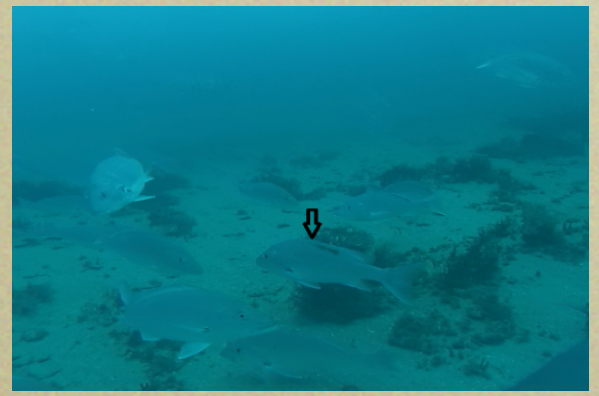







East Coast Fisheries-Independent Monitoring

Overview of Red Snapper Research (2011 – 2017)

August 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 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

	2011	2012	2013	2014	2015	2016
Cooperative Tagging Study [a]	■	■	■			
FIM Hooked-Gear Pilot Study [b]		■	■			
Spawning Aggregation Study [c]				■	■	
Juvenile Red Snapper Study [d]					■	■
Selectivity Study [e]						■

[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

Timeline – Sampling Gear

	2011	2012	2013	2014	2015	2016
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						

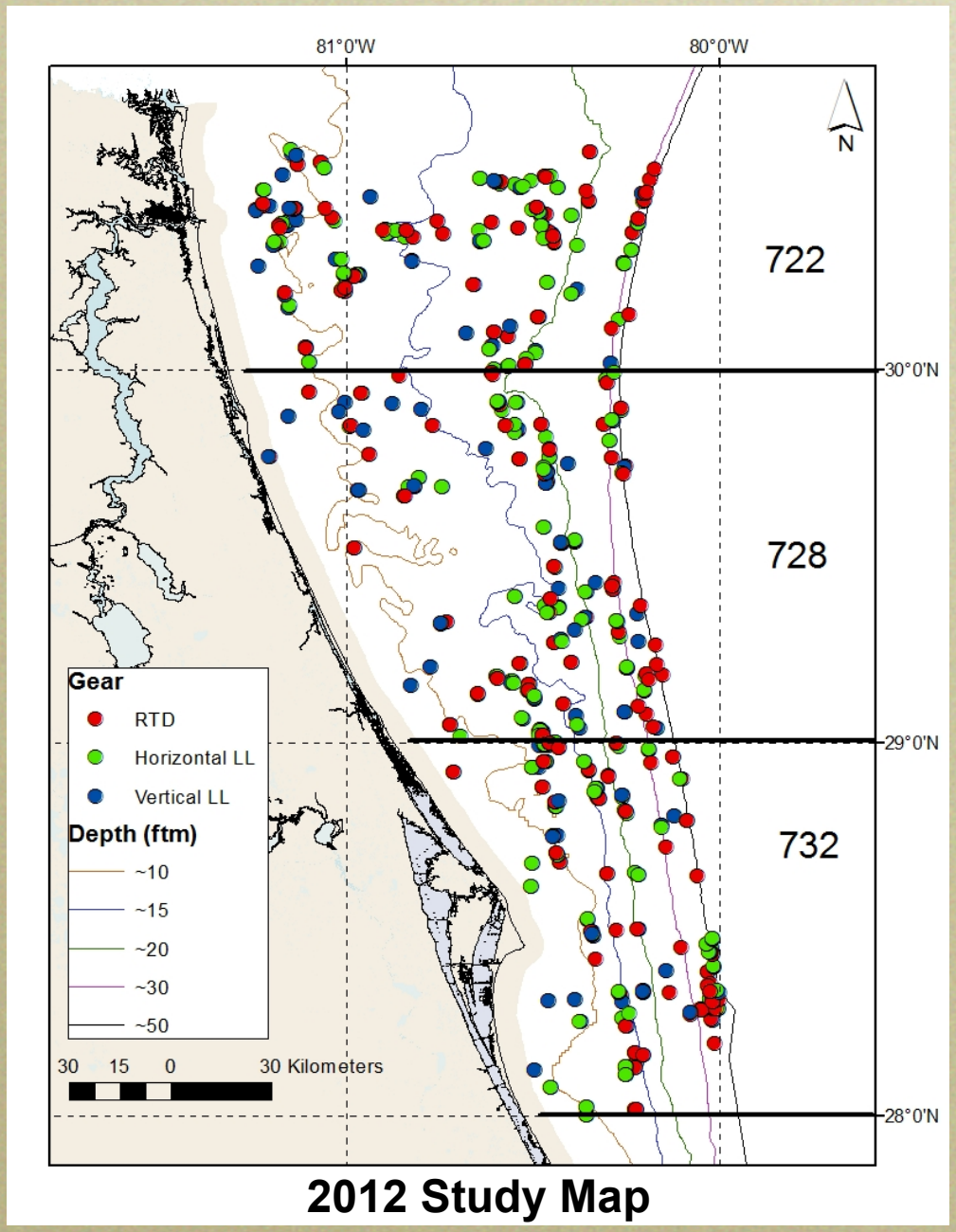
[a] Objective to capture and tag as many Red Snapper as possible

