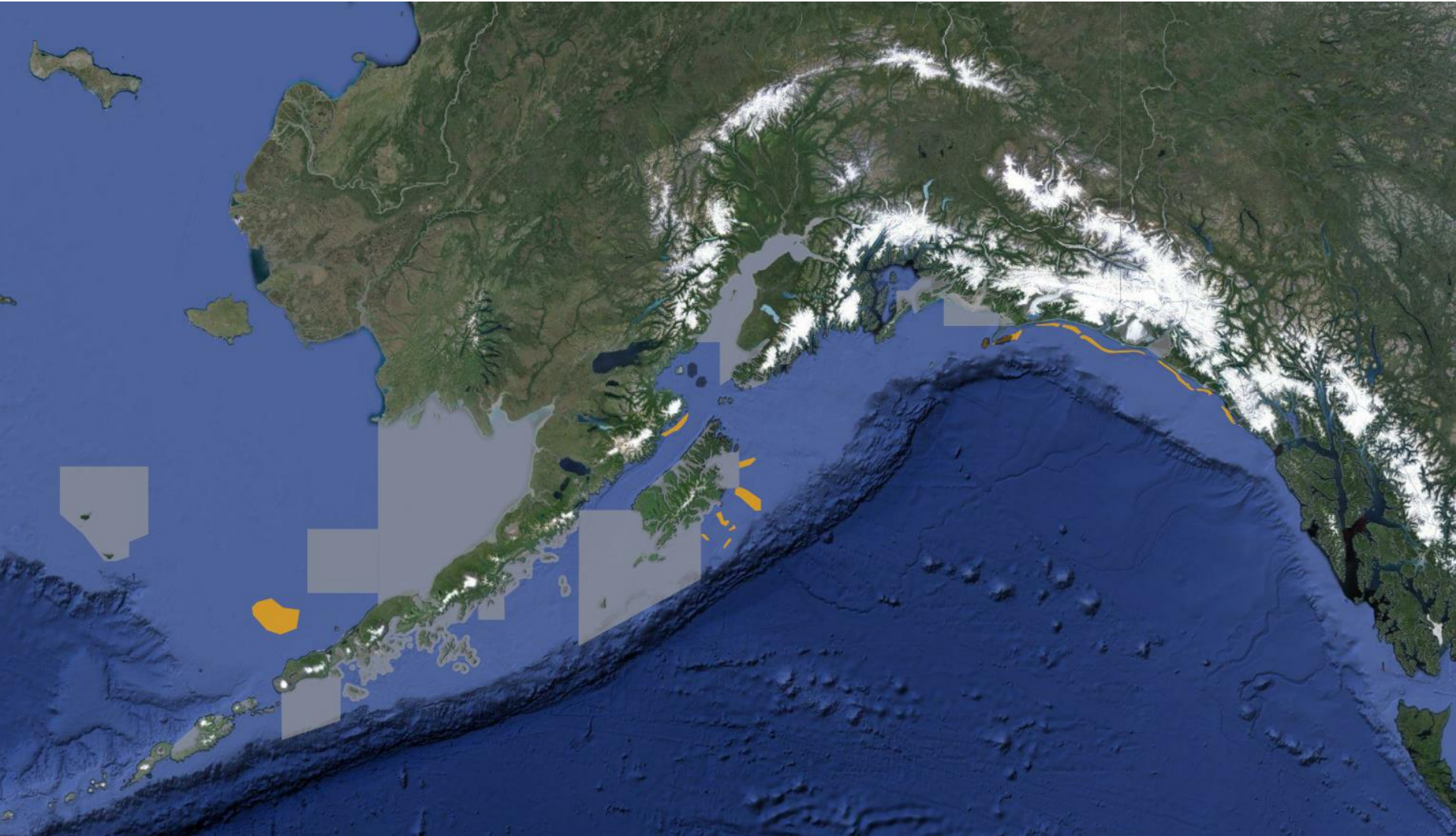


STOCK ASSESSMENT AND FISHERY EVALUATION REPORT FOR THE WEATHERVANE SCALLOP FISHERY OFF ALASKA

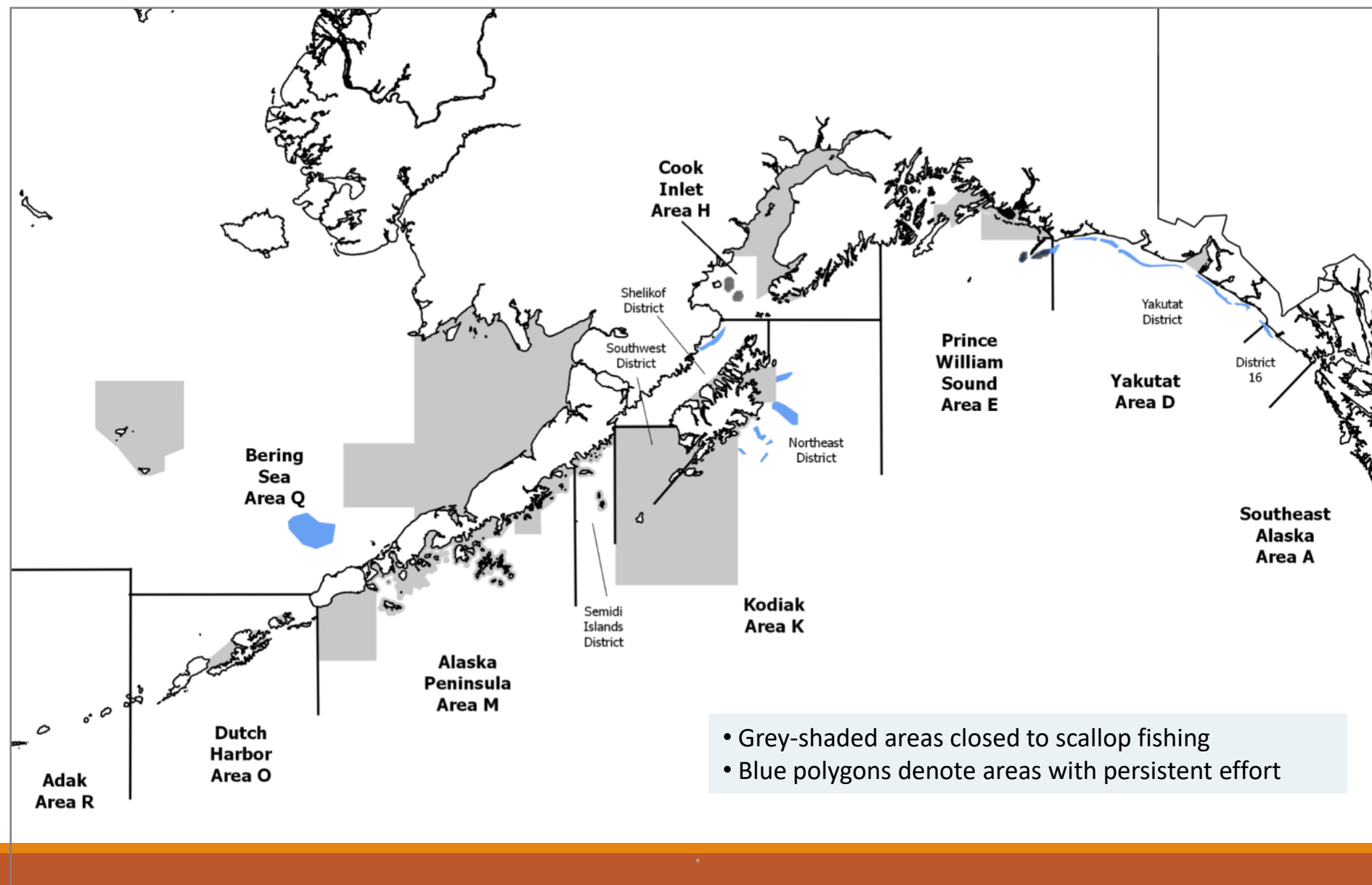
Compiled by the Scallop Plan Team, March 2019



