

C1 SCALLOP SAFE

SSC REVIEW

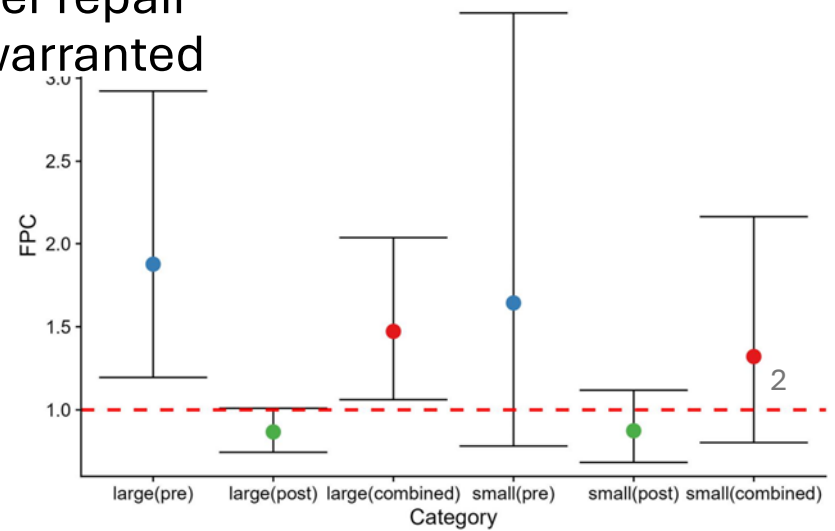
APRIL 2024

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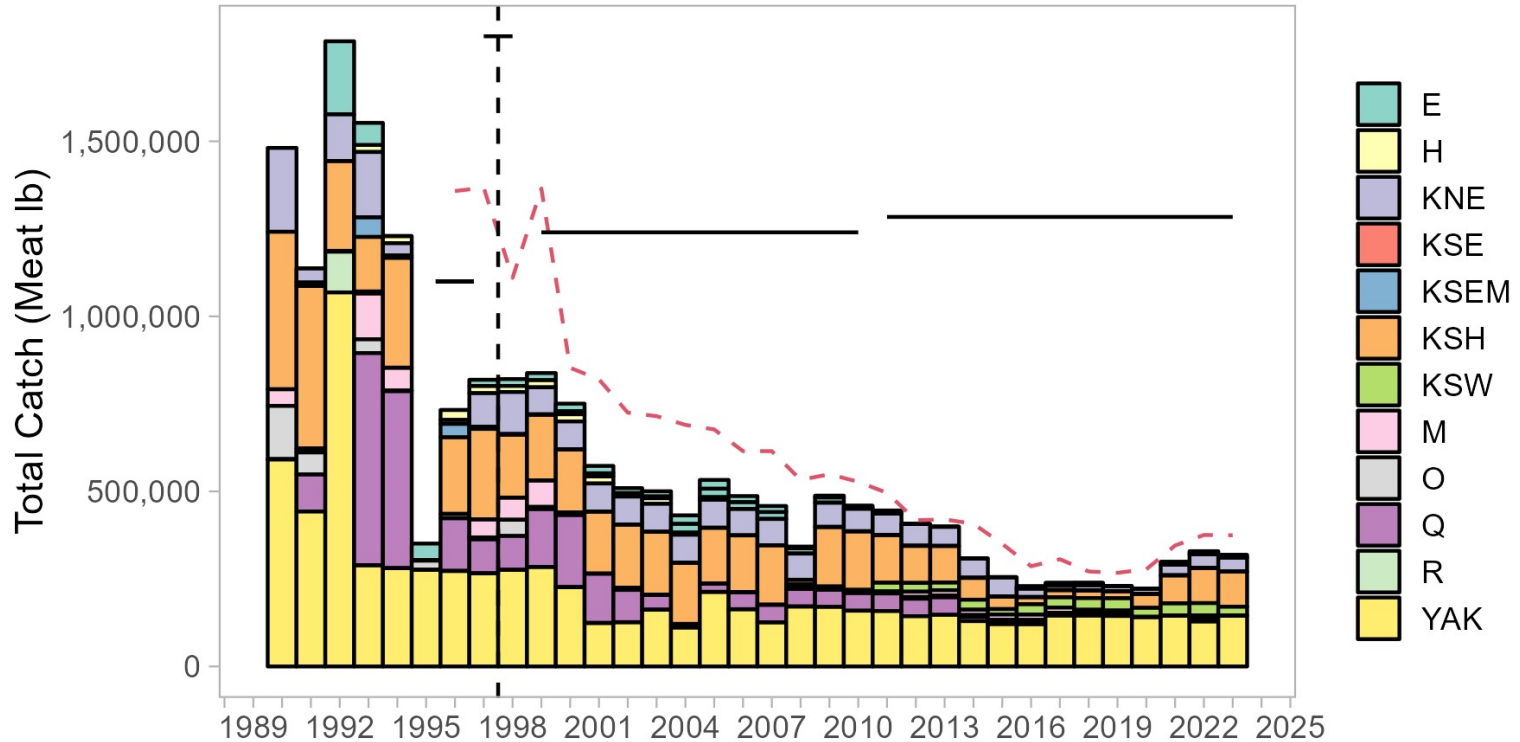


