

Longfin Squid

2024-26 Specifications

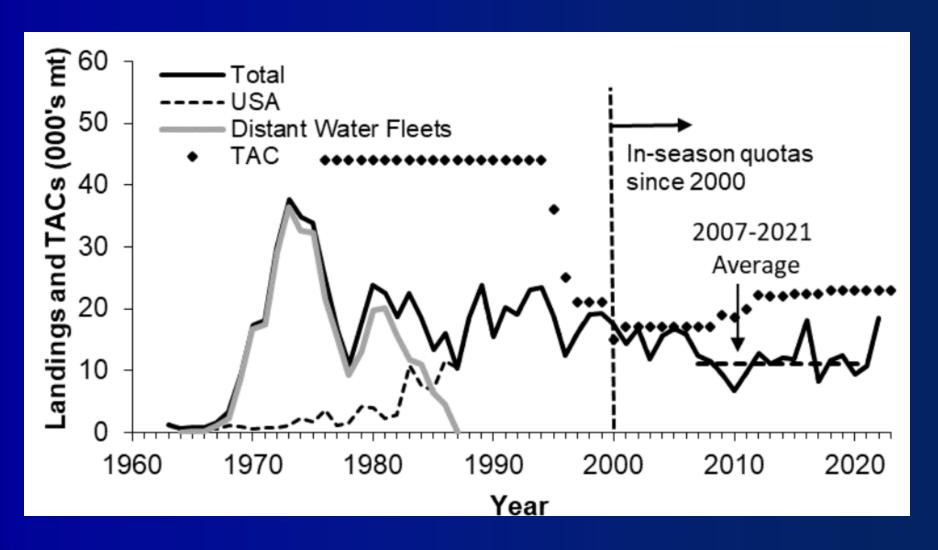
SSC - July 2023



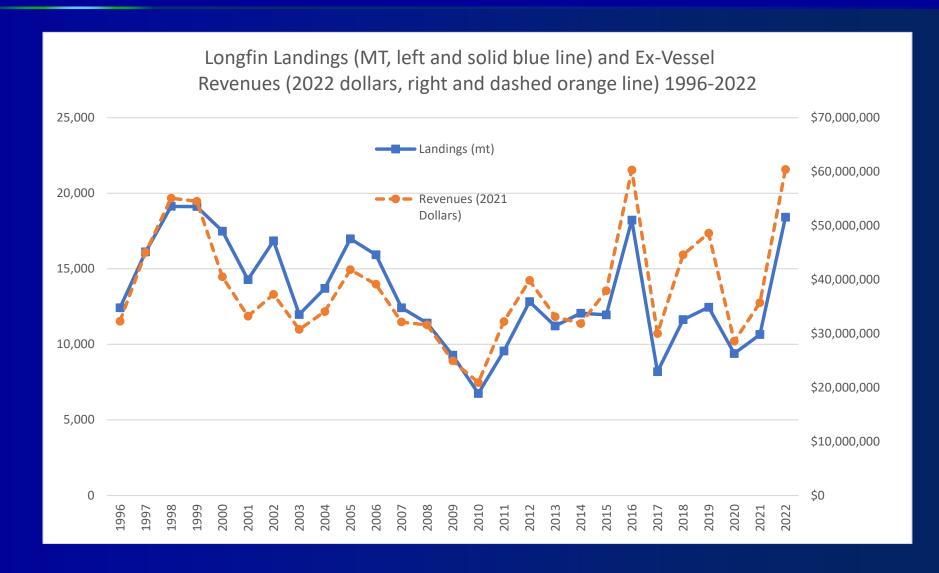
Overview

- Background (some moved to backup)
- Advisory Panel (AP) Fishery Performance Report
- Staff ABC Recommendation