- FISHERY OVERVIEW
- MANAGEMENT OVERVIEW
- 2018 ASSESSMENT RESULTS
- RECENT FISHERY PERFORMANCE
- PROGRAM UPDATES

Fishery Overview

Weathervane Scallop Fishing Areas



Weathervane Scallop Fishery Overview

Federal Waters

9 Federal LLPs

- 7 LLPs permitted to deploy two 15 ft dredges
- 2 vessels permitted to deploy two 10 ft dredges
- Cook Inlet: single 6 ft dredge

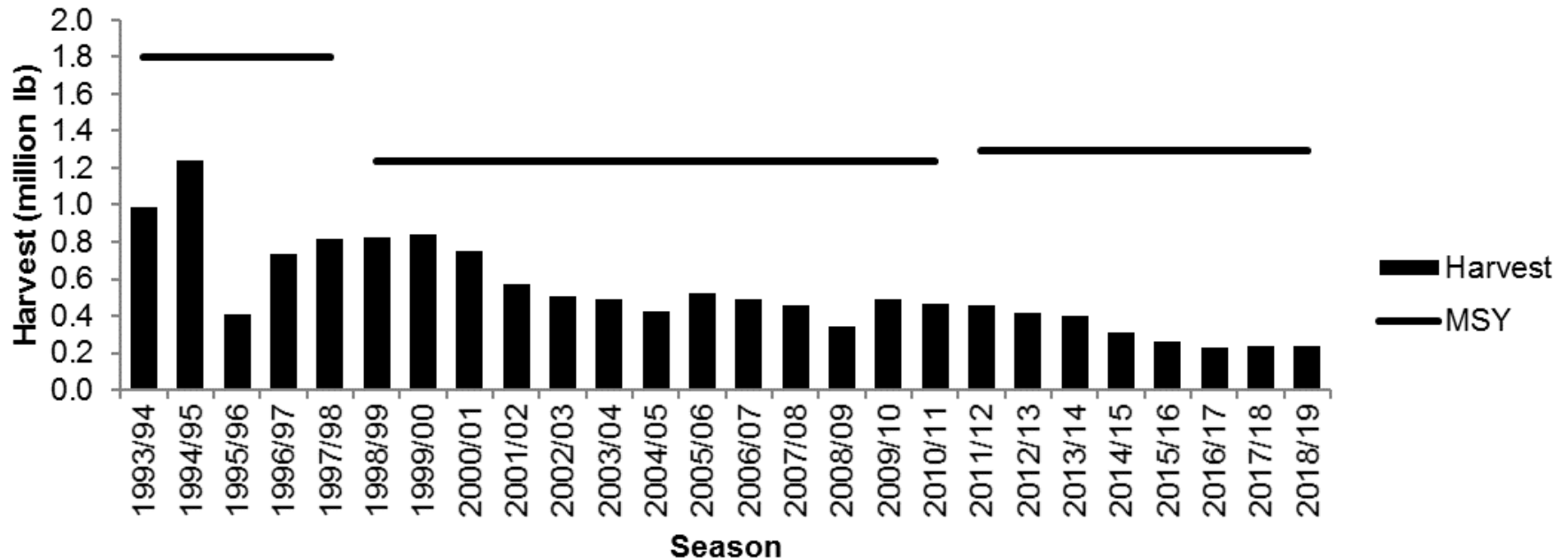


State waters

- Open access state water fishery beginning in 2014
- State waters closed to scallop fishing in many places
- Known scallop beds in state waters not closed to scallop fishing: District 16, Yakutat District, Area E (Kayak Island), Kodiak Shelikof District, and Area O (Dutch Harbor)

MSY, OY, and Overfishing Definition

Statewide Weathervane Scallop Fishery
Harvest and MSY Levels



- MSY = 1.29 million lb scallop meats
- MSY definition based on average 1990-1997 harvest with 1995 excluded
- In absence of spawning biomass estimate the OFL defaults to MSY
- maxABC = 90% of OFL
- SPT recommendation for ABC = 1.161 mil lb (90% of OFL) for 2019/20

Management Overview

Stock Assessment

Pre 2016

- 5% of harvest comes from locations with fishery independent assessment
- 95% of harvest managed from fishery dependent data sources

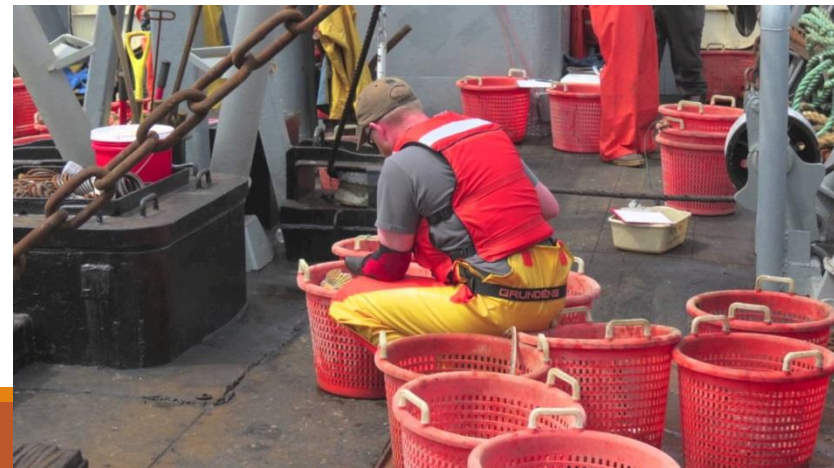
Post 2016

- Statewide survey to cover Shelikof Strait and Yakutat area biennially (~70% of mean harvest)

