



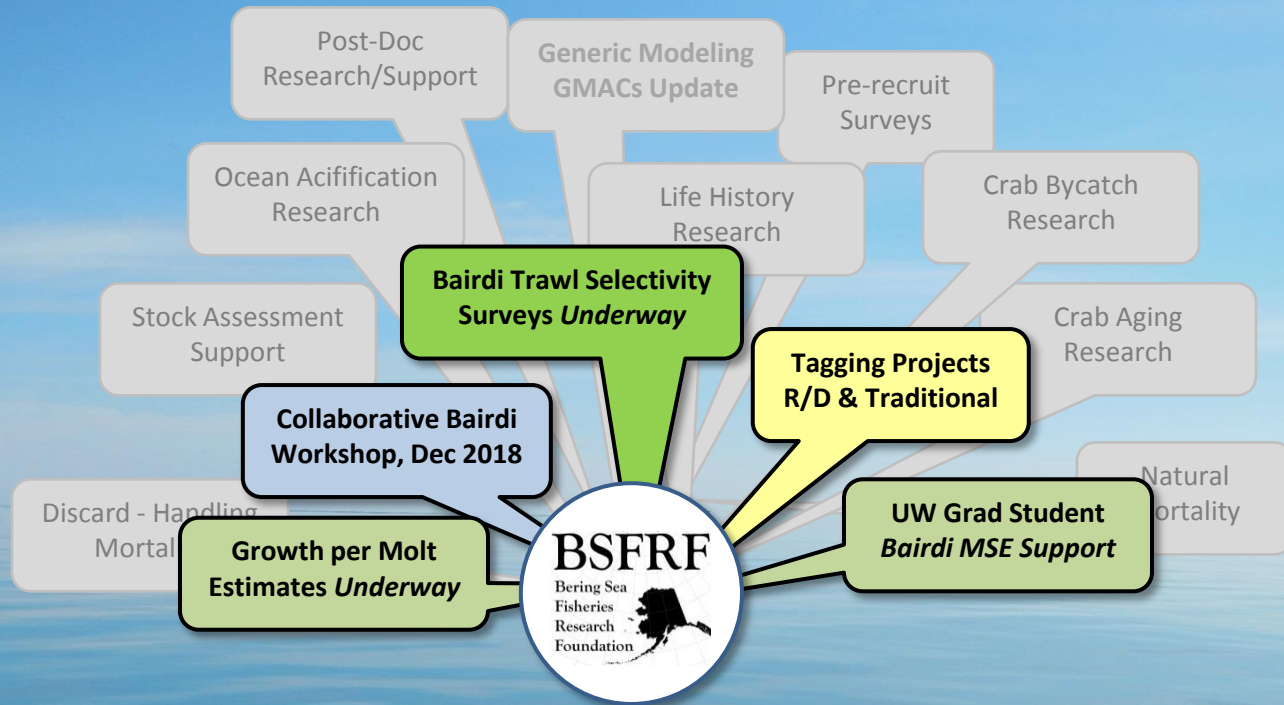
BSFRF Research Update

CPT – May 2018

Scott Goodman, BSFRF

- Cooperative BSFRF Trawl Surveys
- Snow/Tanner Growth Work
- Tagging R/D & Tagging Project Support
- Collaborative Bairdi Workshop
- Grad Student Support – Bairdi Research

BSFRF Research



Who We Are...