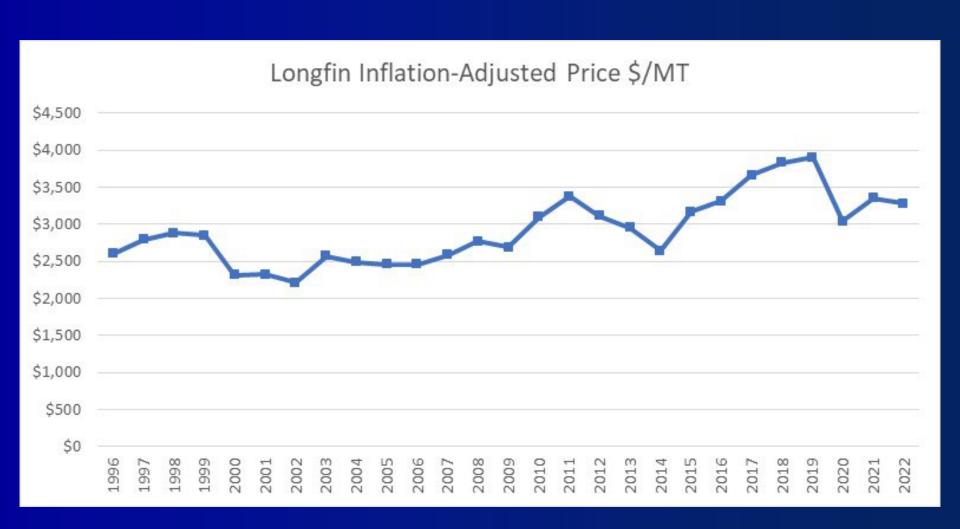
Catch 1989-2022



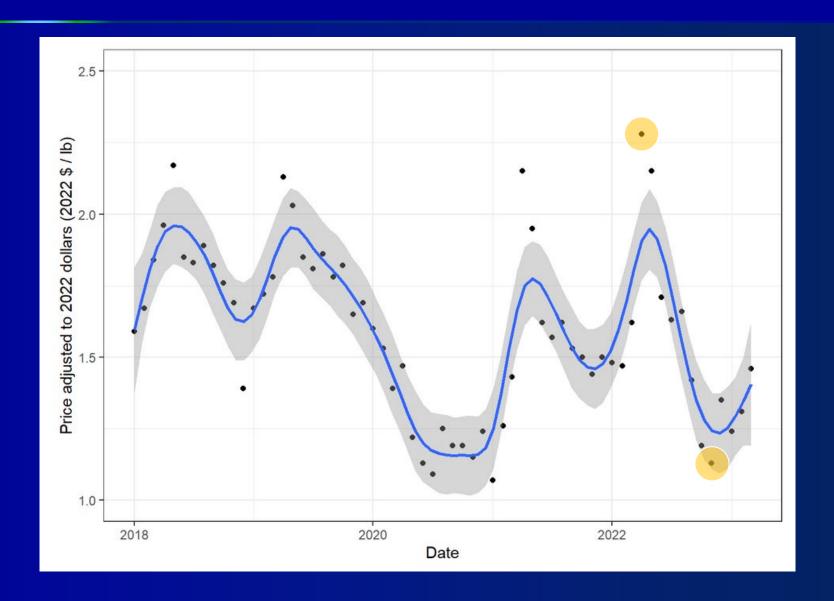
Landings/Revenues 1996-2022



Prices 1996-2022



Prices 2018-March 2023



2021/2022

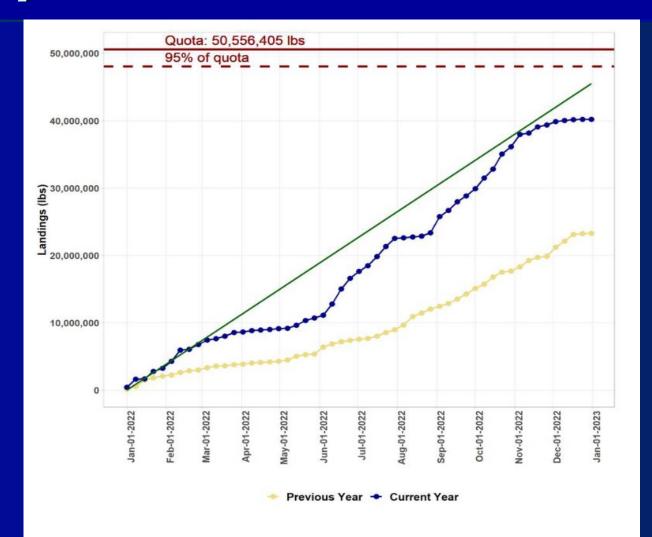


Figure 6. U.S. Preliminary Weekly Longfin landings; 2022 in blue, 2021 in yellow-orange. Source: https://www.fisheries.noaa.gov/new-england-mid-atlantic/commercial-fishing/quota-monitoring-greater-atlantic-region.

