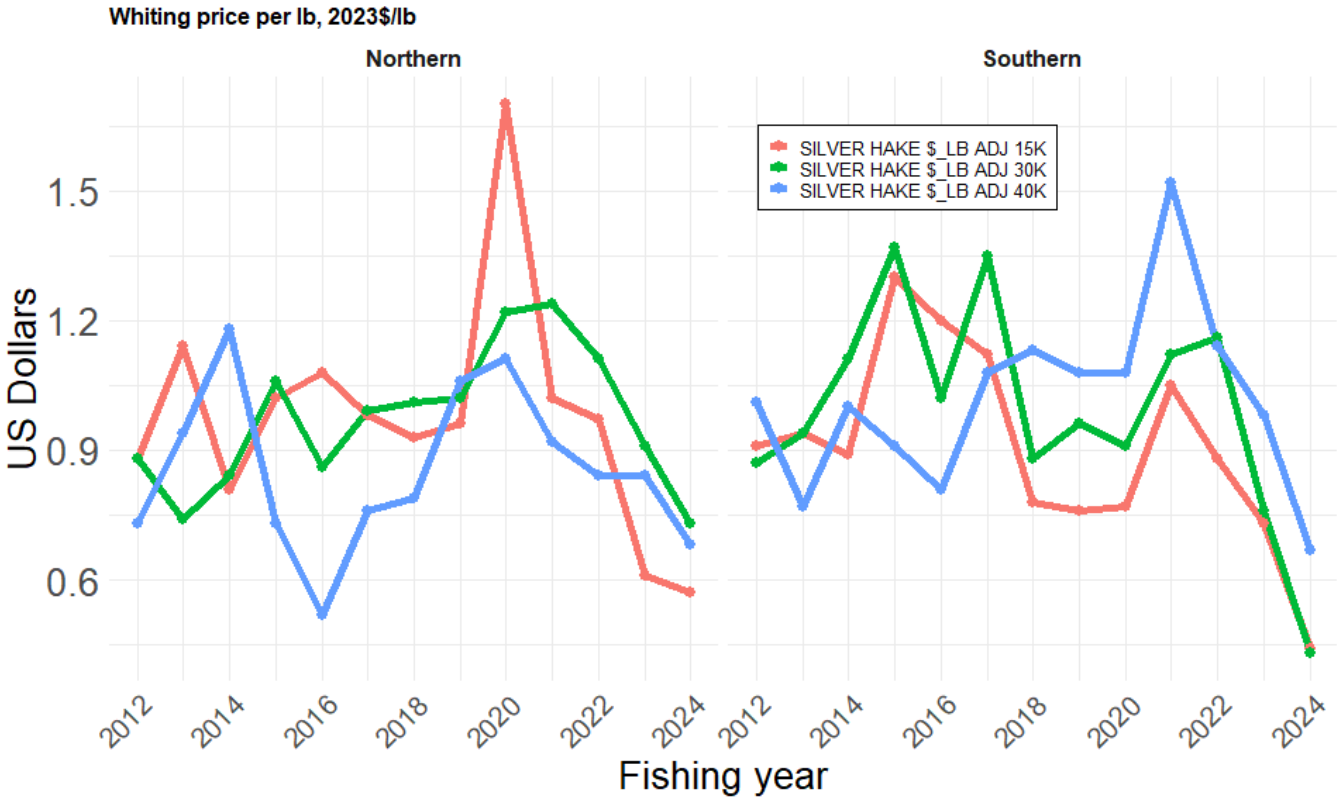
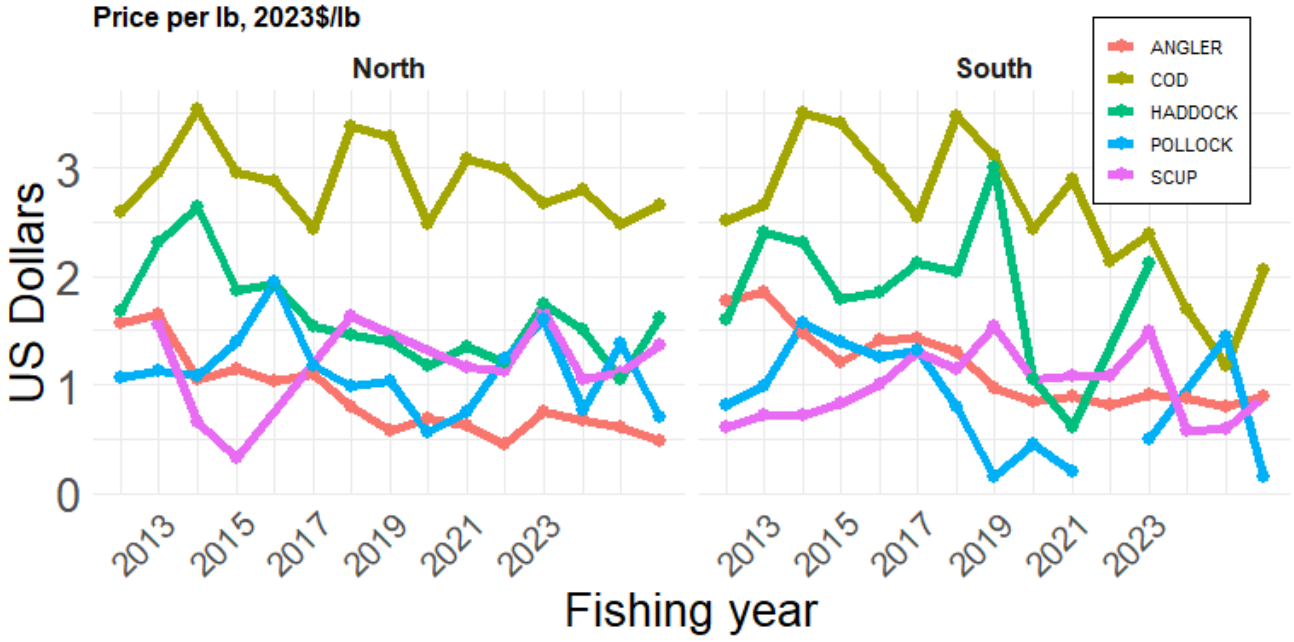