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

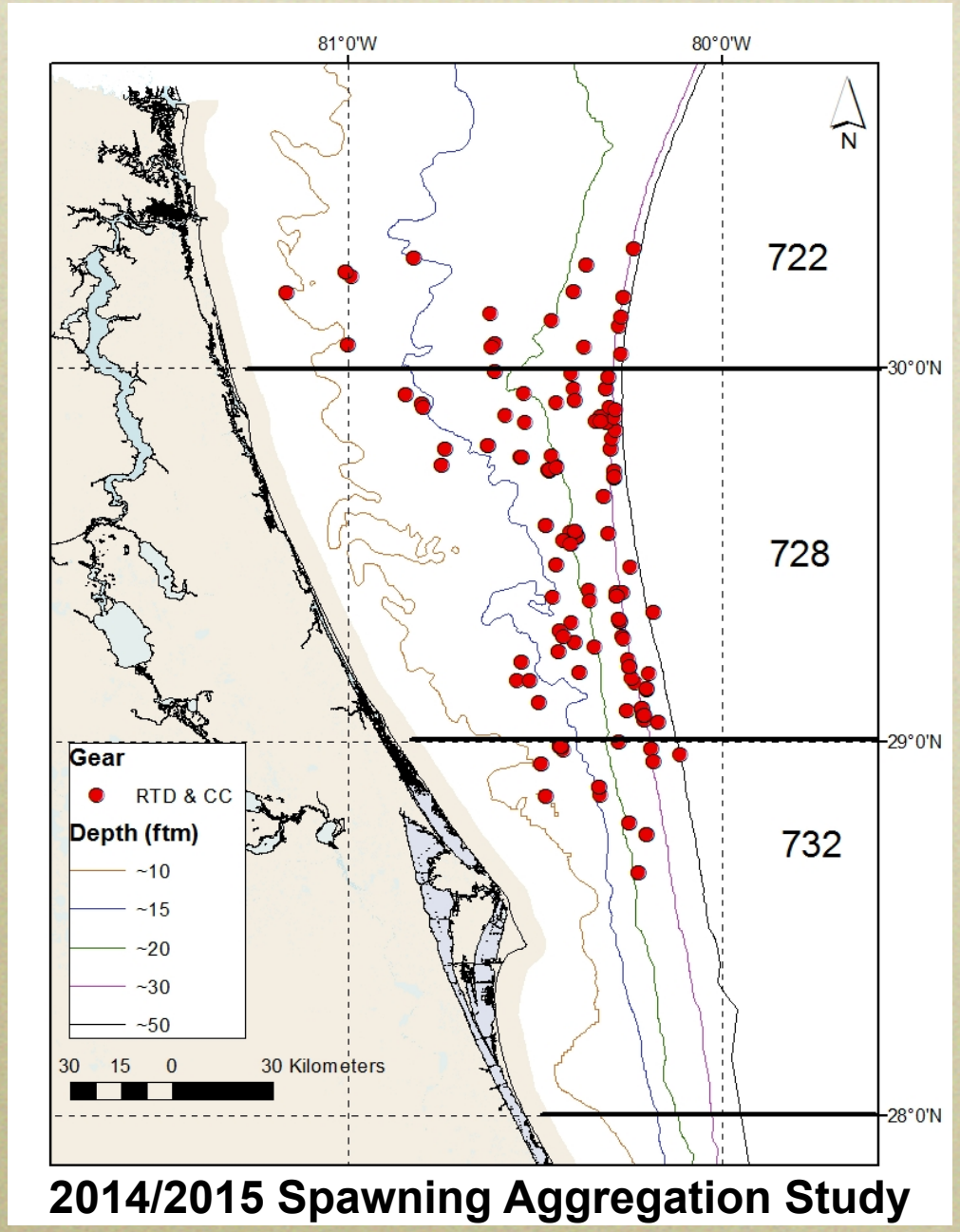
[c] Objective to capture spawning grouper not sampled by RTD

