Southeast Alaska King, Tanner, and Dungeness Crab Fisheries

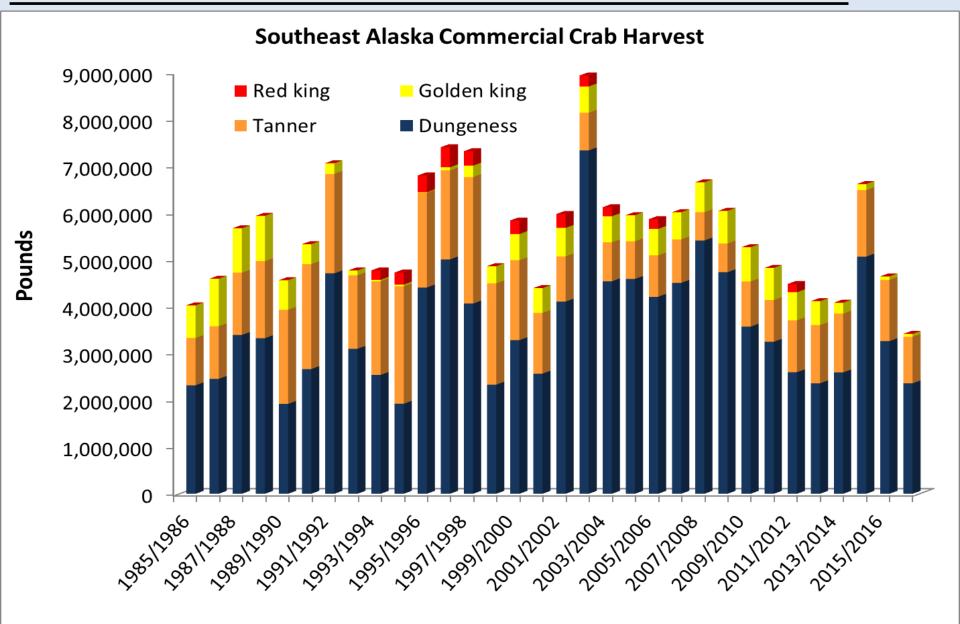
Alaska Board of Fisheries January 11–14, 2018 Sitka