Figure 8: Trends in silver hake price by trip category: Trip categories: 10-15k, 15-30k and > 30k lb. silver hake landings

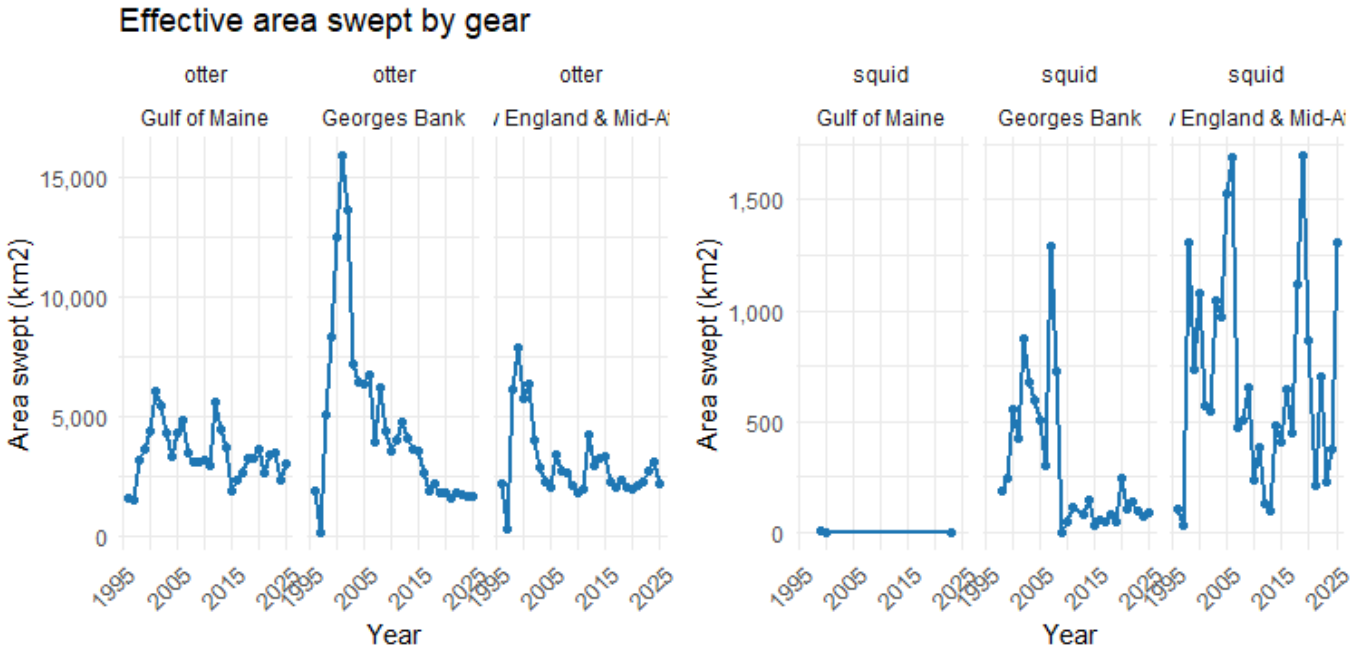
- General decline in commonly landed NER finfish prices in both regions, with a significant decline in cod price since 2018 from the southern area.
- Steady decline in monkfish and haddock prices in both regions.



Trends in fish prices by management area. ‘ANGLER’ = Monkfish

3.5 Effective area swept by gear and area

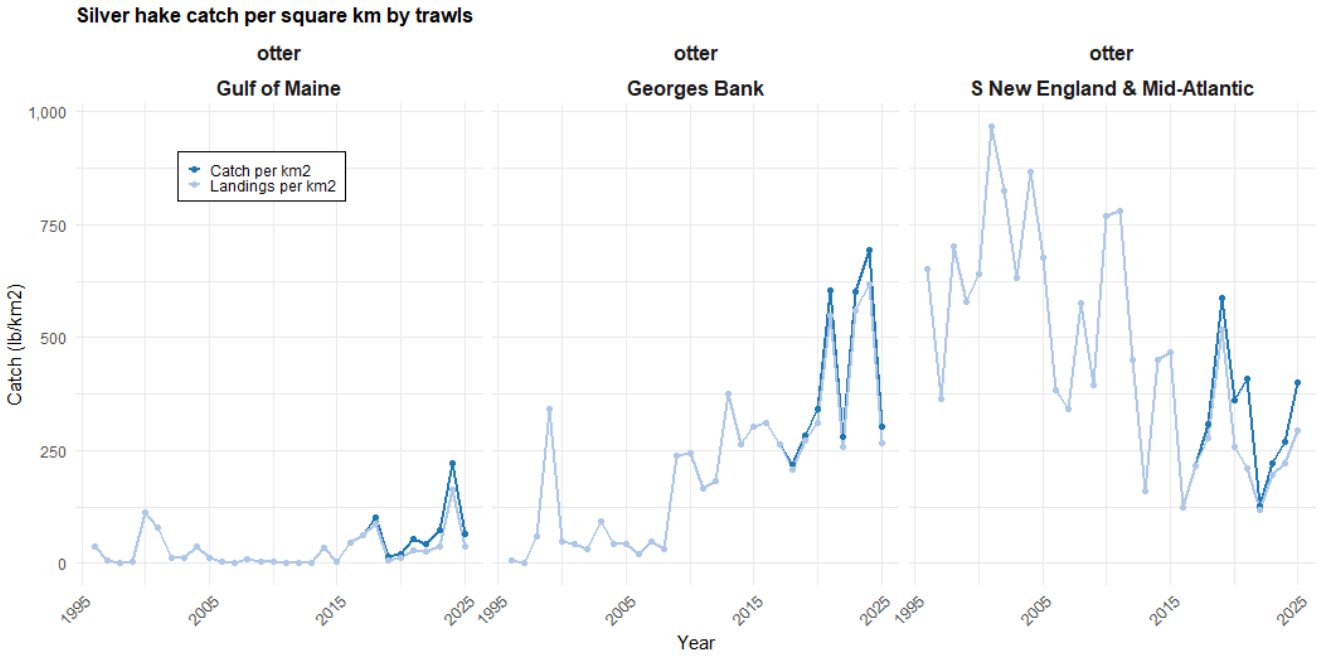
- Catch per area swept trends by region for otter trawls and squid trawls
- Otter trawl effort declines
- Squid trawl effort variable in Southern New England



