




East Coast Fisheries-Independent Monitoring

Overview of Red Snapper Research (2011 – 2017)

September 2017

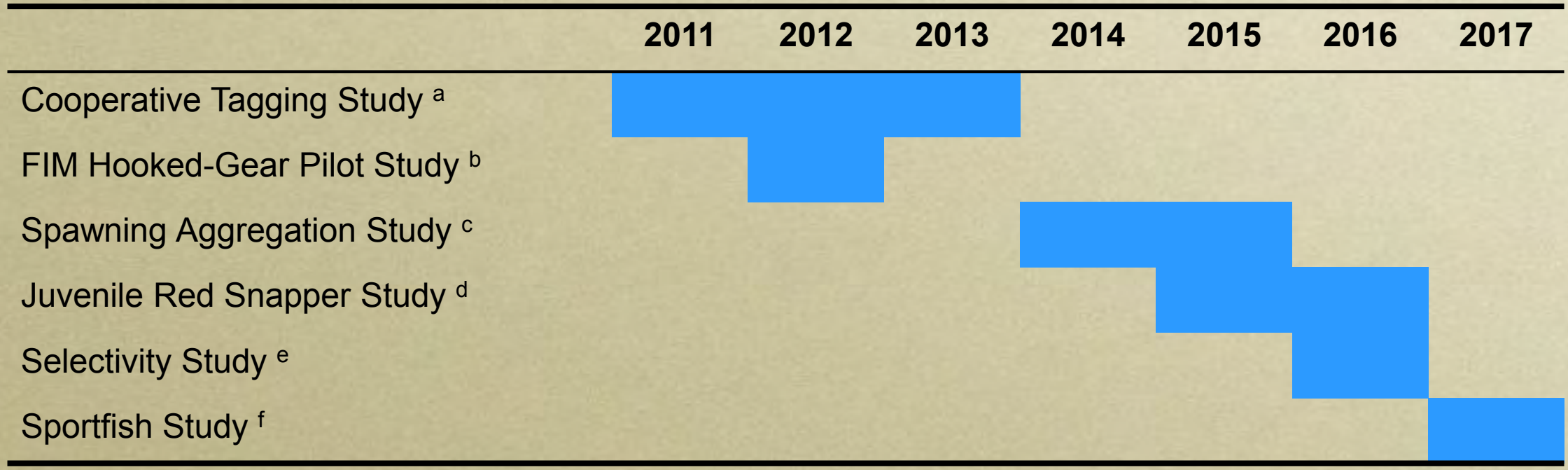
Florida Fish and Wildlife Conservation Commission

Fish and Wildlife Research Institute

Introduction

- FWC-FWRI has been conducting reef fish sampling projects off NE Florida (South Atlantic Red Snapper's center of abundance) since 2011
- Data collected over the last 6 years on Red Snapper abundance and age composition in this area could help supplement information used to evaluate condition of the stock and progress in rebuilding
- Presentation summarizes data collected by different projects focused on different topics:
  - Results need to be interpreted carefully
  - Potentially more valuable from a qualitative perspective

Timeline - Projects



[a] Unstandardized methods, unstandardized site selection, opportunistically January - December

[b] Standardized hooked-gear methods, monthly stratified-random sampling (SRS) sampling design, April - October

[c] Standardized and unstandardized hooked-gear methods, monthly SRS sampling design, targeted spawning locations and peak spawning months for Red Snapper, Gag, and Scamp, February - July

[d] Standardized trawl and trap methods, yearly SRS sampling design, August - November

[e] Standardized HNL, trap, camera methods, and unstandardized HNL methods, yearly SRS sampling design, April – August

[f] Standardized HNL, yearly SRS sampling design, May – July

Timeline – Sampling Gear

	2011	2012	2013	2014	2015	2016	2017
Unstandardized Captain's Choice	a	a	a	b , c	c	d	
Vertical Longline (12-Hook)							
Bottom Longline (12-Hook)							
Repetitive Timed-Drop (RTD; Standardized Active Fishing Methods)							
Groundfish Trawl							
Small-mesh Z Trap							
Large-mesh Chevron Trap							
Stereo Camera							
GoPro Camera Array							

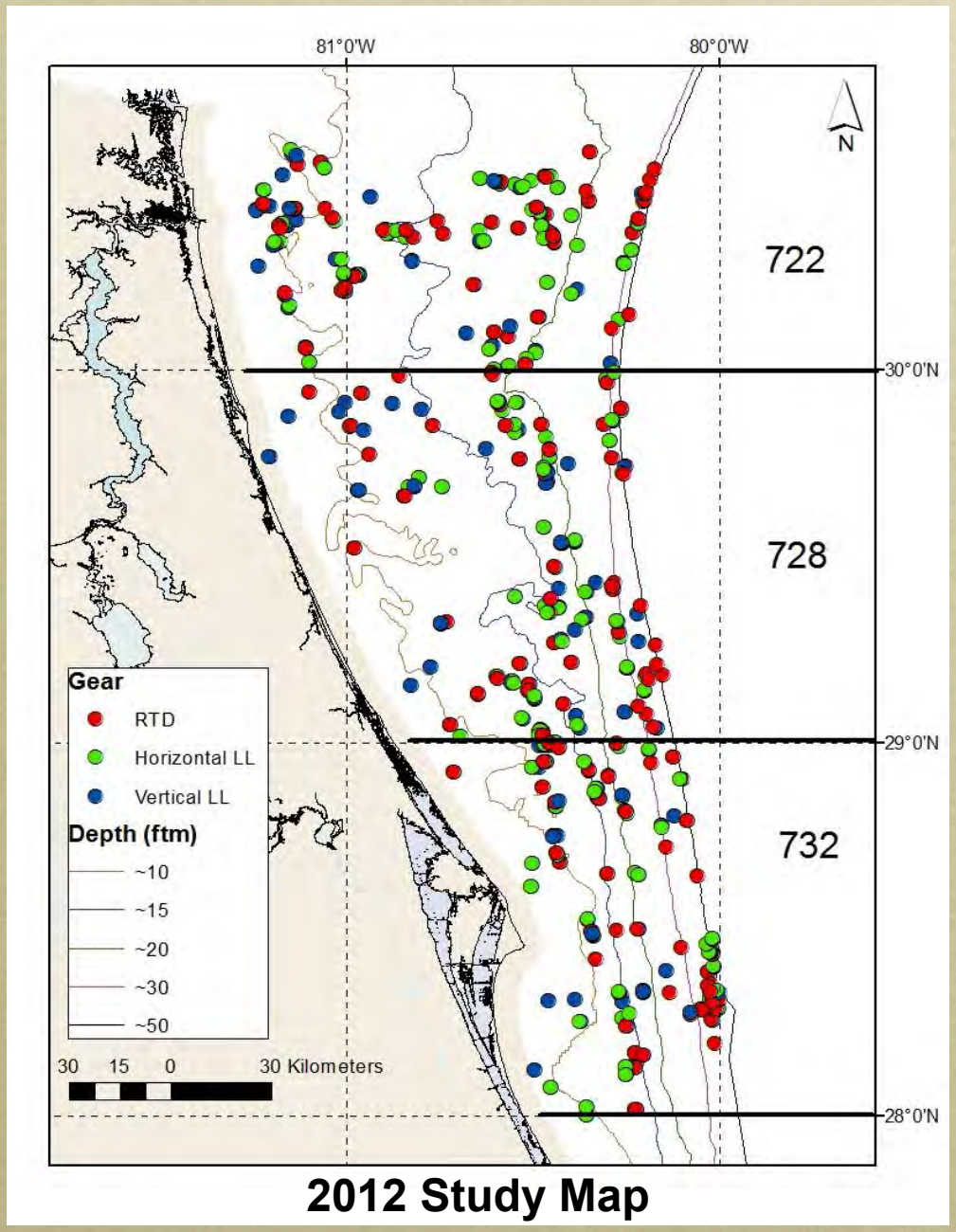
[a] Objective to capture and tag as many Red Snapper as possible