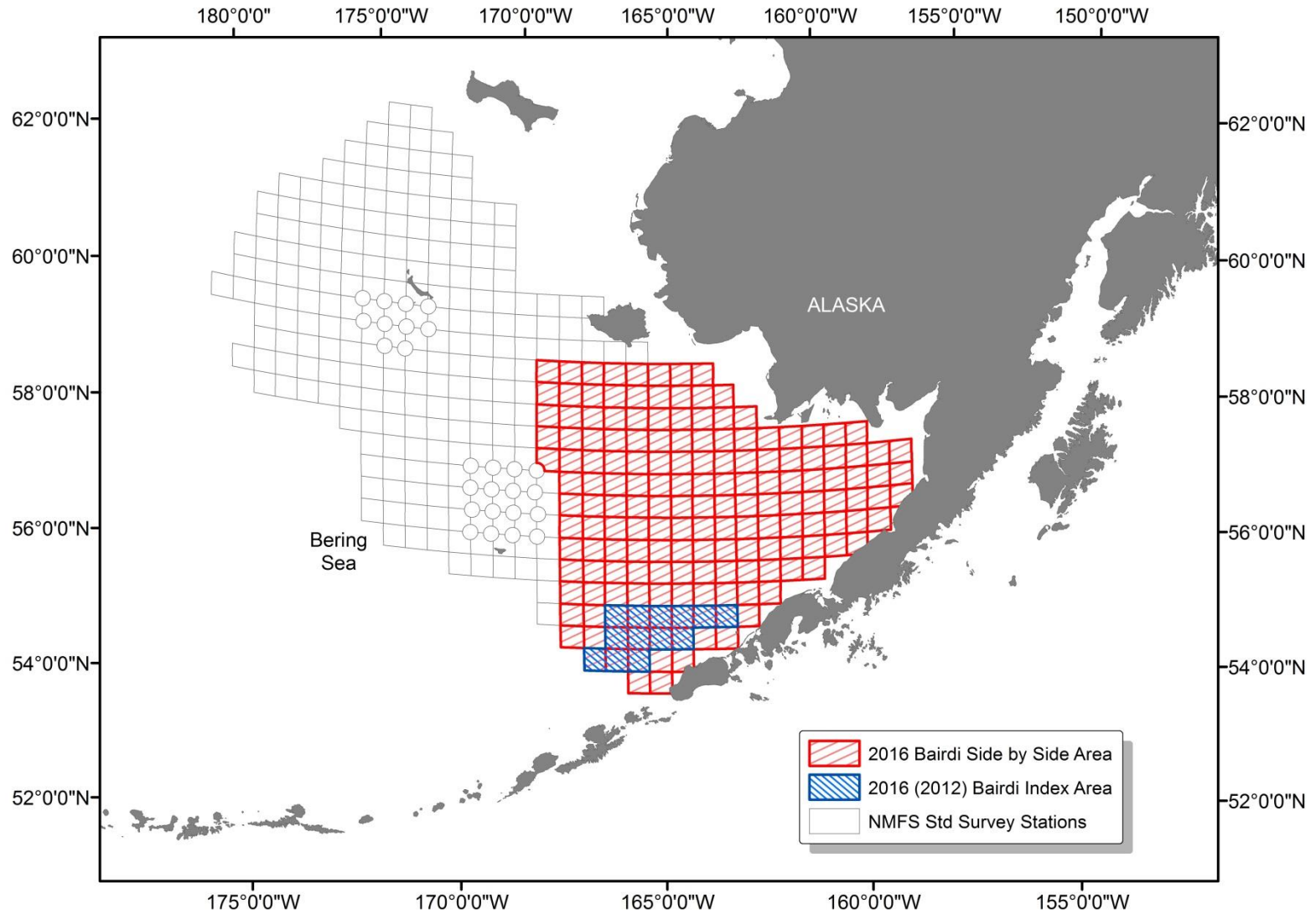
Harvesters - Processors



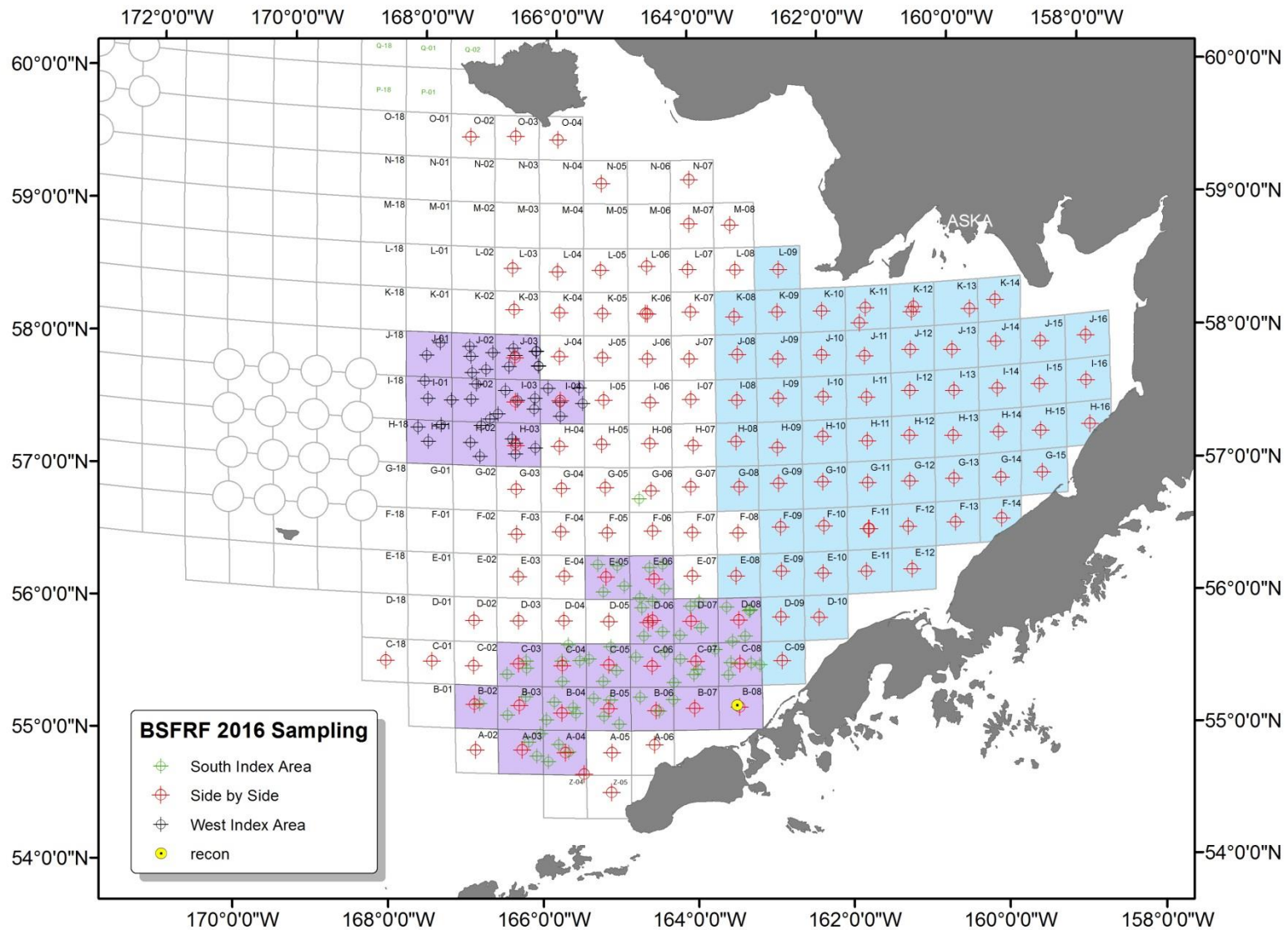
Cooperative Research Partners

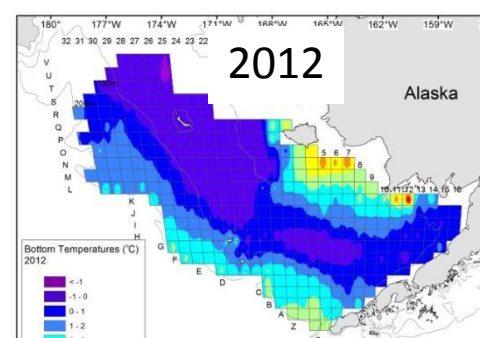
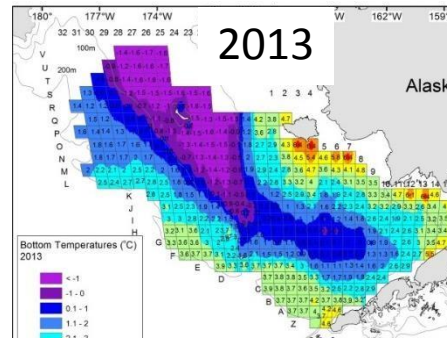
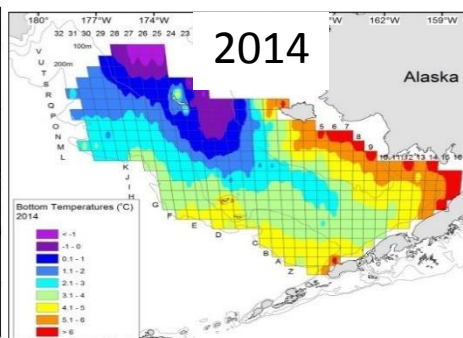
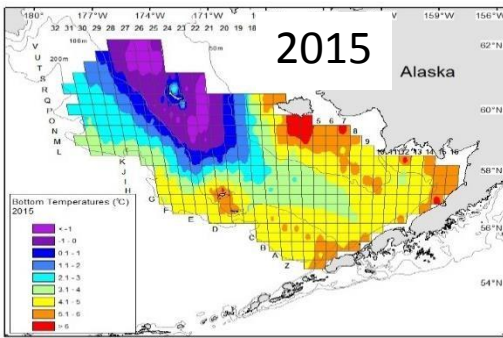
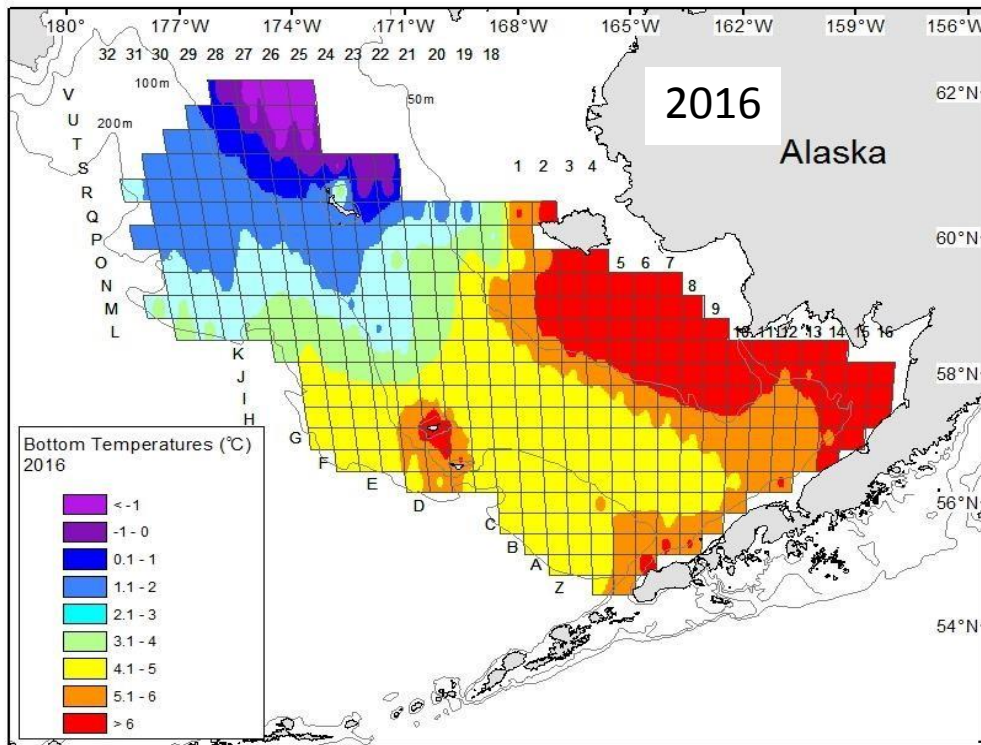
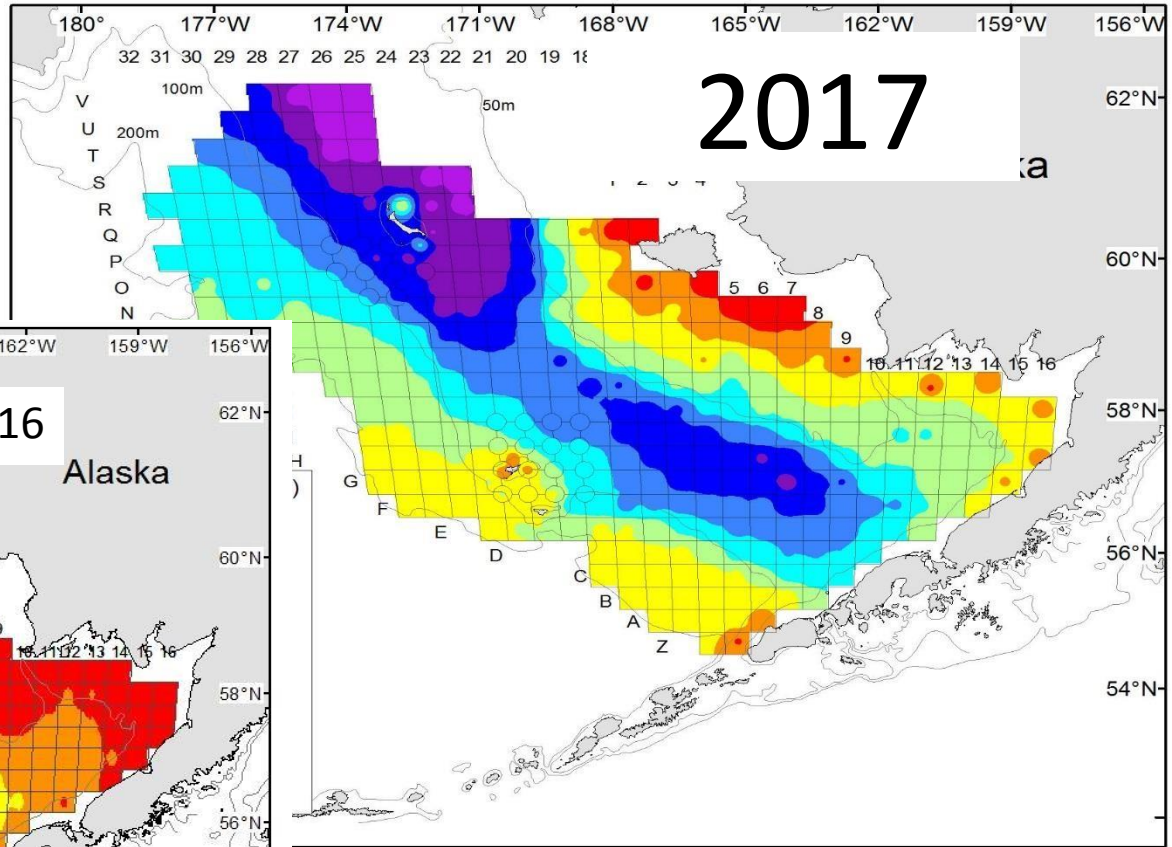