2023 ADF&G Dredge Survey

- 2023 survey sampled western GOA: Area E (West / East Kayak Island) and Area D (Yakutat)
- Exploitable-sized (≥ 100 mm SH)
 - ↓ Area E, ↑ Area D
- Recruit-sized (< 100 mm SH)
 - ↑ Area E, ↓ Area D
- Survey Dredge Comparison
 - Homer dredge repaired mid-2023 survey
 - Inconsistent results before/after repair
 - Fishing power correction not warranted
 - Size distribution very similar



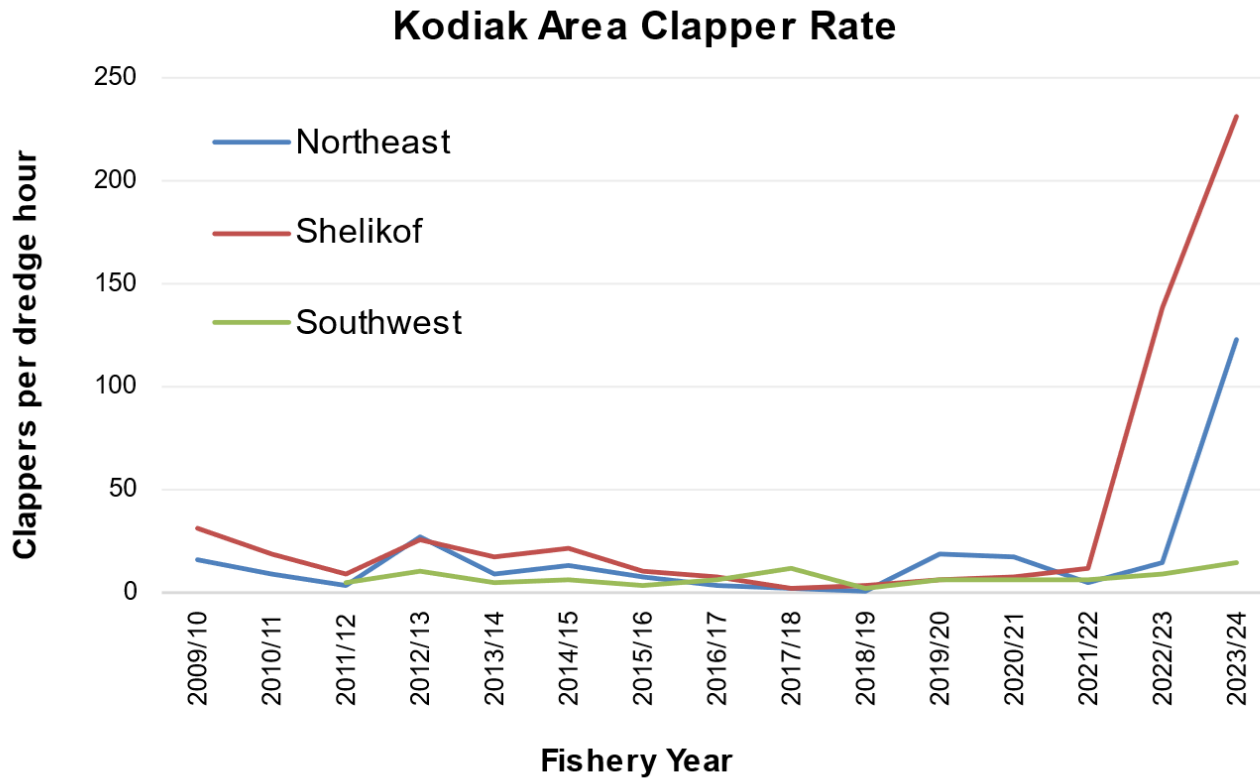
2023/24 Fishery



Season	Combined GHL	Retained Catch (lb)	Total Catch (lb)	OFL (mil lb)	ABC (mil lb)
2019/20	267,500	229,945	246,900	1.284	1.156
2020/21	277,500	222,560	234,662	1.284	1.156
2021/22	345,500	298,770	311,978	1.284	1.156
2022/23	375,500	329,095	345,689	1.284	1.156