Otter and squid trawl area swept by area

3.6 Silver hake catch (2017 to present) or Kept (pre-2017) per km2 effective swept area by otter trawls

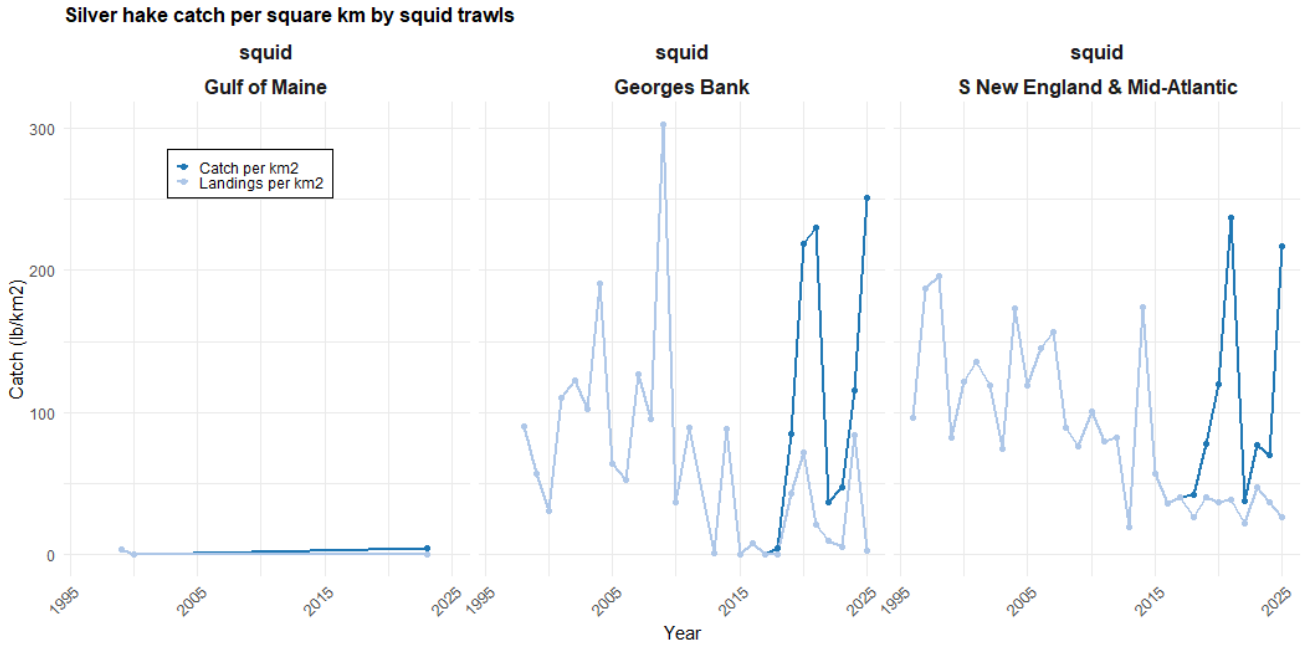
- Increasing commercial CPUE increasing in the Gulf of Maine and Georges Bank, but declining in Southern New England
- Evidence of distribution change



Otter trawl silver hake catch per square km

3.7 Silver hake catch (2017 to present) or Kept (pre-2017) per km2 effective swept area by squid trawls

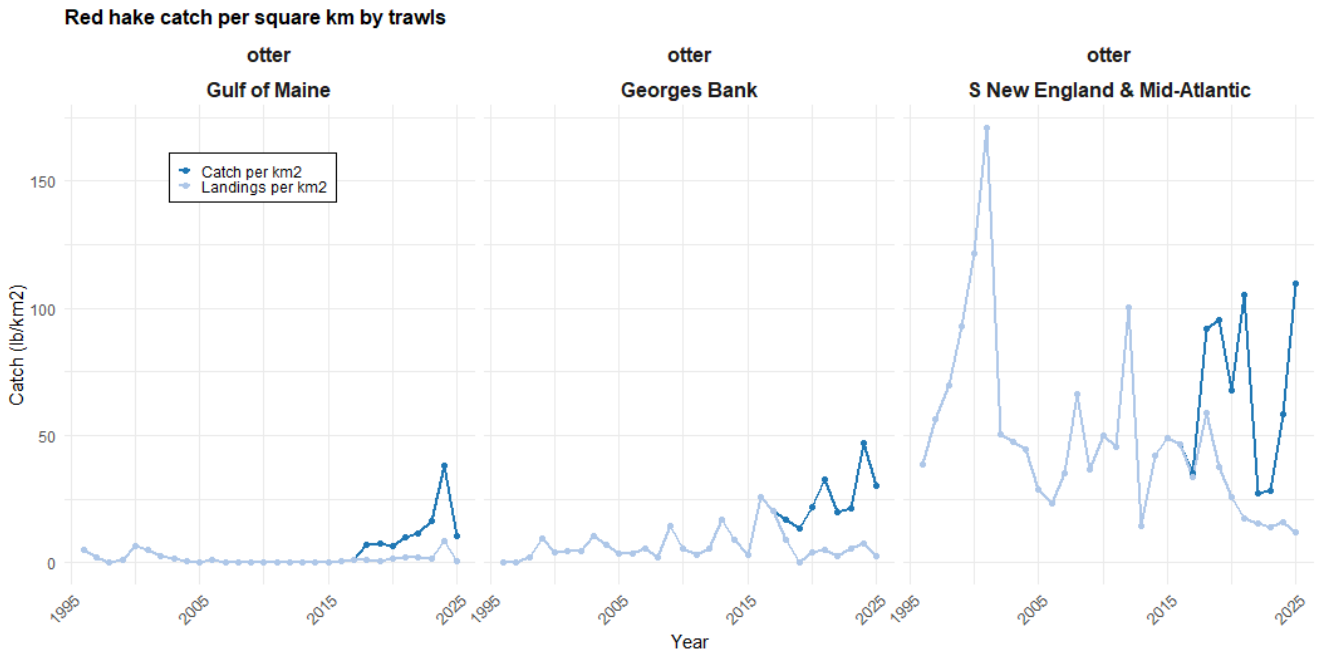
- Minimal squid trawl fishing in the Gulf of Maine
- Greater proportion of silver hake discarded. Considerable increase in 2025 discards.
- Declining CPUE in Southern New England
- Evidence of distribution change