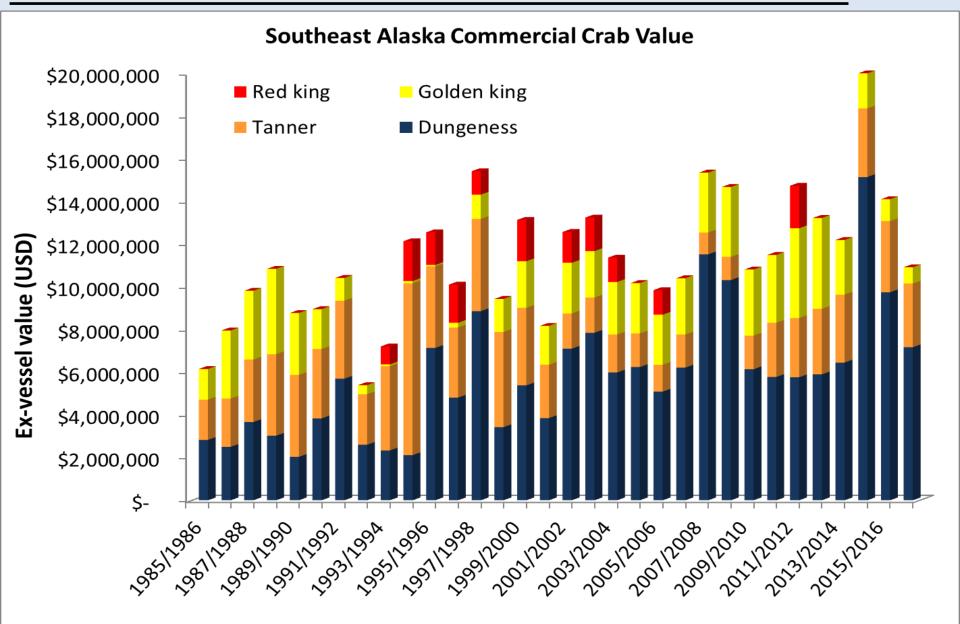


Report by Karla Bush, Joe Stratman, and Patrick Fowler

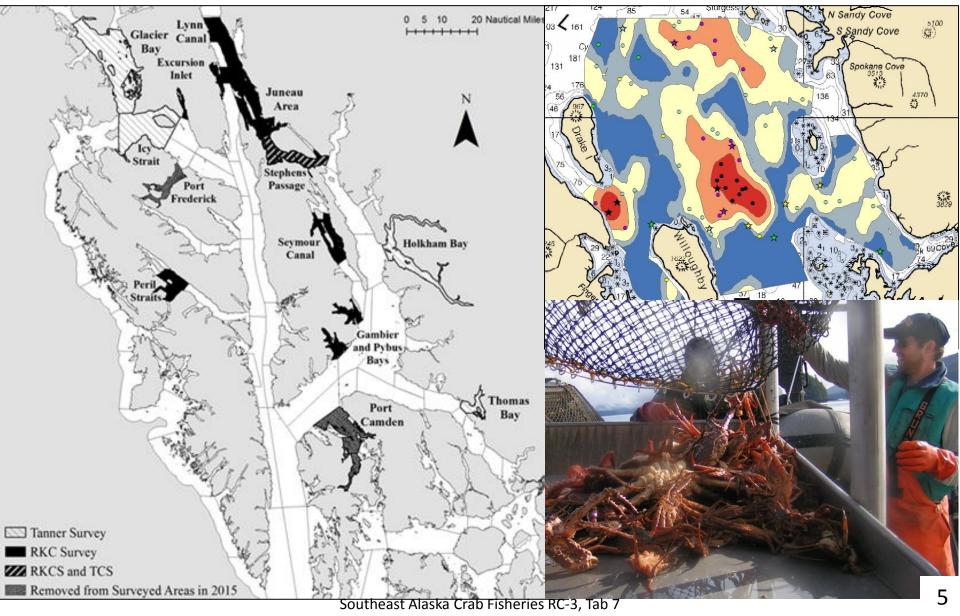
Southeast Commercial Crab Fisheries

Presentation Outline:
Management Overview
Dungeness crab Fishery
Red king crab Fishery
Golden king crab Fishery
Tanner crab Fishery





Survey/Stock Assessment: Red king and Tanner crab



- Male only
- Minimum legal size (carapace width) set to allow reproductive activity prior to entering fishery.









 Seasons established to avoid sensitive life history events (molting/mating).

Southeast Alaska Commercial Crab Fishing Seasons

			500	<i>x</i>	-45	. ,	10110	, 00			, i.a.	<u> </u>	~	31111	<u>ص</u>	Cus	0113							
	Ja	an	Fe	еb	Μ	ar	Α	pr	М	ay	Jι	ın	Jı	ıl	Αι	gL	Se	q	0	ct	Ν	ov	De	ec
Dungeness																								
Tanner																								
Red king																								
Golden king*																								

^{*} Closes by Emergency Order

Limited	d Entry
King &	Tanne

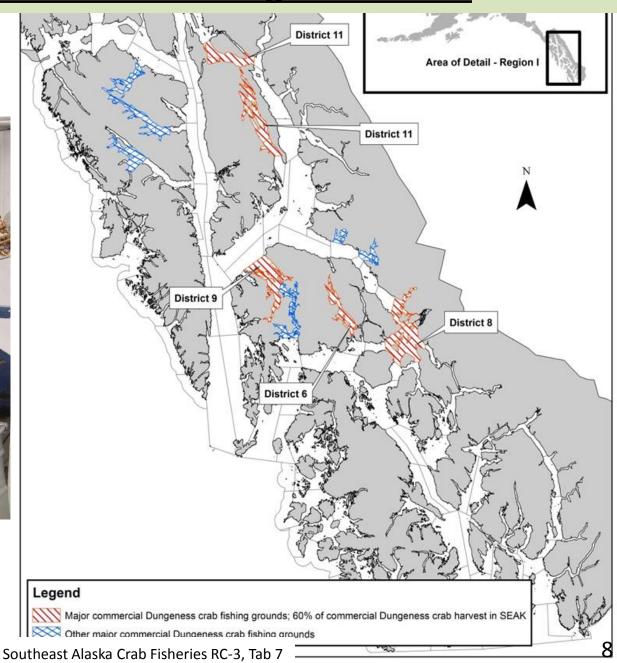
t	ľ	У	'.
r)	<u>e</u>	<u>r</u>

			Species	
Permit	Number of Permits	Tanner	Red/Blue king	Golden king
T19A	24	24		
K19A	7		7	
K29A	6		6	6
K39A	9			9
K49A	16	16	16	
K59A	6	6		6
K69A	30	30	30	30
	Maximum nermits	76	59	51