2023 T1

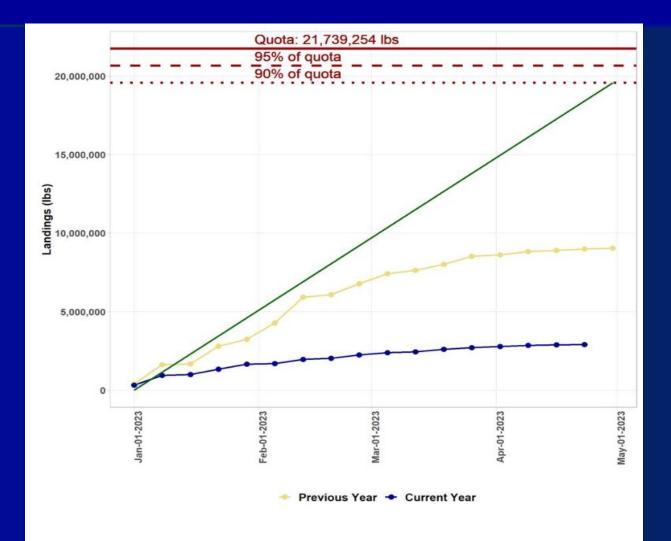
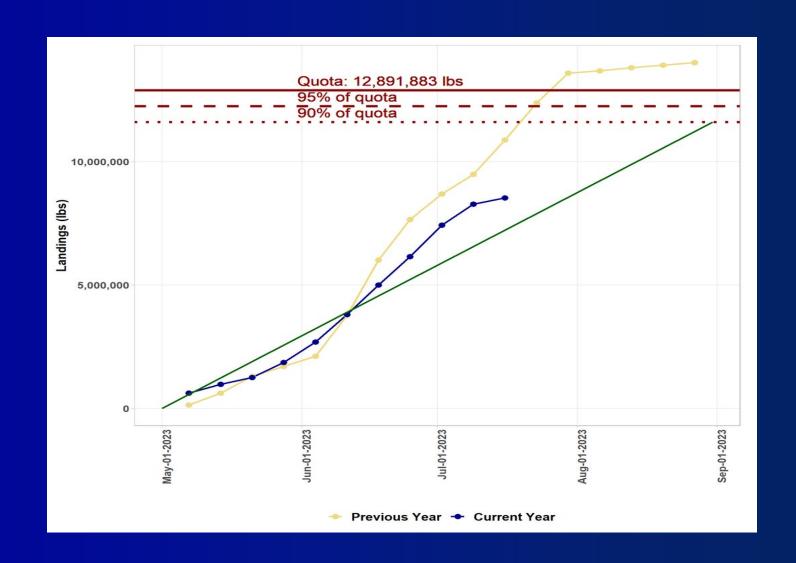


Figure 7. U.S. Preliminary Weekly Trimester 1 Longfin landings; 2023 Trimester 1 in blue, 2022 Trimester 1 in yellow-orange. Source: https://www.fisheries.noaa.gov/new-england-mid-atlantic/commercial-fishing/quota-monitoring-greater-atlantic-region.