2016 Planned Sampling

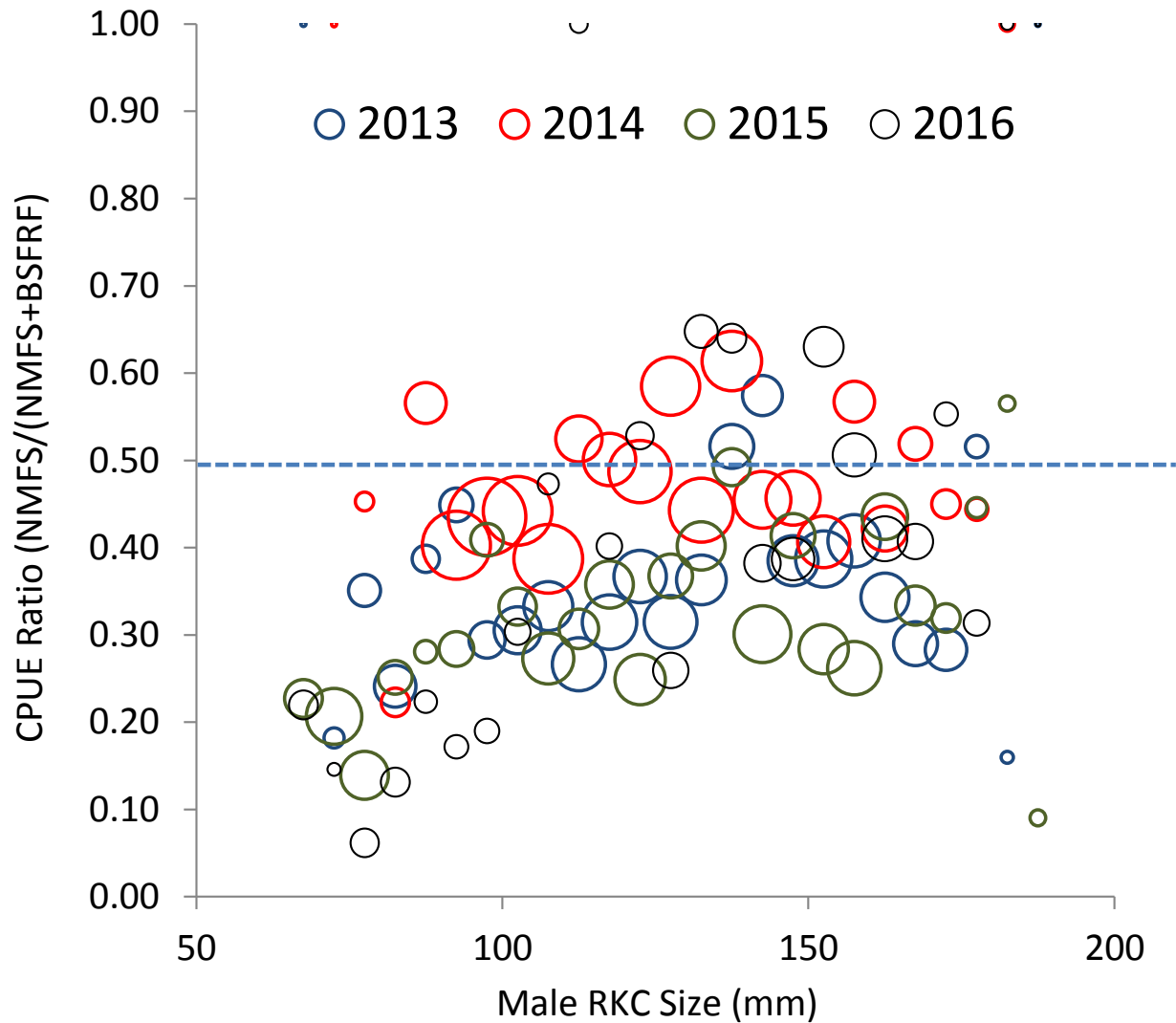


2016 Actual Sampling

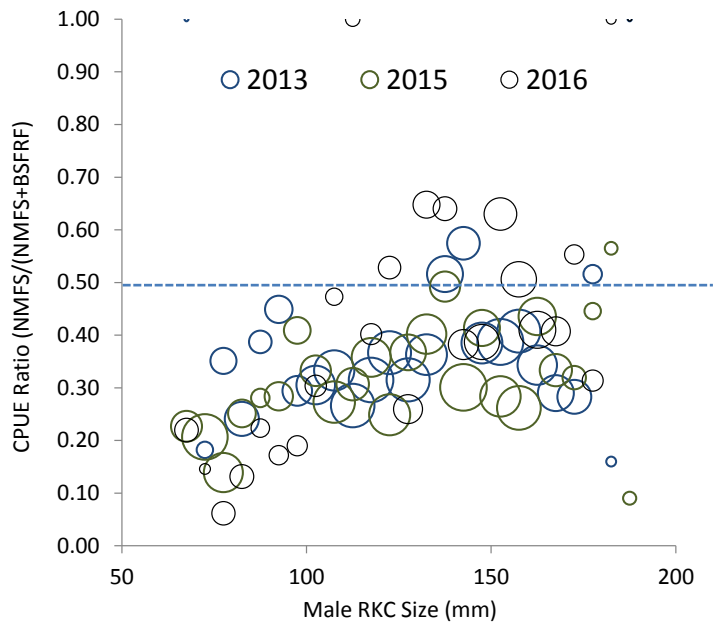




BBRKC Trawl Selectivity 2013-2016



Estimating Trawl Selectivity Accurately



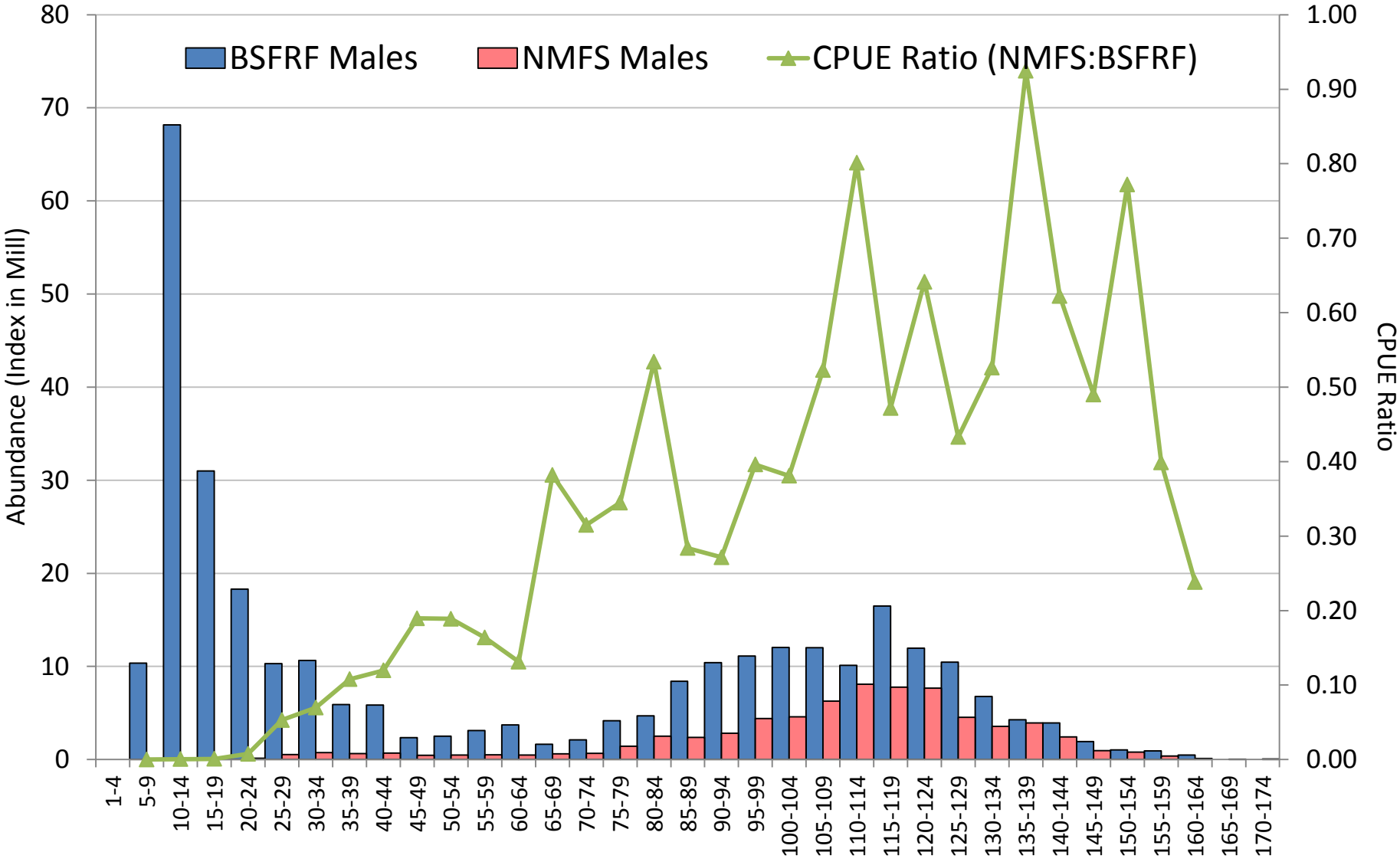
- Updating temporal/spatial trends
- Revising methods per model/species
- Addressing variability in data
- NMFS survey availability
- Other survey availability
- Model scenario selection
- Current models v. GMACs
- Spatial modeling
- Incorporating new data
- Consistent methods across models
- Reviewing influence of herding

Bairdi Trawl Selectivity

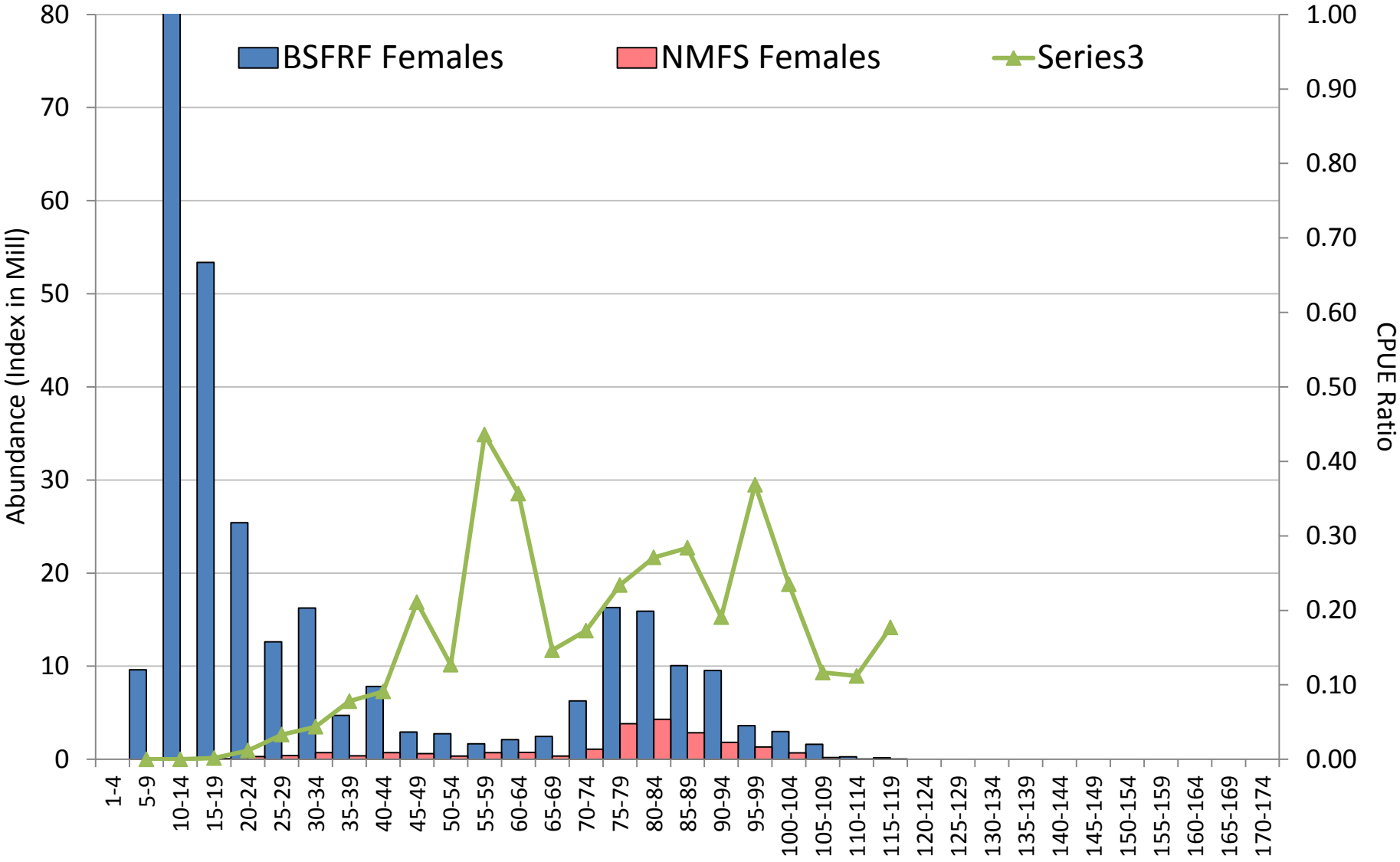
- What we have already? [variability/coverage]
- What is the strategy? [snow/king/Tanner]
- What we are doing this year? [east & west]
- What's on the horizon – next year? [wrapped up]



