



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

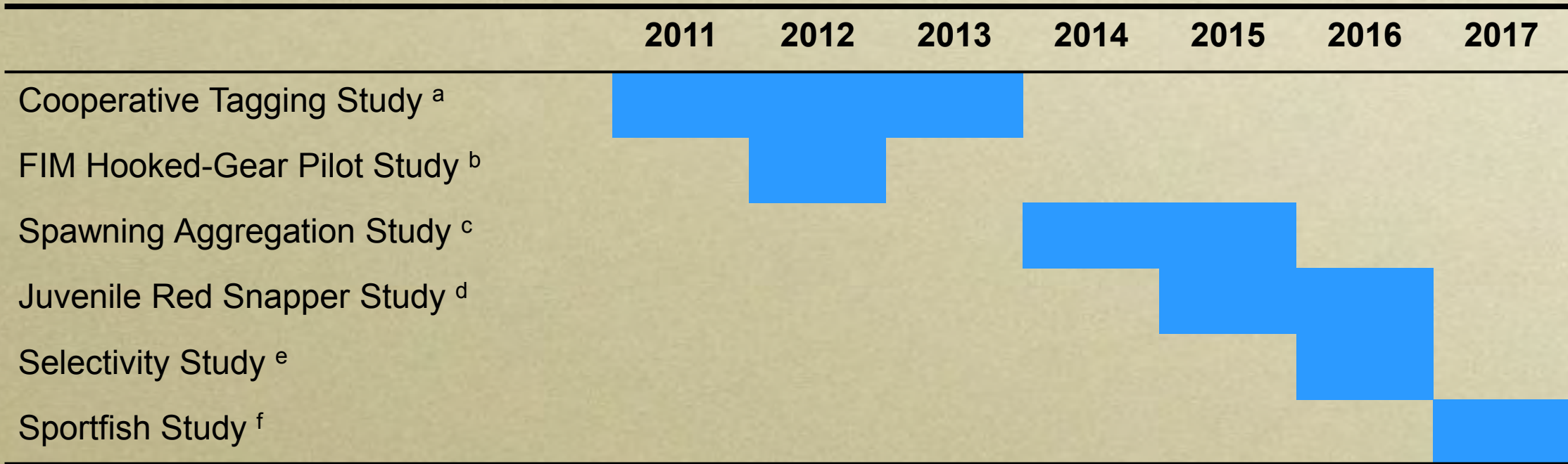
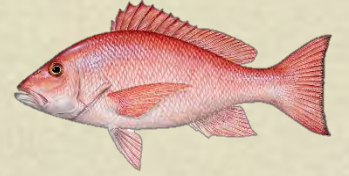
Introduction



- 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

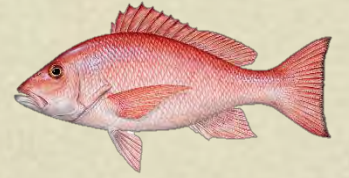
^d Standardized trawl and trap methods, yearly SRS sampling design, August - November

^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

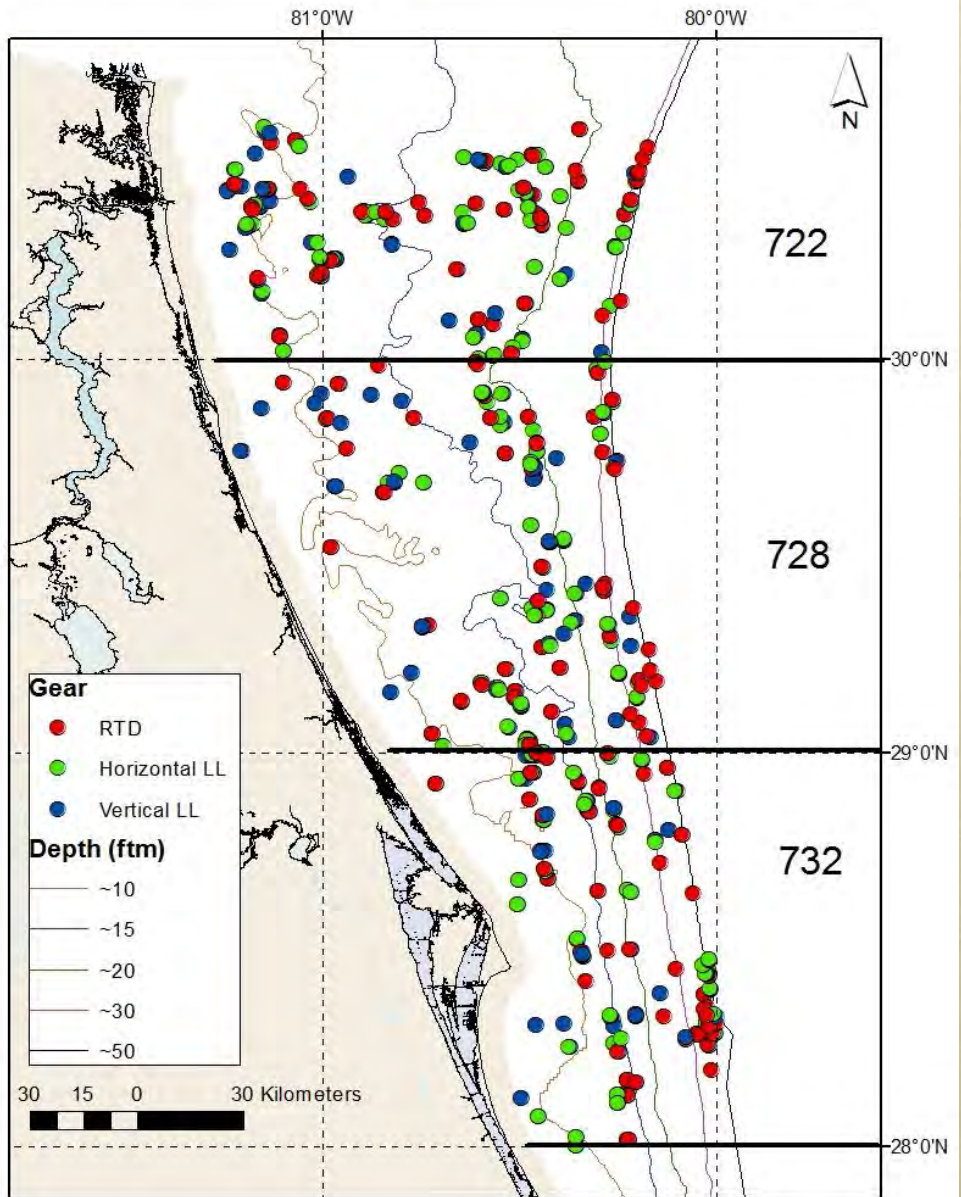


	2011	2012	2013	2014	2015	2016	2017
Unstandardized Captain's Choice	a	a	a	b, c	c	d	
Vertical Longline (12-Hook)							
Bottom Longline (12-Hook)							
Repetitive Timed-Drop (RTD; Standardized Active Fishing Methods)							
Groundfish Trawl							
Small-mesh Z Trap							
Large-mesh Chevron Trap					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