Observer Program

100% mandatory observer coverage (except in Cook Inlet)

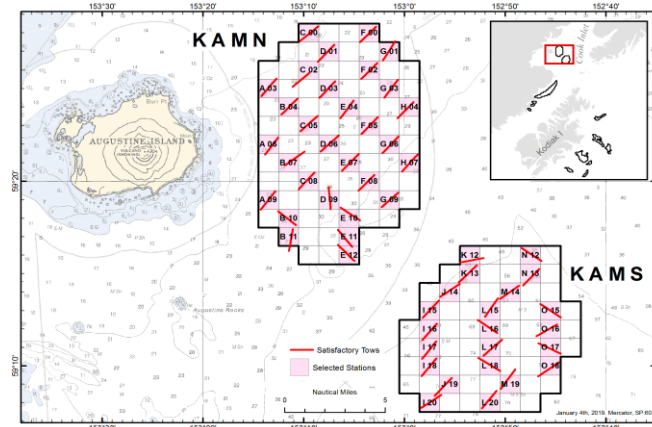
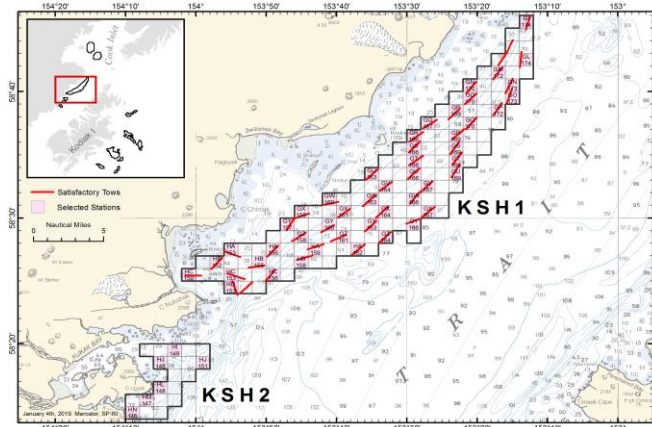
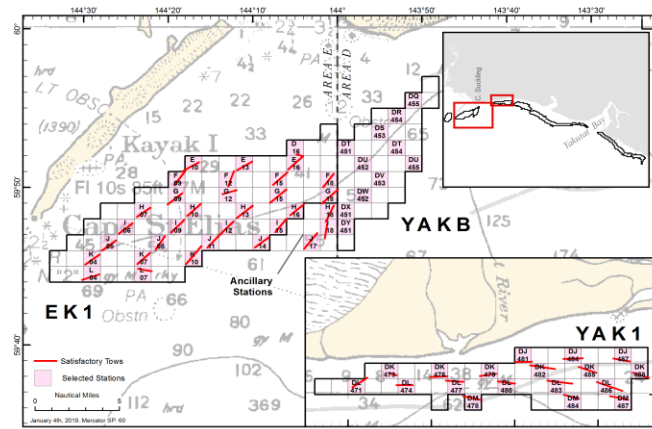
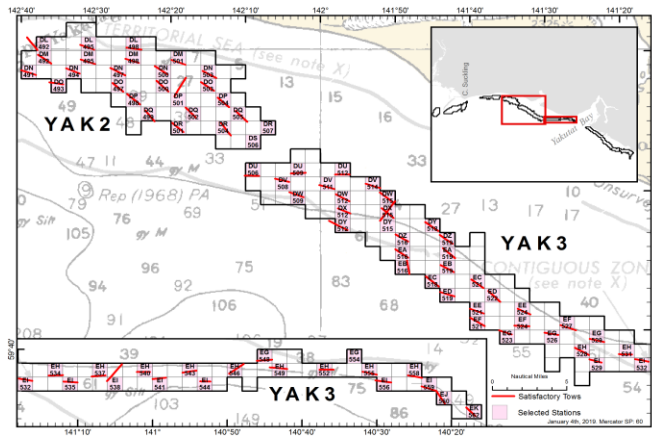
- CPUE
- Shell height
- Age
- Discard rates & condition
- Catch composition
- Harvest location
- Harvest depth
- Bycatch