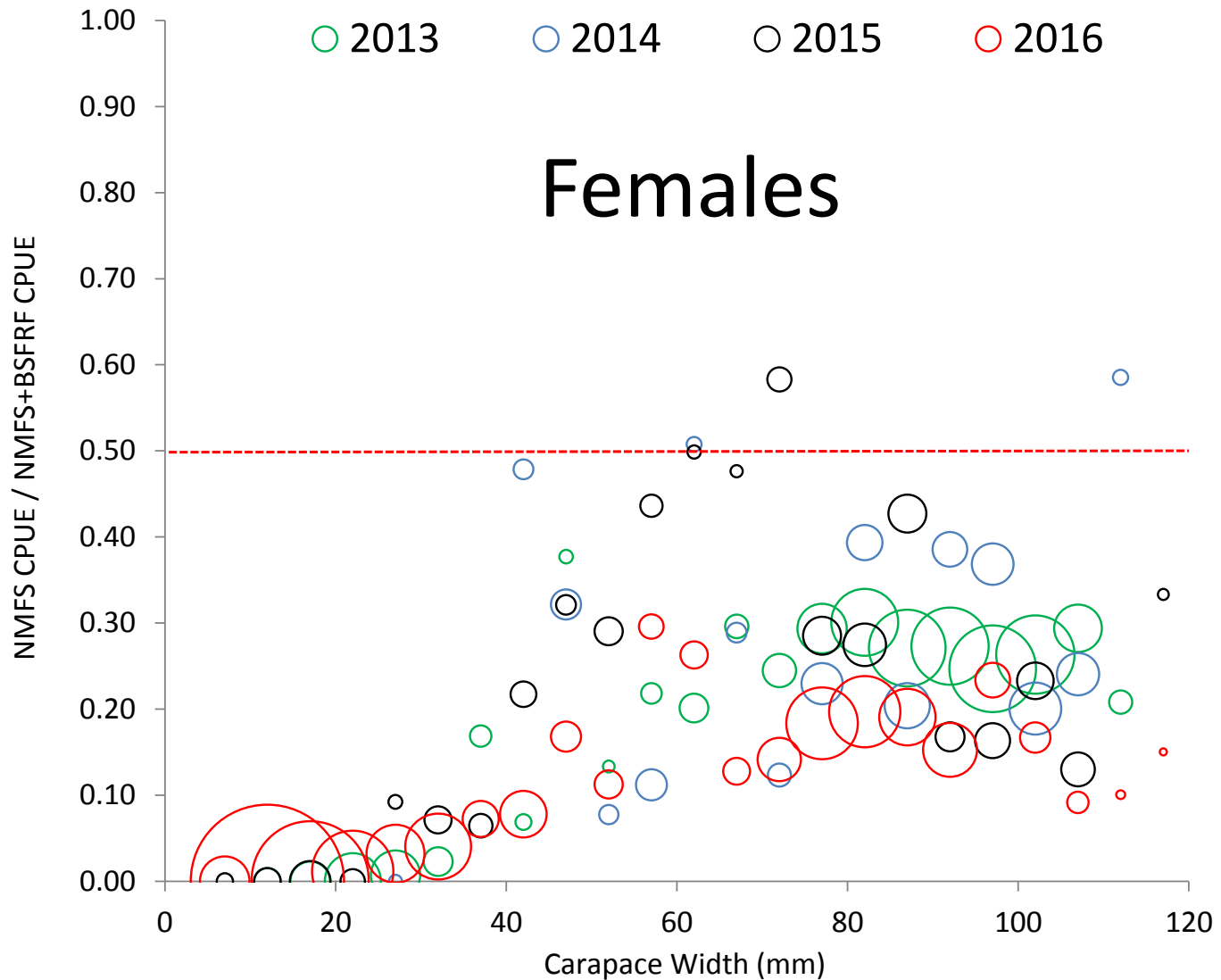
Bairdi Trawl Selectivity 2016 – Expanded Side by Side



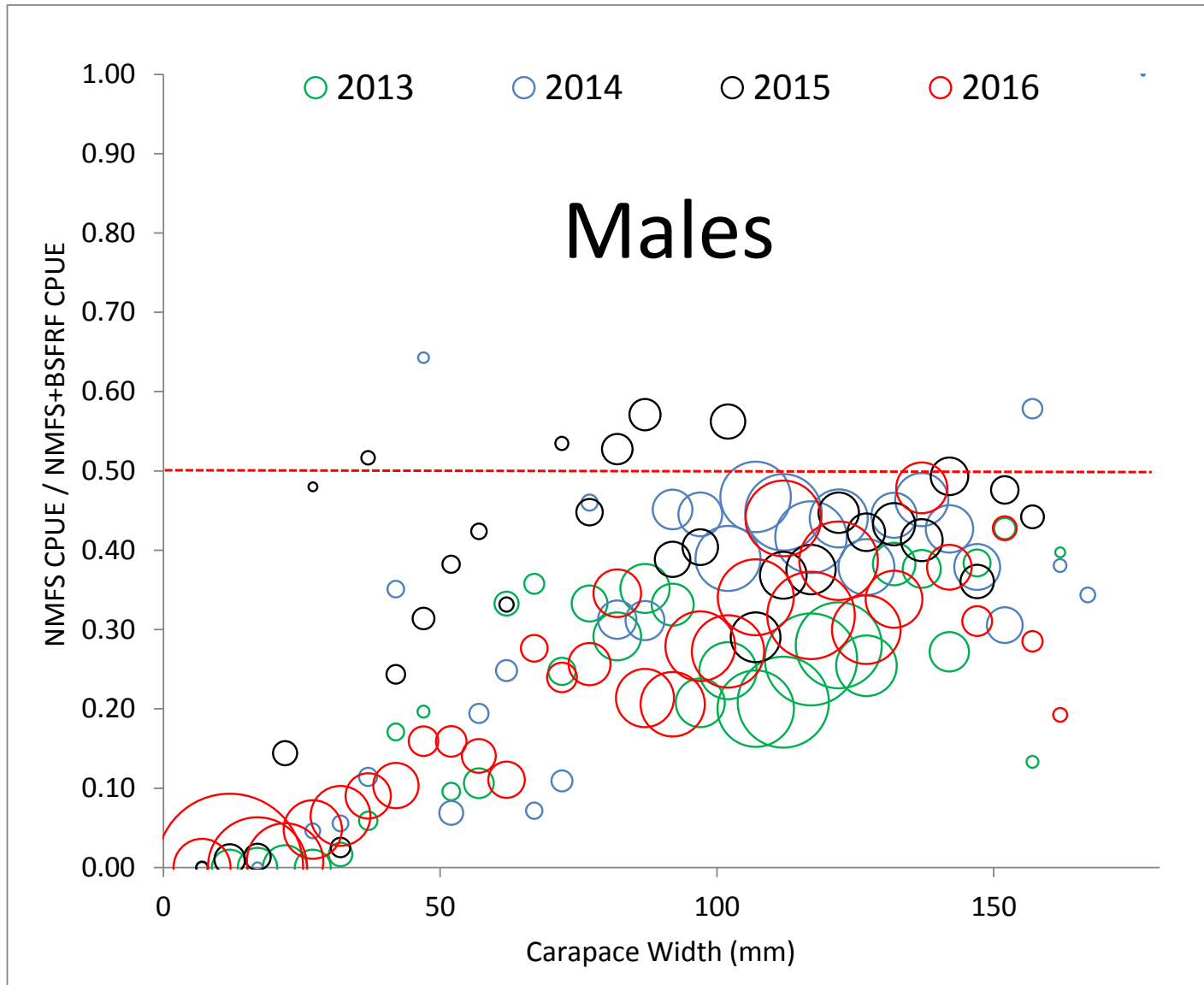
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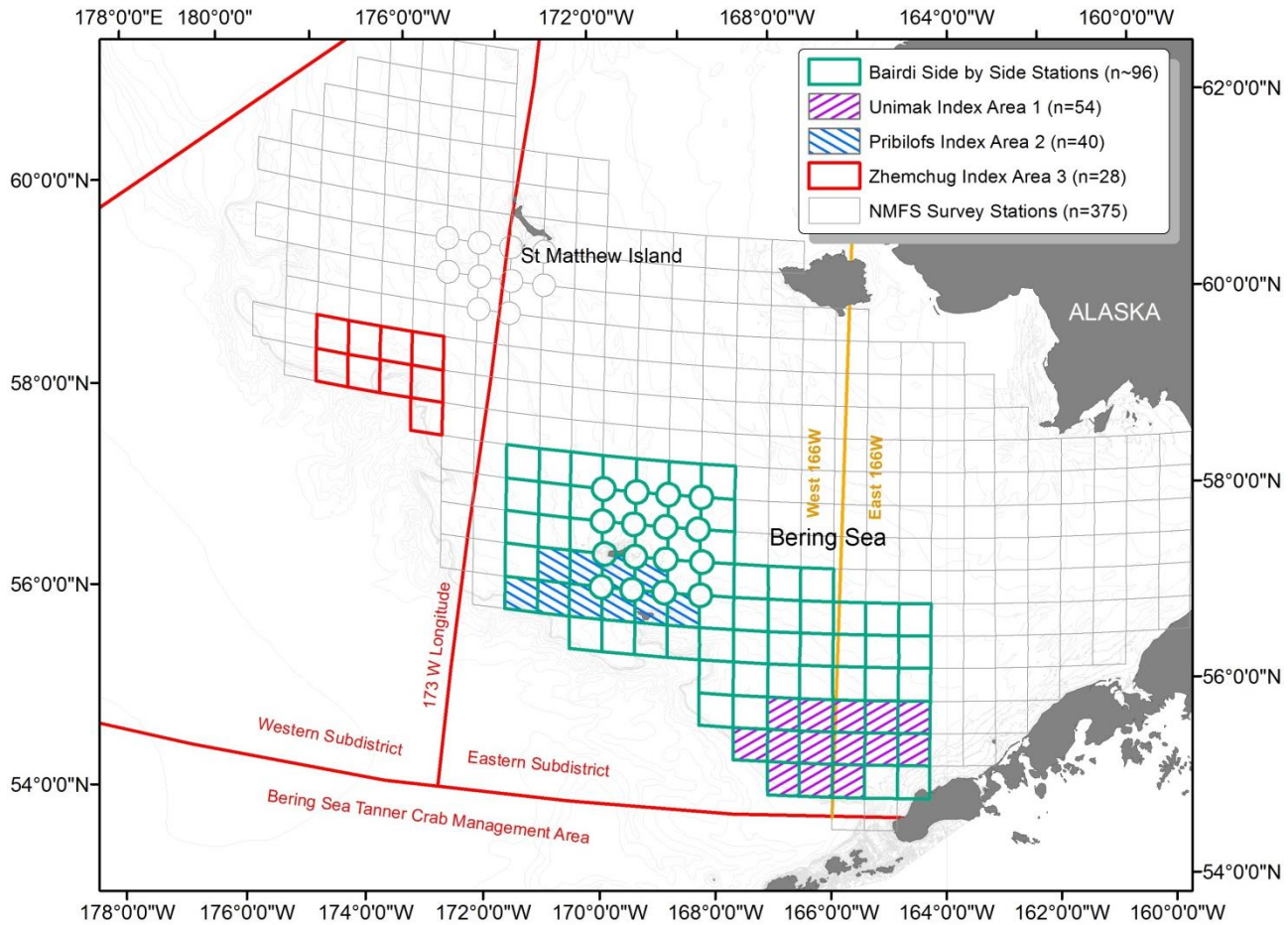
Bairdi Trawl Selectivity 2013-2016