2023 T2



Discussion Questions

- What factors influence catch and landings?
- What other issues or concerns do you want to highlight?
- Recommendations for 2024 regulations?
- Research recommendations?

Longfin — FPR

- High production early in 2022 + some sluggish sales = higher inventory
- Higher inventory = Lower prices and demanding higher quality squid
- High diesel costs

So...Less incentive to fish late 2022/early 2023



Longfin — FPR

 Various area-based and/or gear restrictions reduce landings and/or increase costs

Some new participants entering from scallops and/or groundfish



Longfin — **FPR**

- Research
 - Escapement-based approaches
 - Wary of sub-annual assessment/management
 - Catchability



Staff ABC Recommendation

Maintain ABC of 23,400 MT until there's an assessment to justify a change

- Catch variable as expected
- No long-term trend in annualized biomasses, though unclear how informative they are



Questions?



Management

- First FMP for longfin squid was 1978
- Limited Access directed fishery Tier 1
 - no trip limits initially
 - Gear: 2-1/8" inches Sept-April 1-7/8" May-Aug
 - T1/T3 closures: 2,500 pound trip limit
 - T2 closures: 250 pound trip limit
- 5,000 pounds for Tier 2, 2,500 for Tier 3
- 250 pounds for incidental permits (open access)
- Butterfish cap

Management

- T1: Jan-April 43%
- T2: May-Aug 17%
- T3: Sept-Dec 40%

- Some rollover allowed T1 → T2
 - Max T2 increase is 1.5*original
- Full rollover into T3

2023 Specifications

"Longfin A" – 2021-23 Specifications Same as 2020/Current (No action and Preferred)

Table 9. Longfin A Specifications

Specification	Longfin 2021-2023 (MT)	Rationale
(a) Overfishing Limit (OFL)	Not available	unknown
(b) Acceptable Biological Catch (ABC)	23,400	from SSC
(c) Commercial Discard Set-Aside	2.00%	from recent observations
(d) Initial Optimum Yield (IOY)/DAH/DAP	22,932	ABC - discard set-aside

23,400 MT was catch in the year of the highest exploitation ratio (1993) from the 2010 assessment. (23,950 MT now due to revised discards)

"Assessments"

- Biomass looks OK
- Unclear how informative current assessment is
- Varying perspectives on biomass trends in historical assessments.

Stock Status to 2022 "B"

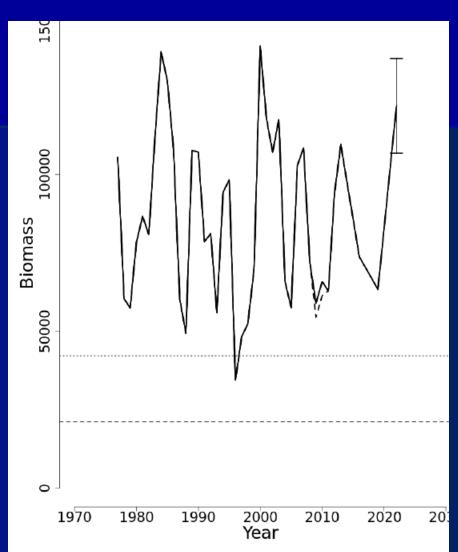


Figure 1: Trends in the two-year moving averages of annualized q-adjusted, swept-area biomass (i.e., annually averaged NEFSC spring and fall survey biomasses, in mt) of longfin inshore squid from the current assessment (solid line) and the 2020 assessment updates (dashed line). Biomass estimates are shown as interpolated values for years where biomass could not be estimated due to inadequate survey sampling coverage of longfin squid habitat (i.e., 2014 and 2020 spring and 2017 and 2020 fall surveys). The 80% confidence limits (106,748, 136,923) are shown for the 2022 biomass estimate (121,836 mt) in relation to the BMSY proxy (42,405 mt) and $B_{Threshold}$ (21,203 mt).