2023/24	374,700	318,647	328,112	1.284	1.156



2023/24 Fishery



- Retained CPUE remains high
- Managers concerned, puzzled
- SPT heard relevant presentation on *Merocystis*

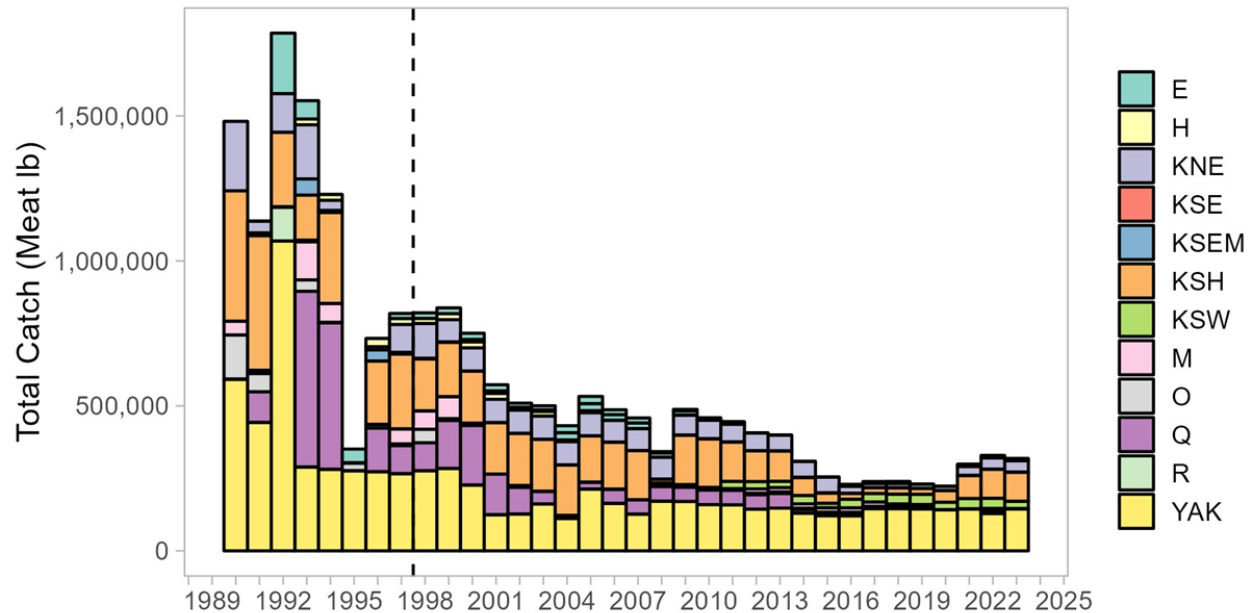


Stock Status & Specs

- Stock status is “**unknown**”, no biomass estimate or target
- OFL based on average total catch from 1990 – 1997, excluding 1995 (as prescribed in the FMP)
 - OFL = 1.284 mil lb
 - ABC = 1.156 mil lb (90% OFL)
- Setting OFL/ABC for 2024/25 & **2025/26 (Amend. 18)**
- **SSC 2022:** *“The SSC recommends that the SPT consider whether the OFL levels are appropriately set using the current reference period from 1990-1997, given the more recent CPUE trends and biological information (e.g., average weight) available.”*