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

Project Sample Sites

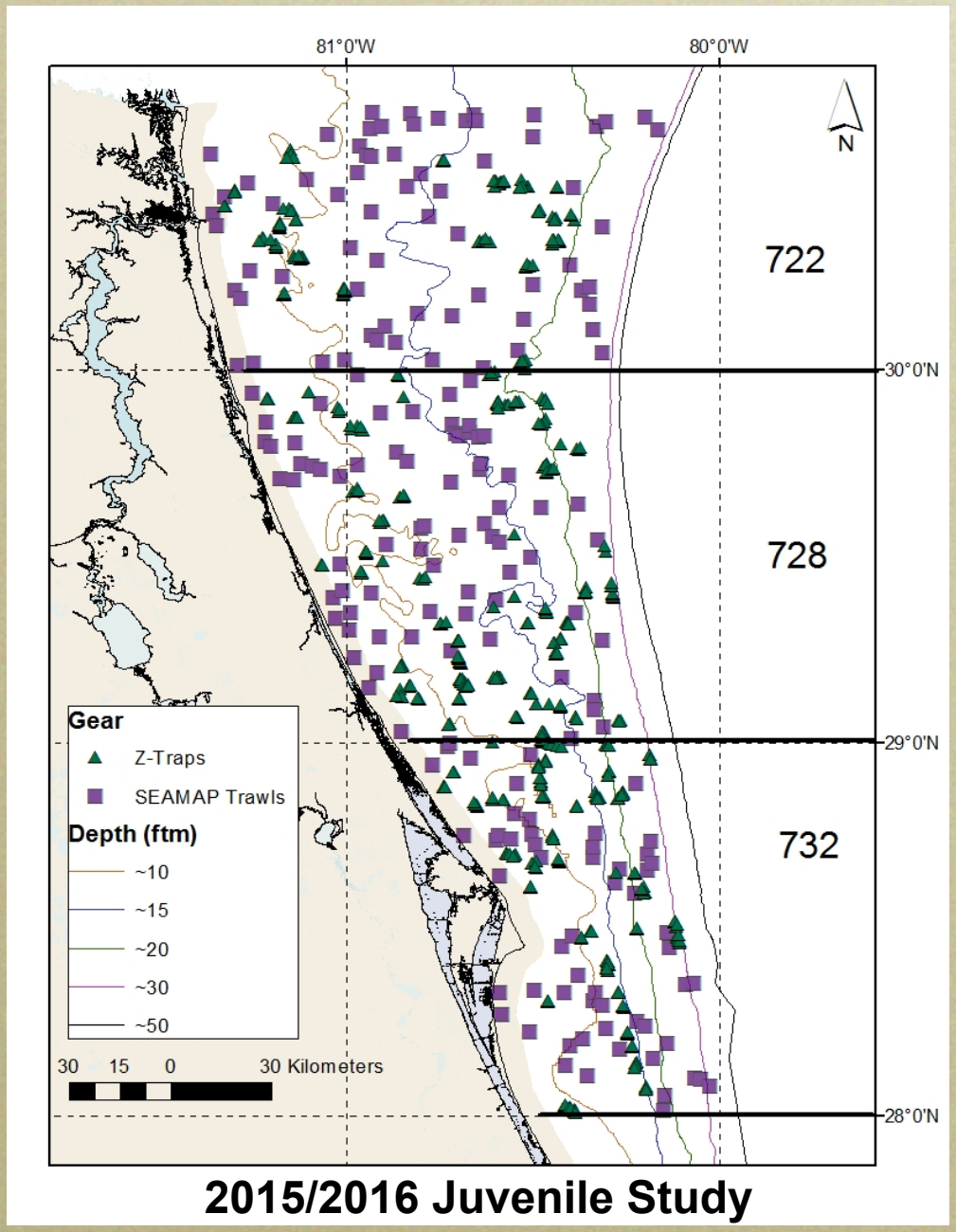


2012 Study Map

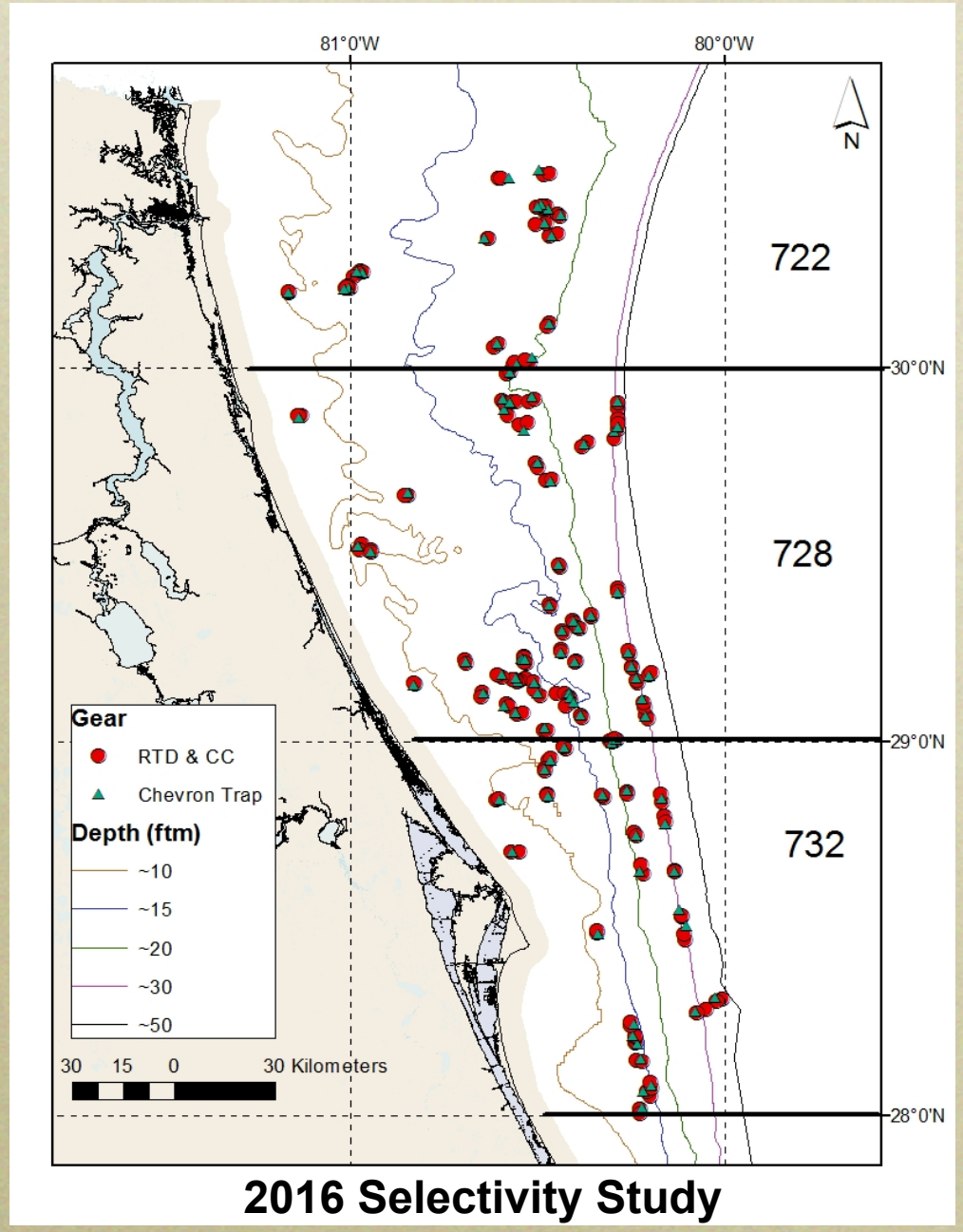