2022 Landings Details

State	Metric Tons		
RI	11,787		
NJ	2,258		
NY	2,059		
MA	1,680		
СТ	456		
Other	165		
Total	18,406		

2021		2022			
Stat Area	Metric	Stat Area	Metric		
	Tons		Tons		
537	2,267	537	4,516		
613	2,115	613	2,862		
616	1,574	616	2,481		
622	1,216	622	1,821		
626	472	626	1,609		
539	408	631/632	978		
526	340	538	590		
538	264	539	465		
611	254	526	388		
525	230	611	306		
612	152	623	305		
167	124	612	217		
Other	725	525	176		
Total	10,141	562	143		
		Other	744		
		Total	17,601		

Bycatch

- Relatively high in the longfin fishery, similar to previous years
 - about 1/3 catch discarded
- See bycatch tables

NE Fisheries Science Center Common Name	Pounds Observed Caught	Pounds Observed Discarded	Of all discards observed, percent that comes from given species	Percent of given species that was discarded	Pounds of given species caught per mt longfin Kept	Pounds of given species discarded per mt lo ngfin Kept	Rough Annual Catch (pounds) based on 2- year (2021-2022) average of longfin landings (14,624 mt)	Rough Annual Discards (pounds) based on 3-year (2021- 2022) average of longfin landings (14,624 mt)
SQUID, ATL LONG-FIN	3,611,912	112,343	6%	3%	2,275	71	33,275,343	1,034,980
BUTTERFISH	608,147	579,258	29%	95%	383	365	5,602,659	5,336,512
SCUP	196,035	164,263	8%	84%	123	103	1,806,008	1,513,303
SQUID, SHORT-FIN	193,786	128,182	6%	66%	122	81	1,785,284	1,180,897
SEA ROBIN, NORTHERN	154,652	154,652	8%	100%	97	97	1,424,757	1,424,757
HAKE, SILVER (WHITING)	105,192	62,946	3%	60%	66	40	969,096	579,902
SKATE, LITTLE	102,443	100,907	5%	99%	65	64	943,777	929,625
HAKE, SPOTTED	94,096	93,250	5%	99%	59	59	866,877	859,077
DOGFISH, SMOOTH	64,557	56,898	3%	88%	41	36	594,741	524,183
SKATE, WINTER (BIG)	62,081	57,322	3%	92%	39	36	571,928	528,091
DOGFISH, SPINY	61,795	61,735	3%	100%	39	39	569,296	568,743
FLOUNDER, SUMMER	54,327	25,611	1%	47%	34	16	500,495	235,949

2020-2025 Research Priorities

LONGFIN SQUID

SHORT-TERM/SMALLER SCALE

- **72.** Further develop practicable ways to reduce bycatch.
- **73.** Refine understanding of availability and catchability in surveys (e.g., fall NEAMAP-Bigelow comparisons and conversion factors).
- **74.** Collect more age, sex and maturity data for each seasonal cohort.
- **75.** Evaluate effectiveness of current mesh regulations.

LONG-TERM/LARGER SCALE

- **76.** Quantify escapement over the headrope and wings of the NEFSC survey trawl.
- 77. Determine what portion of stock is outside current research trawl surveys.
- Until real-time assessment is feasible, expand cohort analysis to refine stock assessments and their incorporation of seasonal indices (currently spring and fall are just averaged).
- **78.** Evaluate approaches to real time management including expanding age and growth studies to better estimate average growth patterns and to discern seasonal productivity/catchability patterns.
- **79.** Evaluate methods of incorporating ecological relationships, predation, and oceanic events that influence abundance and availability.
- **80.** Refine understanding of stock range and structure.

AP Fishery Performance Reports

 Bring advisor perspectives and recommendations to the Scientific and Statistical Committee, Monitoring Committee, and Council/Board when setting or reviewing catch limits and other measures