SCALLOP PLAN TEAM

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Alyssa Hopkins (ADF&G Kodiak)
TOPICS

- 2022 stock status
- 2021 dredge survey
  - Shell height conversion
- Fishery update
  - Total removals ’20/21
  - Retained catch ‘21/22
- Stock Synthesis model development
- Elements of full SAFE
- Socioeconomics
Stock status is “unknown”

As per FMP:
- OFL = 1.284 million lb meats
- ABC = 1.156 million lb meats (ABC control rule)

Total removals suggest overfishing did not occur in 2020/21 or 2021/22*
- 2020/21 total removals = 238,551 lb meats
- 2021/22 retained catch = 298,755 lb meats
## 2021 ADF&G DREDGE SURVEY

- Prince William Sound and Yakutat registration Areas

<table>
<thead>
<tr>
<th>Bed</th>
<th>Last Survey</th>
<th>Abundance ≥ 100mm</th>
<th>Abundance &lt; 100 mm</th>
<th>MW Biomass</th>
<th>MW:SH</th>
<th>MW:RW</th>
</tr>
</thead>
<tbody>
<tr>
<td>WKI</td>
<td>2019</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
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<td>↓</td>
</tr>
<tr>
<td>EKI (EKI)</td>
<td>2018</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
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<td>↓</td>
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<tr>
<td>EKI (YAK)</td>
<td>2019</td>
<td>↑</td>
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<tr>
<td>YAK1</td>
<td>2018</td>
<td>↑</td>
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<tr>
<td>YAK2</td>
<td>2018</td>
<td>↓</td>
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</tr>
<tr>
<td>YAK3</td>
<td>2019</td>
<td>↓</td>
<td>↓</td>
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<tr>
<td>YAK4</td>
<td>2019</td>
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<td>↓</td>
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<tr>
<td>YAK5</td>
<td>2019</td>
<td>↓</td>
<td>↓</td>
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</table>
SHELL HEIGHT CONVERSION

\[ L_{\text{bottom}} = \beta_0 + \beta_1 L_{\text{top}} + \varepsilon \]

\[ \beta_1 = 1.02 \]

\[ \beta_2 \not\geq 0 \]

- Unknown which measurements require conversion since method was not consistent throughout timeseries
FISHERY MANAGEMENT UPDATE

2020/21 Season
227,270 lb

2021/22 Season
298,755* lb

* Discards not yet available
• 1995-2008 requires observer data recovery
• Little knowledge of connectivity
• Biology differs throughout “stock” range
Model scenarios: See SAFE section A3.4

- $M = 0.14 – 0.24$
- Early fishery CPUE timeseries (KSH)
- Trawl Survey CPUE (KSH)
Stock Synthesis appears to be a viable tool for AK scallop assessment, but needs refinement.

- Strong retrospective pattern in both KAM and KSH models
- Likely some mis-specification

$M$ has big impact on scaling SSB and model fit.

- Larger $M \sim$ increased SSB and better fit

SPT did not see including trawl data as a high priority since it is not available for most of the stock

SPT supported exploring less data intensive assessments
Next full SAFE will be in 2024

Current version is very long, contains some redundant reporting

- Survey history and methodology – ADF&G Operational Plans (Burt et al. 2021; Knutson and Spalinger 2021; previous versions)
- Finer details of area specific fishery performance – do not directly inform stock status

Reductions would ease preparation and likely review
SOCIOECONOMIC CONSIDERATIONS: REVISIONS TO THE APPENDIX

• Merged the history appendix to eliminate duplication
• Retained and updated the breakeven analysis originally from Amendment 4 (LLP formation)
• Added additional community and crew discussions and port landings for the past three seasons, documents and database development project ADF&G Kodiak has initiated to link past fish ticket data to port of landing
• Expanded discussions of fleet consolidation under LLP management since inception in 2000
• Updated all tables and figures
• Provided responses to past SSC comments in the comment response section of the SAFE.
LLP OWNERSHIP INFORMATION: INDEPENDENT OF THE COOPERATIVE

- LLP (004) was transferred from Scott Hulse to Ty W. Babb, of Maine, in 2022; no known vessel associated.

- Two LLPs are owned by east coast entities, Atlantic Capes (LLP 003) and EWT LLC (LLP 006, no vessel associated).

- The vessel Kilkenny (homeported in Kodiak), is owned by Atlantic Capes (LLP 003), according to CFEC records; historically Kilkenny has delivered fresh scallop meats for marketing in Kodiak and Homer.

- No State of Alaska waters registrants have fished since the management plan was adopted.
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), the Provider (LLP 008), and the Ocean Hunter (LLP 009).
- 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 VALUE UPDATE

- Landings increased from 227,270 lb to 298,755 lb
- Assumed 6 percent price increase in 2021 (preliminarily $11.06/lb. up from $10.43)
- Value increased from $2.4 million to $3.3 million
- Two cooperative vessels fished in 2021-22
- Potential crew share (assumes 24 total positions, and 42% of total revenue) increased from $41,482 to $57,824
- Breakeven analysis indicates participation is near breakeven levels; however, efficiencies gained via effort consolidation likely mean participants are performing above breakeven levels
## PORT LANDINGS 2019-2022

<table>
<thead>
<tr>
<th>Port</th>
<th>2019/20</th>
<th>2020/21</th>
<th>2021/22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dutch Harbor</td>
<td>1</td>
<td></td>
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</tr>
<tr>
<td>Homer</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Kodiak</td>
<td>5</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Yakutat</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Seattle</td>
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<td>1</td>
<td></td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
<td><strong>8</strong></td>
<td><strong>10</strong></td>
</tr>
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Source: ADF&G Kodiak Scallop Program Office, 2022
US ATLANTIC SEA SCALLOP LANDING AND VALUE, AND IMPORTS AND VALUE

- 49 million lbs. in 2020, projected 40 million lbs. landed in 2021
- $486.2 million in 2020, $421.4 projected in 2021
- $9.94 per lb. in 2020, assumed $11.06 per lb. in 2021 (six percent increase)
- Imports increased from 36.5 million lbs. to 55.4 million lbs.
- Average import price, all product forms combined, increased from $5.35 to $5.86
Questions?