2016 Sablefish Industry Meeting

Northern Southeast Inside (NSEI) Sablefish

Kristen Green, ADF&G
Agenda

- Introduction – Kristen Green (ADF&G)
- NSEI fishery and survey data review – Kray Van Kirk (ADF&G)
- NSEI age structured assessment model – Kray Van Kirk (ADF&G)
- 2016 Outlook: NSEI sablefish quota/ decrement review – Kristen Green (ADF&G)
- NSEI future fieldwork/ budget update – Kristen Green (ADF&G)
- Gulf of Alaska federal sablefish fishery stock status – Dana Hanselman (NOAA)
- Whale tagging and depredation – Neve Baker (SEASWAP)
- Seabird Bycatch – Rob Suryan (Oregon State)
ADFG Presentation Overview

• History of NSEI fishery and stock assessment

• Current NSEI stock assessment methodology
  – Stock assessment review (CPUE/mark recapture)
  – 2017: proposing an Age Structured Assessment model
  – Decrement process

• Future NSEI plans: 2016 and beyond
  – ADF&G Longline/Marking survey future
  – Collaborative research
Stock Assessment History

- Survey CPUE (1988 to present)
- Fishery CPUE (1997: logbooks implemented)

- Mark-recapture study
  - Tagged fish released from longline survey 1997–1999
  - Concern over hook shyness – reduced catch in longline fishery
  - Since 2000, tagged fish have been released with pots;
  - use this to estimate abundance, use fishery/survey data to convert to biomass/calculate harvest rate
History of the NSEI fishery

Round lbs

LIMITED ENTRY

EQUAL QUOTA SHARE

harvest

AHO
**NSEC Harvest Rate History**

- **F40%** (2004–2007)
- **F45%** (2009)
- **F50%** (2010–2015)

Harvest rate over time from 2004 to 2016, showing trends for different definition levels.
Sablefish Geographic Trends

DFO Canada biomass

DFO Canada trap survey (inside waters)

West Coast biomass

Alaska biomass (outside waters)

SE Alaska CPUE (outside waters)
Outlook to 2016 AHO

- Decrease in 2015 fishery and survey CPUE
- No signs of recruitment in fishery/survey, (but hopeful for small juveniles in the future!)
- Finalizing analyses for ABC
- $F50\%$ Harvest rate policy

Juvenile sablefish removed from troll-caught coho stomachs, September 2015
Decrement

The AHO is calculated by making the following decrements from the ABC:

1) estimated sablefish bycatch mortality in the commercial halibut fishery;

2) ADF&G longline survey removals;

3) recreational charter harvest;

4) 2014 subsistence and personal use harvest,

5) sablefish discard mortality in non-halibut fisheries.
Decrement amounts for 2013–2015

<table>
<thead>
<tr>
<th>Decrement type</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bycatch mortality in halibut fishery</td>
<td>52,114</td>
<td>47,514</td>
<td>38,963</td>
</tr>
<tr>
<td>ADF&amp;G longline survey removals (excluding catch retained by permit holders)</td>
<td>77,261</td>
<td>80,814</td>
<td>74,689</td>
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<tr>
<td>Guided recreational harvest</td>
<td>29,601</td>
<td>35,944</td>
<td>51,910</td>
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<tr>
<td>Private recreational harvest (unguided)</td>
<td>7,076</td>
<td>7,076</td>
<td>5,212</td>
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<tr>
<td>Bycatch mortality in non-halibut fisheries</td>
<td>12,533</td>
<td>5,081</td>
<td>9,218</td>
</tr>
<tr>
<td>Subsistence and personal use</td>
<td>26,535</td>
<td>30,335</td>
<td>19,741</td>
</tr>
<tr>
<td>Total Decrements</td>
<td>205,120</td>
<td>206,764</td>
<td>199,733</td>
</tr>
<tr>
<td>AHO</td>
<td>1,002,162</td>
<td>745,774</td>
<td>786,748</td>
</tr>
<tr>
<td>Permit Holders</td>
<td>78</td>
<td>78</td>
<td>78</td>
</tr>
<tr>
<td>EQS</td>
<td>12,848</td>
<td>9,561</td>
<td>10,087</td>
</tr>
</tbody>
</table>
NSEI AHO/Decrements as % of ABC

2013
- 83%

2014
- 78%

2015
- 80%
  - 8%
  - 4%

- halibut fishery
- ADFG longline survey
- guided recreational harvest
- private recreational harvest
- bycatch other fisheries
- subs/PU
- AHO
ADF&G NSEI Tagging Survey

- Conducted successful surveys in 2012, 2013, 2015 (2012 first yr on ADF&G vessel)

- Plan to survey every other year

- Tag between 6,000–8,000 fish each year throughout NSEI

- 2015 Survey Summary
  - 6,862 sablefish tagged
  - 210–445 fm depth (avg=342 fm)
  - 17–41” sablefish length (avg=26”)
• Continue annual LL surveys (cost recovery)

• 3 vessels, up to 9 permit holders can participate
  – Permit holders need to be present while PQS is harvested.

• Goal is to continue to REDUCE survey removal impact, benefit fleet

• Three vessels under contract
  – New contract bid next year (5 year)
Collaborative research: ADF&G funded graduate study: Movement Patterns Juvenile Sablefish (Rhea Ehresmann-ADFG)

Goals: examine movements and improve knowledge of early life history of sablefish
Fieldwork: 2015 & 2016: total of 40 age-1 fish will be tagged
Budgets

- Legislative cuts will likely continue
- General fund sablefish Increment cut
- Funding for longline surveys (cost recovery)
- Funding for marking survey
Questions