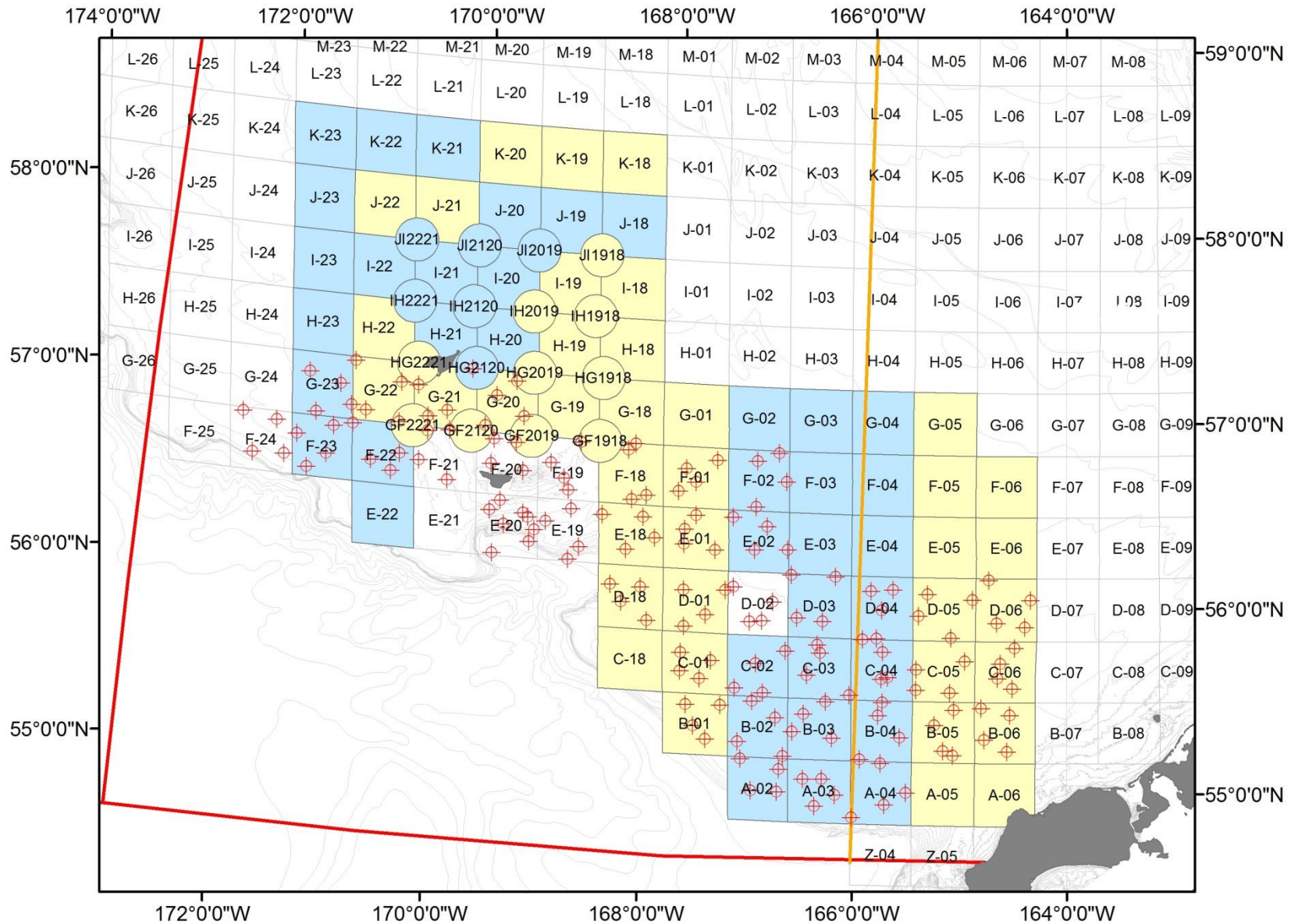
Bairdi Trawl Selectivity 2013-2016



Bairdi Projects – Planned



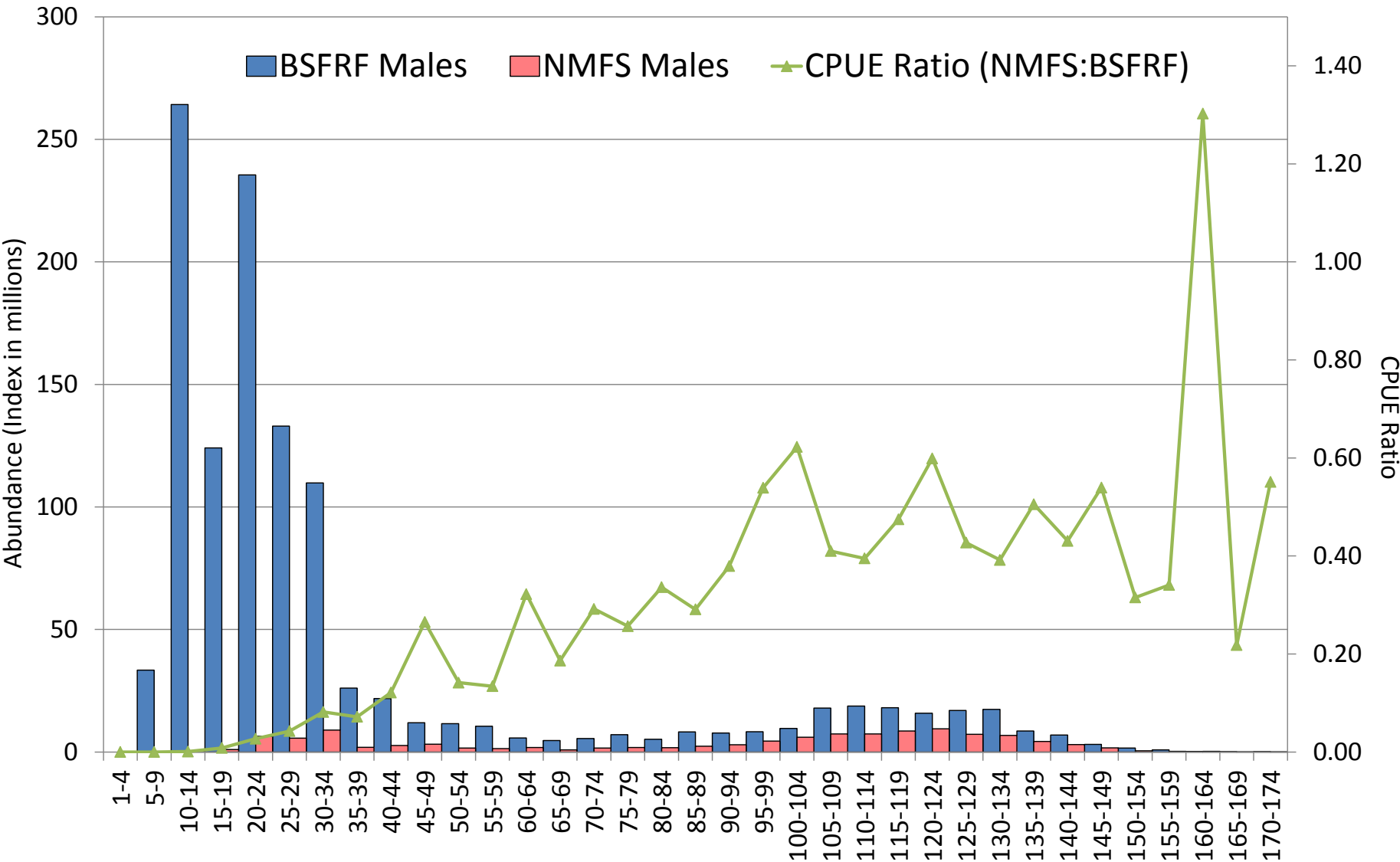
Bairdi Projects – Actual 2017



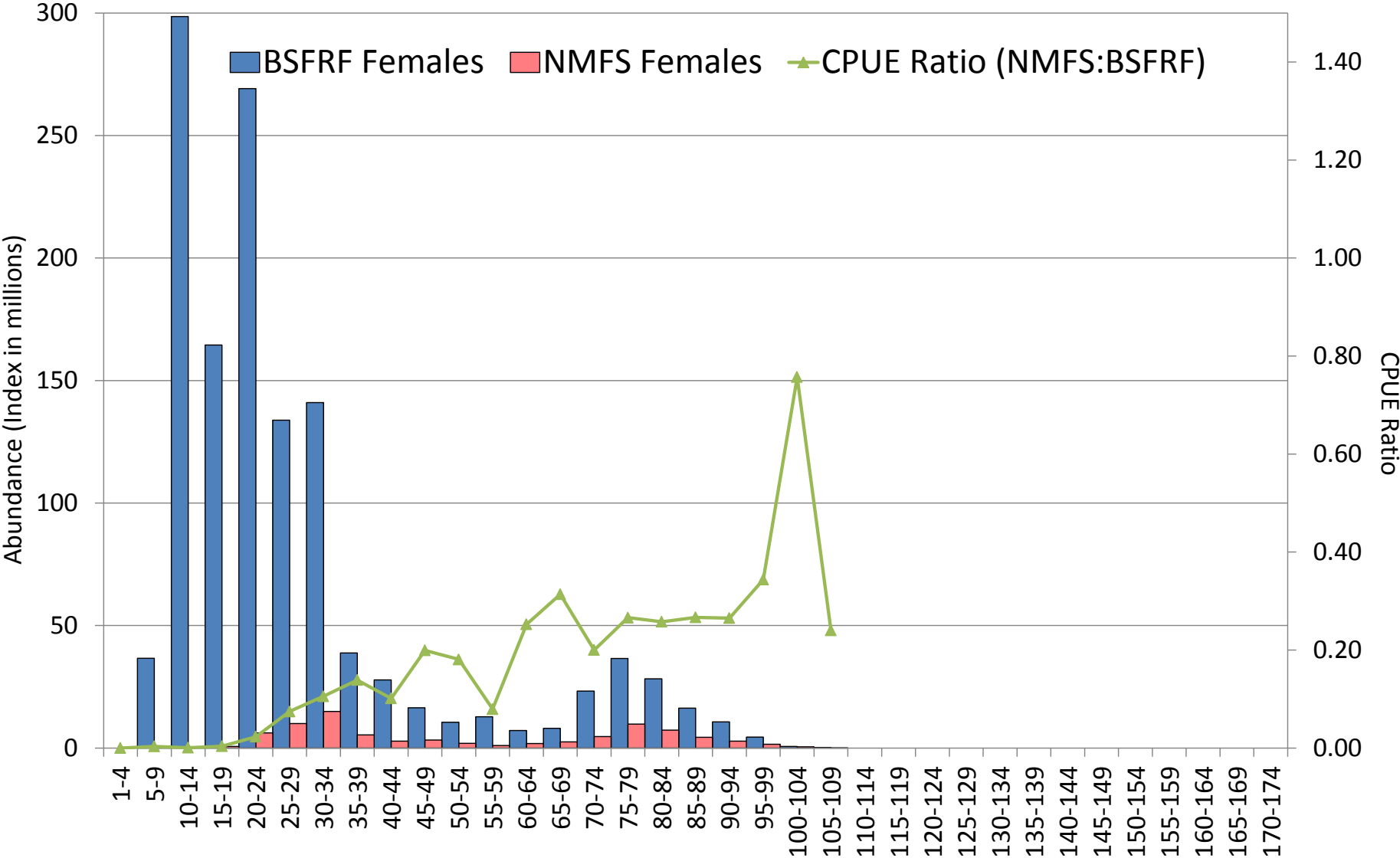
Bairdi Projects – Actual 2017

- NMFS Survey 209 + Bairdi Stations Total
- 95 side by side stations [53% of catch]
- From NMFS cpue data:
 - 132 stations account for 95% [72 sbs]
 - Top 20 stations acct. for 52% [11 sbs]
- In 95 sbs NMFS 12,600/BSFRF 22,400 catch
- In 95 sbs CPUE NMFS 921k/BSFRF 6,149k
- 156 BSFRF index area tows in 101 station

