Alaska Dept. of Fish and Game Trawl Surveys
In the Gulf of Alaska and Eastern Aleutian Is.

Dan Urban, Nicholas Sagalkin, Kally Spalinger
ADF&G Kodiak
Alaska Dept. of Fish and Game Trawl Surveys
In the Gulf of Alaska and Eastern Aleutian Is.

Dan Urban¹, Nicholas Sagalkin², Kally Spalinger²
¹NMFS Kodiak, ²ADF&G Kodiak
Large-mesh Trawl Survey Stations

Gulf of Alaska

Kodiak Island
R/V Resolution

circa 1970, 27.3 m
Video: Wayne Donaldson, ADF&G Kodiak
## NET SPECIFICATIONS

<table>
<thead>
<tr>
<th></th>
<th>Shrimp Net</th>
<th>Multi-species trawl net</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NET</strong></td>
<td>Small-mesh high opening</td>
<td>400-mesh Eastern otter trawl</td>
</tr>
<tr>
<td><strong>FOOTROPE</strong></td>
<td>18.6 meters 17m “tickler” chain</td>
<td>29 meters 1 cm chain attached every 25.4 cm</td>
</tr>
<tr>
<td><strong>OPENING</strong></td>
<td>9.8 m x 4 m</td>
<td>13.8 m x 1.9 m</td>
</tr>
<tr>
<td><strong>DOORS</strong></td>
<td>Astoria semi-V 340 kg, 1.7m x 2.7 m</td>
<td>Astoria V 340 kg, 1.5 m x 2.1 m</td>
</tr>
<tr>
<td><strong>MESH</strong></td>
<td>3.1 cm stretch mesh throughout</td>
<td>10.2 stretch mesh in mouth</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8.9 cm stretch mesh in body</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.2 cm stretch mesh in codend</td>
</tr>
</tbody>
</table>
FISHING POWER STUDY,  Oct. 1997

- R/V Resolution (400-mesh Eastern) and F/V Peggy Jo (Nor’Eastern)
- 33 paired trawls
- SCANMAR headrope and wing sensors
- bottom contact sensor
FISHING POWER STUDY: RESULTS

- the 400-mesh Eastern tended to narrow as the tow progress, probably related to the accumulation of catch in the codend
FISHING POWER STUDY: RESULTS

• the 400-mesh Eastern tended to narrow as the tow progress, probably related to the accumulation of catch in the codend

• the net occasionally increased and decreased in width by several meters in a pulsing pattern--doors losing contact with the bottom...
FISHING POWER STUDY: RESULTS

• the 400-mesh Eastern tended to narrow as the tow progress, probably related to the accumulation of catch in the codend

• the net occasionally increased and decreased in width by several meters in a pulsing pattern--doors losing contact with the bottom??

• the net sensors said the area-swept was 17% more than estimated by Capt. Ron!!
FISHING POWER STUDY: RESULTS

- the 400-mesh Eastern tended to narrow as the tow progress, probably related to the accumulation of catch in the codend
- the net occasionally increased and decreased in width by several meters in a pulsing pattern--doors losing contact with the bottom??
- the net sensors said the area-swept was 17% more than estimated by Capt. Ron!!

<table>
<thead>
<tr>
<th></th>
<th>Captain Ron</th>
<th>Sensors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net width</strong></td>
<td>Constant 12.2 m</td>
<td>Avg. 13.8 m</td>
</tr>
<tr>
<td><strong>Tow distance</strong></td>
<td>1.74 km</td>
<td>1.85 km*</td>
</tr>
</tbody>
</table>

*net stayed on bottom during part of the retrieval
6 up
4 down
WHAT ABOUT BURIED CRAB?

photo: Guy Powell, ADF&G Kodiak
The survey is consistent from year to year: same vessel, nets, skipper.
ADF&G Trawl Standardization

• The survey is consistent from year to year: same vessel, nets, skipper.

• Personnel and money constraints
ADF&G Trawl Standardization

• The survey is consistent from year to year: same vessel, nets, skipper.
• Personnel and money constraints
• The survey is considered a “blunt tool” for setting crab GHLs.
ADF&G Trawl Standardization

- The survey is consistent from year to year: same vessel, nets, skipper.
- Personnel and money constraints
- The survey is considered a “blunt tool” for setting crab GHLs.

### Tanner Crab Guideline Harvest 2008

<table>
<thead>
<tr>
<th>Section</th>
<th>Allowable Catch</th>
<th>Harvest Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kodiak NE</td>
<td>225,520</td>
<td>100,000</td>
</tr>
<tr>
<td>Kodiak E</td>
<td>550,056</td>
<td>400,000</td>
</tr>
<tr>
<td>S. Peninsula West</td>
<td>551,893</td>
<td>250,000</td>
</tr>
</tbody>
</table>
THANK YOU!

photo: Nick Sagalkin, ADF&G Kodiak