Squid trawl silver hake catch per square km

3.8 Red hake catch (2017 to present) or Kept (pre-2017) per km2 effective swept area by otter trawls

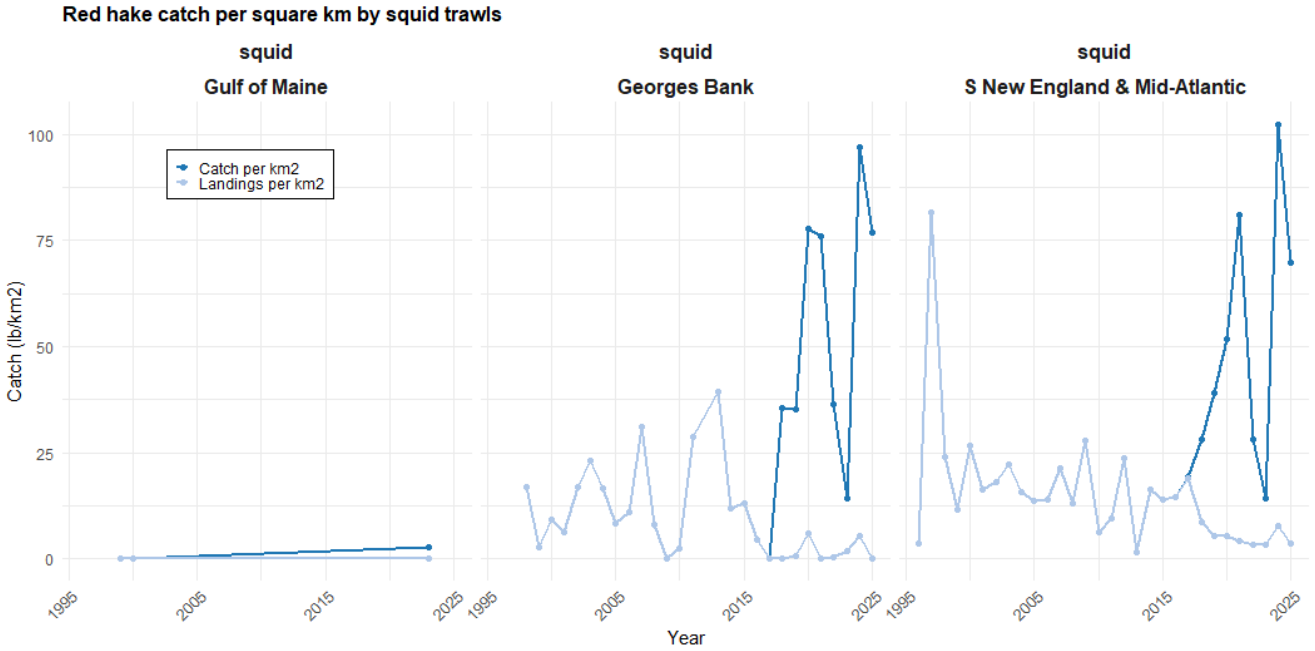
- Increasing commercial CPUE increasing in the Gulf of Maine and Georges Bank, variable without trend in Southern New England
- Higher proportion of discards compared to silver hake