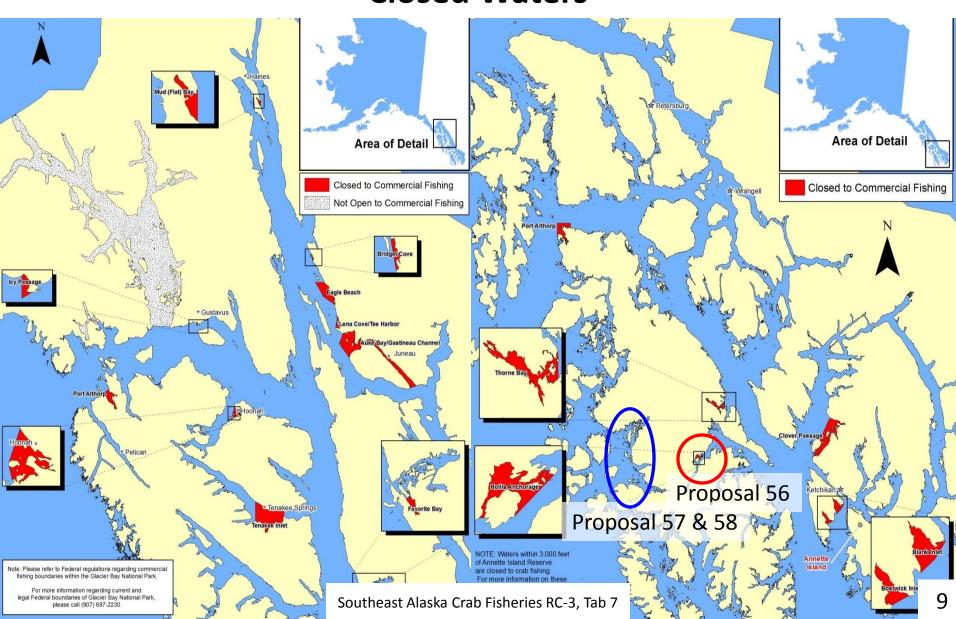
		Maximum permits	76		59	51
					Maximu	ım pots
<u>Dungeness</u>			Number	r of	Status	Proposal
	Permit	Gear type/limit	permi	ts	quo	54
Vessels with more	D9AA	100% max pots (300)	49		14,700	11,760
than one permit	D9BA	75% max pots (225)	43		9,675	7,740
holder are limited	D9CA	50% max pots (150)	83		12,450	9,960
to 300 pots	D9DA	25% max pots (75)	98		7,350	5,880
Proposal 55 would increase this to 400	D10A	Ring net	2			
	D11A	Dive	2			
pots per vessel		Maximum permits	277		44,175	35,340
Pots per vesser		Southeast Alaska Crab Fisheries	RC-3, Tab 7	•		

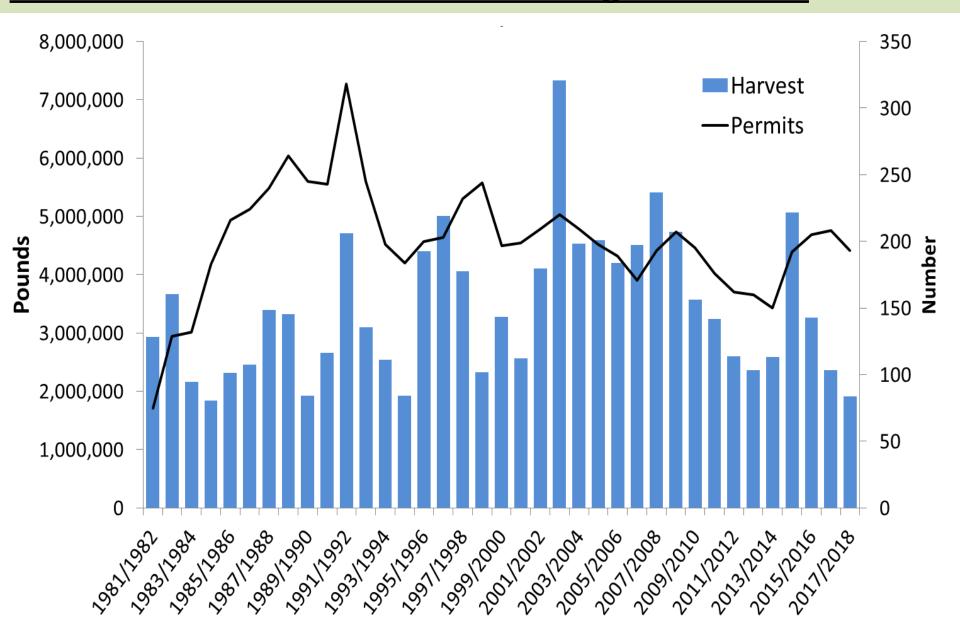
Major Fishing Areas





Closed Waters



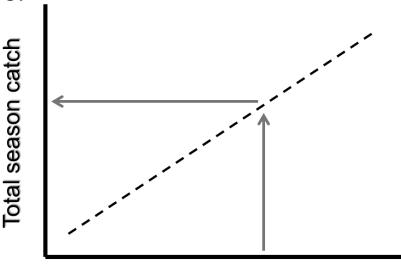


Management Plan – (Proposal 235 repeals this plan)

Harvest Projection Threshold

 Simple regression to predict the current season's catch, based on the catch and effort in the first seven days.

