

Bering Sea Fisheries Research Foundation 2012 Cooperative Research

Bering Sea Crab Trawl Surveys
2004 - 2012

Cooperative Research
Between Government & Industry
Steve Hughes, Scott Goodman



Snow Crab Handling Mortality

- Data collection began during the 2010 and continued in 2011 by NMFS
- Data collection was incomplete due to shortage of cold weather conditions
- BSFRF prioritized completion of this research
- Four observers hired, trained by NMFS, placed aboard four crabbers in the fishery during 2012 season
- Data collection completed and provided to NMFS Kodiak for analysis



Bairdi Tanner Crab Growth Studies

- Field work planning BSFRF/NMFS/ADF&G
- BSFRF chartered catcher trawler *F/V Half Moon Bay* in April 2012
- 30 tows completed in Amak area and north to ice edge, 647 bairdi retained from catch held in onboard tanks and delivered to live holding tanks in DH at Unisea dock – for collection of growth per molt data by NMFS/ADF&G
- Study is ongoing – data collection to be completed by end of May 2012
- Growth data collected for about 35 bairdi to date



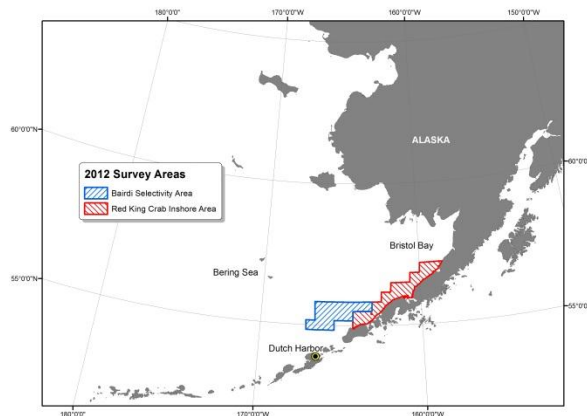
Inshore Bristol Bay Red King Crab Surveys, 2011-12

- Uncertainty about BBRKC distribution and densities in inshore area
- BSFRF chartered *F/V American Eagle* 2011 and *Half Moon Bay* in 2012
- 2011 results suggests showed warmer inshore area during cold year
- 2012 expectation is for colder inshore area in more severe cold year
- Results from two years together may suggest extension of standard survey into nearshore area in cold years to address cold year inshore distribution/density



Estimating Efficiency of NMFS Trawl - *Bairdi* Tanner Crab

- One of 2012 cooperative BSFRF/NMFS/ADF&G research priorities
- First year of *bairdi* specific field work to address trawl selectivity in study area
- Based on review of prior cooperative survey data – *bairdi* collections
- 52 tows planned in 13 NMFS stations adjacent to cooperative inshore BBRKC study area in the eastern portion of *bairdi* survey grounds
- Results are expected to inform NFMS trawl selectivity of *bairdi* for use in stock assessment similar to 2009-2010 cooperative survey experiments for *opilio*



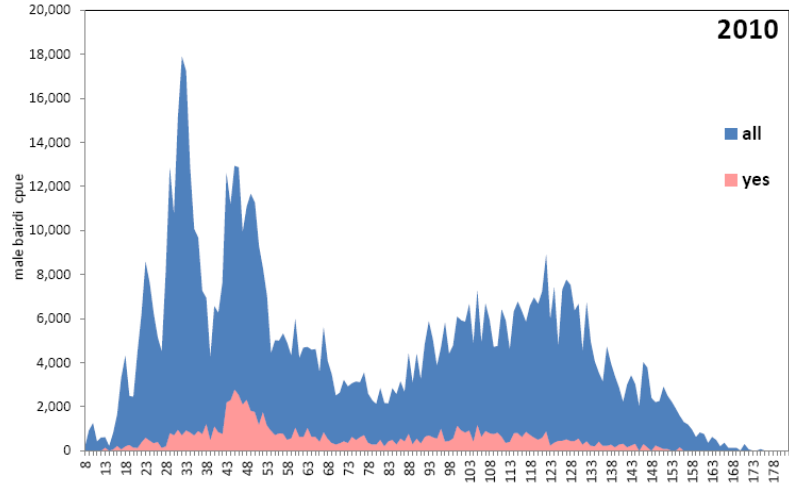
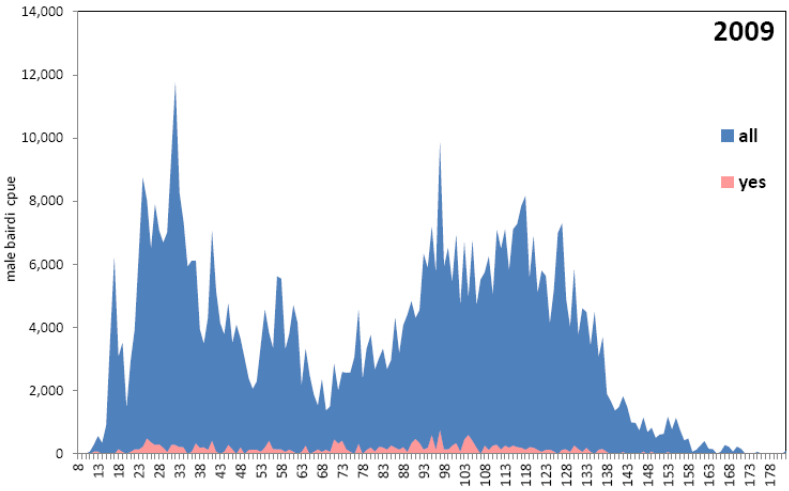
Existing Data Summary – NMFS Trawl Selectivity for *Bairdi*