Otter trawl red hake catch per square km

3.9 Red hake catch (2017 to present) or Kept (pre-2017) per km2 effective swept area by squid trawls

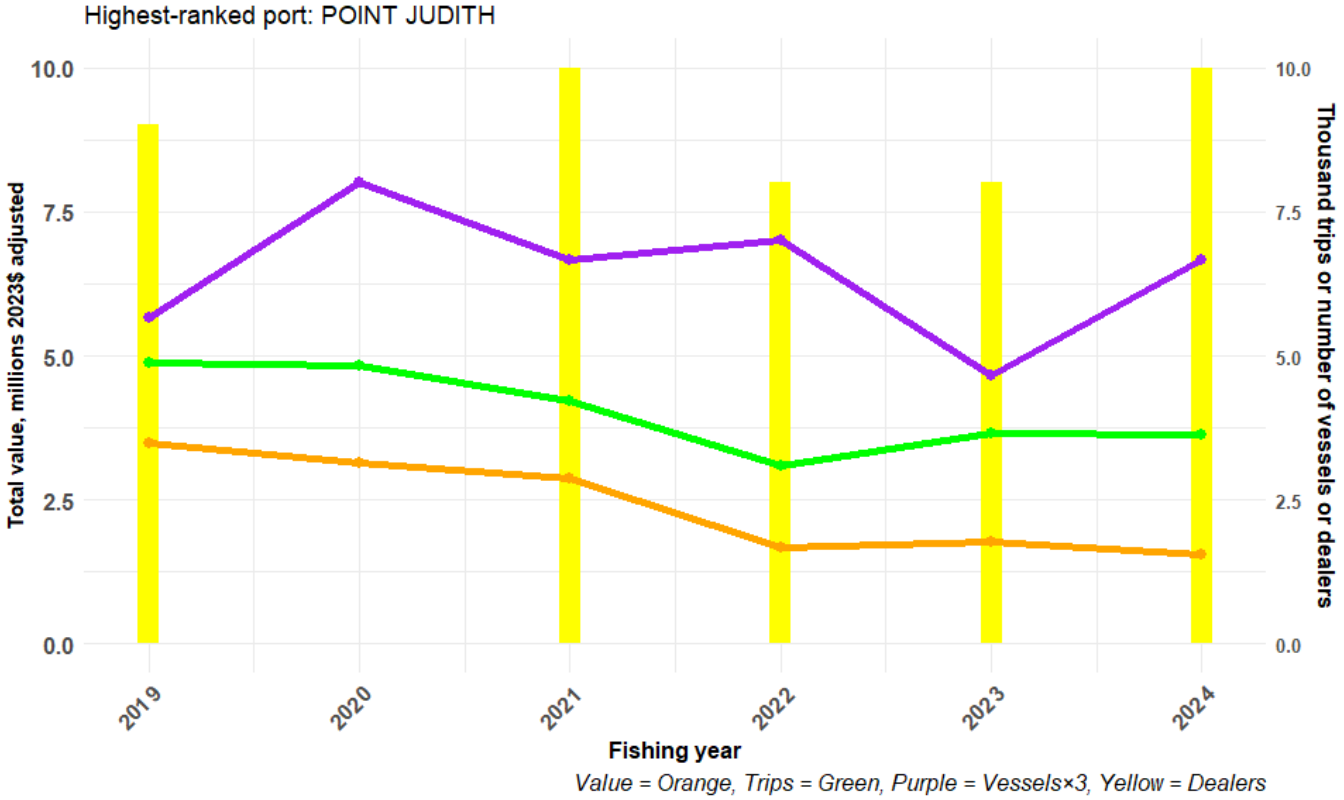
- Declining LPUE in Southern New England
- Much higher proportion of discards compared to silver hake and red hake caught by otter trawls



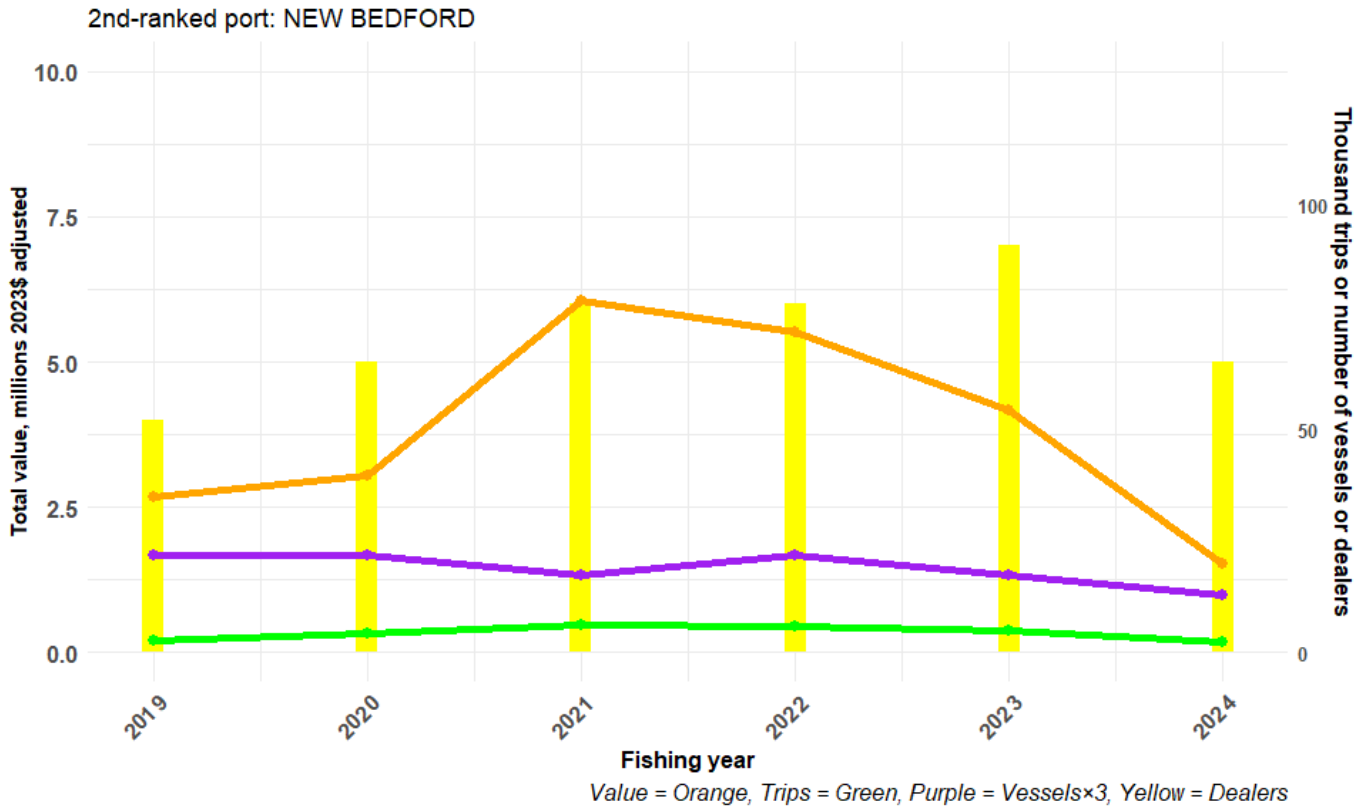
Squid trawl red hake catch per square km