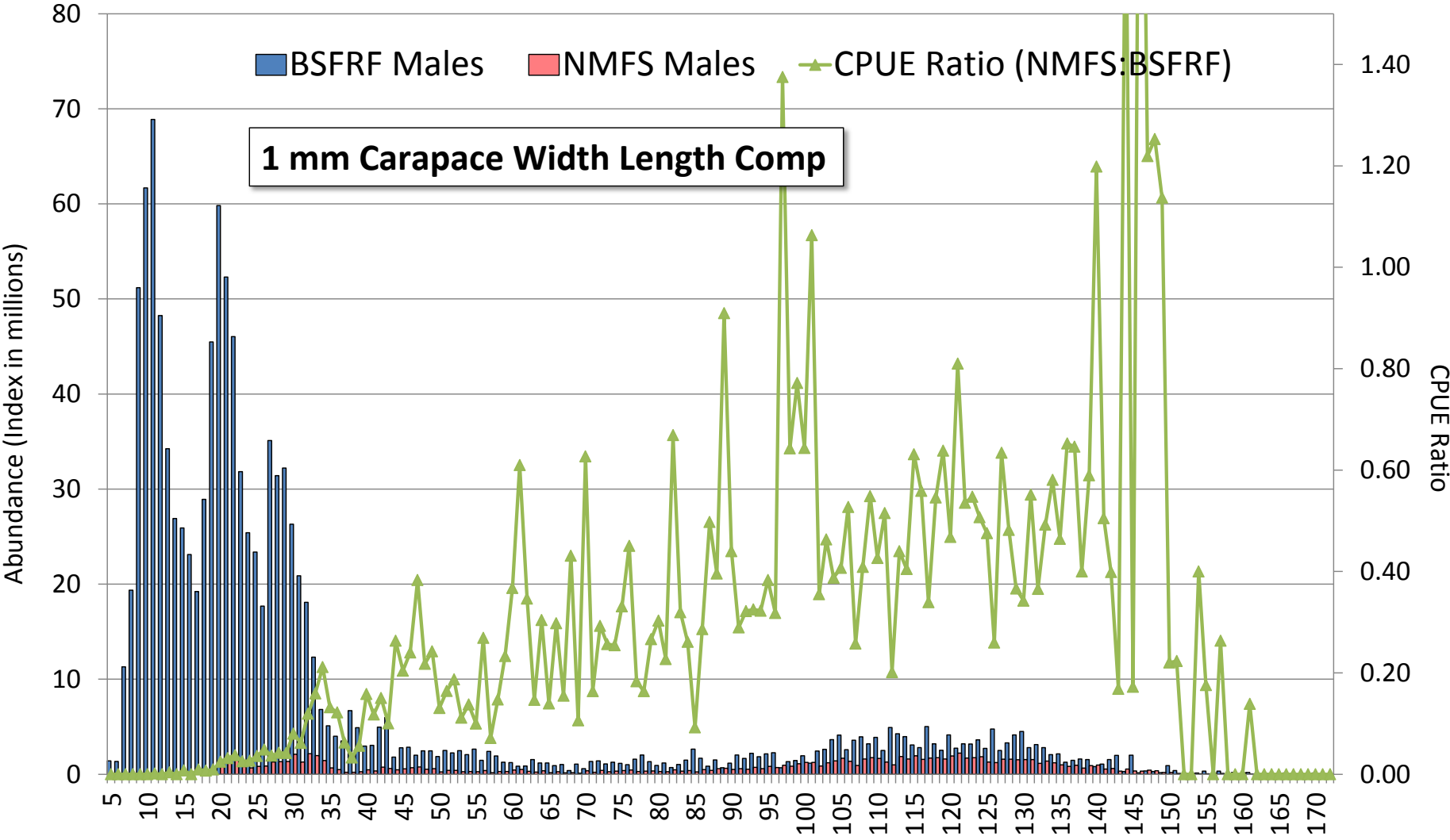
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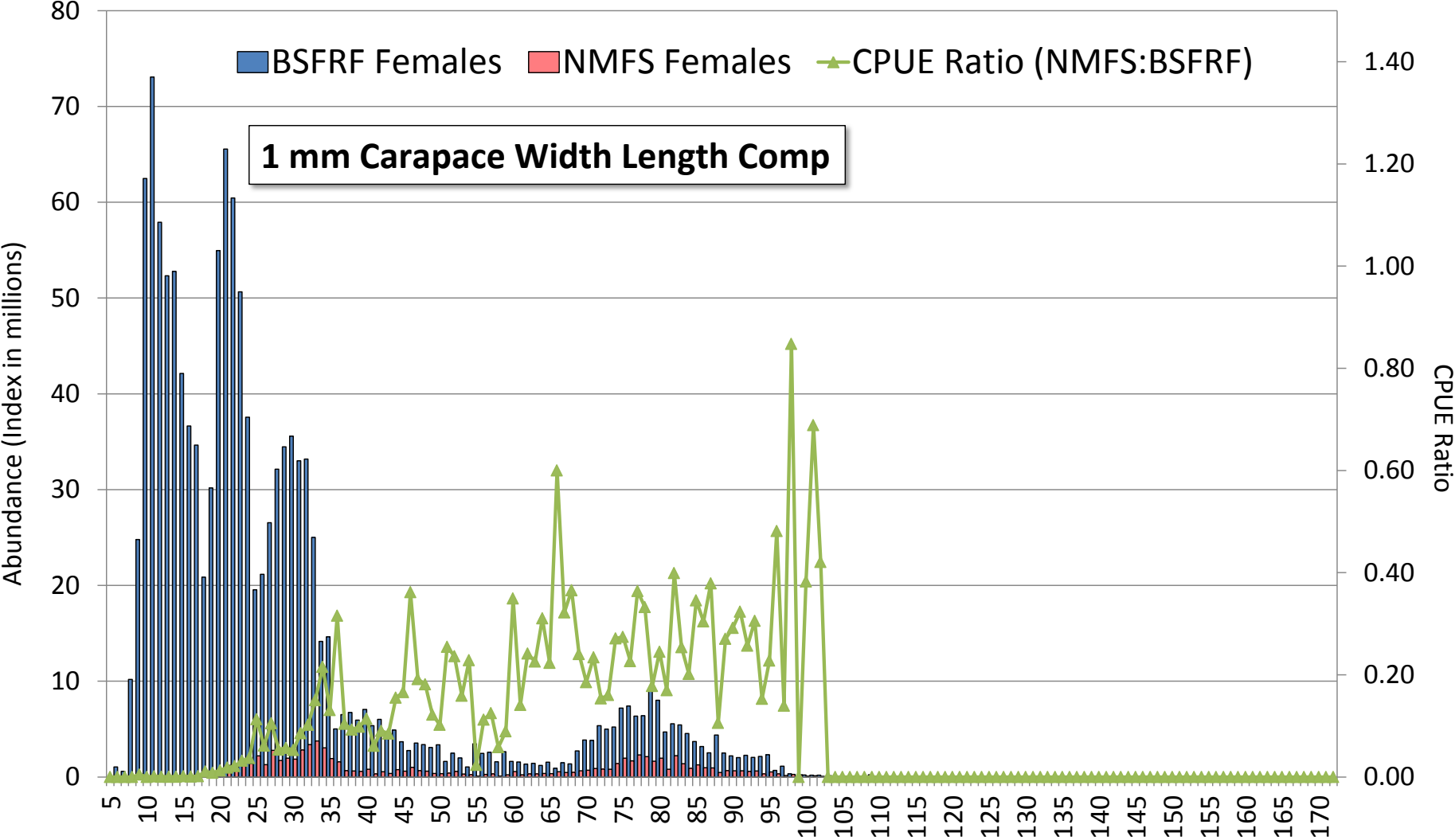
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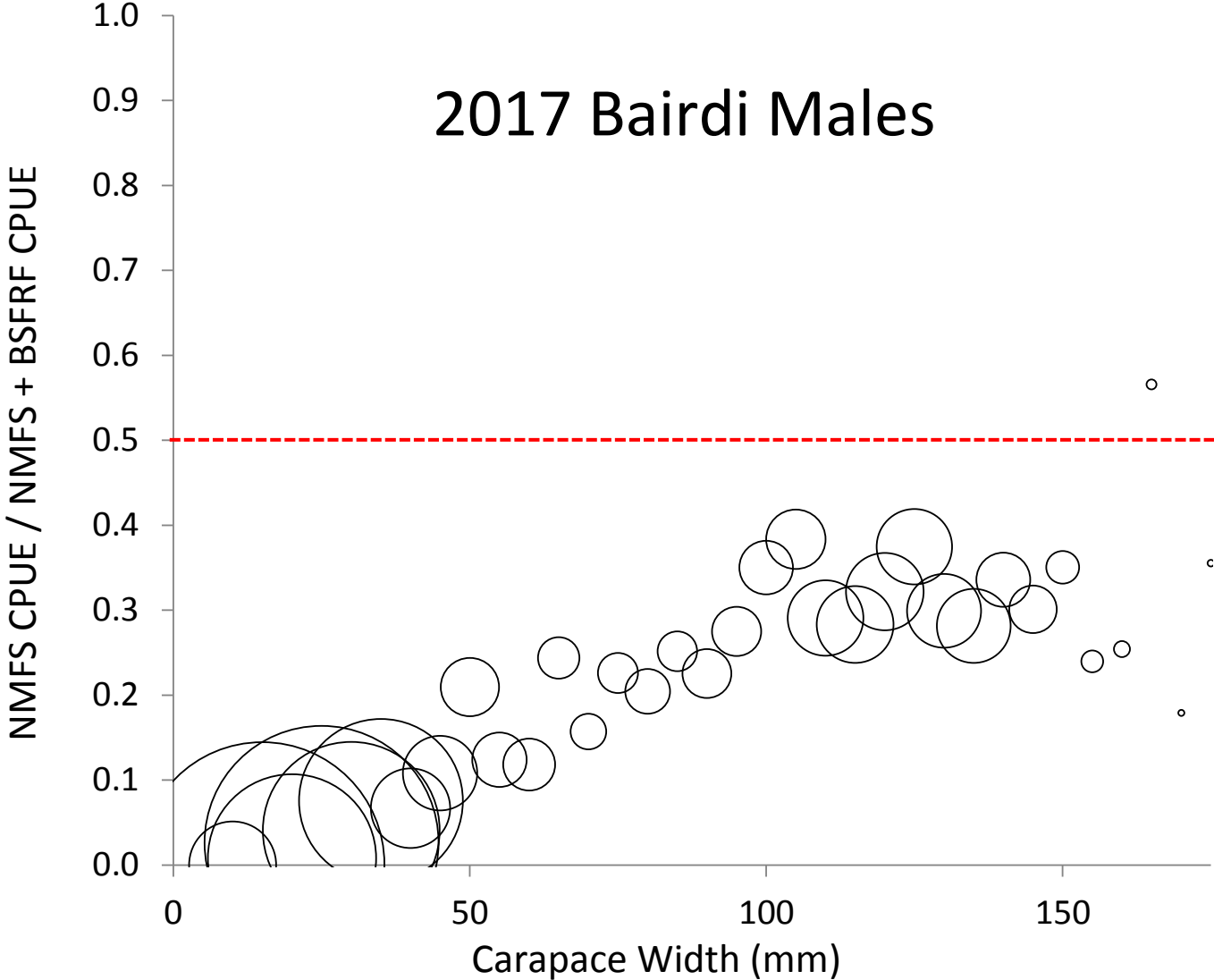
Bairdi Trawl Selectivity 2017 – Expanded Side by Side