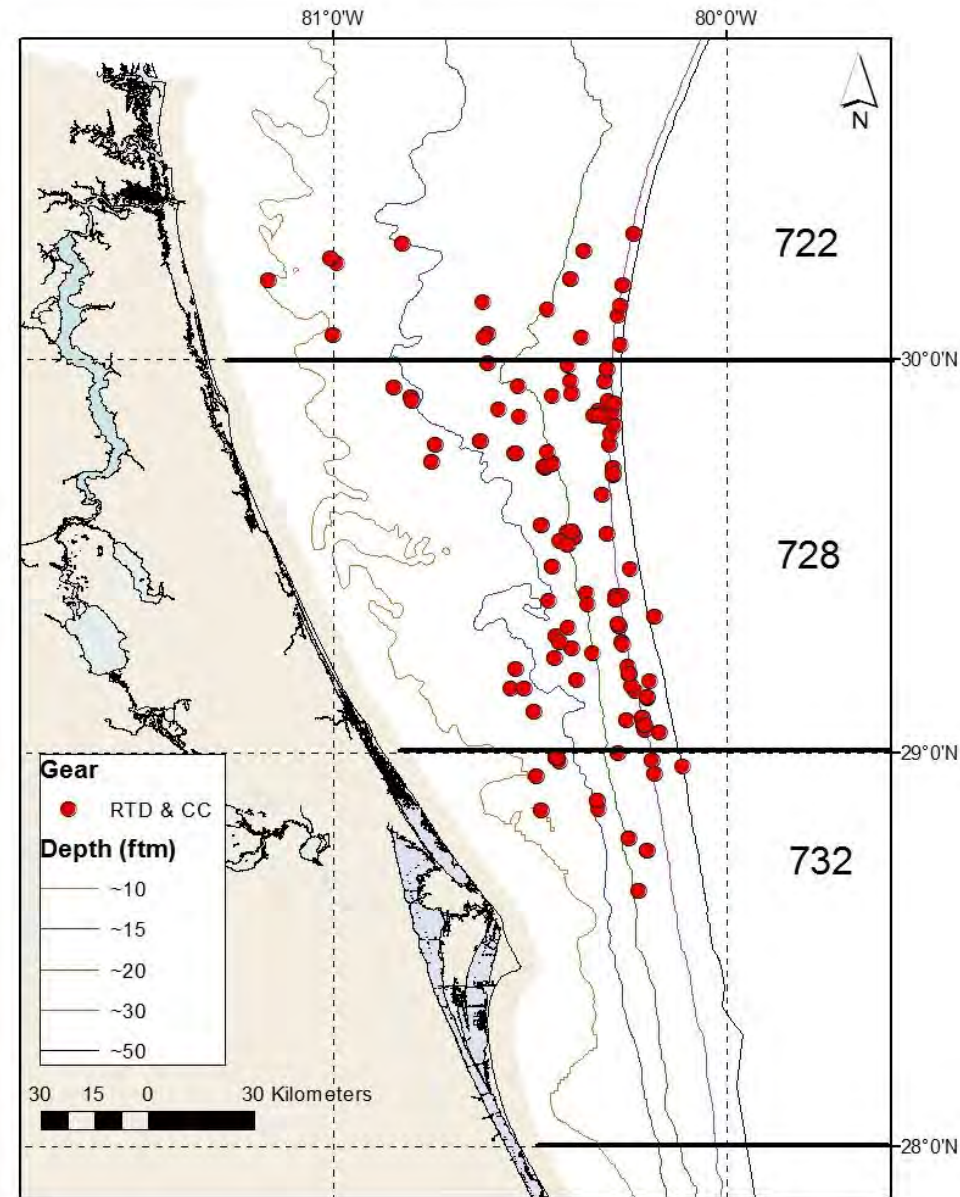
- a Objective to capture and tag as many Red Snapper as possible
- b Objective to capture spawning Red Snapper not sampled by RTD
- c Objective to capture spawning grouper not sampled by RTD
- d Objective to compare RTD to unstandardized Captain's Choice HNL



