Southeast Commercial Crab Fisheries

Presentation Outline:
Management Overview
Dungeness crab Fishery
Red king crab Fishery
Golden king crab Fishery
Tanner crab Fishery
Southeast Commercial Crab Fisheries - Overview

Survey/Stock Assessment: Red king and Tanner crab
Southeast Commercial Crab Fisheries - Overview

• 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

<table>
<thead>
<tr>
<th></th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dungeness</td>
<td>☐</td>
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<tr>
<td>Tanner</td>
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</tr>
<tr>
<td>Red king</td>
<td>☐</td>
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<td>☐</td>
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<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Golden king*</td>
<td>☐</td>
<td>☐</td>
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* Closes by Emergency Order
Southeast Commercial Crab Fisheries - Overview

Limited Entry - King & Tanner

<table>
<thead>
<tr>
<th>Permit</th>
<th>Number of Permits</th>
<th>Tanner</th>
<th>Red/Blue king</th>
<th>Golden king</th>
</tr>
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<tbody>
<tr>
<td>T19A</td>
<td>24</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K19A</td>
<td>7</td>
<td></td>
<td>7</td>
<td></td>
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<tr>
<td>K29A</td>
<td>6</td>
<td></td>
<td>6</td>
<td>6</td>
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<tr>
<td>K39A</td>
<td>9</td>
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<td>9</td>
</tr>
<tr>
<td>K49A</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>K59A</td>
<td>6</td>
<td>6</td>
<td></td>
<td>6</td>
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<tr>
<td>K69A</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
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</tbody>
</table>

Maximum permits: 76, 59, 51

Dungeness

<table>
<thead>
<tr>
<th>Permit</th>
<th>Gear type/limit</th>
<th>Number of permits</th>
<th>Maximum pots</th>
</tr>
</thead>
<tbody>
<tr>
<td>D9AA</td>
<td>100% max pots (300)</td>
<td>49</td>
<td>14,700</td>
</tr>
<tr>
<td>D9BA</td>
<td>75% max pots (225)</td>
<td>43</td>
<td>9,675</td>
</tr>
<tr>
<td>D9CA</td>
<td>50% max pots (150)</td>
<td>83</td>
<td>12,450</td>
</tr>
<tr>
<td>D9DA</td>
<td>25% max pots (75)</td>
<td>98</td>
<td>7,350</td>
</tr>
<tr>
<td>D10A</td>
<td>Ring net</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>D11A</td>
<td>Dive</td>
<td>2</td>
<td></td>
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</tbody>
</table>

Maximum permits: 277, 44,175, 35,340

Vessels with more than one permit holder are limited to 300 pots.

Proposal 55 would increase this to 400 pots per vessel.
Southeast Alaska Commercial Dungeness Crab

Major Fishing Areas
Southeast Alaska Commercial Dungeness Crab

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.

• 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 Alaska Crab Fisheries RC-3, Tab 7
Southeast Alaska Commercial Dungeness Crab

Southeast Dungeness Total Catch and Predicted Catch at Day 7

<table>
<thead>
<tr>
<th>Pounds</th>
</tr>
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<tbody>
<tr>
<td>8,000,000</td>
</tr>
<tr>
<td>7,000,000</td>
</tr>
<tr>
<td>6,000,000</td>
</tr>
<tr>
<td>5,000,000</td>
</tr>
<tr>
<td>4,000,000</td>
</tr>
<tr>
<td>3,000,000</td>
</tr>
<tr>
<td>2,000,000</td>
</tr>
<tr>
<td>1,000,000</td>
</tr>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

Season lengths based on projection:

<table>
<thead>
<tr>
<th>Season</th>
<th>&lt;1.5 million lb</th>
<th>Between 1.5 and 2.25 million lb</th>
<th>&gt;2.25 million lb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer</td>
<td>Closes no sooner than 21 days after season opening.</td>
<td>Closes no sooner than 28 days after season opening.</td>
<td>Complete season</td>
</tr>
<tr>
<td>Fall</td>
<td>No fall season.</td>
<td>30 day fall season.</td>
<td>Complete season</td>
</tr>
</tbody>
</table>
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 6 ½ 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 Sport Fisheries

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

- **Ketchikan**: 3,485
- **Prince of Wales Island**: 6,875
- **Petersburg & Wrangell**: 3,766
- **Sitka**: 2,391
- **Juneau**: 1,762
- **Remainder of Southeast Alaska\(^a\)**: 1,610

\(^a\)Includes the Haines, Skagway, and Glacier Bay areas, low response rates prohibit survey area estimates for these locations.
Southeast Alaska Commercial Red King Crab

Major red king crab fishing grounds
Southeast Alaska Commercial Red King Crab

Survey area legal biomass and commercial harvest

- Harvest (all areas)
- GHL threshold
- Legal biomass (surveyed areas)
- Average legal biomass 1993-2007

Pounds


Southeast Alaska Crab Fisheries RC-3, Tab 7
Southeast Alaska Commercial Red King Crab

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
Southeast Alaska Commercial Golden King Crab

Management Areas

Proposal 65: see RC-2, p.39

Management areas:
- East Central
- Icy Strait
- Lower Chatham Strait
- Mid-Chatham Strait
- North Stephens Passage
- Northern
- Southern
Southeast Alaska Commercial Golden King Crab

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
# Southeast Alaska Commercial Golden King Crab

**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.  

**Proposal 69***

- 145,000 pounds  
- 55,000 pounds  
- 225,000 pounds
Southeast Alaska Commercial Golden King Crab

Harvest/Effort – by area

Southeast Alaska Crab Fisheries RC-3, Tab 7
Southeast Alaska Commercial Golden King Crab Harvest/Effort – by area

Icy Strait

Southeast Alaska Crab Fisheries RC-3, Tab 7
Southeast Alaska Commercial Tanner Crab

Commercial Tanner Crab Management Core, Non Core and Closed Areas of Registration Area A
Refer to 5AAC 35.113 for Legal Descriptions

Legend
- Core Areas
- Noncore Areas
- Closed to Commercial Fishing
- Core Area Open for Qualifying Fishermen's Lifetimes for Commercial Tanner Crab

Southeast Alaska Crab Fisheries RC-3, Tab 7
Southeast Alaska Commercial Tanner Crab Harvest/Effort

- Ring net fishery
- Pot fishery
- Permits

Pounds

Number

Southeast Alaska Commercial Tanner Crab

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
Southeast Alaska Commercial Tanner Crab

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

Proposal 72 – ‘exploratory’ areas would open for an additional 14 days

Proposal 73 – Equal quota share fishery

<table>
<thead>
<tr>
<th>Pots Registered</th>
<th>Additional Fishing Days</th>
<th>Additional Fishing Days</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mature Biomass is Between 2,300,000 and 5,500,000 lb</td>
<td>Mature Biomass is Greater than 5,500,000 lb</td>
</tr>
<tr>
<td>1,600 – 2,399</td>
<td>4 Additional Days</td>
<td>5 Additional Days</td>
</tr>
<tr>
<td>2,400 – 3,199</td>
<td>3 Additional Days</td>
<td>4 Additional Days</td>
</tr>
<tr>
<td>3,200 – 3,999</td>
<td>2 Additional Days</td>
<td>3 Additional Days</td>
</tr>
<tr>
<td>4,000 – 5,599</td>
<td>1 Additional Days</td>
<td>2 Additional Days</td>
</tr>
<tr>
<td>5,600 – 7,000</td>
<td>0 Additional Days</td>
<td>1 Additional Days</td>
</tr>
</tbody>
</table>
Thank you / Questions?