[b] Objective to capture spawning Red Snapper not sampled by RTD

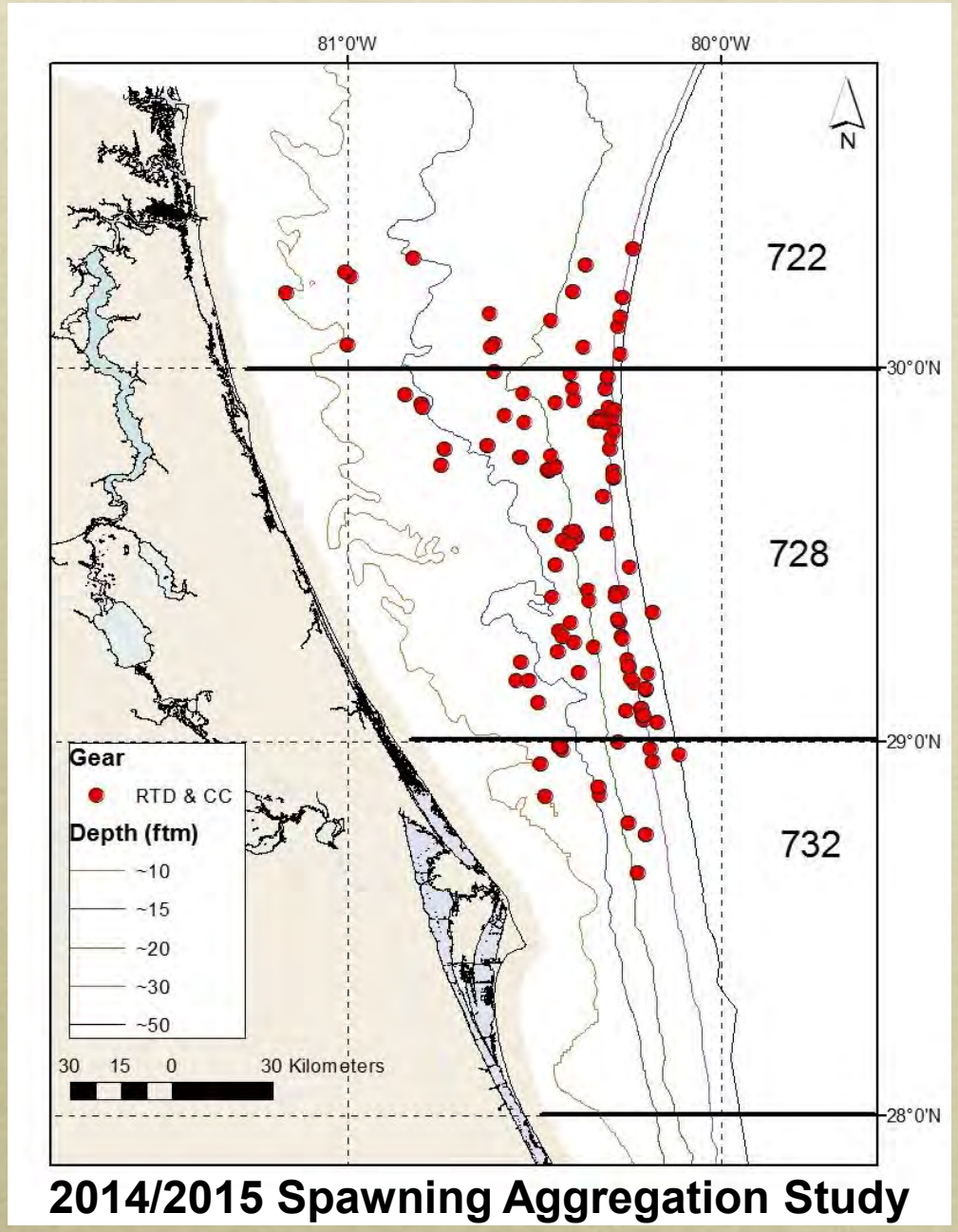
[c] Objective to capture spawning grouper not sampled by RTD