3.10 Top ports by value, FY 2022-2024

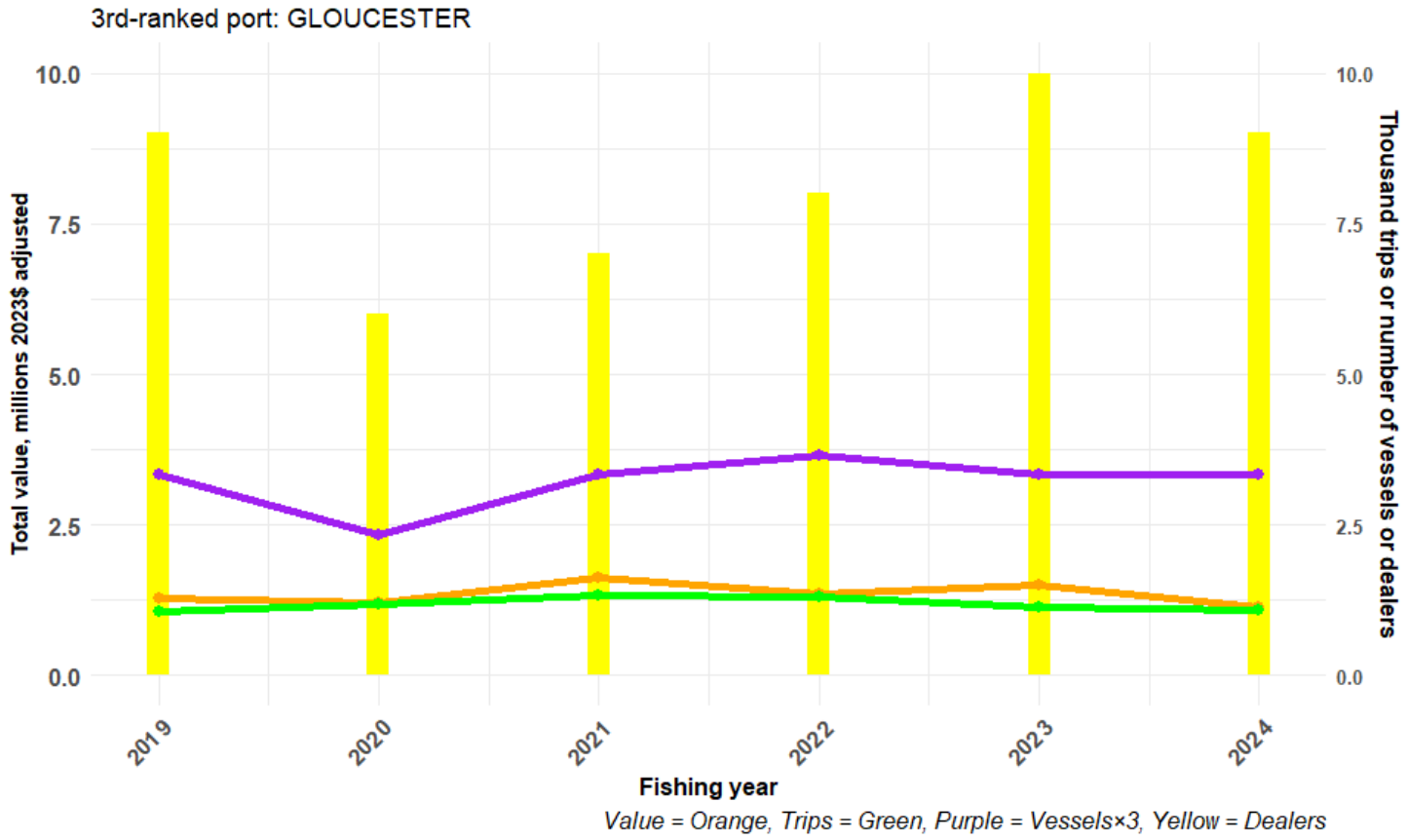
State	Port	Trips	Days absent	Vessels	Ave length	Age	Value (2023$)	Discards	Dealers
RI	POINT JUDITH	3,636	10,515	56	55	43	979,055	5,626,898	9
MA	NEW BEDFORD	289	2,202	12	68	40	958,588	1,362,941	6
MA	GLOUCESTER	1,035	4,347	27	58	36	581,207	3,536,818	8
NY	MONTAUK	1,135	5,387	28	64	39	482,516	3,520,190	13
CT	NEW LONDON	54	862	3	66	45	57,065	515,333	6
NJ	BELFORD	220	408	10	61	53	43,219	294,553	3
CT	EAST HAVEN	141	528	4	58	43	37,317	373,369	3
CT	STONINGTON	432	864	10	47	40	35,102	517,629	5



