Southeast Alaska Red King Crab Stock Assessment



King and Tanner Task Force Mtg. December 14, 2022



Image: northpacificseafoods.com

RKC Assessment / Management

Assessment

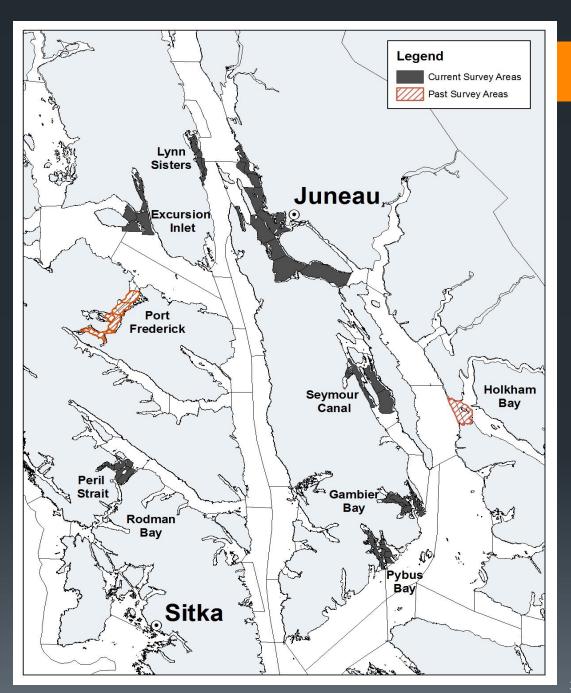
- 7 areas surveyed with ~572 pot lifts (47 pots added for 2022)
- Biomass estimated using Catch-Survey Analysis (CSA) model

Management plan

- Season November 1 January 24
- Appropriate harvest rate
- Regional GHL set using survey biomass
- Pot limits based on GHL
- Minimum GHL threshold of 200,000 lbs legal crab
- Mark/Recapture expansion factor incorporated into biomass estimate
- Males only, 7-inch minimum CW

Southeast Alaska

Major Commercial Red King Crab Fishing Grounds



Tagging Project:

- Collect growth and movement.
- Tag is retained though the molt, placed in the isthmus muscle.
- Juveniles greater than 112mm; pre-recruits; and legal crab were tagged.
- Initial tagging done in two bays: Seymour Canal and Excursion Inlet.

Seymour crab tagged: 2019 -- 134

2020 - 42

2021 - 1

Excursion crab tagged: 2019 -- 401

2020 – 242; 9 recaptures

2021–154; 7 recaptures

The average growth per year from the recaptures is **14** millimeters.

(3 skip molted and showed no growth)



Expanded tagging in 2022:

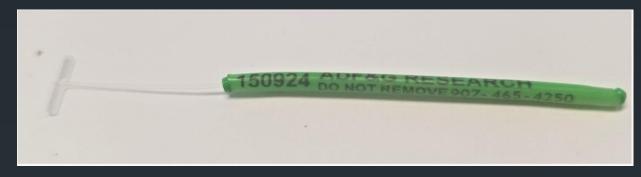
Excursion inlet: **51** tagged; 2 recaptures

Seymour: 92 tagged

Pybus: 89 tagged

Peril: 134 tagged

Gambier: 148 tagged



Total: **514**

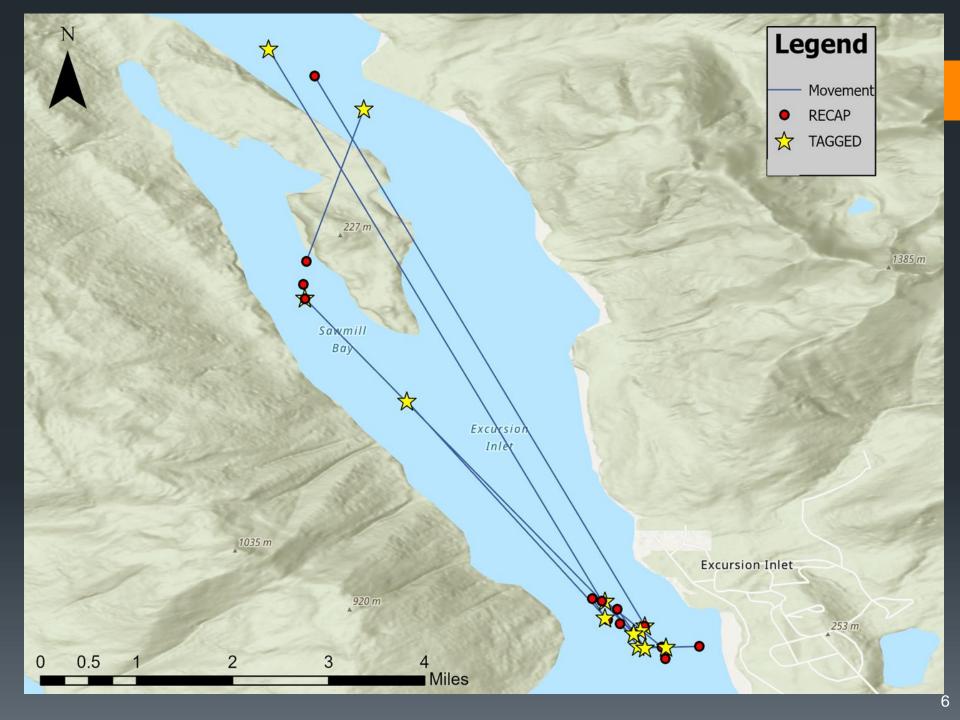
The department will continue to tag opportunistically on the survey.