Project Sample Sites

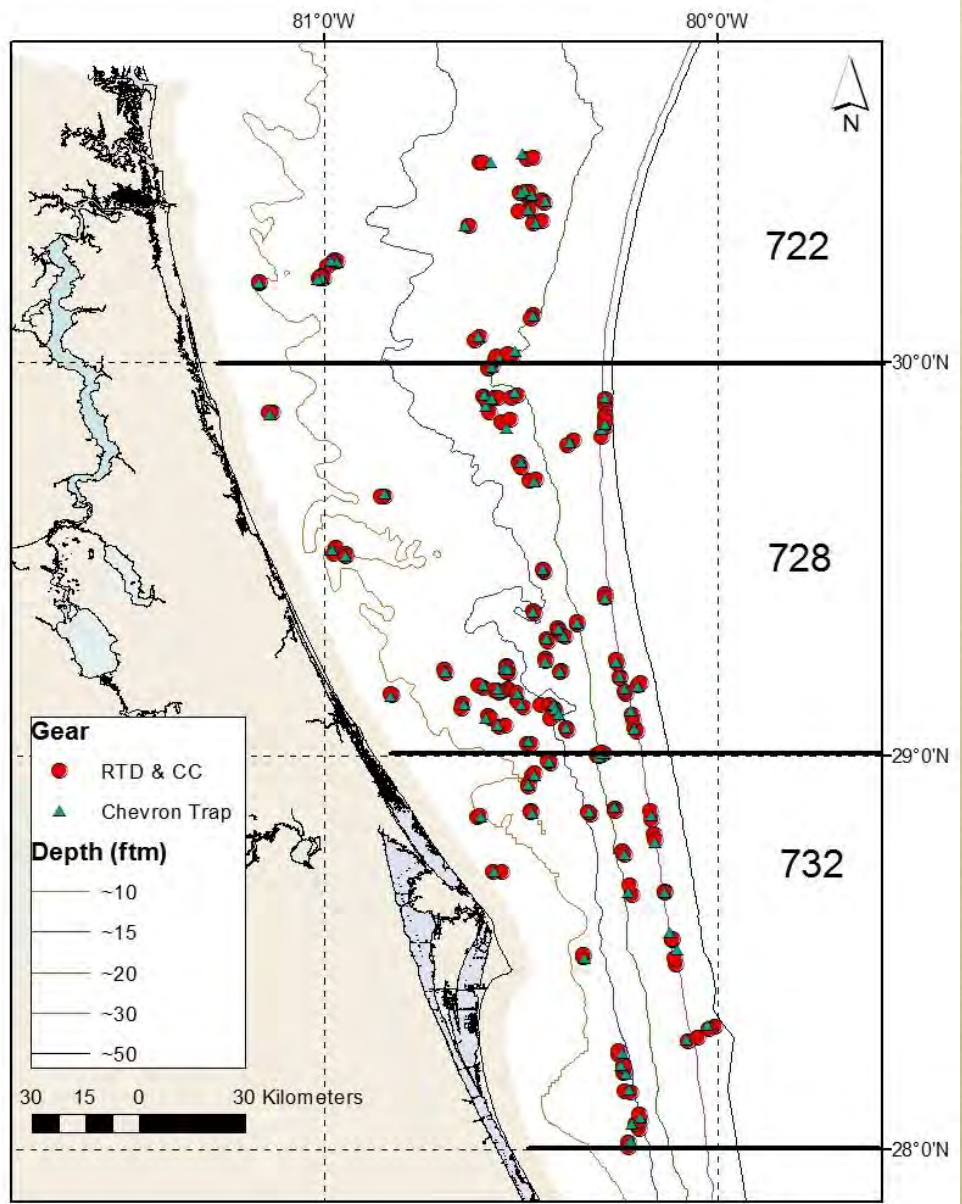


2012 Study Map

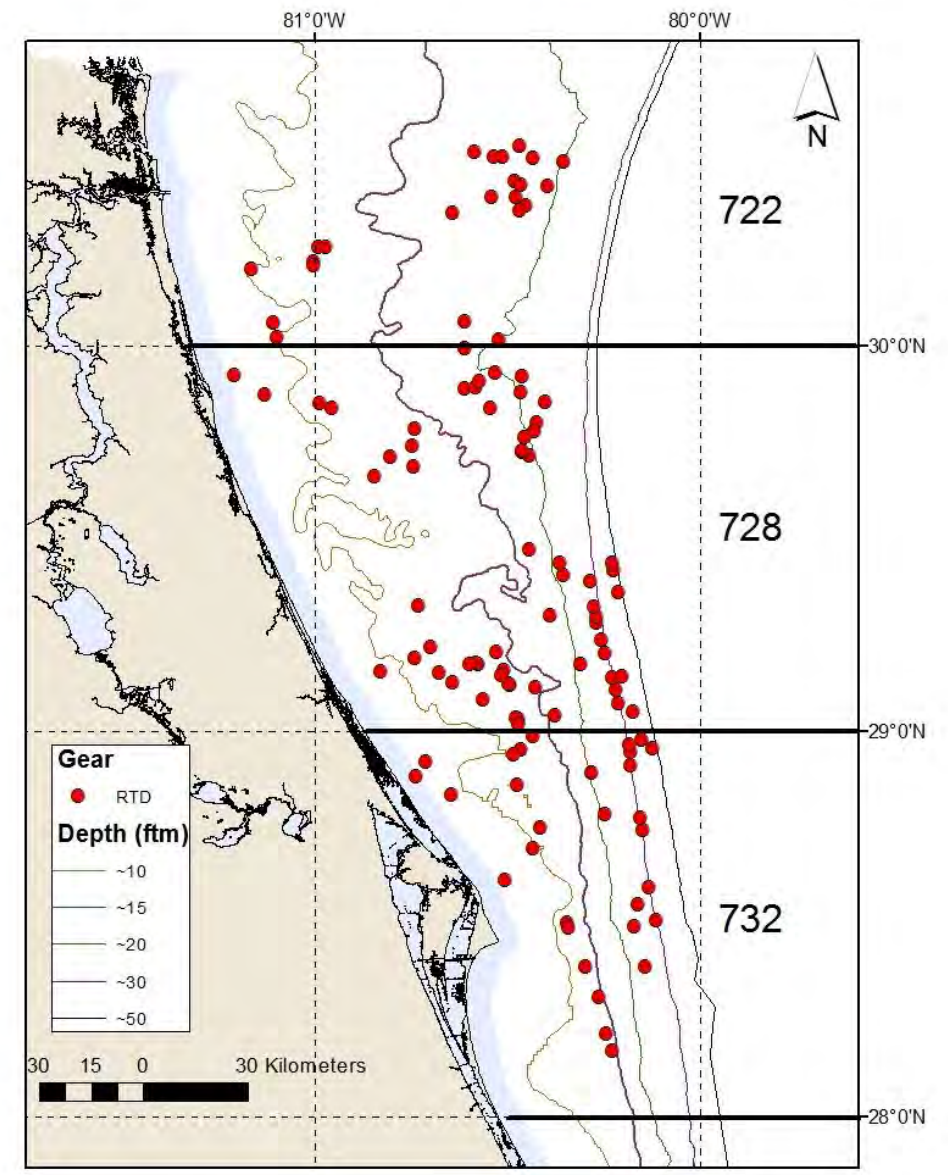


2014/2015 Spawning Aggregation Study

Project Sample Sites



2016 Selectivity Study