Total Catch Reference Period



District	Avg Retained Catch (lb) '90 –'97	Percent Total (%)
E	41,415	3.3
H	12,730	1.0
KNE	106,092	8.5
KSEM	16,543	1.3
KSH	302,601	24.2
KSW	780	0.1
M	45,580	3.6
O	37,751	3.0
Q	209,433	16.8
R	16,620	1.3
YAK	458,575	36.7

~20% of reference catch is from non-core areas



Assessment Development

- Setting aside age-structured assessment, for now
 - Time intensive, ends do not justify the means
- Roadblocks:
 - 7 ADF&G registration areas, more within
 - Fishing in areas west of Kodiak becoming increasingly irregular
 - Dredge survey can only cover major harvest areas
 - Disparity in available data between **'core'** and **'non-core'** areas
- **YAK, EKI, WKI, KSH, and KNE have full suite of fishery and survey data (these areas are ~ 80% of landings)**
- **H*, M, O, Q are truly data-limited (*in present day)**



App B: REMA + Tier 4 HCR

- Explore simple, data-limited modelling approach – REMA
 - Survey round biomass, fishery CPUE for core areas
- Apply BSAI crab Tier 4 F_{OFL} control rules

$$F_{\text{OFL}} = \begin{cases} 0 & \frac{B_{prj}}{B_{\text{MSY, proxy}}} \leq 0.25 \\ \frac{M \left(\frac{B_{prj}}{B_{\text{MSY, proxy}}} - \alpha \right)}{1 - \alpha} & 0.25 < \frac{B_{prj}}{B_{\text{MSY, proxy}}} \leq 1 \\ M = 0.13 \text{ yr}^{-1} \text{ (FMP)} & B_{prj} > B_{\text{MSY, proxy}} \end{cases}$$

B_{prj} = 2023 predicted biomass, after 2023/24 fishery
 $B_{\text{MSY, proxy}}$ = Mean biomass 2009-2023



App B: Stock-wide OFL

- Stock-wide reference points are the sum of core and non-core (i.e., surveyed/non-surveyed) areas

$$\text{OFL} = \underbrace{\text{OFL}_s}_{\text{(core)}} + \underbrace{\text{OFL}_{ns}}_{\text{(non-core)}}$$

- Non-core stock uses status quo, average total catch approach
 - Area H, M, O, Q, KSW, KSE



App B: Conclusions

- REMA is useful tool, perhaps not most suitable
 - Size data is ubiquitous, not used by REMA
 - Time series truncated, survey time series is short
- Research gaps – maturity, M , dredge efficiency
- Definition of reference time series still an issue

- **Stock delineation based on data availability may be only path to better informed assessment**
 - Similar concept used for rockfish species complex (GOA ORX)





NOAA
FISHERIES

Scallop SAFE 2024: Socioeconomic Update

Prepared by Scott A. Miller, Industry
Economist, NOAA Fisheries, Juneau.

LLP Ownership Information: Cooperative Affiliated

- No known change in cooperative membership or cooperative affiliated LLP ownership shares
- Cooperative members collectively own three vessels qualified to fish their LLPs; the Polar Sea (LLP 005, LLP 003), the Provider (LLP 008, LLP 004), and the Ocean Hunter (LLP 007, LLP 009).
- LLP 002 (American Seafoods) and LLP 010 (Alaska Scallop Fisheries LLC) are also cooperative members.
- Provider is exclusively used to fish scallops, Polar Sea and Ocean Hunter may also participate in the Crab Rationalization Program fisheries
- Cooperative members freeze product at sea and deliver to cold storage or freezer containers for barging



Landed and Value Update

- Landings decreased from 329,095 to 318,647 pounds, a 3% decrease
- Price decreased from \$13.56/lb. to \$12.81/lb. (~6%), due to substantial increase in Japanese imports.
- Value decreased to \$4.082 million (~9%)
- Two cooperative vessels fished in 2022-23 with landings in Kodiak and Yakutat.