2014/2015 Spawning Aggregation Study

Project Sample Sites

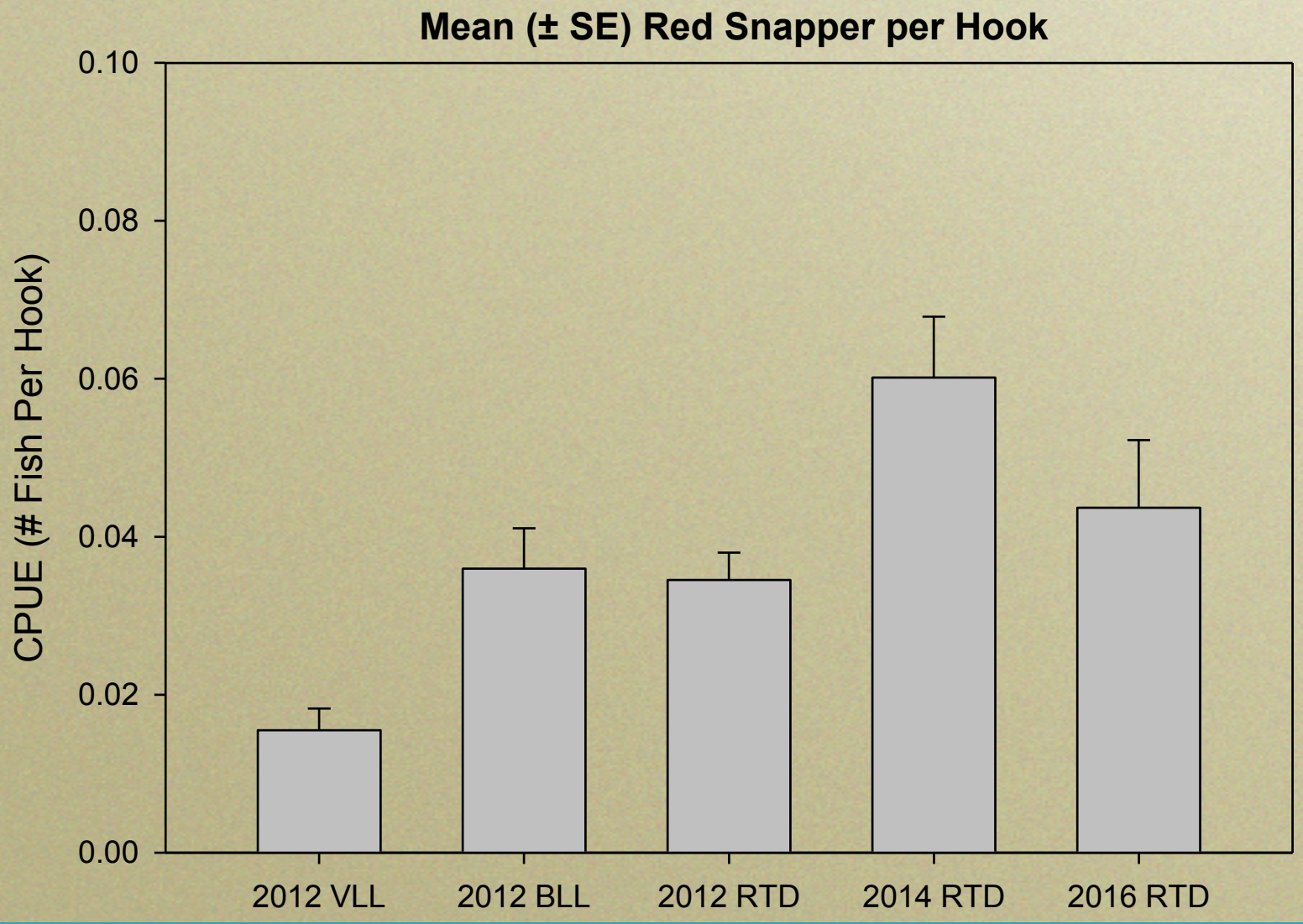