[d] Objective to compare RTD to unstandardized Captain's Choice HNL

Project Sample Sites

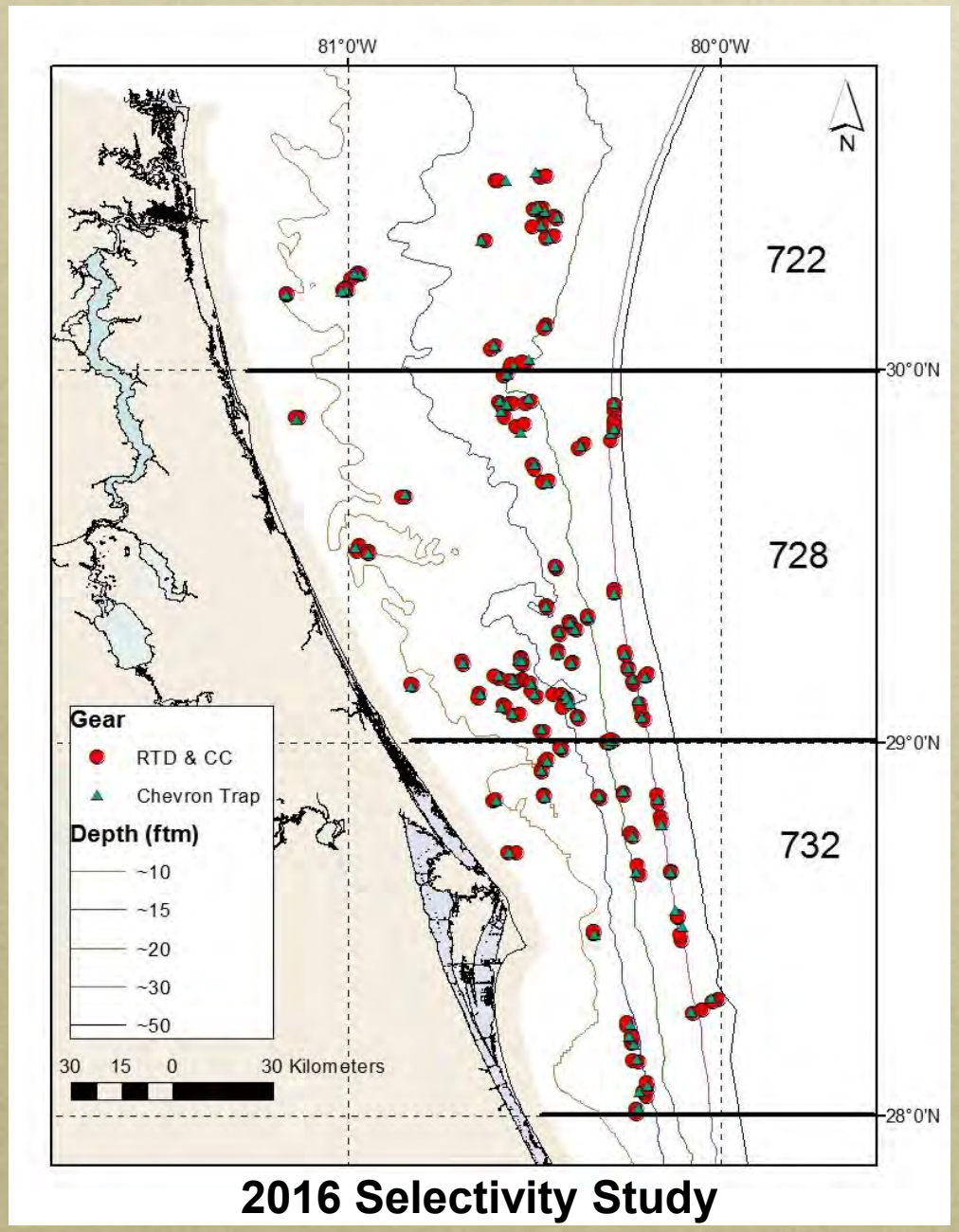


2012 Study Map

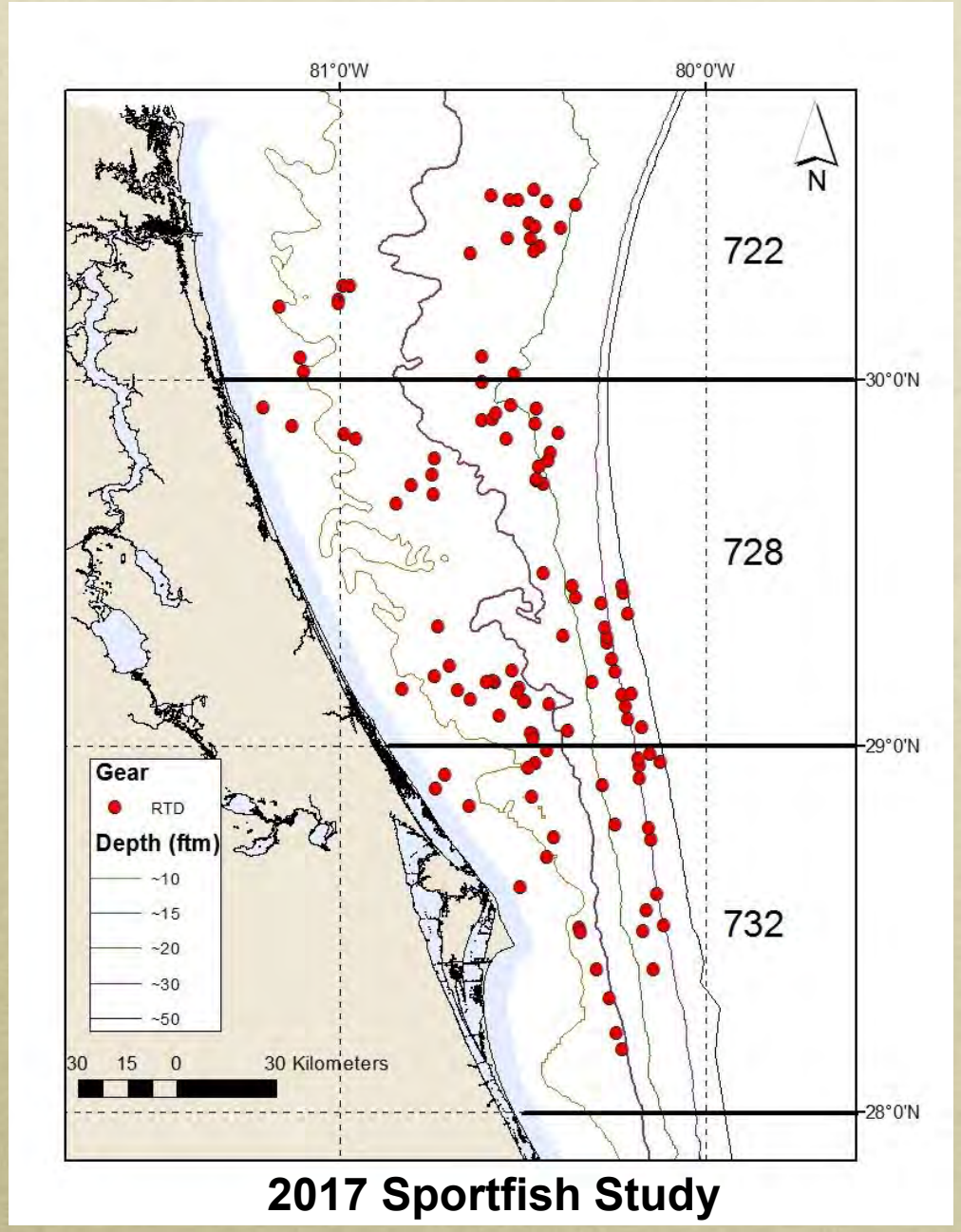


2014/2015 Spawning Aggregation Study