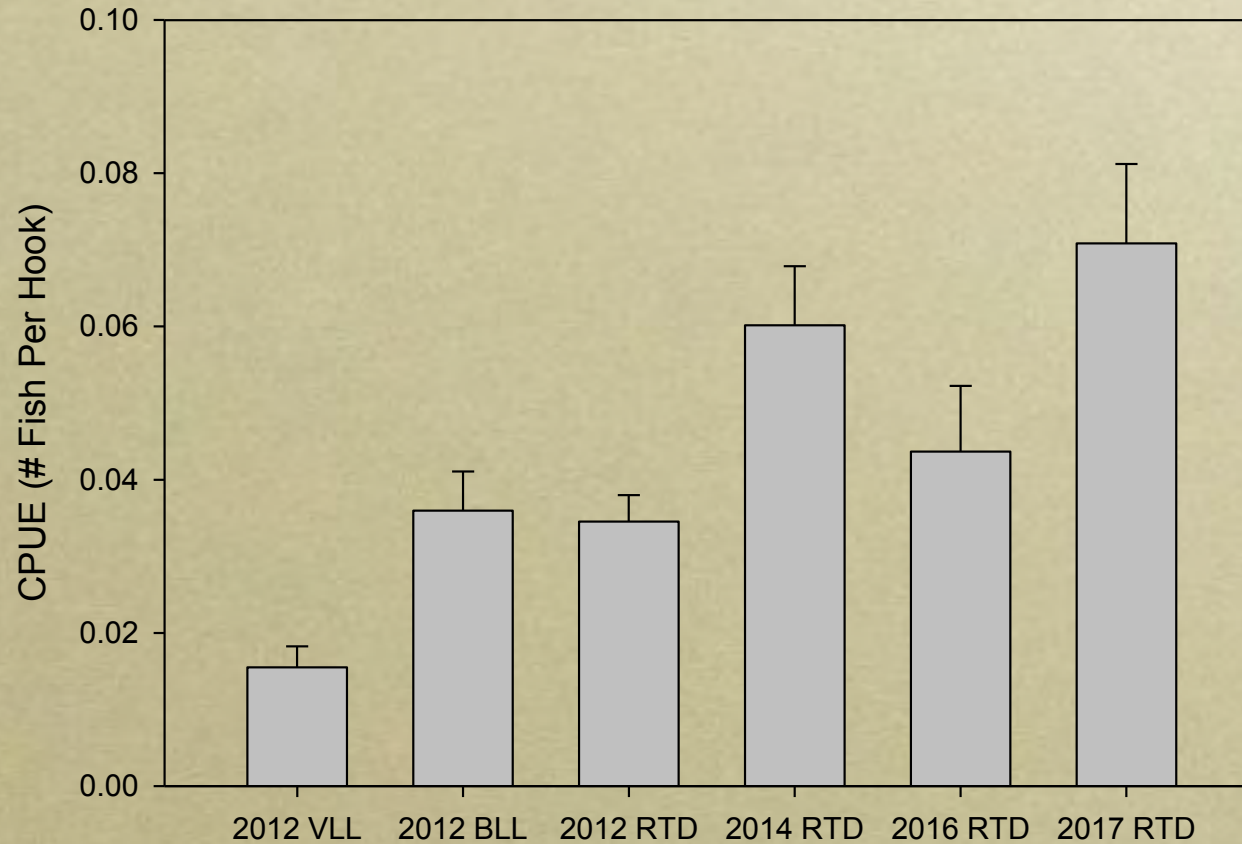


2017 Sportfish Study

Standardized Hook-Gears – CPUE Comparison



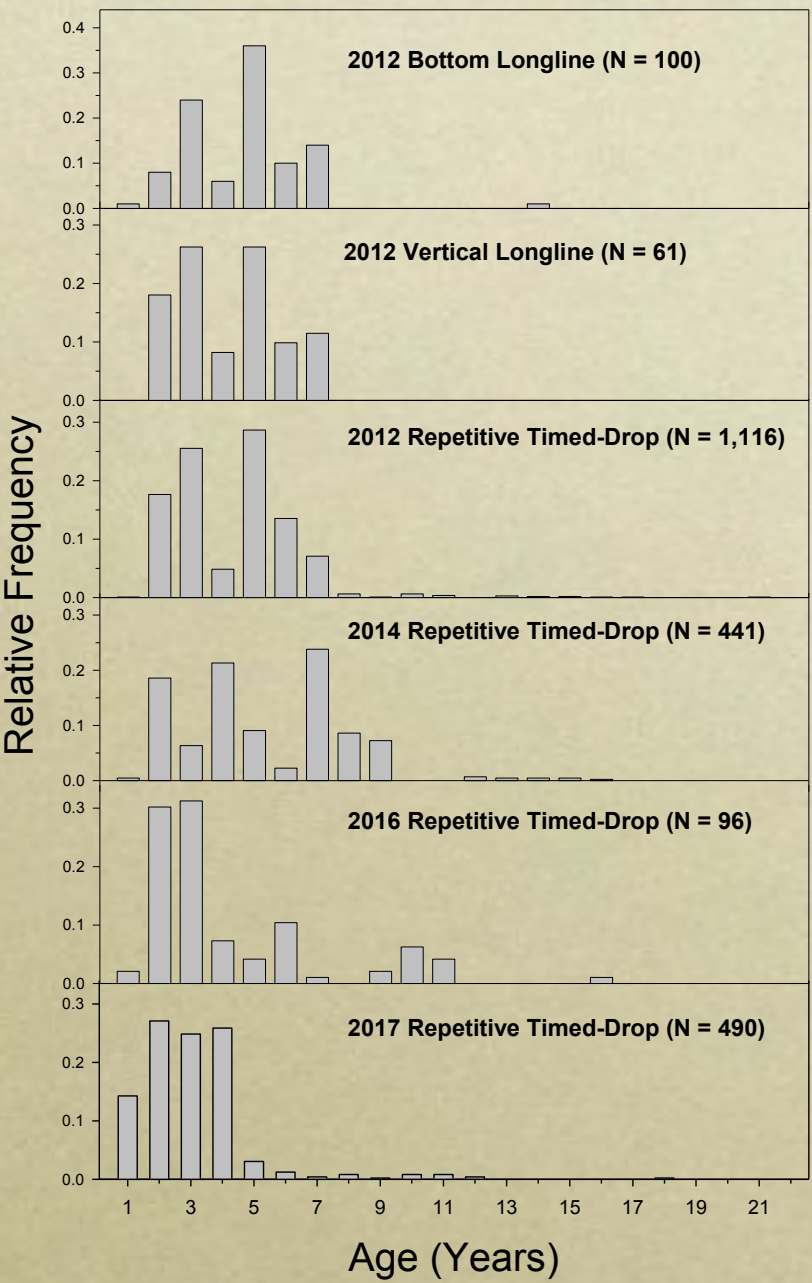
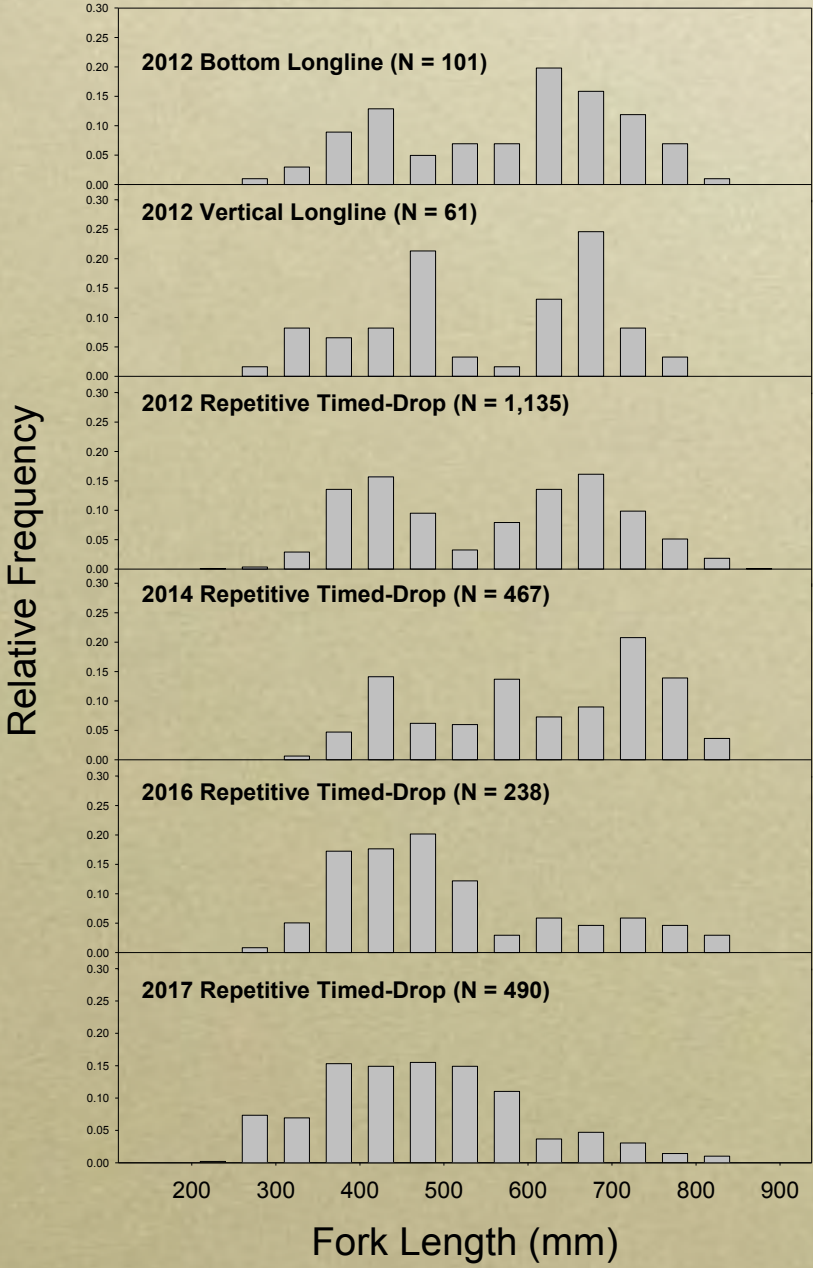
Mean (\pm SE) Red Snapper per Hook