If you catch a crab with a tag.:

Release, if not legal.

Record Lat. Long. and tag # if you can.

There are **No Rewards**.



PU King Crab Permits (outside 11-A)

- New permit system put into place 7/1/18
- Permits due June 23rd
- Statewide harvest survey from 2017: 527 crab

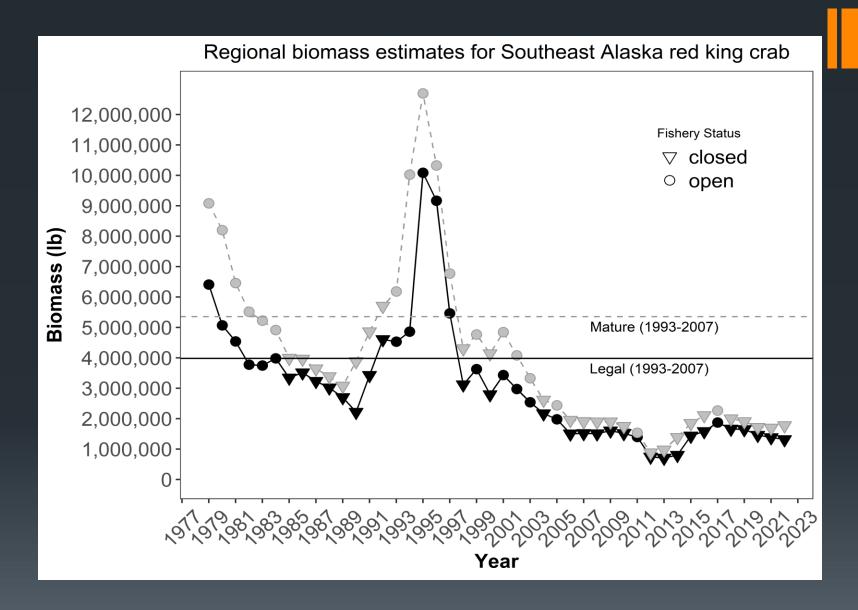
Year	# of Permits	Total # of Crab
2018	2,265	1,637
2019	2,772	1,107
2020	3,410	1,211
2021	2,262	847
2022	1,327 (1,116 still open)	166

Catch by species; 22 BKC, 51 GKC, 5,422 RKC

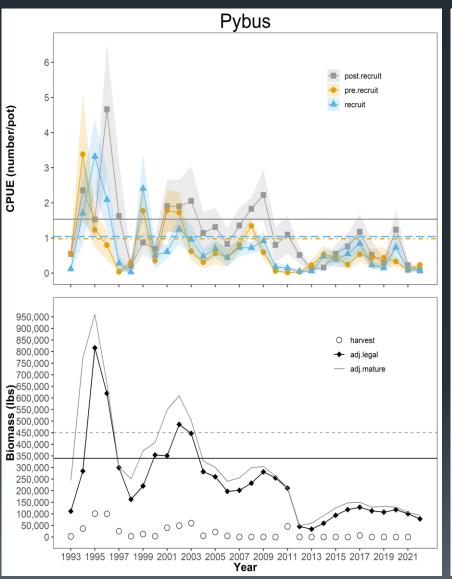
11-A PU Harvest (#s of Crab)