Point Judith commercial activity



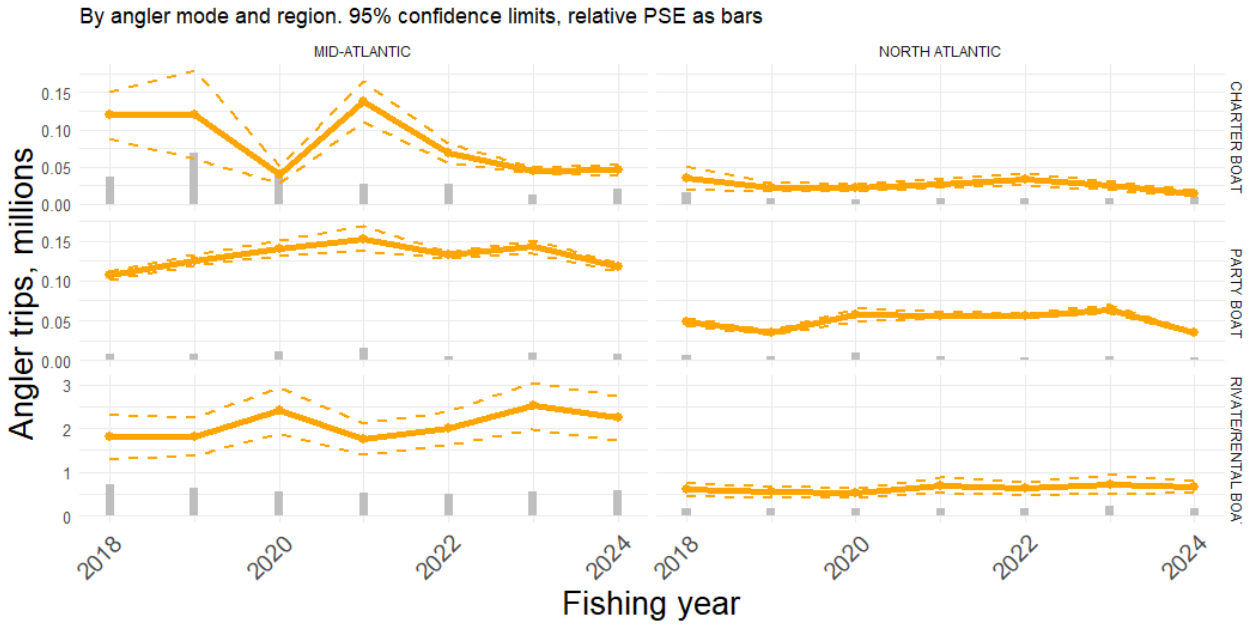
New Bedford commercial activity



Gloucester commercial activity

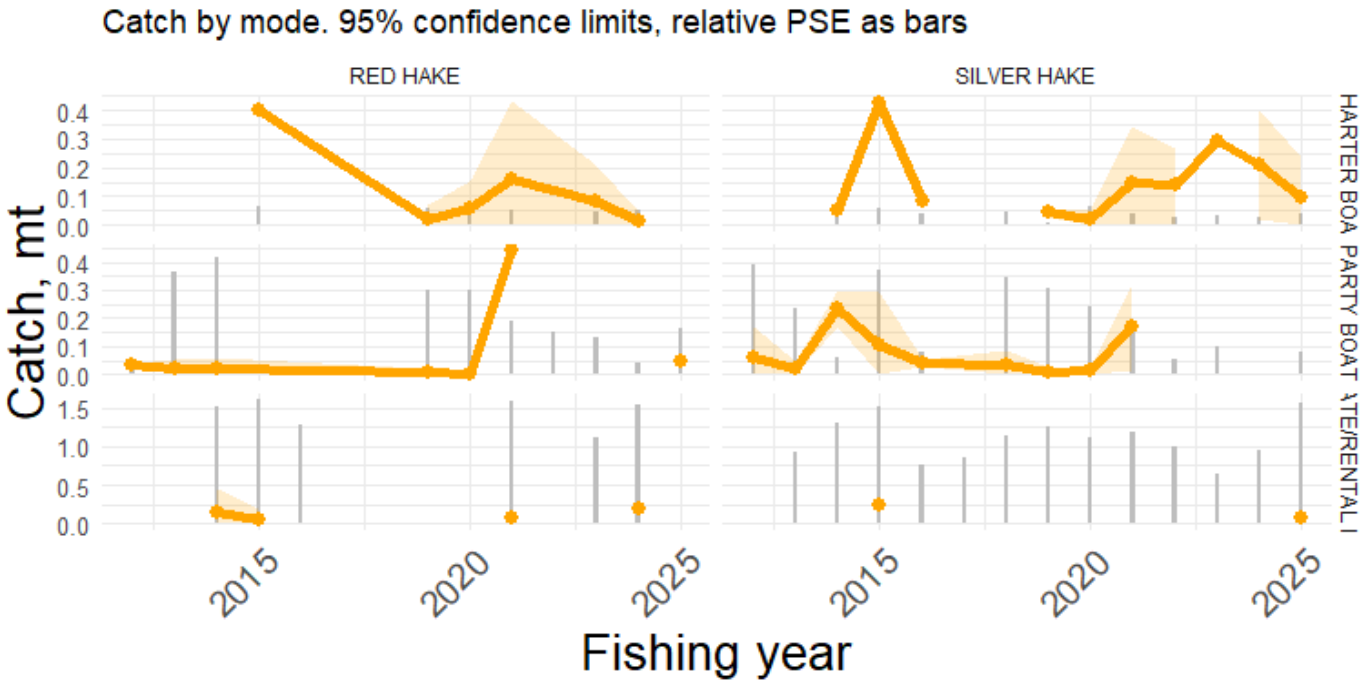
3.11 Recreational fishery characterization

- Anglers and angler trips by mode (Charter, Party, Private Boat)
- Catch: management uncertainty and PSE
- Recreational fishing ports and community participation
- Other factors