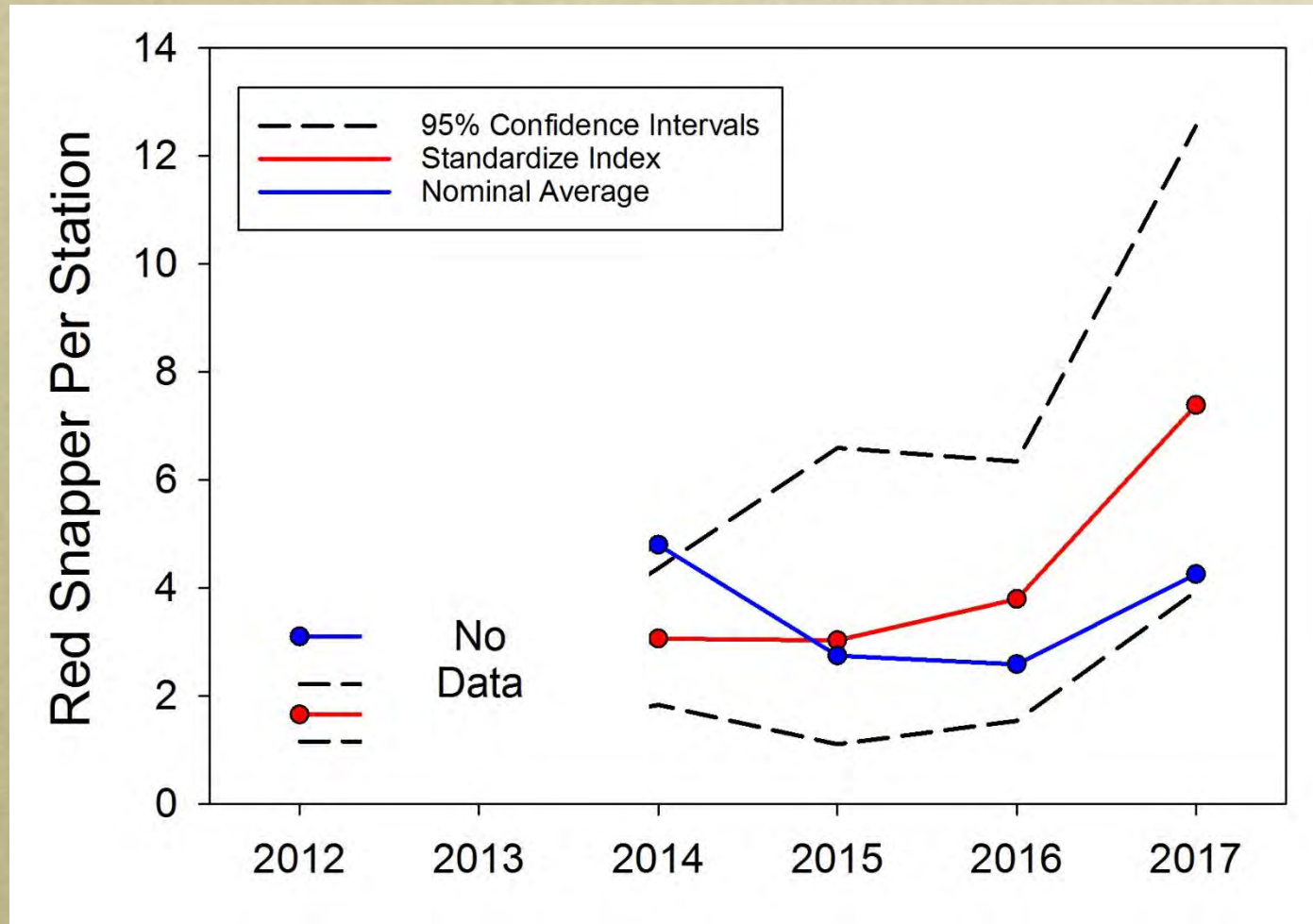
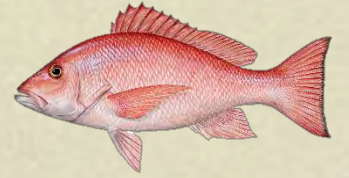
VLL = Vertical Longline
BLL = Bottom Longline
RTD = Repetitive Timed-Drop