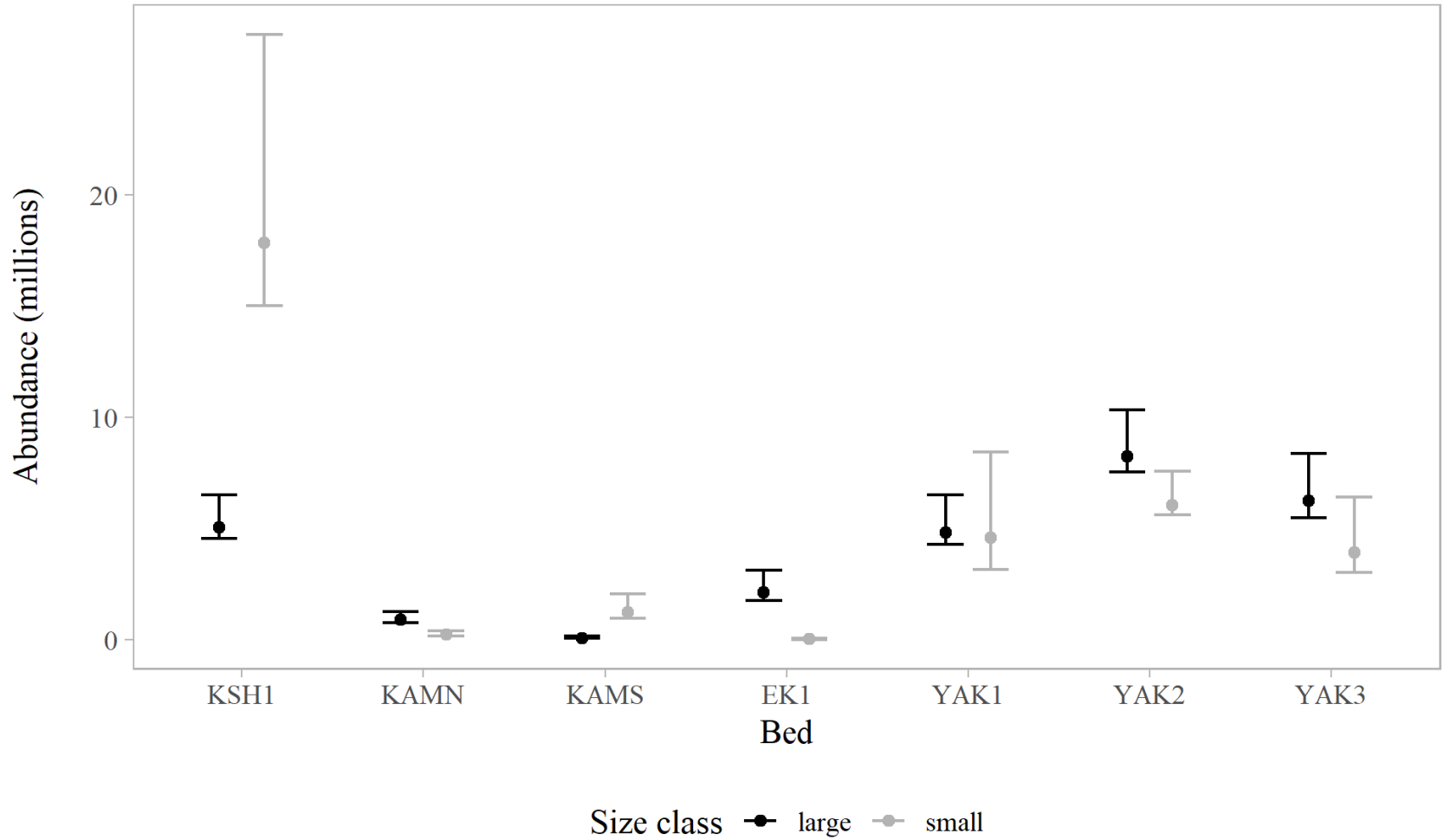
2018 Assessment Results

(see SAFE Chapter 2)

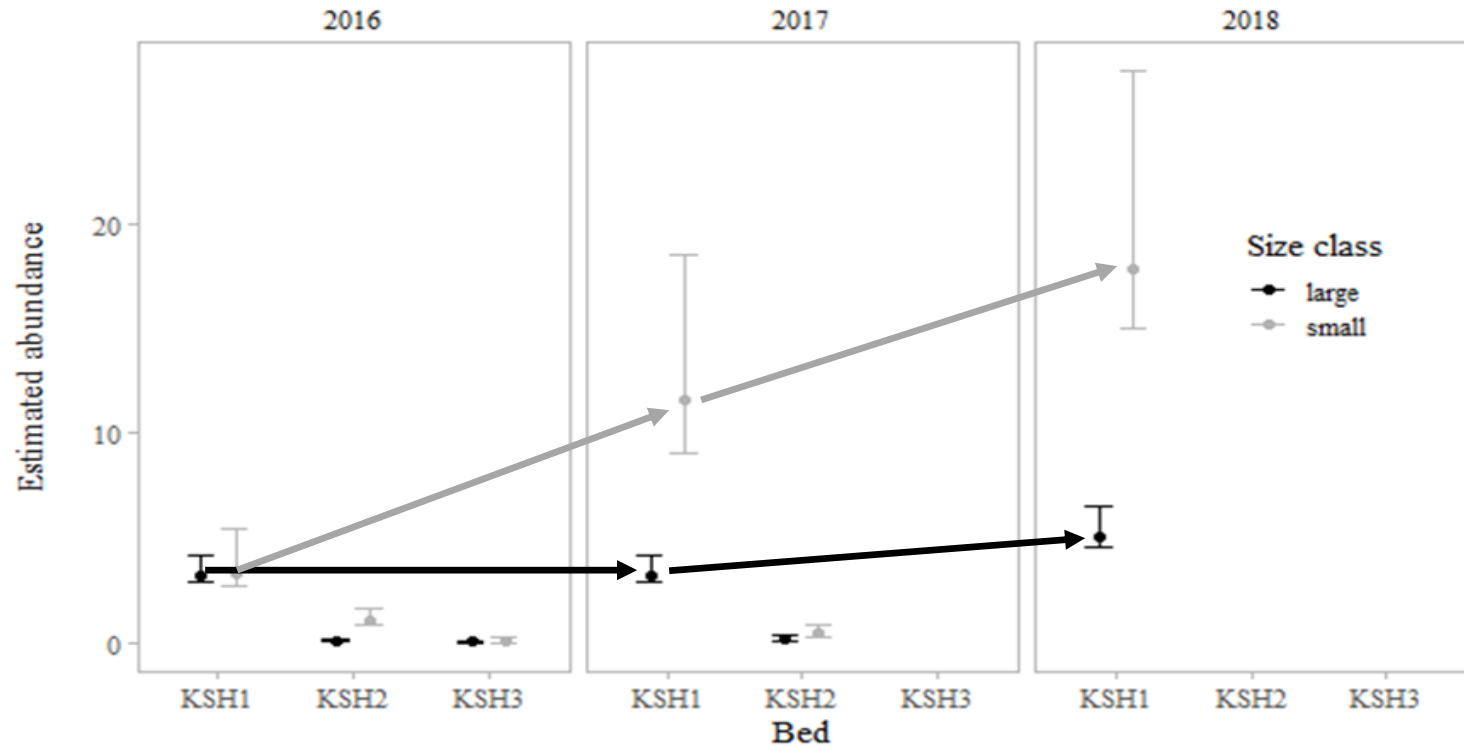
Surveyed Yakutat, Shelikof, Kayak, and Kamishak