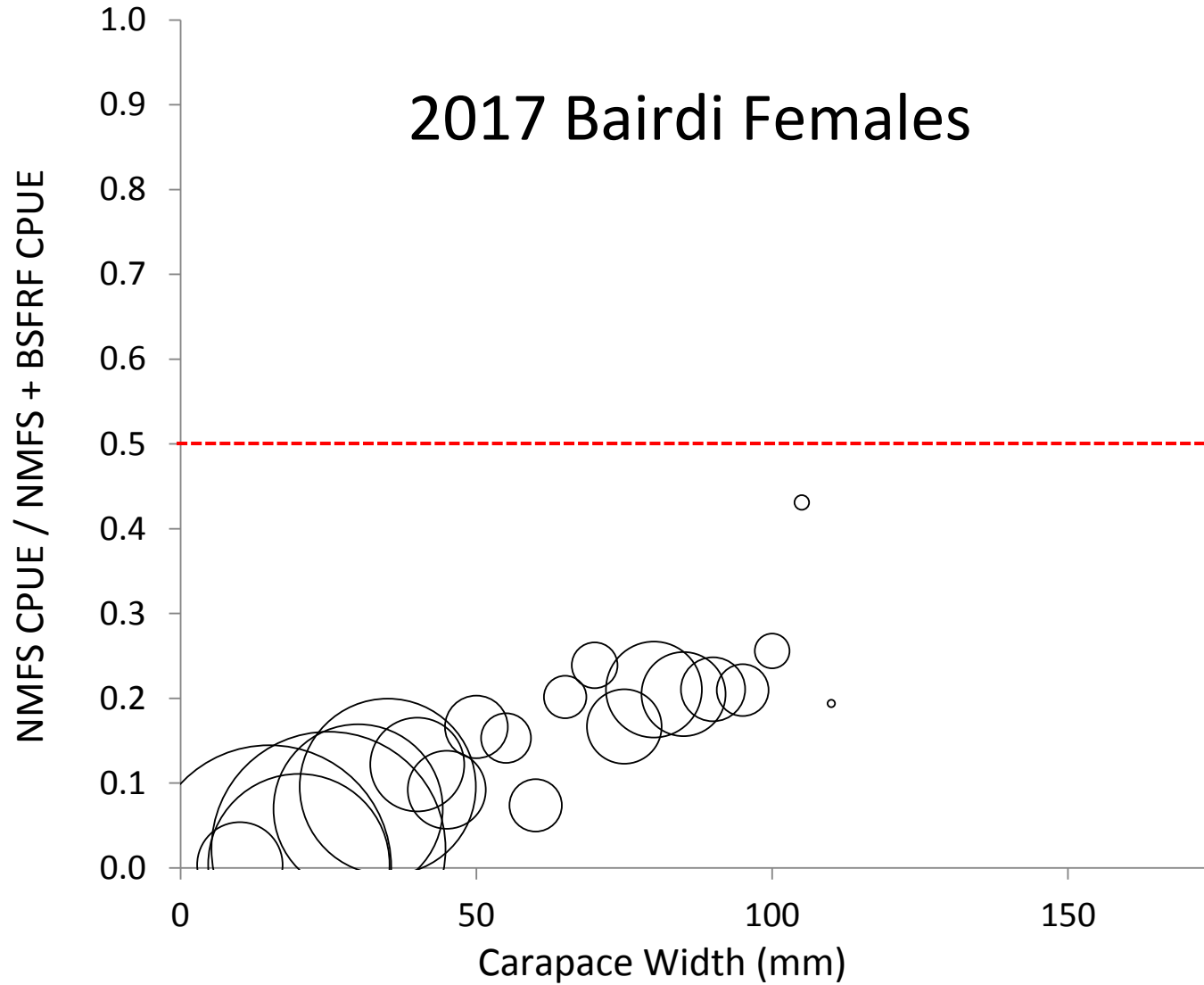
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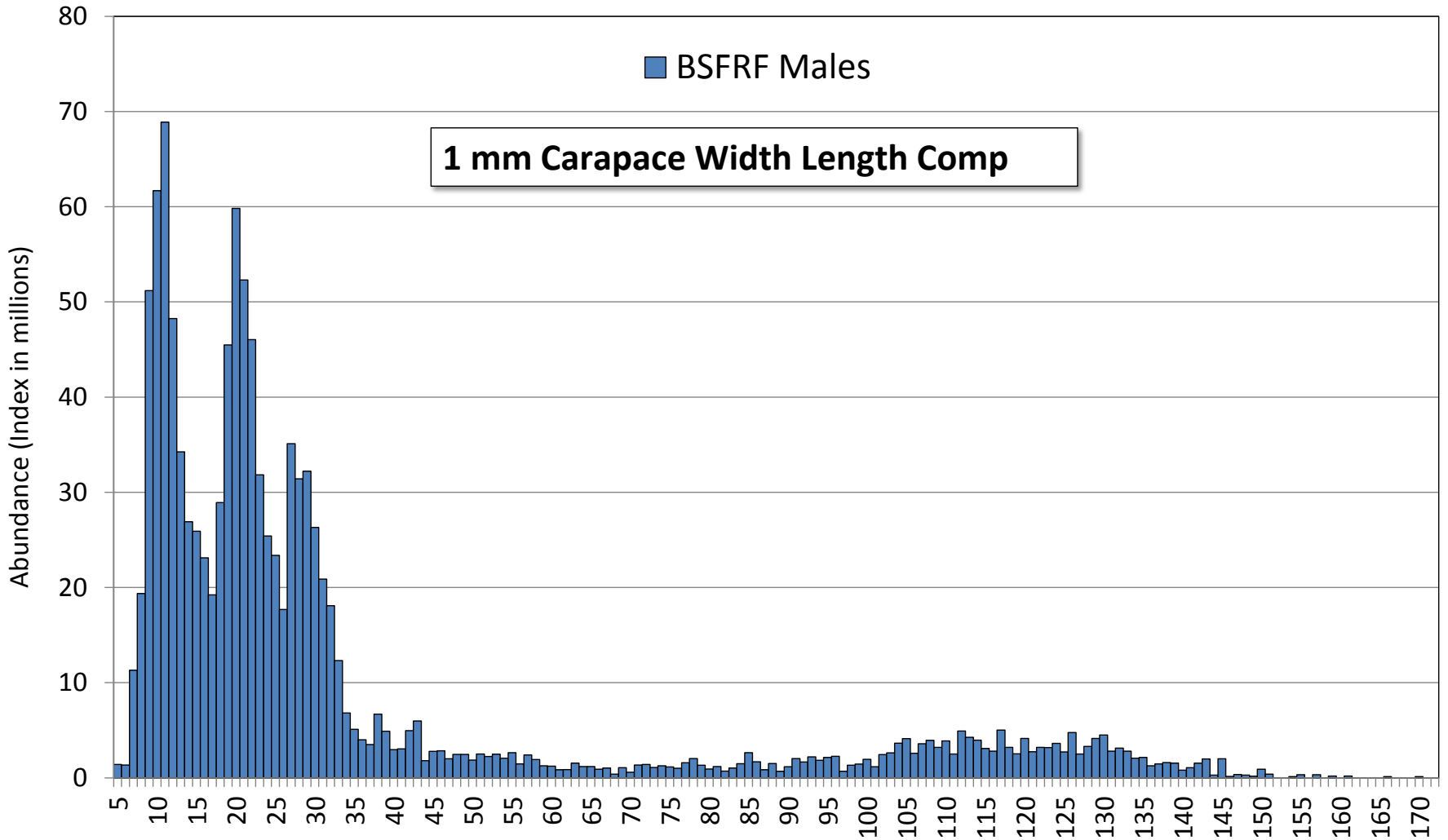
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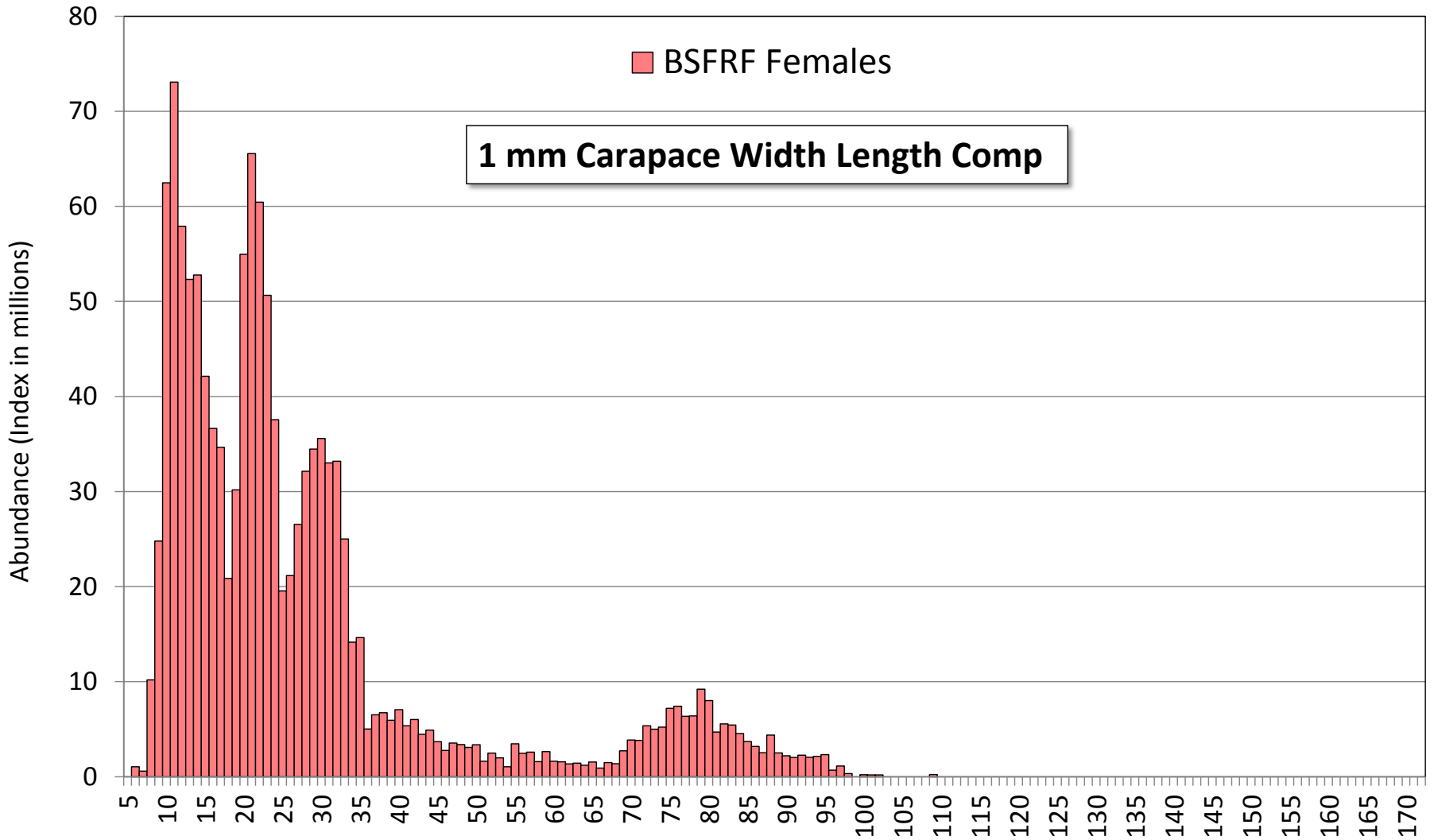
Bairdi Trawl Selectivity – Next Steps