Project Sample Sites

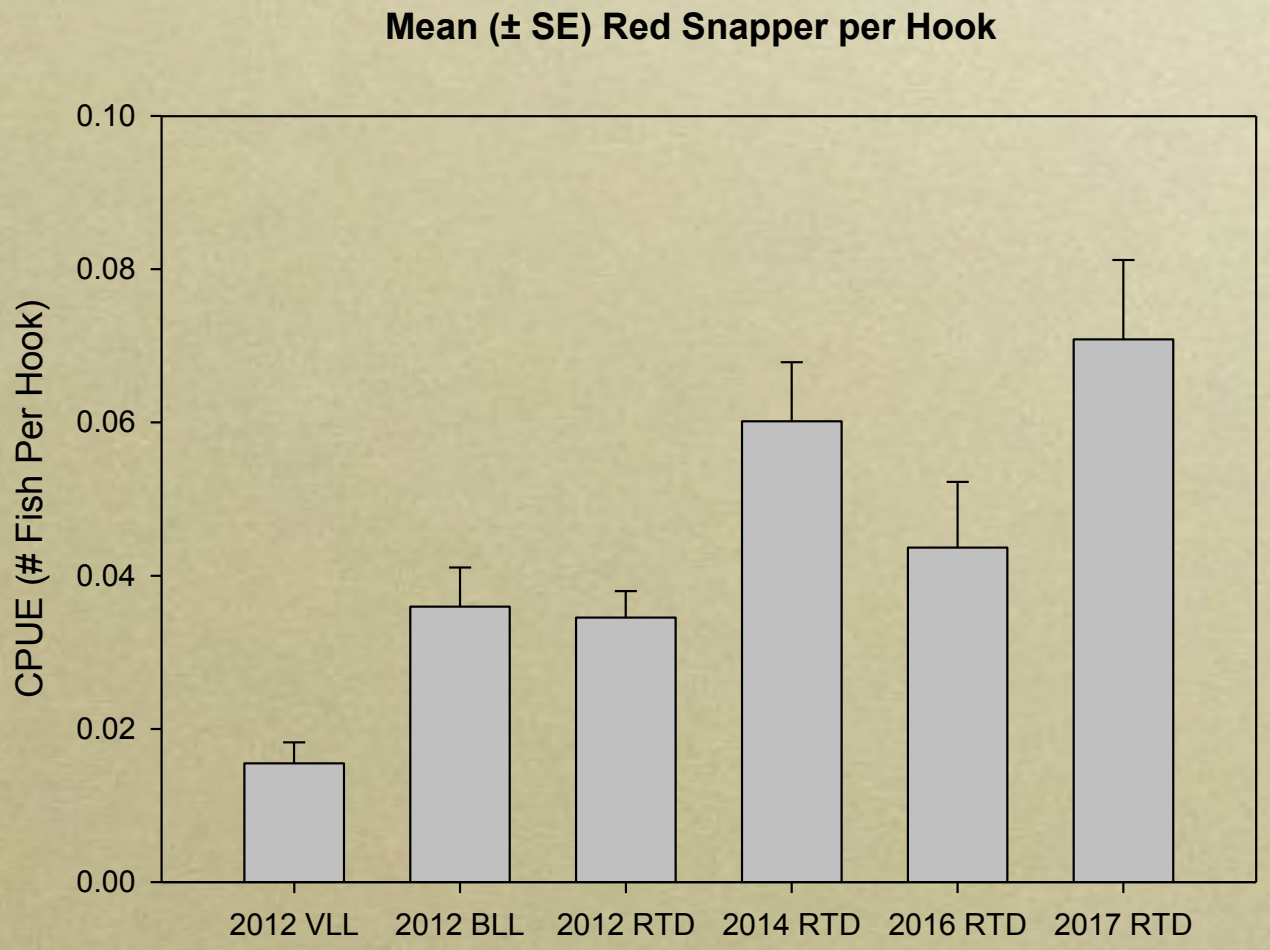


2016 Selectivity Study



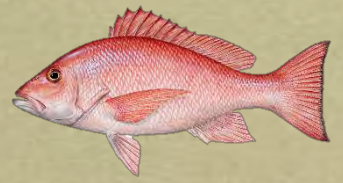
2017 Sportfish Study

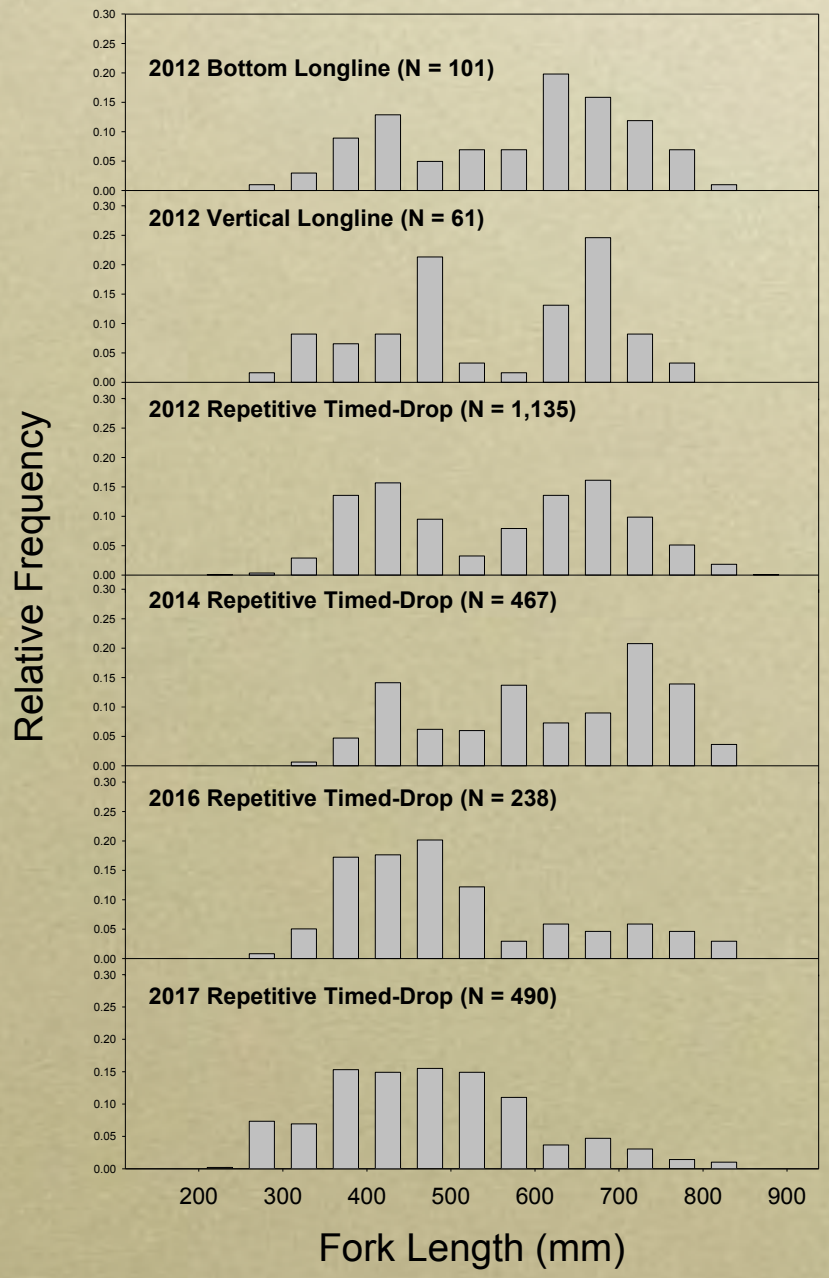
Standardized Hook-Gears – CPUE Comparison