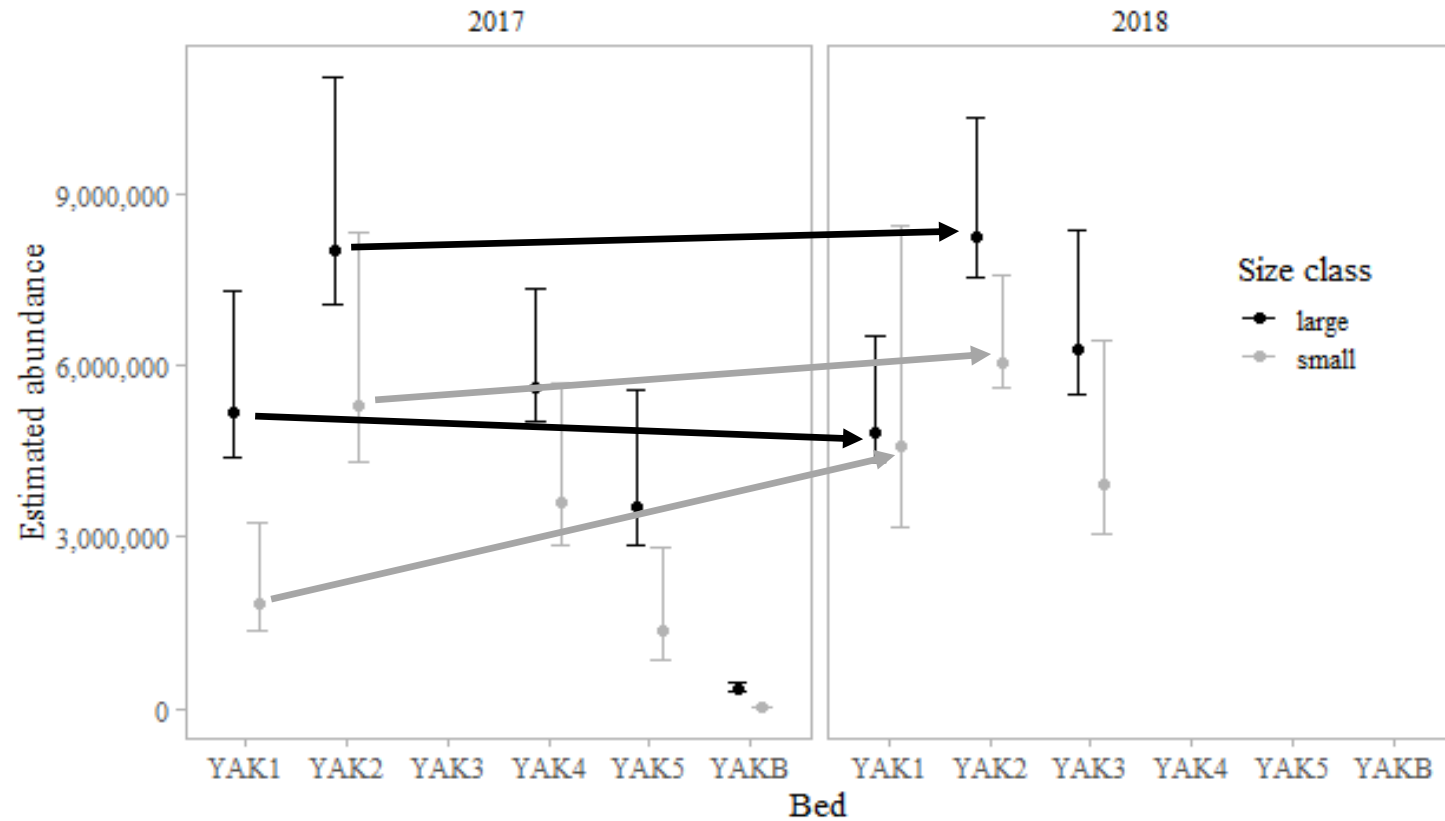
Abundance Estimate



Abundance Comparison

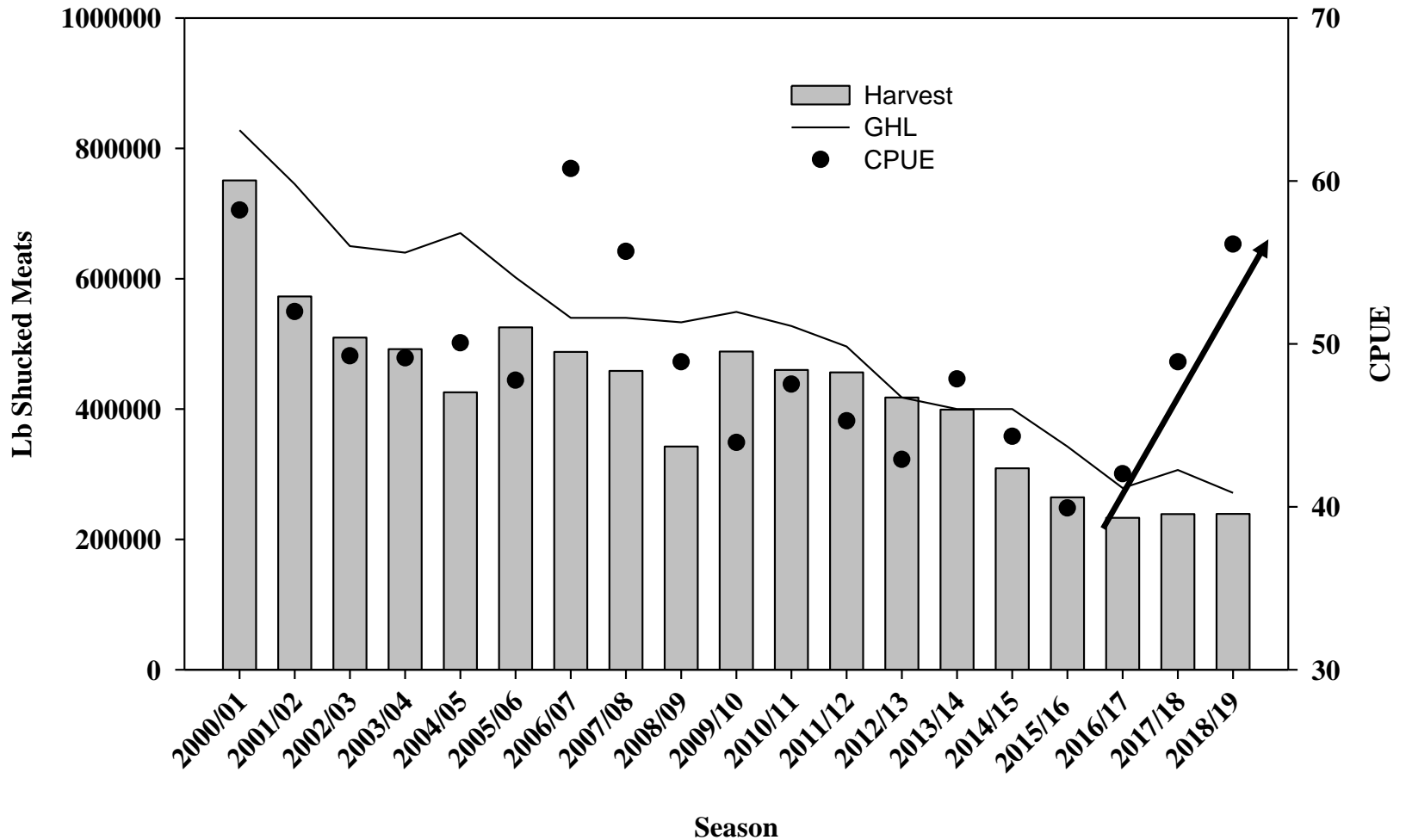


Abundance Comparison

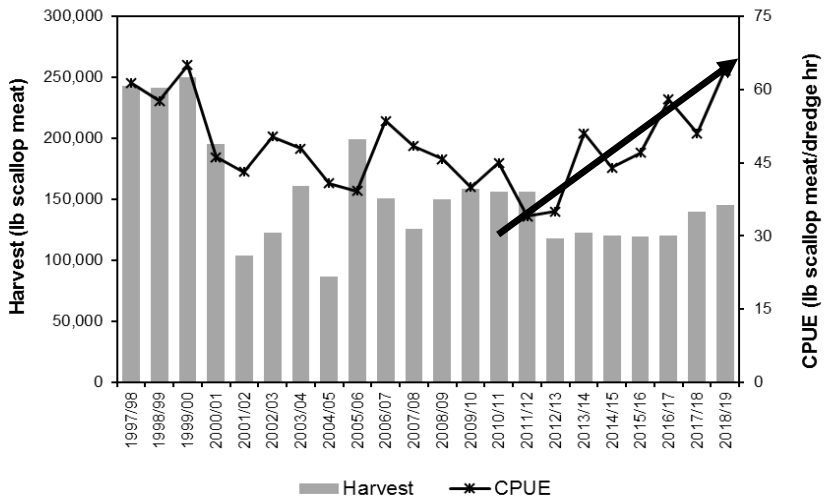


Recent Fishery Performance

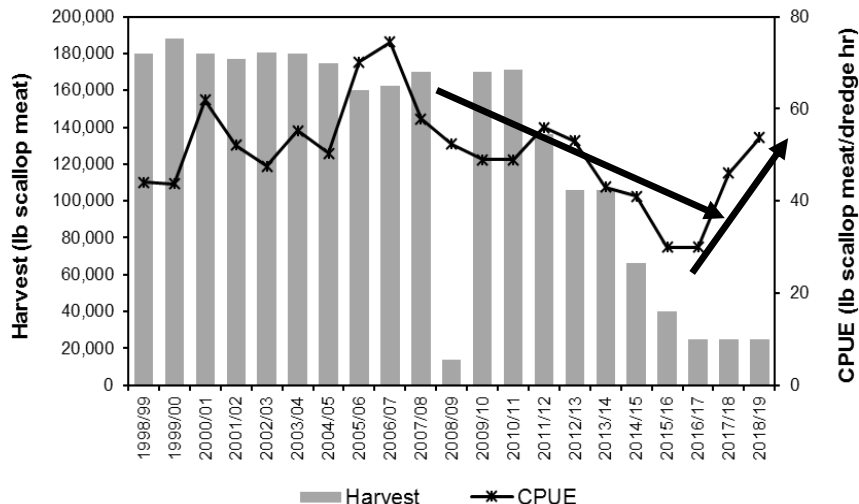
Statewide Harvest



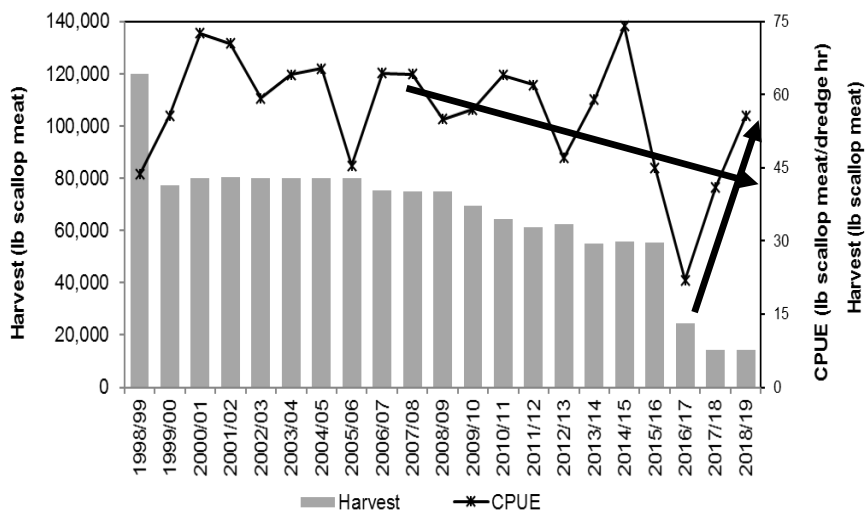
Yakutat District



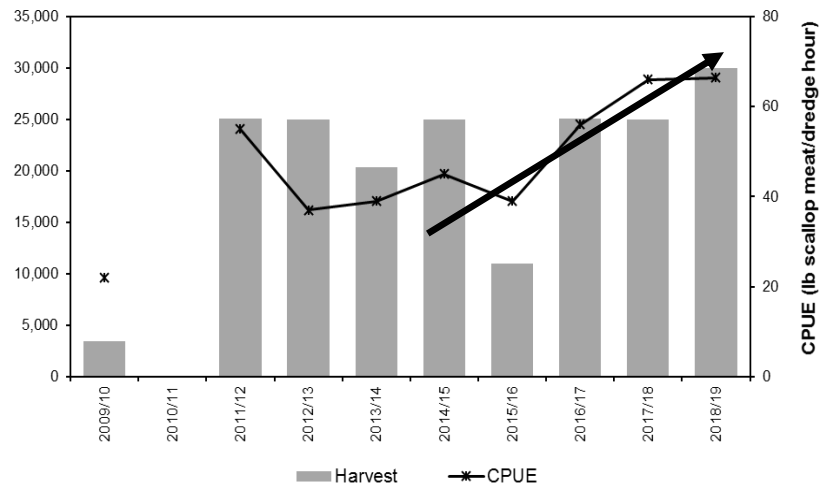
Kodiak Shelikof District



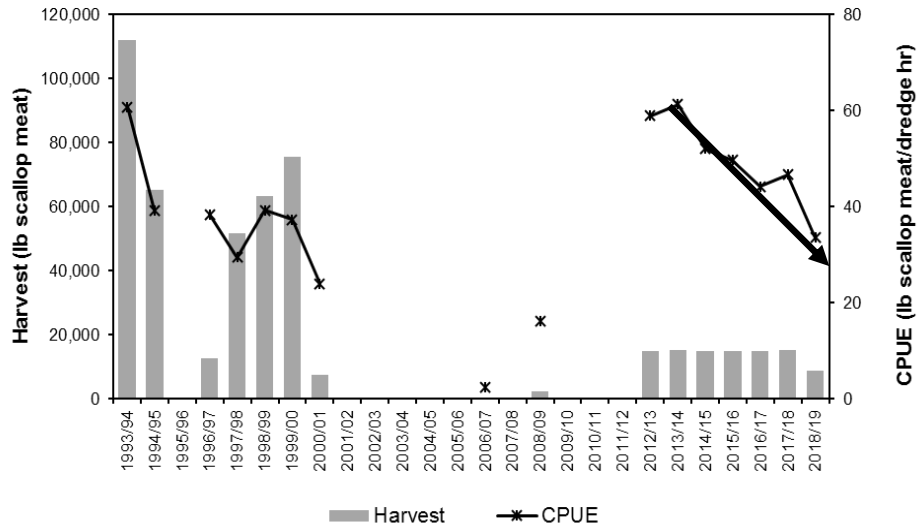