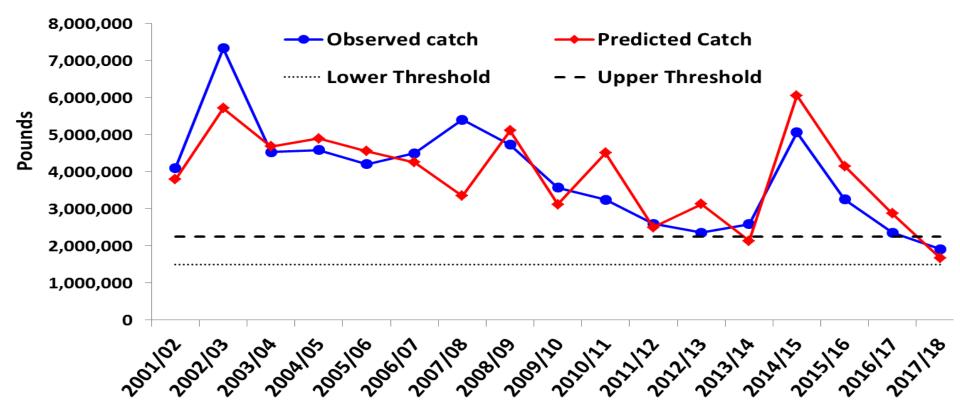




Catch and effort (first seven days)

- Based on three variables:
 - 1. Pounds of crab landed in the first seven days
 - 2. Number of permits that made landings in the first seven days
 - 3. $\frac{7 \text{ day catch (lbs)}}{\text{season catch (lbs)}}$ = ratio of 7 day catch to total season catch (lbs)

Southeast Dungeness Total Catch and Predicted Catch at Day 7



Season lengths based on projection:

Season	<1.5 million lb	Between 1.5 and 2.25 million lb	>2.25 million lb		
Cummor	Closes no sooner than 21 days	Closes no sooner than 28 days	Complete season		
Summer	after season opening.	after season opening.	Complete season		
Fall	No fall season.	30 day fall season.	Complete season		

Southeast Alaska Crab Sport Fisheries

Regulations:

Dungeness and Tanner Crab (in combination):

Bag and possession limit: resident and nonresident anglers, 3 male crab.

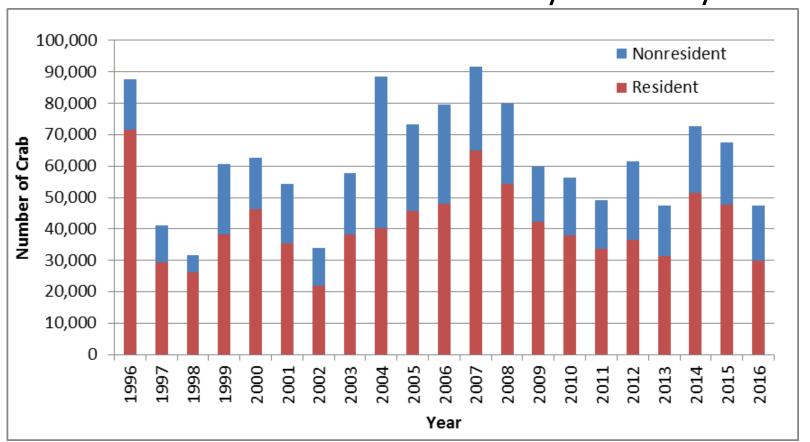
Size limits: 5½ inches minimum size for Tanner and 6½ inches minimum size for Dungeness.

Gear Limits:

- Dungeness: 4 pots or 10 ring nets per person with a maximum of 10 pots or 20 ring nets per vessel.
- Tanner: 4 pots or 10 ring nets maximum per vessel.
- King crab is closed to sport fishing.

Southeast Alaska Crab Sport Fisheries

Statewide harvest survey estimates of Dungeness crab harvest in Southeast Alaska by residency.

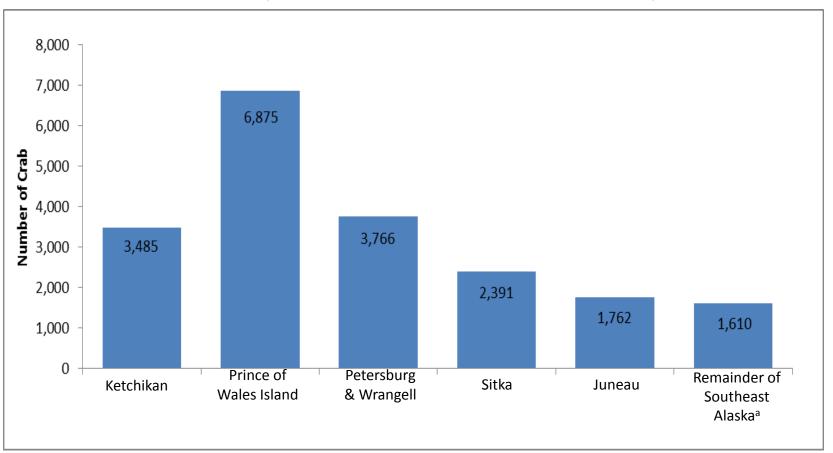


 On average nonresidents harvest 33% or 20,611 Dungeness crab annually (1996-2016).