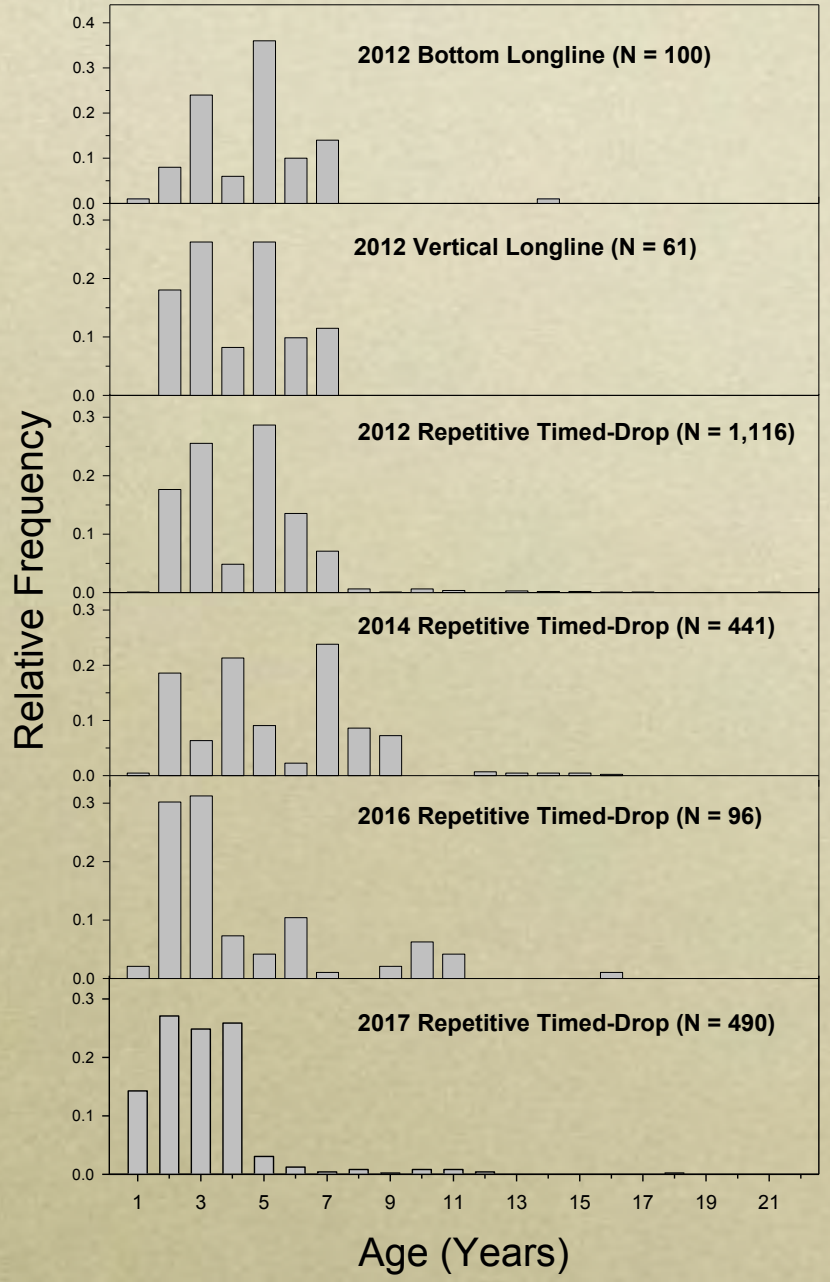


VLL = Vertical Longline
BLL = Bottom Longline
RTD = Repetitive Timed-Drop

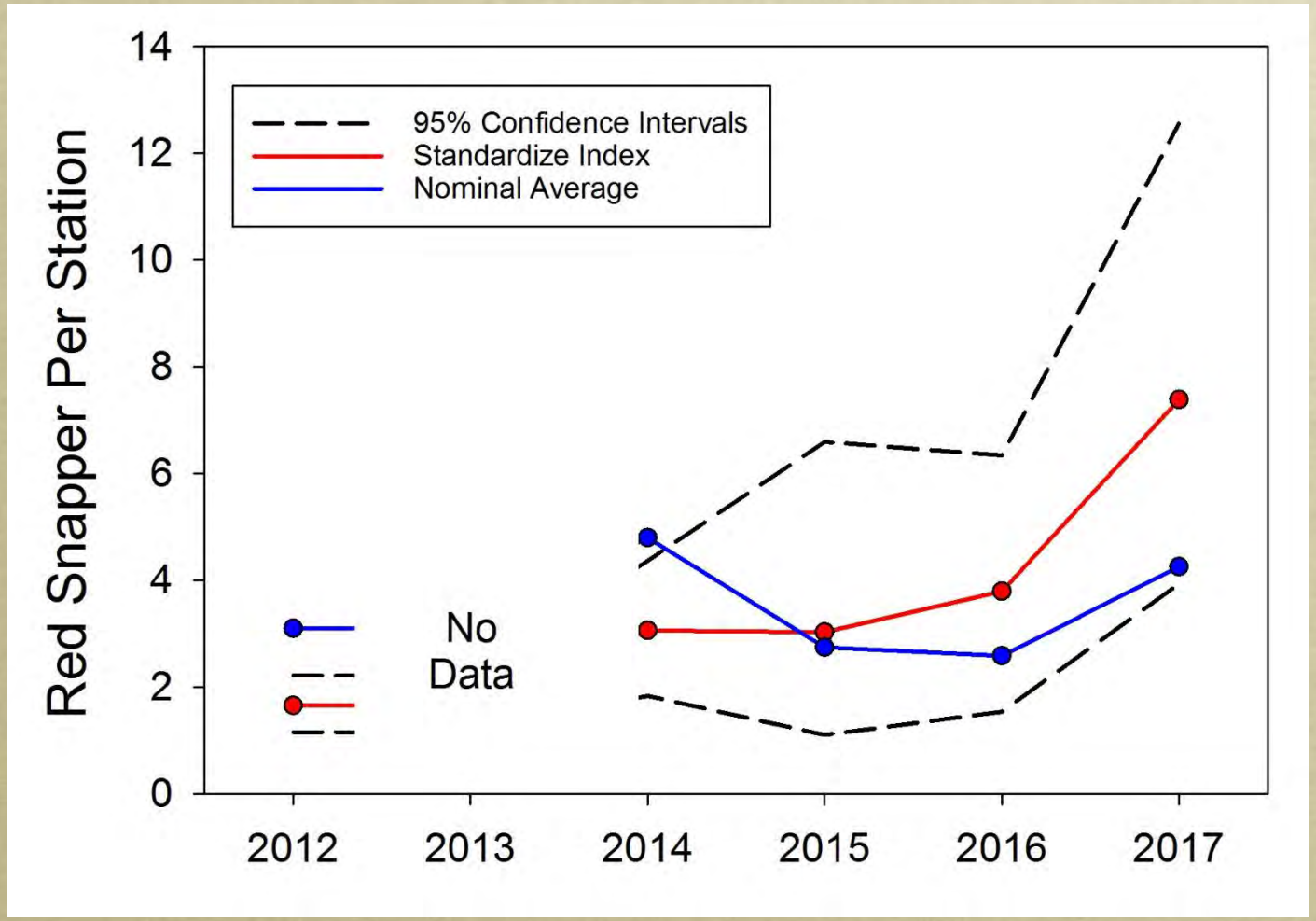
Standardized Hook-Gears – Size/Age Comparison