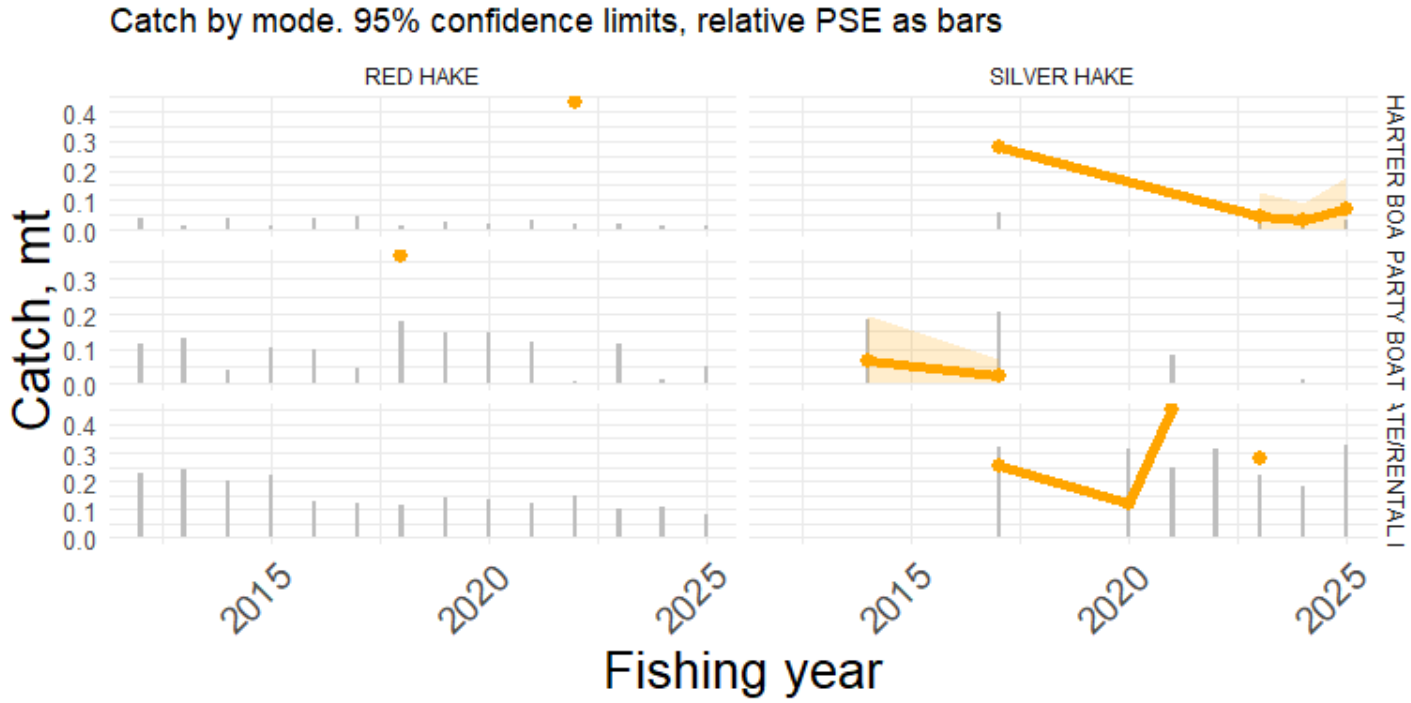


Angler trips by region and mode, MRIP query tool

3.12 MRIP Estimated Catch by Mode

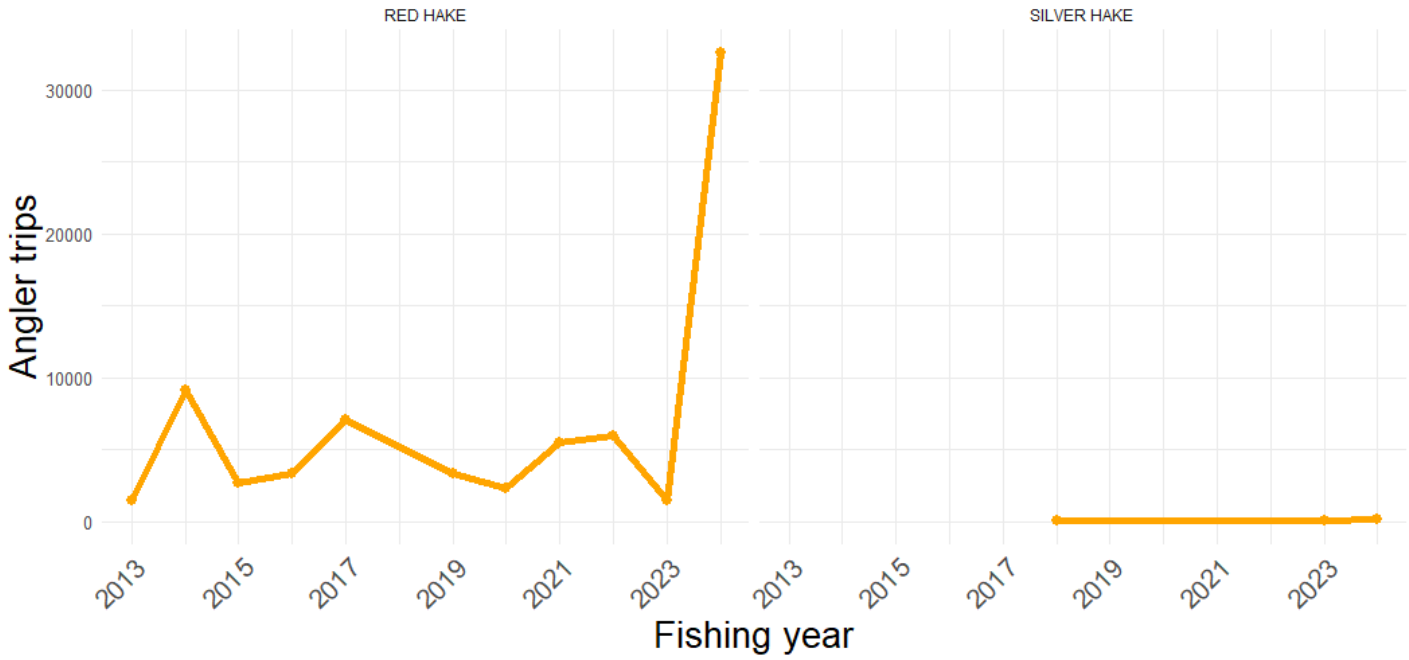


North Atlantic region catch by region and mode, MRIP query tool



Mid-Atlantic region catch by region and mode, MRIP query tool

3.13 Angler trips targeting by species



Trips targeting red and silver hakes, MRIP query tool