Southeast Alaska Crab Fisheries RC-3, Tab 7

Southeast Alaska Crab Sport Fisheries

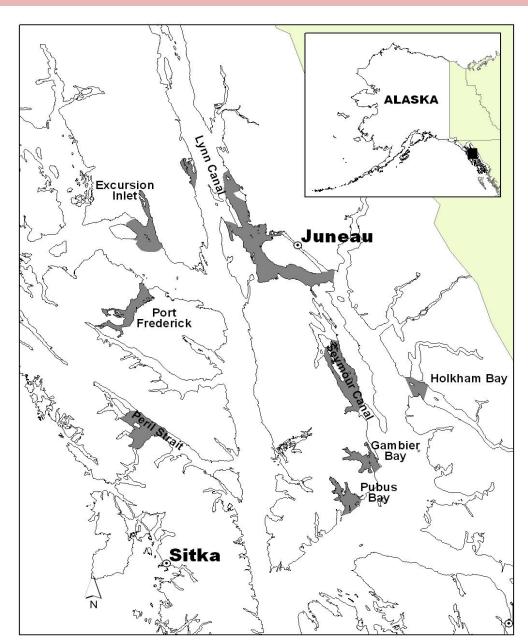
Five-year average (2012–2016) nonresident Dungeness crab harvest by statewide harvest survey area.



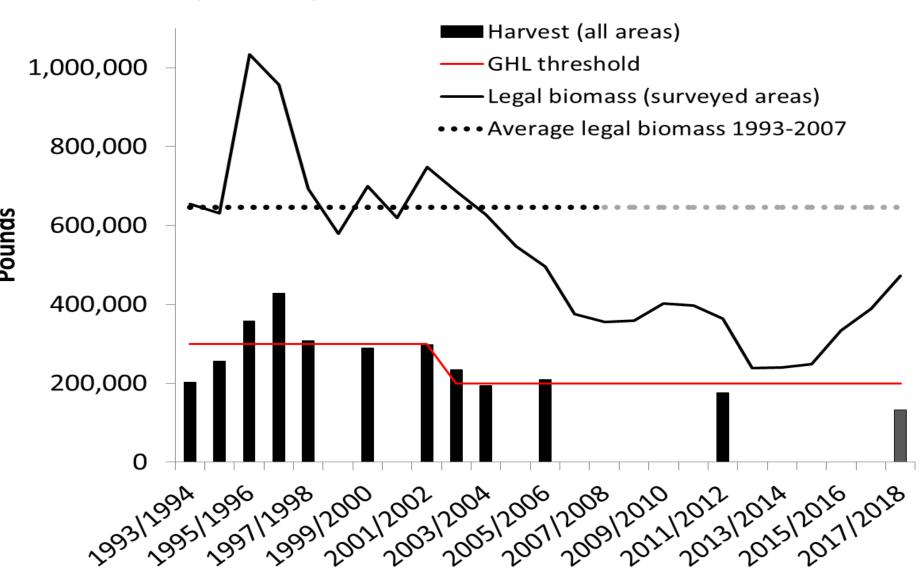
^aIncludes the Haines, Skagway, and Glacier Bay areas, low response rates prohibit survey area estimates for these locations.

Major red king crab fishing grounds









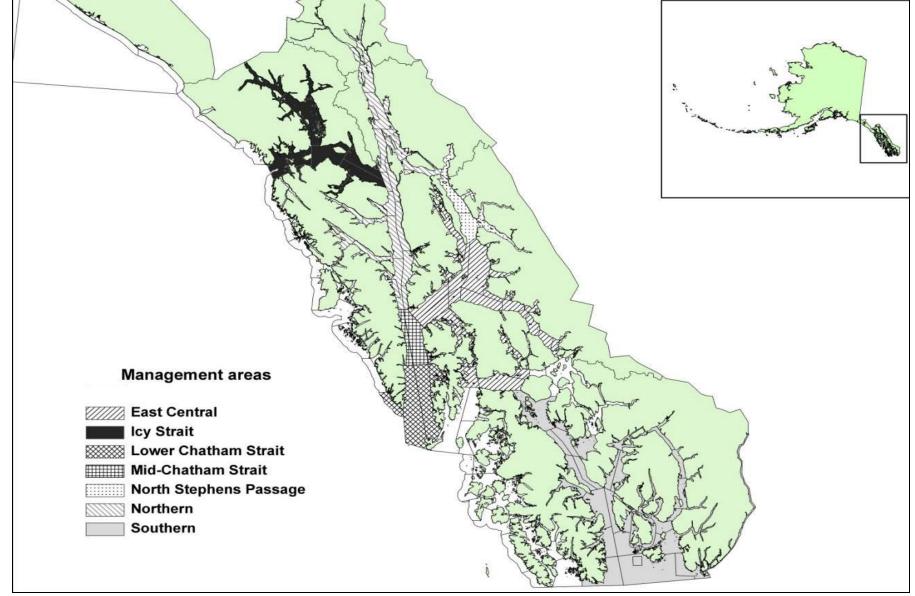
Management Overview:

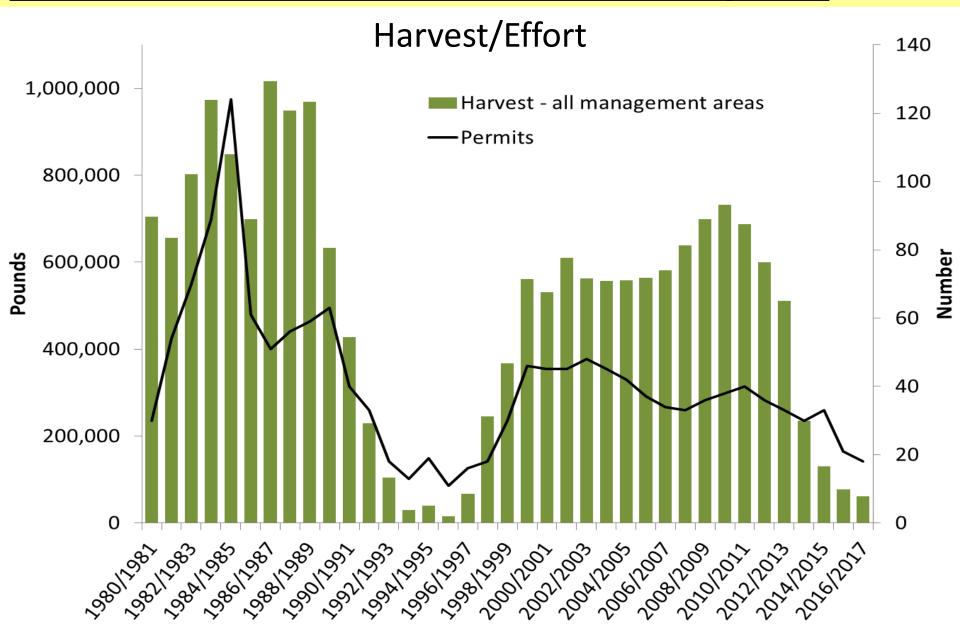
- Pot limits based on GHL (20, 30, 40, or 50 pots)
- Logbooks and call-ins required
- Allocation plan for commercial and personal use in Section 11-A (5 AAC 34.111)
- Personal use permit required for 11-A only
 - Proposal 234 would require a permit for all of Southeast

Management Plan: 5 AAC 34.113

- "Policy on King and Tanner Crab Resource Management"
- Closures for conservation concerns or high effort
- Minimum GHL threshold of 200,000 pounds
- Appropriate harvest rates
- Regional GHL set using survey biomass and estimated proportion of historic harvest in non-surveyed areas

Management Areas Proposal 65: see RC-2, p.39





Management

- Pot limit = 100
- Logbooks and call-ins required
- GHLs are set annually
- Data sources (all fishery dependent): fish tickets, logbooks, and port sampling



Management Plan: 5 AAC 34.114 (Proposal 68)

- "Policy on King and Tanner Crab Resource Management"
- Each fishing area managed as a separate stock
- Closures for conservation concerns or high effort
- Managed based on historical fishery performance
- Lack of information = conservative management

Guideline Harvest Ranges: 5 AAC 34.115

- 1) Northern Area: 0–175,000* pounds;
- 2) Icy Strait Area: 0–75,000* pounds;
- 3) North Stephens
 - Passage Area: 0–25,000 pounds;
- 4) East Central Area: 0-300,000* pounds;
- 5) Mid-Chatham
 - Strait Area: 0–150,000 pounds;
- 6) Lower Chatham
 - Strait Area: 0–50,000 pounds;
- 7) Southern Area: 0-25,000 pounds.