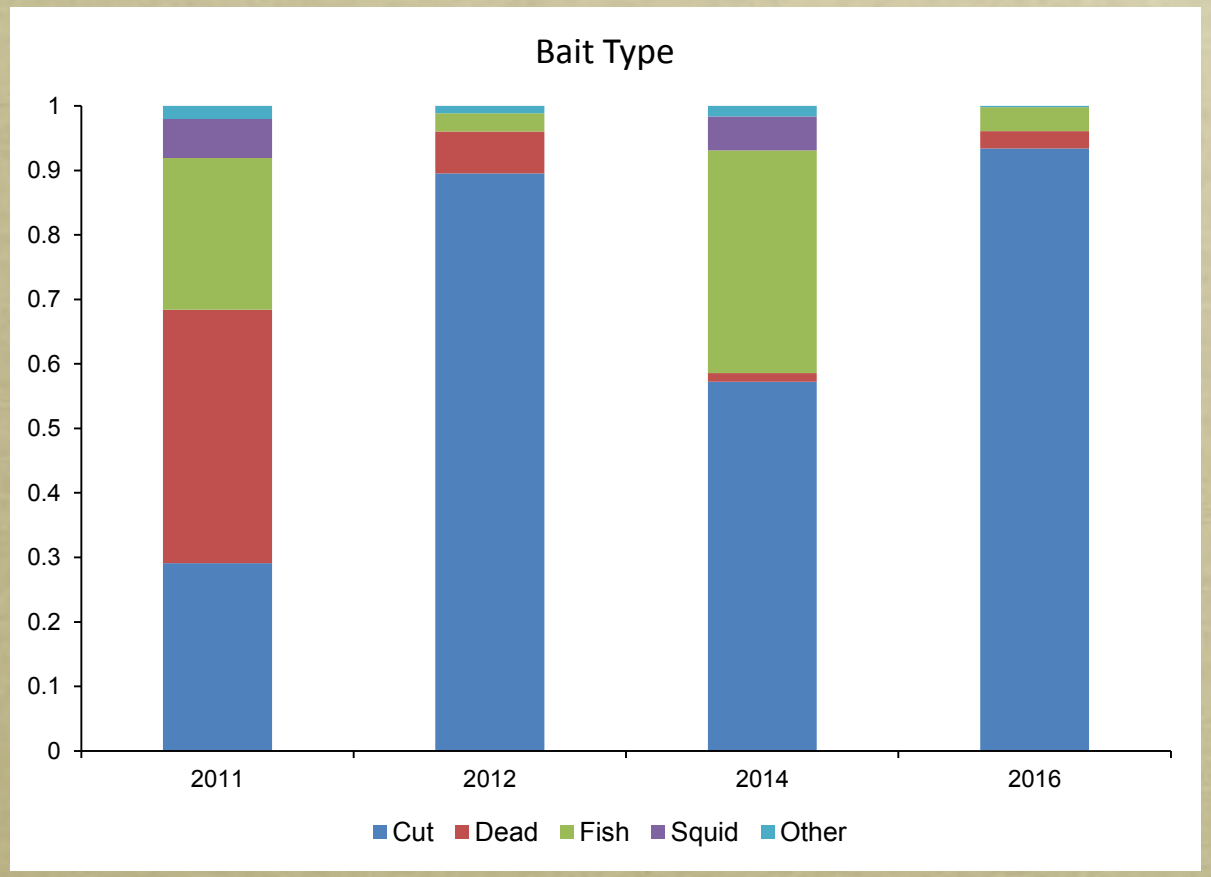


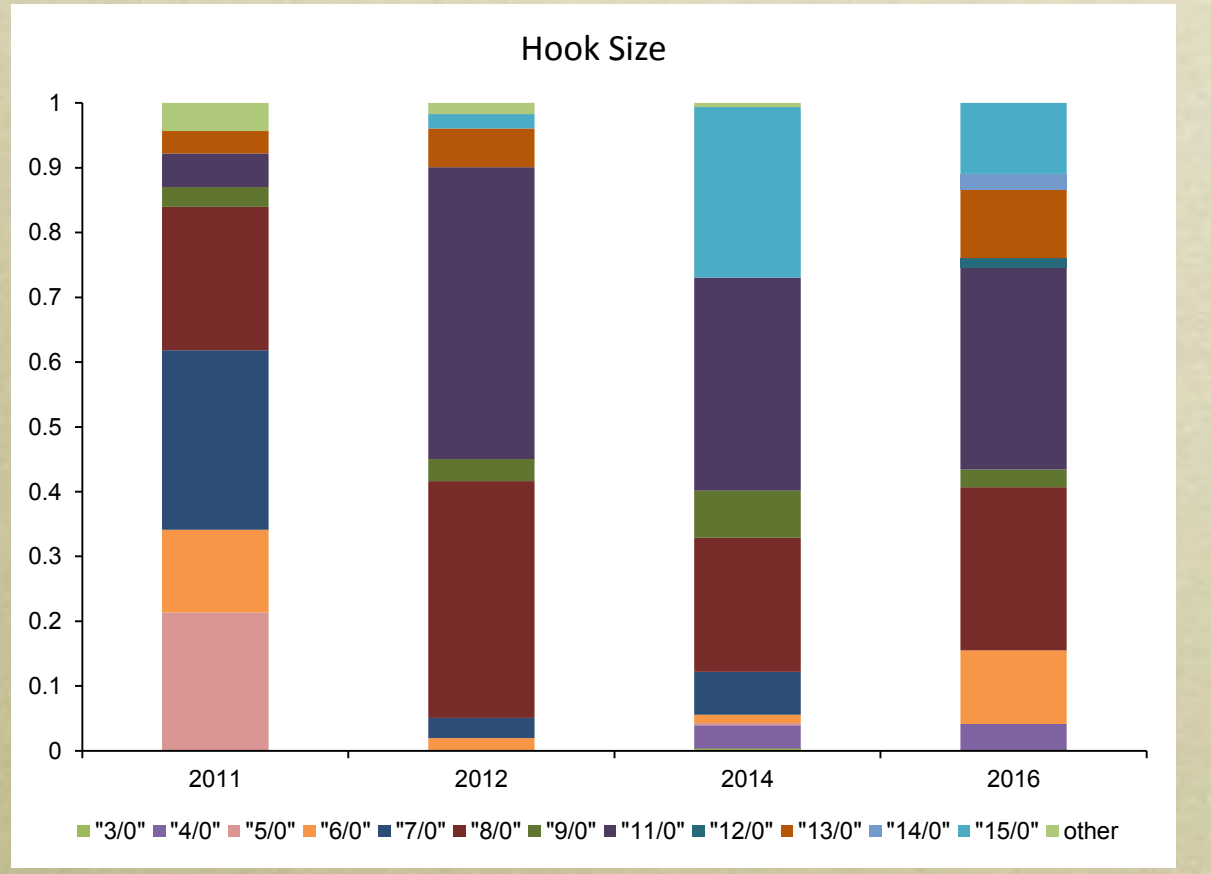


Index of Abundance – RTD Sampling



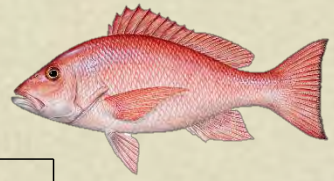
Index of Abundance – Captains Choice Sampling Variability