Kodiak Northeast District



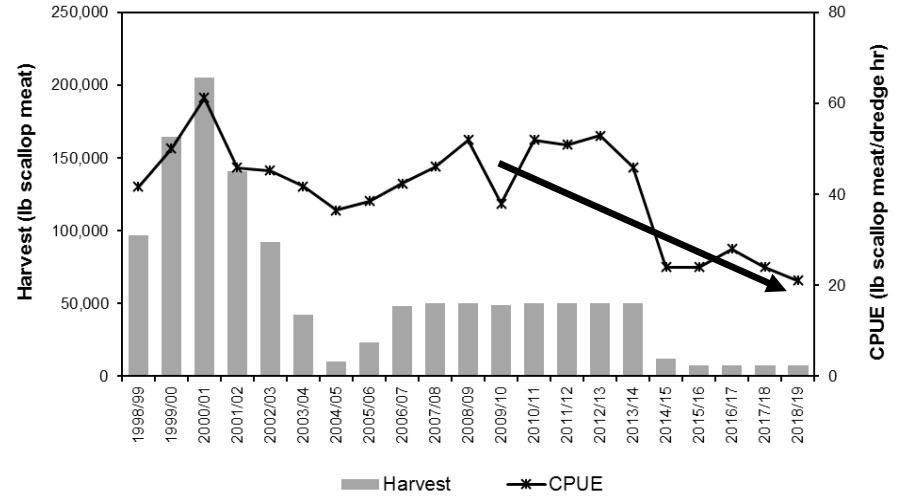
Kodiak Southwest District



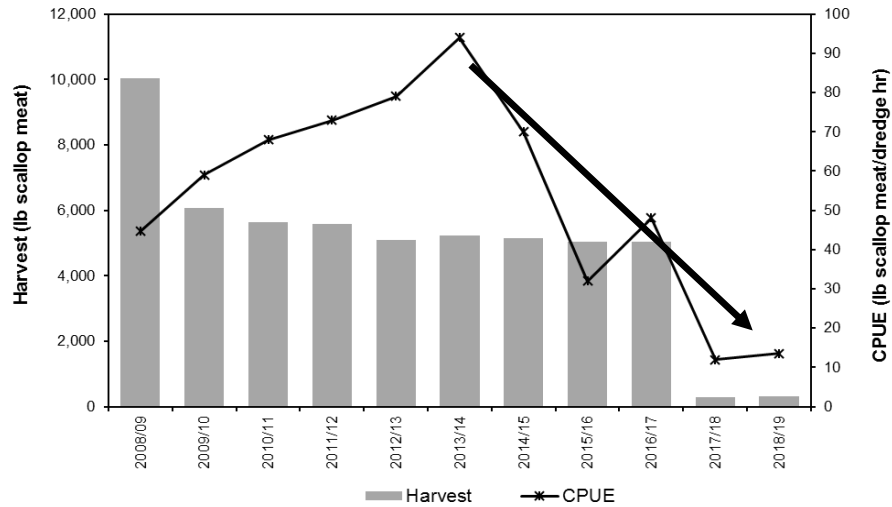
Alaska Peninsula Area



Bering Sea Area



Dutch Harbor Area



2017/18 Scallop Fishery Tanner Crab Bycatch

SAFE Table 3-4

Area/District	Chionoecetes bycatch cap	Est number crab	% of cap	Est weight (lb) ^a
Yakutat District	NE	2,083	NA	164
Yakutat District 16	NE	44	NA	0.2
Prince William Sound	1,600	75	4.7%	1
Cook Inlet	3,933	0	0.0%	0
Kodiak Northeast District	19,388	5,593	28.8%	1,512
Kodiak Shelikof District	63,926	3,639	5.7%	2,155
Kodiak Southwest District	12,000	6,945	57.9%	706
Alaska Peninsula Central District	NE	0	NA	0
Alaska Peninsula Unimak Bight District	12,000	5,058	42.2%	357
Dutch Harbor	10,000	8	0.1%	1
Bering Sea <i>C. bairdi</i>	65,000	6,905	10.6%	5,590
Bering Sea <i>C. opilio</i> and hybrids	300,000	4,199	1.4%	5,638
Statewide total	487,847	34,549	7.1%	16,124