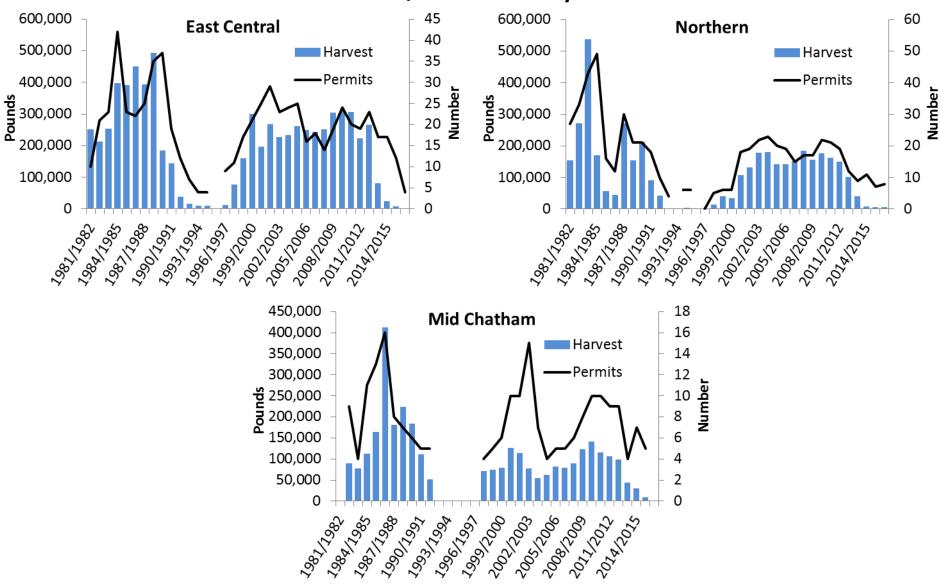


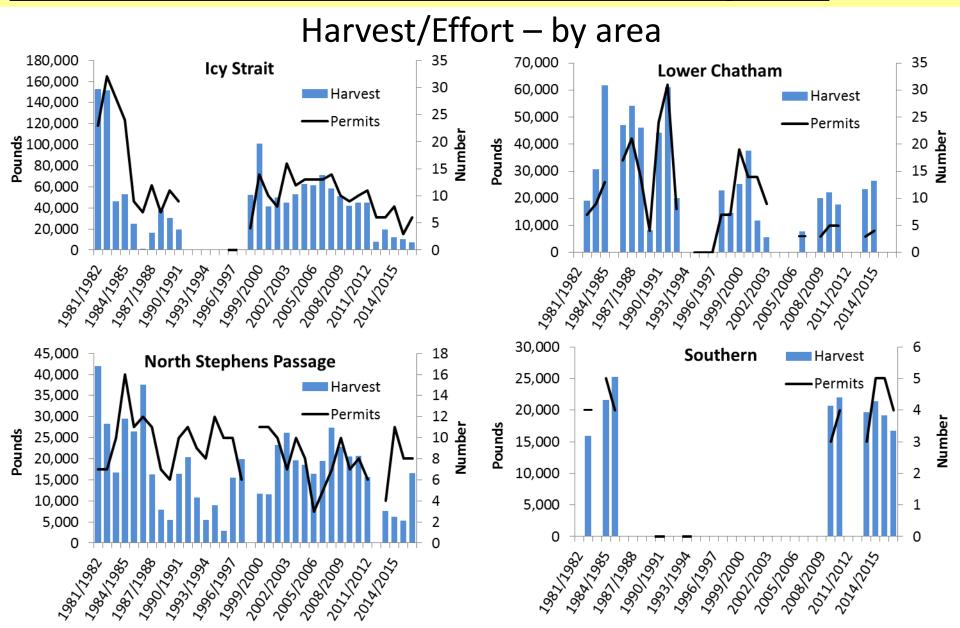
145,000 pounds 55,000 pounds

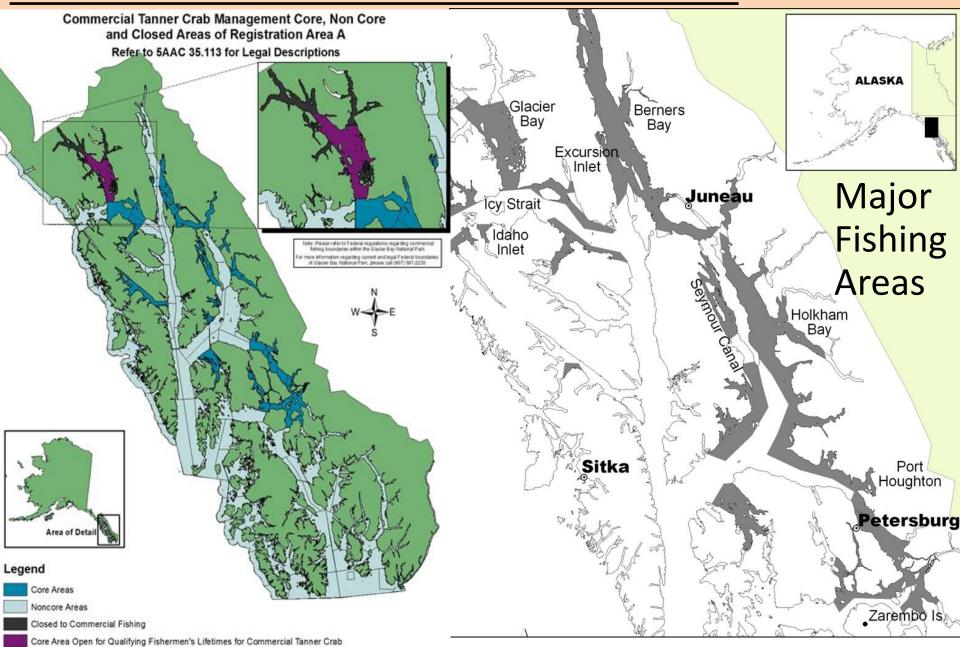
225,000 pounds

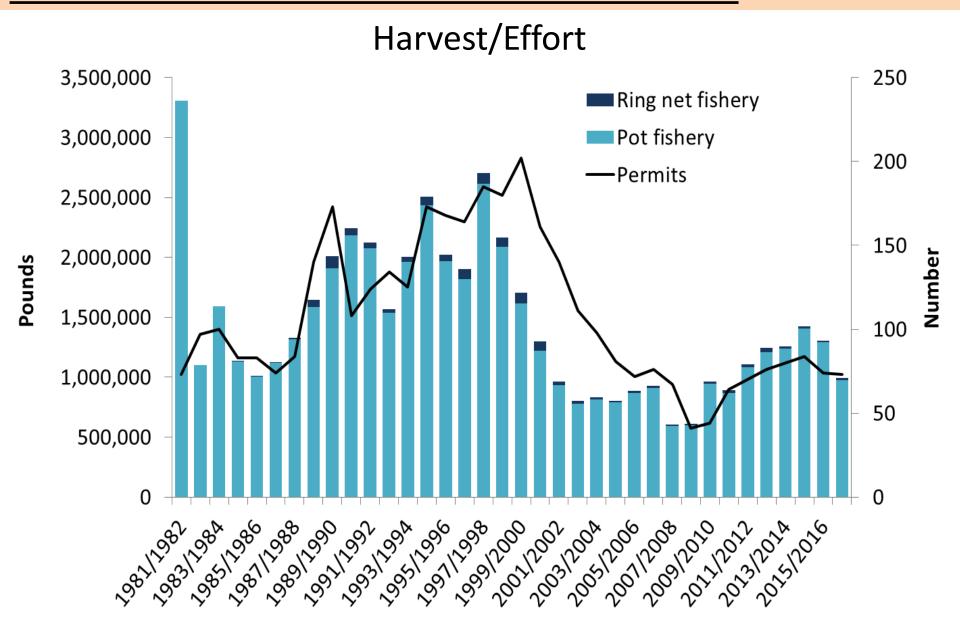












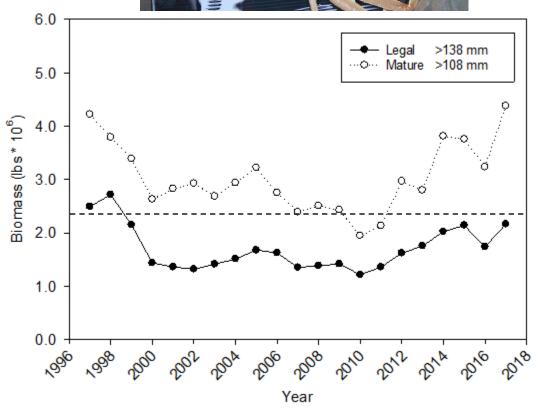
Management

- Pot Limit = 80 pots
- Logbooks required (pot fishery)

Harvest Strategy

- Biomass-based minimum stock threshold to open
 - 2.3 million pounds of mature males





Harvest Strategy

- Fishing Area split into core and noncore areas
- Season length determined by biomass and effort
 - Core and noncore areas open for initial period of 5–10 days
 - Noncore areas open for an additional 5 days
- <u>Proposal 72</u> 'exploratory' areas would open for an additional 14 days

<u>Proposal 73</u> – Equal quota share fishery



Pots Registered	Additional Fishing Days	Additional Fishing Days			
	Mature Biomass is Between 2,300,000 and 5,500,000 lb	Mature Biomass is Greater than 5,500,000 lb			
1,600 – 2,399	4 Additional Days	5 Additional Days			
2,400 – 3,199	3 Additional Days	4 Additional Days			
3,200 – 3,999	2 Additional Days	3 Additional Days			
4,000 – 5,599	1 Additional Days	2 Additional Days			
5,600 – 7,000	0 Additional Days	1 Additional Days			

Thank you / Questions?