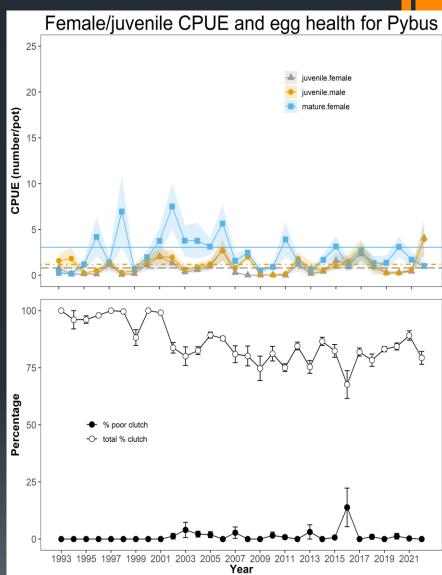
	Commercial fishery		Summer personal use fishery		Winter personal use fishery		Total allowable harvest	
Season	Allocation	Harvest	Allocation	Harvest	Allocation	Harvest	Target	Harvest
2017/18	2,410	2,516	3,012	1,663	602	1,949	6,024	6,128
	,	·	,	·		,	·	·
2018/19	0	0	2,168	1,343	434	1,142	2,602	2,485
2019/20	0	0	1,566	1,446	313	243	1,879	1,680
2020/21	0	0	1,527	1,203	305	150	1,832	1,353
2021/22	0	0	1,601	1,182	320	52	1,921	1,234
2022/23	0	0	1,364	1,177	273	*	1,637	

^{* =} Data still being gathered.