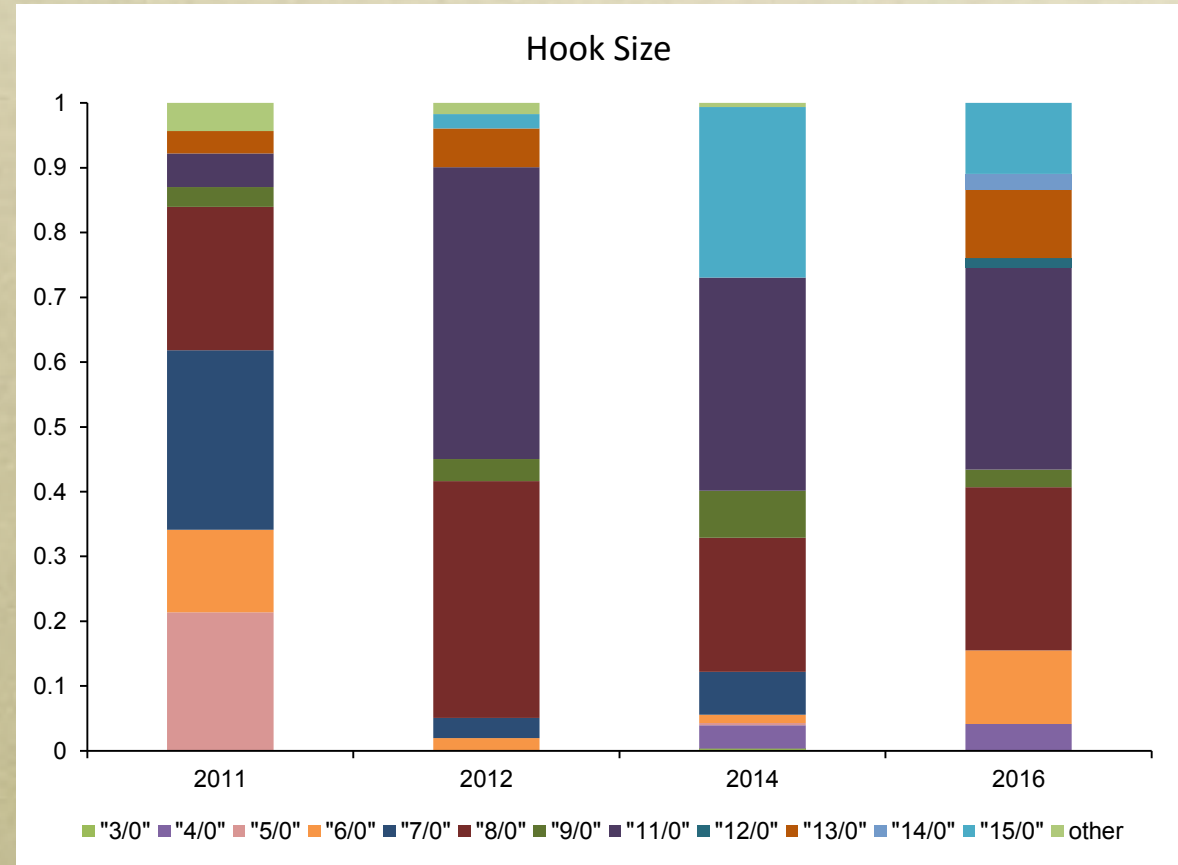
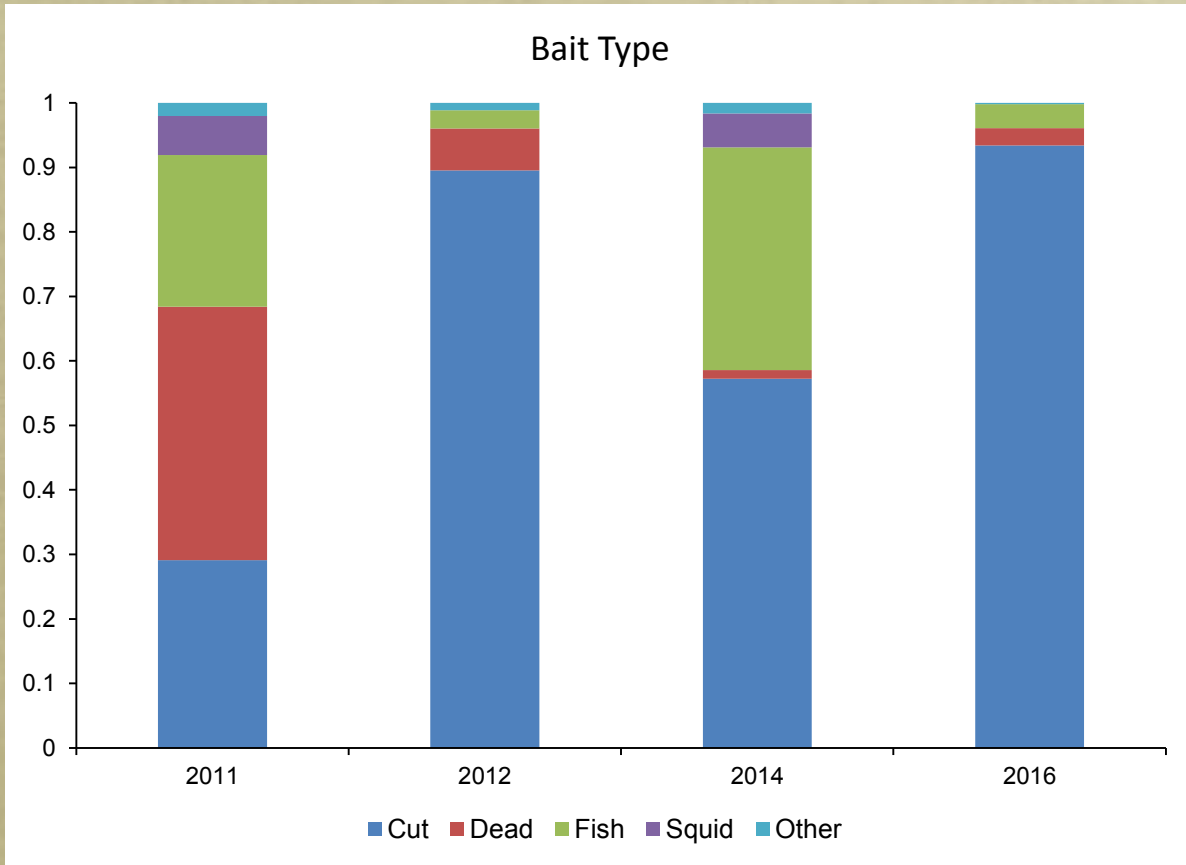
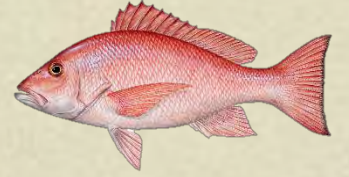
Standardized Hook-Gears – Size/Age Comparison