2015/2016 Juvenile Study



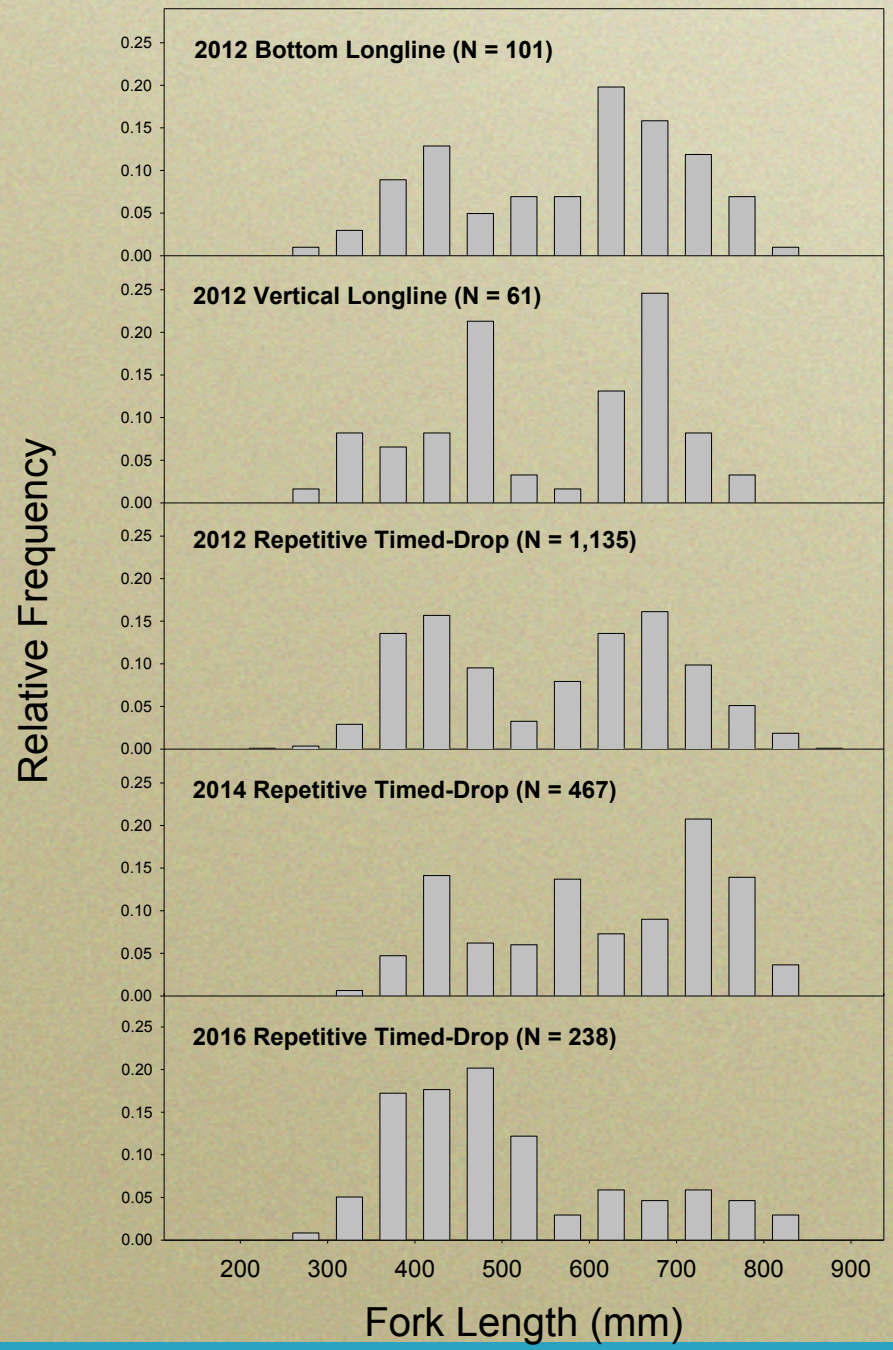
2016 Selectivity Study