- Data are from *bairdi* collected during 2007-2011 BBRKC and *opilio* surveys
- Preliminary summaries suggest results similar to *opilio* specific experiments
- Final summaries will follow methods for *opilio* 2009 and 2010
- Results may be used separately or with *bairdi* selectivity work in 2012+
- Next two frames show what data used and how well it fits *bairdi* distribution

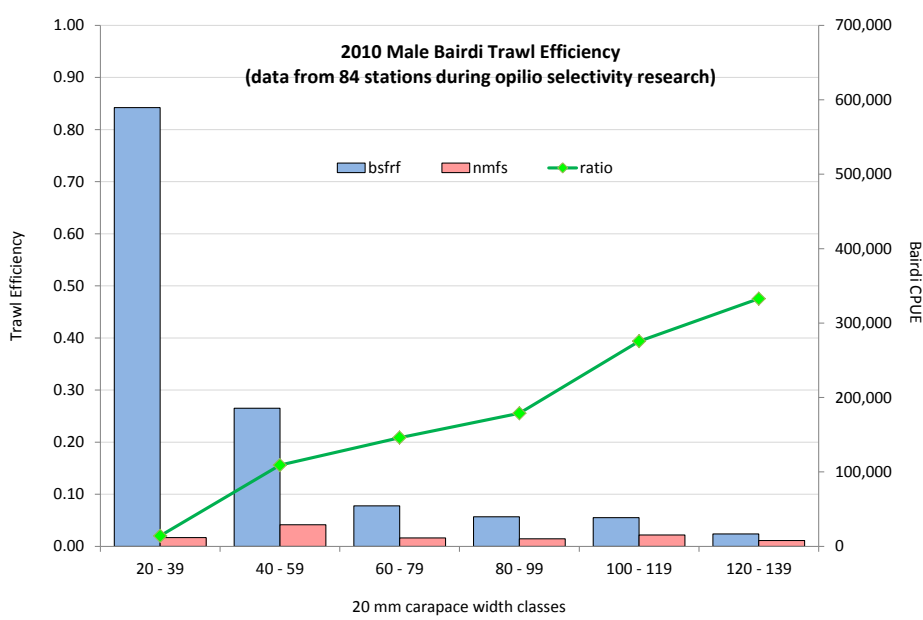
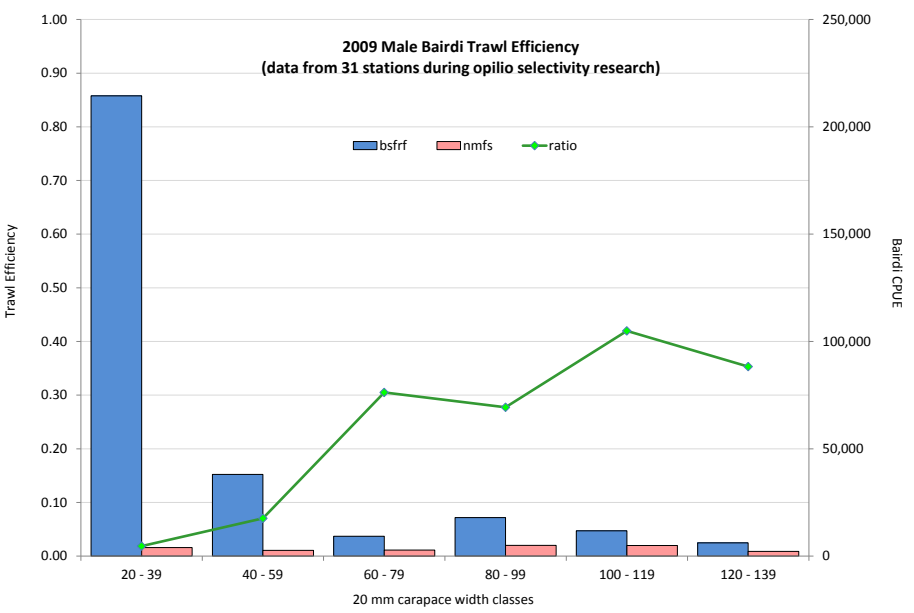




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BSFRF Cooperative Research Results in 2012

- Snow crab growth data (2011)
- Snow crab handling mortality data (2010-2012)
- BBRKC inshore survey distribution/density data (2011-2012)
- *Bairdi* Tanner crab growth data (2012)
- *Bairdi* Tanner crab net selectivity (2009-10, 2012)

- Info for the above projects is fully available for full CPT review/use
- We understand timing/process limits – but would like to keep momentum
- Research Foundation has enduring interest as cooperative partner
- We are science-focused and value positive progress with research partners
- BSFRF is fully funded through 2012 and is beginning future planning