Index of Abundance – RTD Sampling

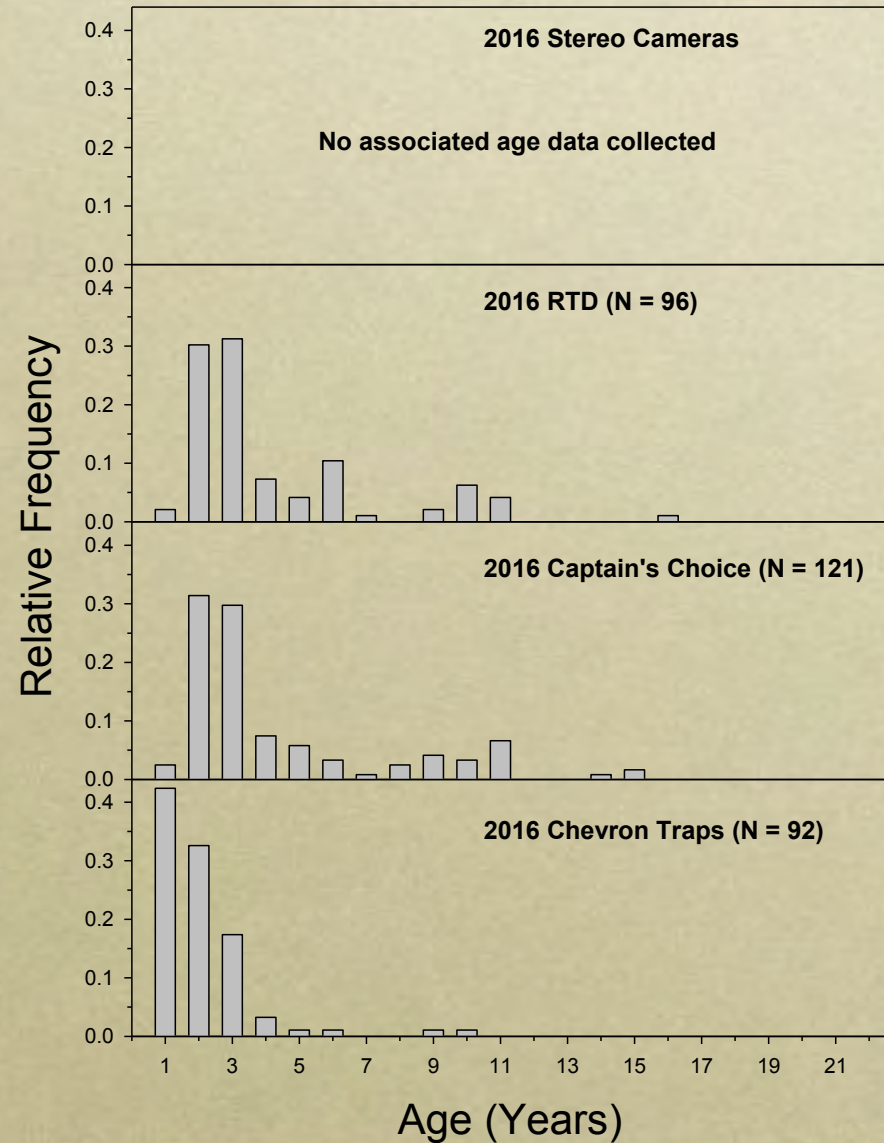
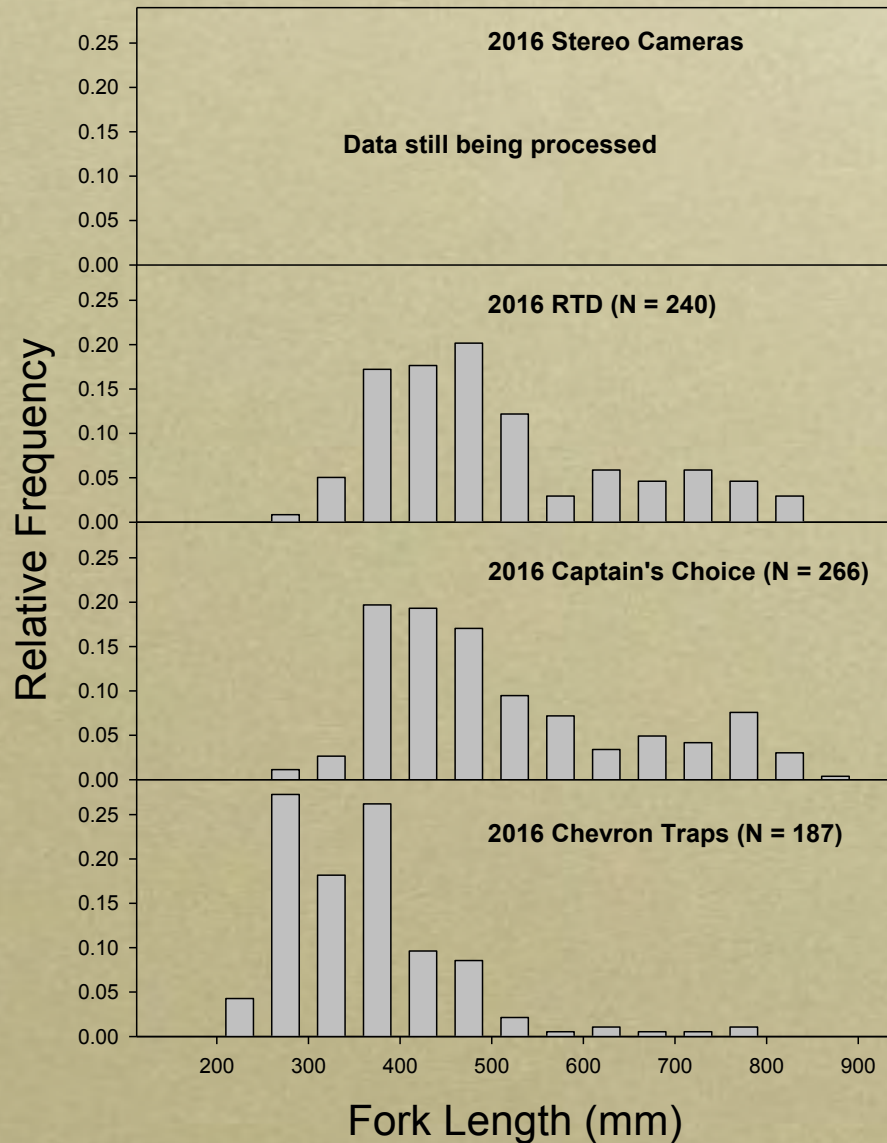
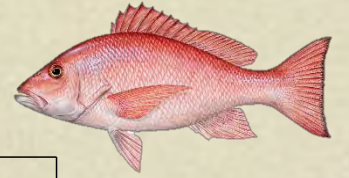