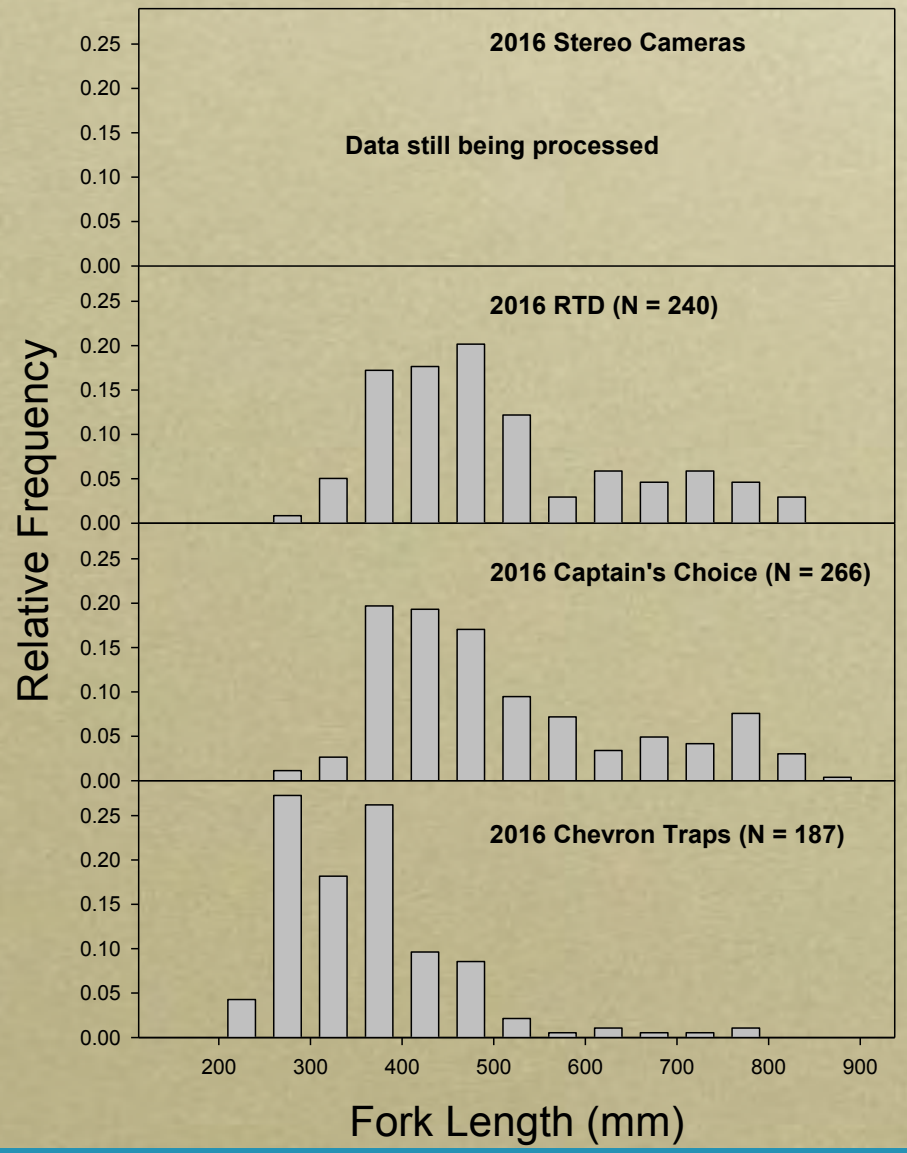


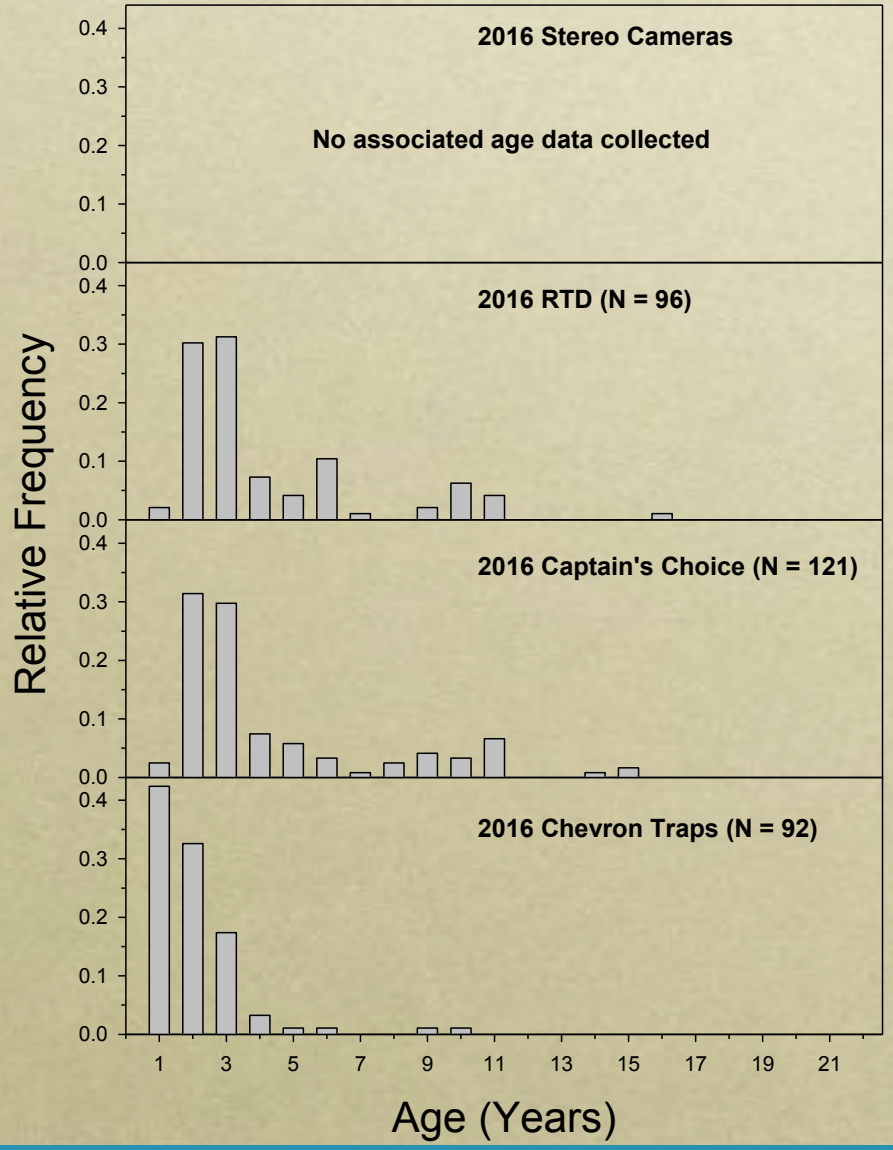


Due to extremely high interannual variability in sampling methods, we were unable to construct an appropriate