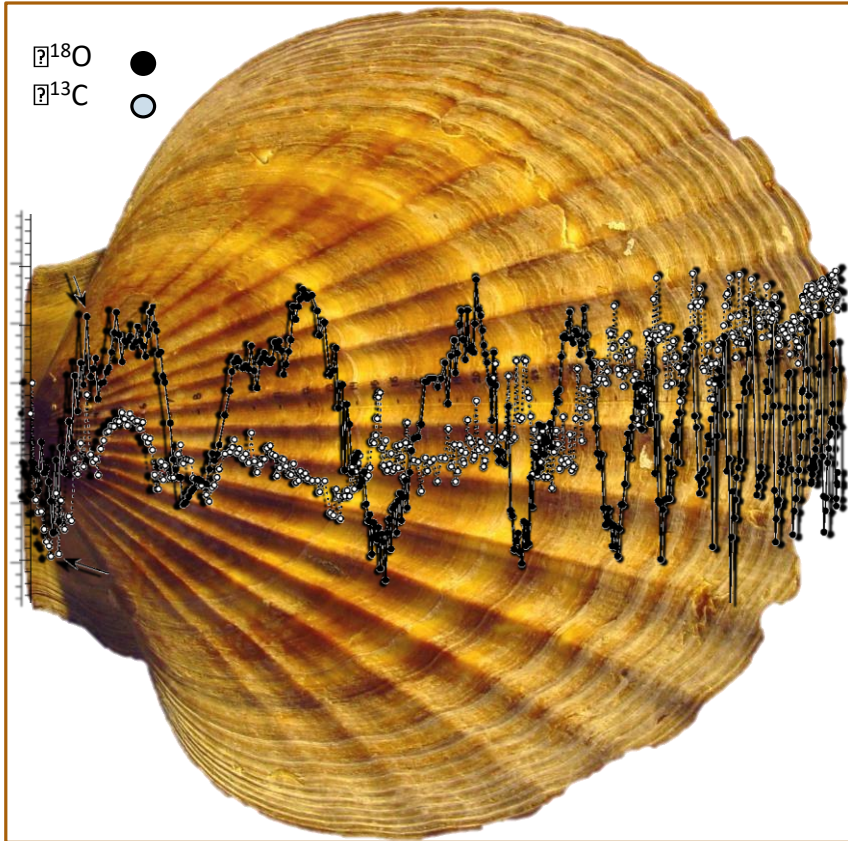
Commercial Weathervane Scallop Real Wholesale Value

SAFE Table 5-1

Year	Vessels	Catch (lb shucked meats) ^a	Nominal Average Price / lb	Inflation Factor ^b	Real Average Price/lb	Real Wholesale Value
2005/06	5	525,357	\$7.58	1.39	\$10.52	\$5,525,127
2006/07	4	487,473	\$7.86	1.28	\$10.09	\$4,916,922
2007/08	4	458,313	\$5.94	1.29	\$7.64	\$3,499,537
2008/09	4	342,434	\$6.34	1.39	\$8.79	\$3,009,430
2009/10	3	488,059	\$6.48	1.2	\$7.80	\$3,807,175
2010/11	3	459,759	\$8.35	1.09	\$9.11	\$4,269,364
2011/12	4	456,058	\$10.39	1.2	\$12.47	\$5,678,577
2012/13	4	417,551	\$10.63	1.01	\$10.72	\$4,488,507
2013/14	4	399,134	\$12.25	1.02	\$12.50	\$4,988,904
2014/15	4	308,888	\$12.39	1.06	\$13.11	\$1,050,401
2015/16	3	264,316	\$12.22	0.98	\$11.92	\$3,152,920
2016/17	2	233,003	\$12.53	1.03	\$12.95	\$3,017,693
2017/18	2	238,710	\$11.54	1.00	\$11.54	\$2,755,060
2018/19 ^c	2	238,808	\$11.60	1.00	\$11.60	\$2,770,173
10-Year Average	3	351,366	\$10.84		\$11.37	\$3,897,877

Program Updates

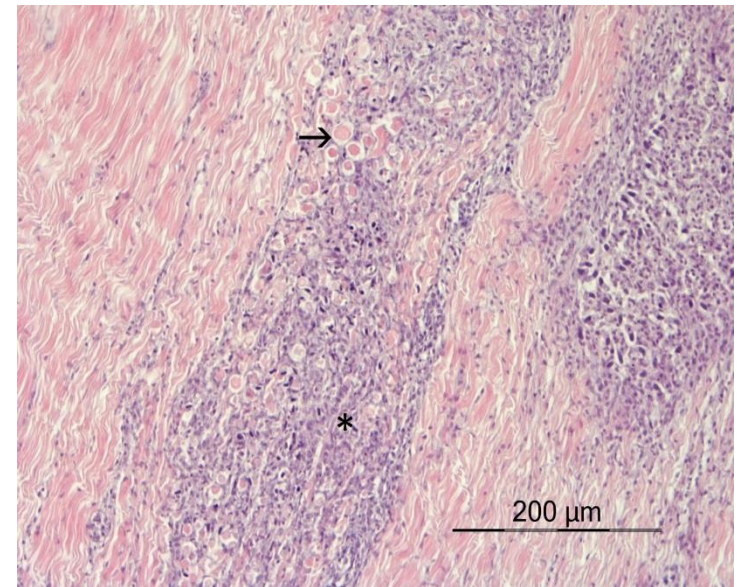
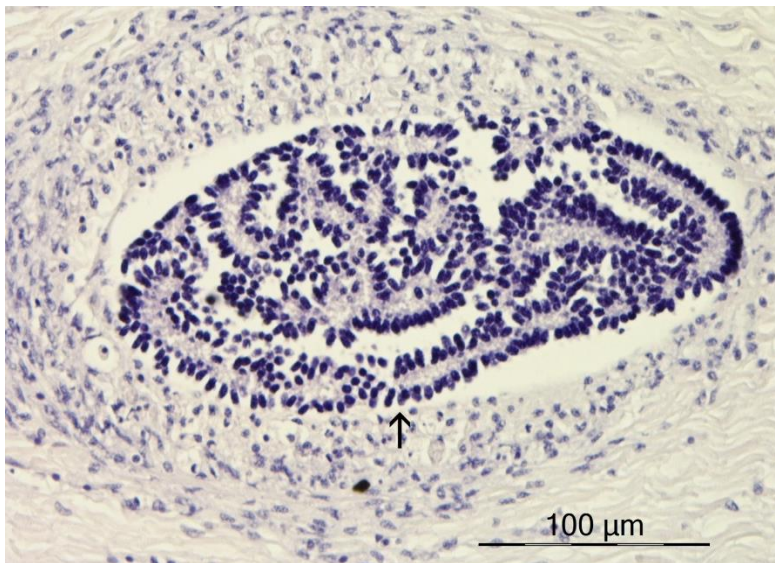
Shell Aging Update



- Validating seasonal banding interpretation
 - $\delta^{18}\text{O}$ & $\delta^{13}\text{C}$ stable isotope analysis
 - Laboratory growth and calcium binding dye studies
- Develop area specific growth models to improve quality control procedures

Parasite Update

- Observer Coordinator continuing to collaborate with Atlantic researchers
 - *Buccinum* newly discovered vector
- Observer program and ADFG Pathology lab planning on expanded collections during 2019/20 season to build on pilot study conducted in 2015



Thank You