Index of Abundance – Captains Choice Sampling Variability

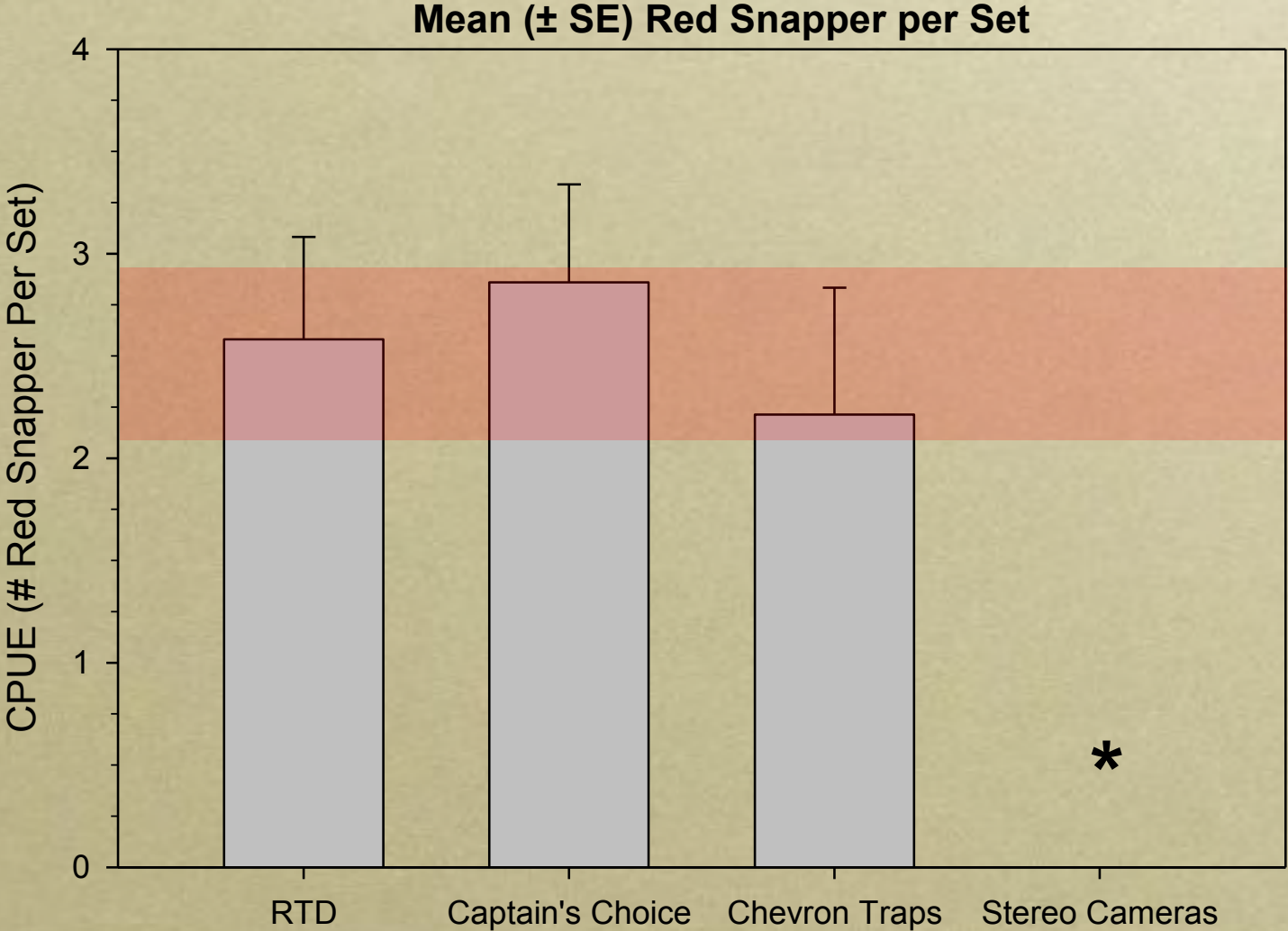


Due to extremely high interannual variability in sampling methods, we were unable to construct an appropriate index for Captain's Choice data

Selectivity Study – Size/Age Comparison



Selectivity Study – CPUE Comparison



* = Data still being processed