- Incorporating data into model
- Choosing modeling methods
- Completing sampling - survey data from western stock areas, 2-year project
- Reviewing other information from current data

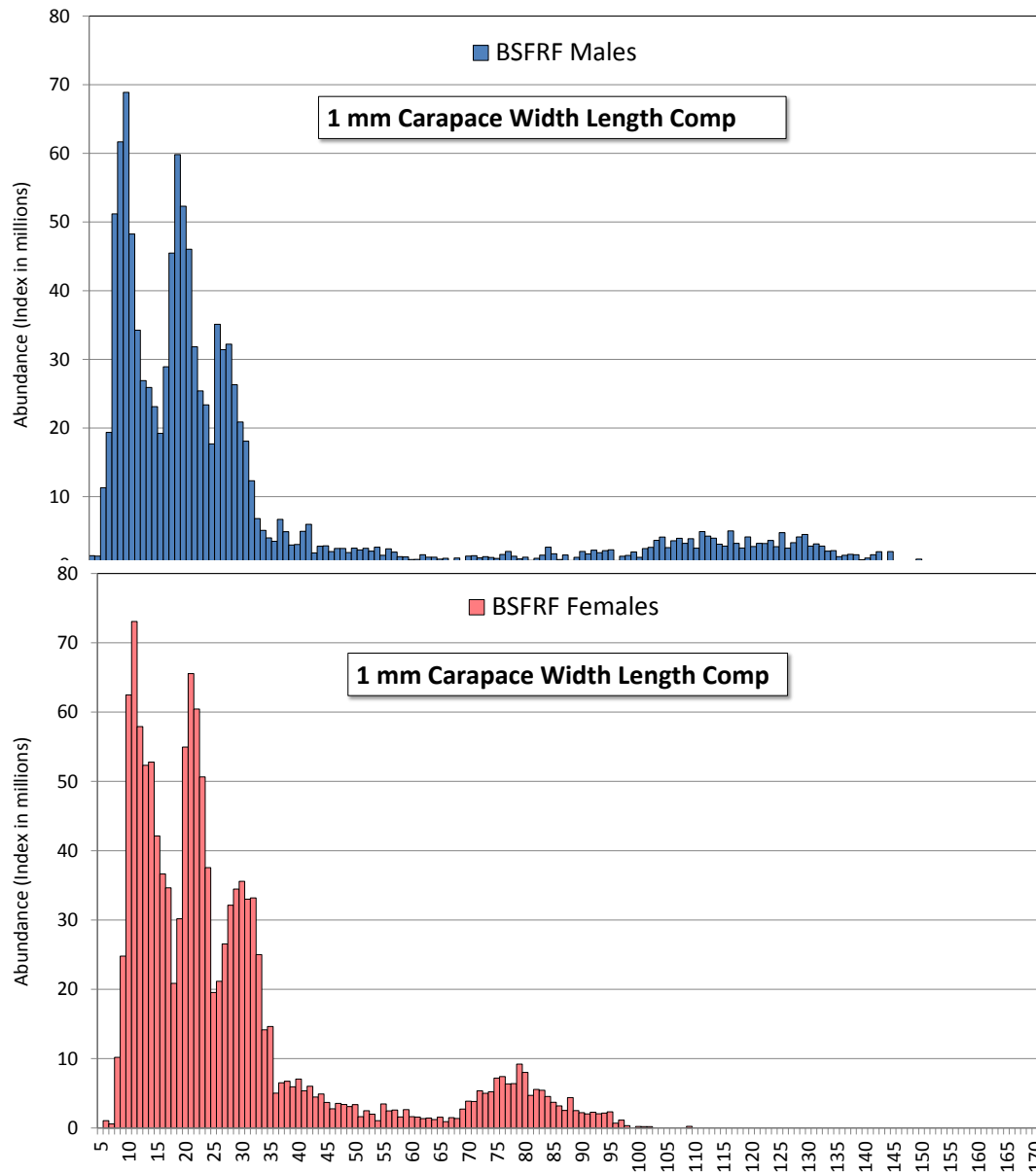
Bairdi Trawl Surveys 2017



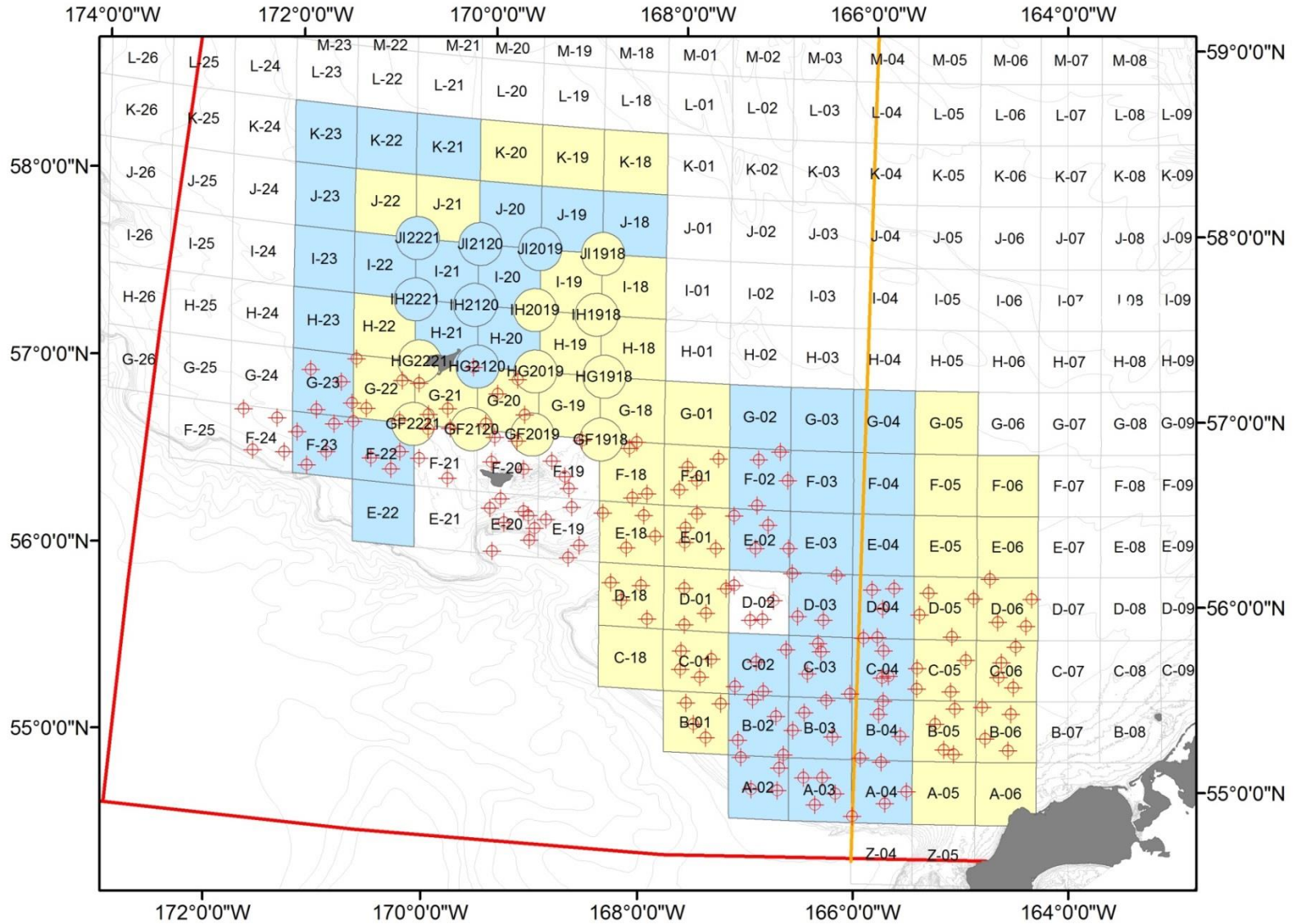
Bairdi Trawl Surveys 2017



Bairdi Trawl Surveys 2017



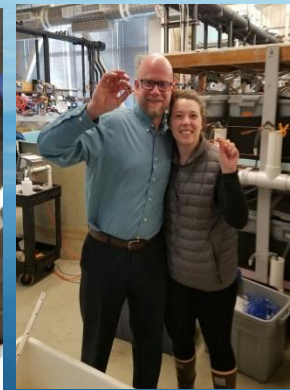
2018 Survey Plans



Ongoing Crab Growth Research, 2012-17



- BSFRF chartered F/V Sunset Bay for 10 day charter, April – (2012, '15, '16, '17)
- Live collection of Snow & Tanner crabmales and females with Nephrops trawl
- Pre-molt crabs retained for transport to Dutch Harbor for holding during molting
- Methods; crab onshore at Westward tanks, crab in water @ harbor, crab -> Kodiak
- Currently ongoing monitoring – about 150 cumulative growth points to date



- Warm water in Spring 2016 allowed for collection in area usually under ice
- Cold water in Spring 2017 kept collection charter in search mode in/out of ice

Collaborative Bairdi Workshop

- BSFRF Hosted in Juneau, December 17-18, 2018
- About 30 attendees, NMFS, ADFG, UAF, DFO, et al.
- Collaborative review - bairdi biology, stock assessment & harvest strategy
- Focused on issues of female biomass control rule in the harvest strategy
- Productive 2-day sessions of brief presentations, longer discussions
- Outcomes suggested some options forward with lesser primary focus on female biomass, and the consideration of a suite of indicators
- Recommendations focused on longer term review, revision to current strategy that fits with ADFG/BOF timeline, including an MSE approach
- Highlighted the importance of stakeholder involvement to provide input about what sort of harvest strategy the industry desires
- Continue relationship building between managers, BSFRF & industry stakeholders
- Near-term future follow up (other workshops) on bairdi and/or other stocks



Management Strategy Evaluation—Tanner Crab (*Chionoecetes bairdi*)

Madison Shipley

Proposed Research

May CPT 2018

Tagging R&D and Tagging Project Support



Bob Foy/NMFS
Acoustic Tags
Drone Receivers

- Nearshore RKC
- RKCSA adjacent
- Tanner crab/Pribs
- Others



Ben Daly/ADFG
Archival Tags
Deploy & Recover

- Tanner crab/Pribs

Questions