index for Captain's Choice data

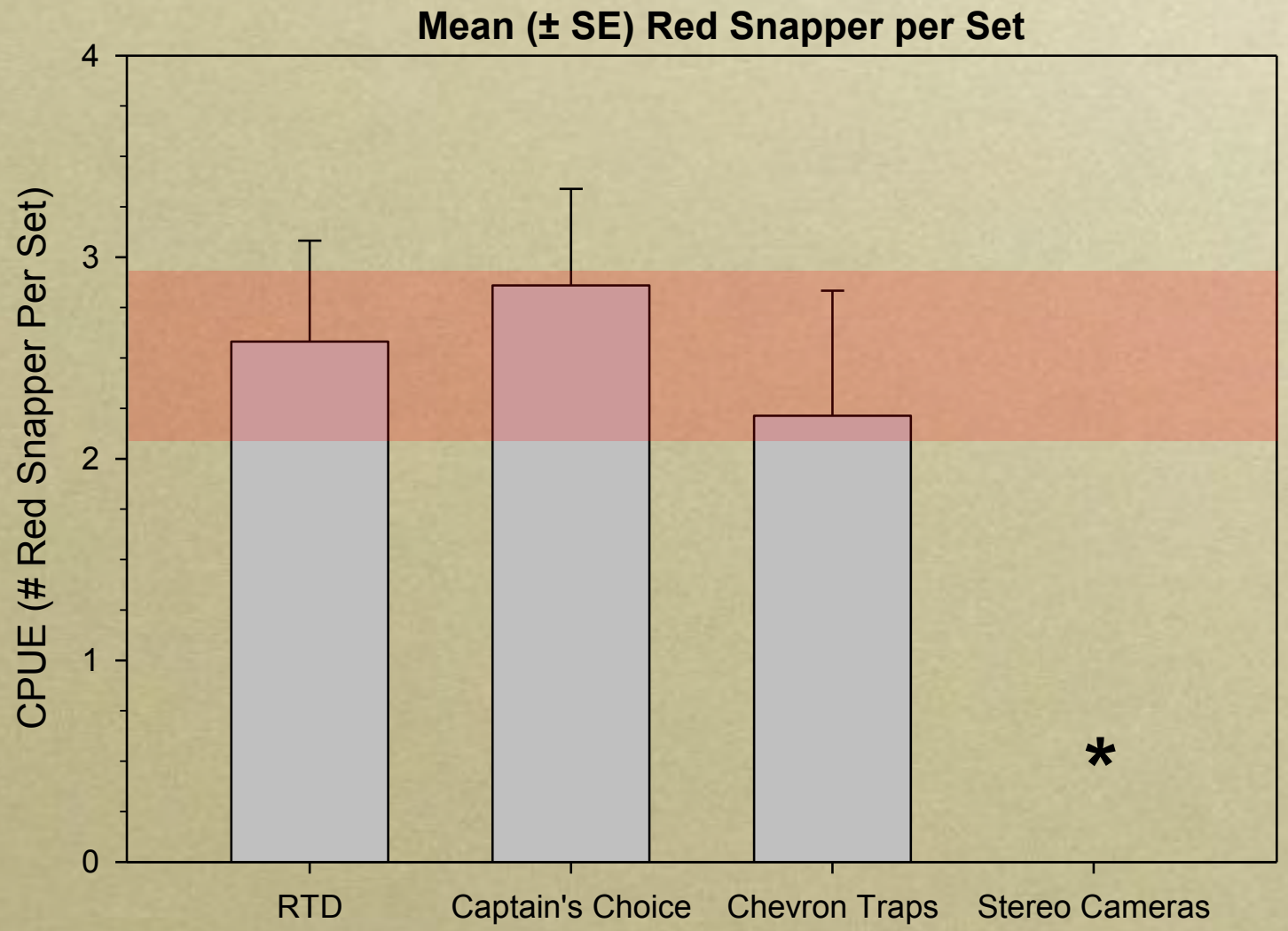
Selectivity Study – Size/Age Comparison







Selectivity Study – CPUE Comparison



* = Data still being processed