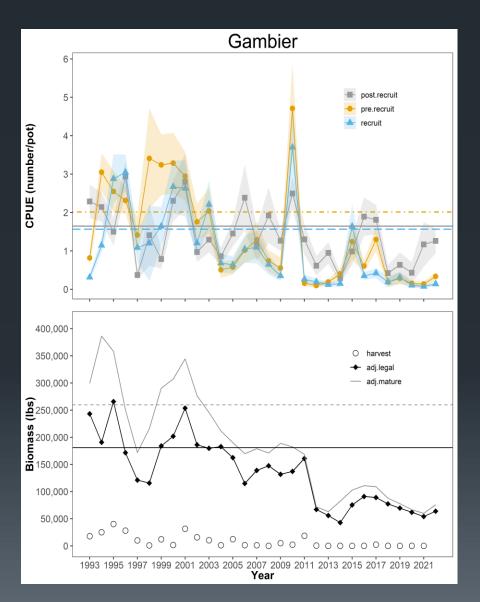


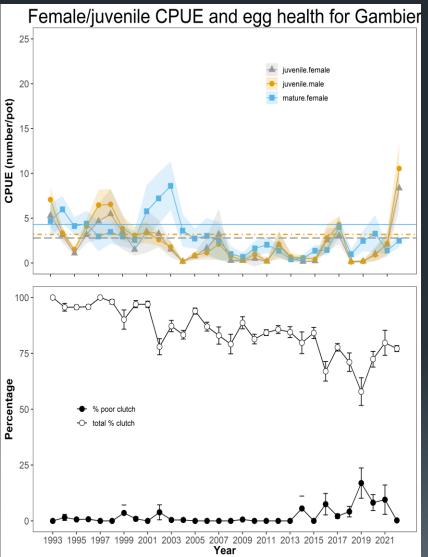
Pybus Bay



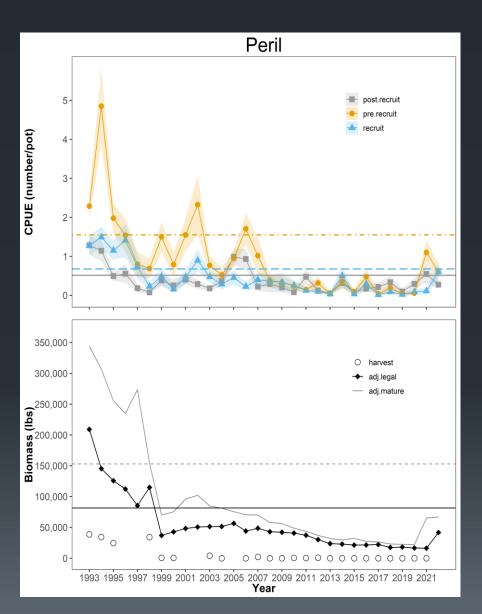


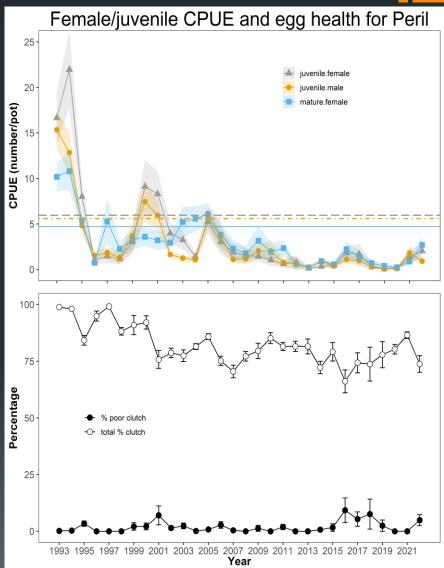
Gambier Bay



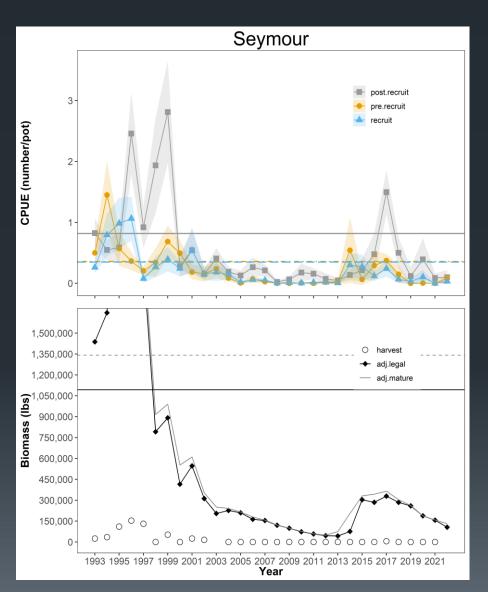


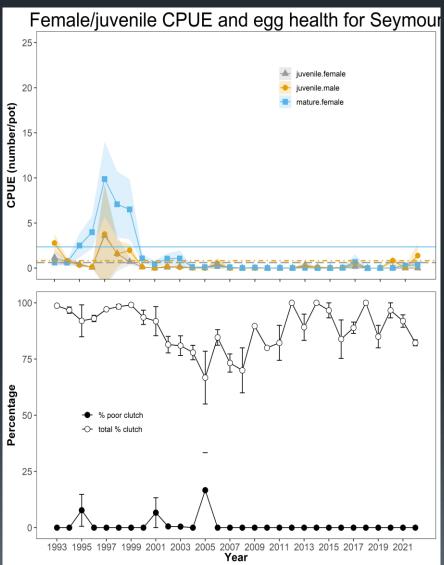
Peril Strait



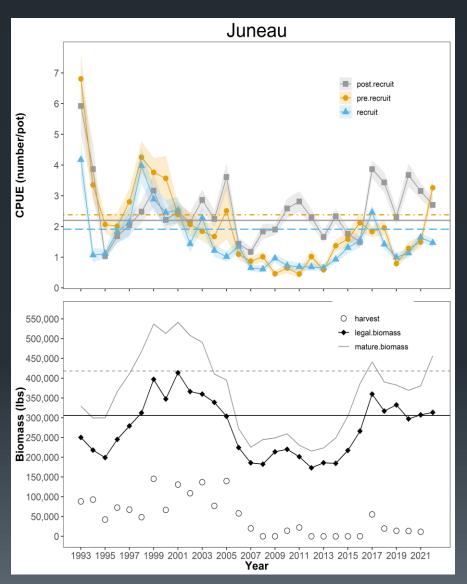


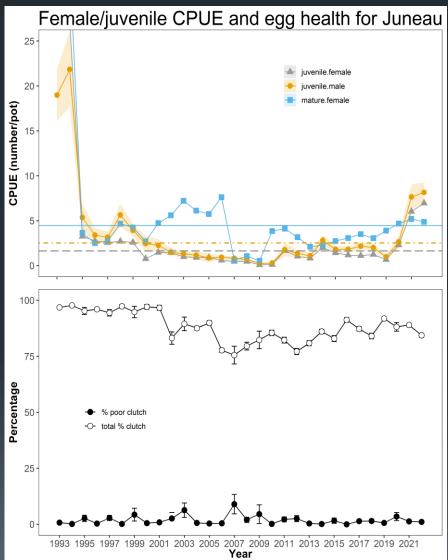
Seymour Canal



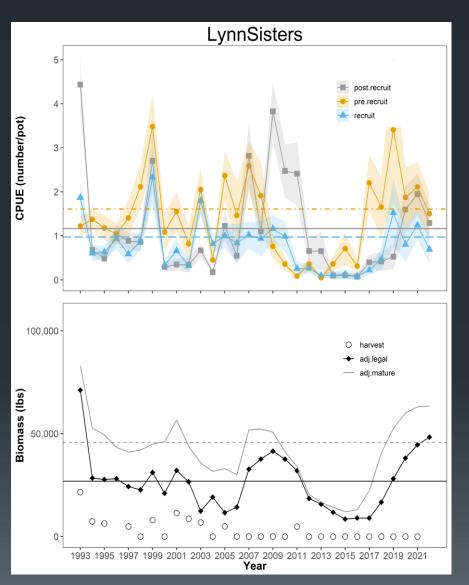


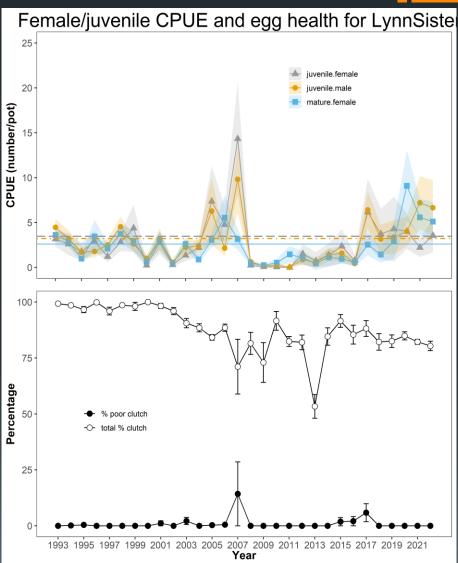
Juneau Area



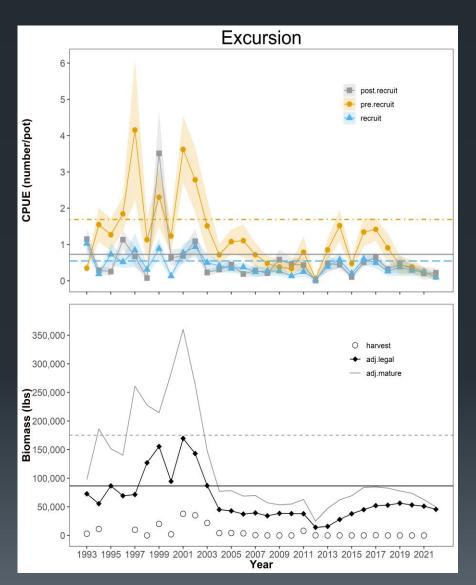


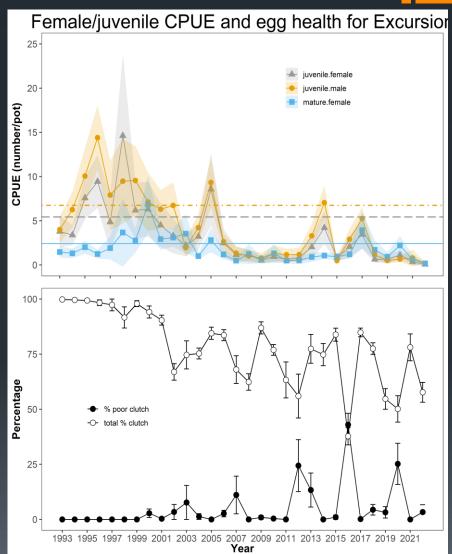
Lynn Sisters





Excursion Inlet





Survey area	Adjusted Legal Crab	Adjusted Mature biomass	Mature harvest rate	Total GHL	Personal use catch	2022 Commercial GHL
Pybus Bay	78,366	93,578	0%	0	0	0
Gambier Bay	63,923	75,705	0%	0	0	0
Seymour Canal	106,357	131,963	0%	0	0	0
Peril Strait	41,725	66,943	0%	0	0	0
Juneau Area	313,371	456,921	7.0%	31,984	19,190	12,794
Lynn Sisters	48,294	63,536	0%	0	0	0
Excursion Inlet	45,590	49,820	0%	0	0	0
Other Areas	623,636	838,932	10%	83,893	1,000	82,893
Blue King Crab	7,395	9,948				0
Total	1.328.657	1,787,347				95,687