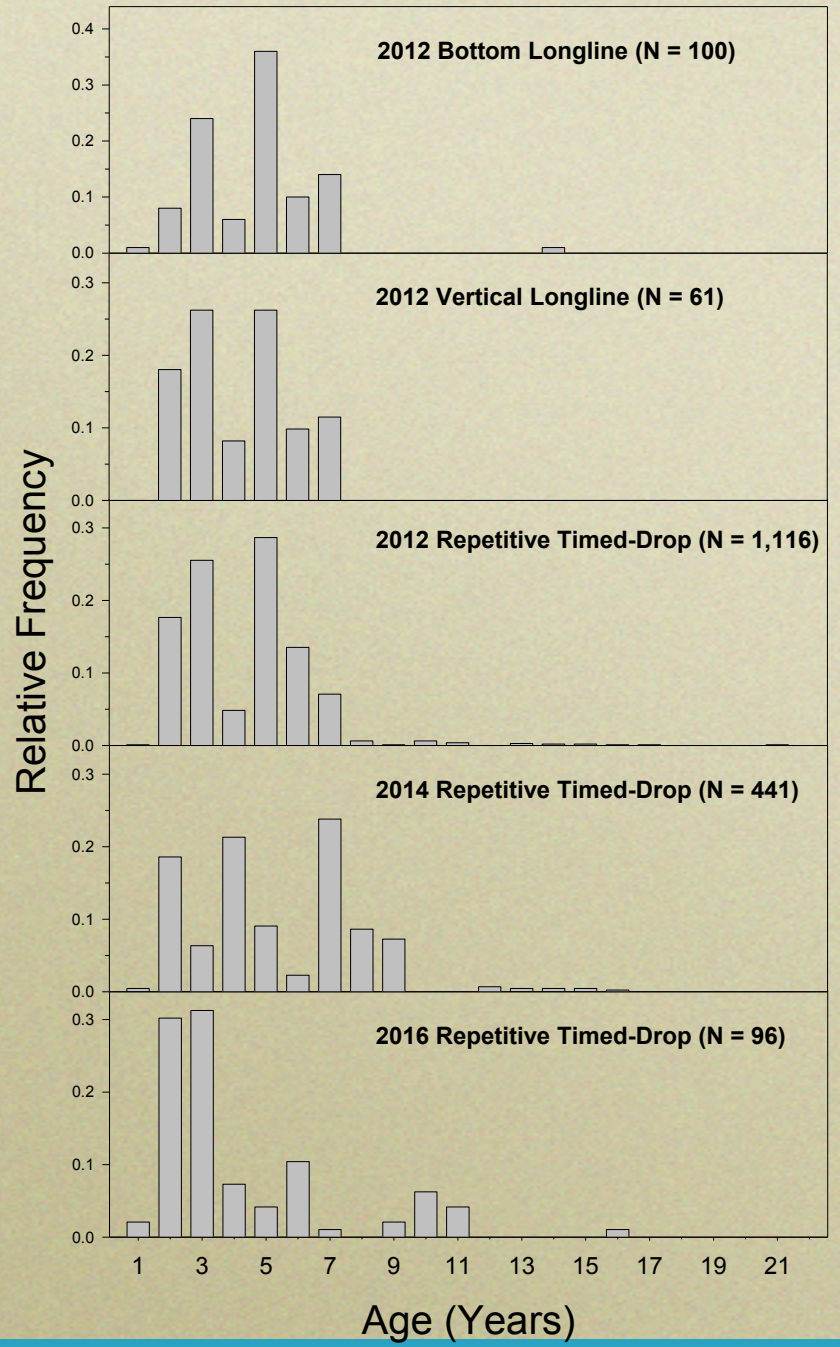
Standardized Hook-Gears – CPUE Comparison



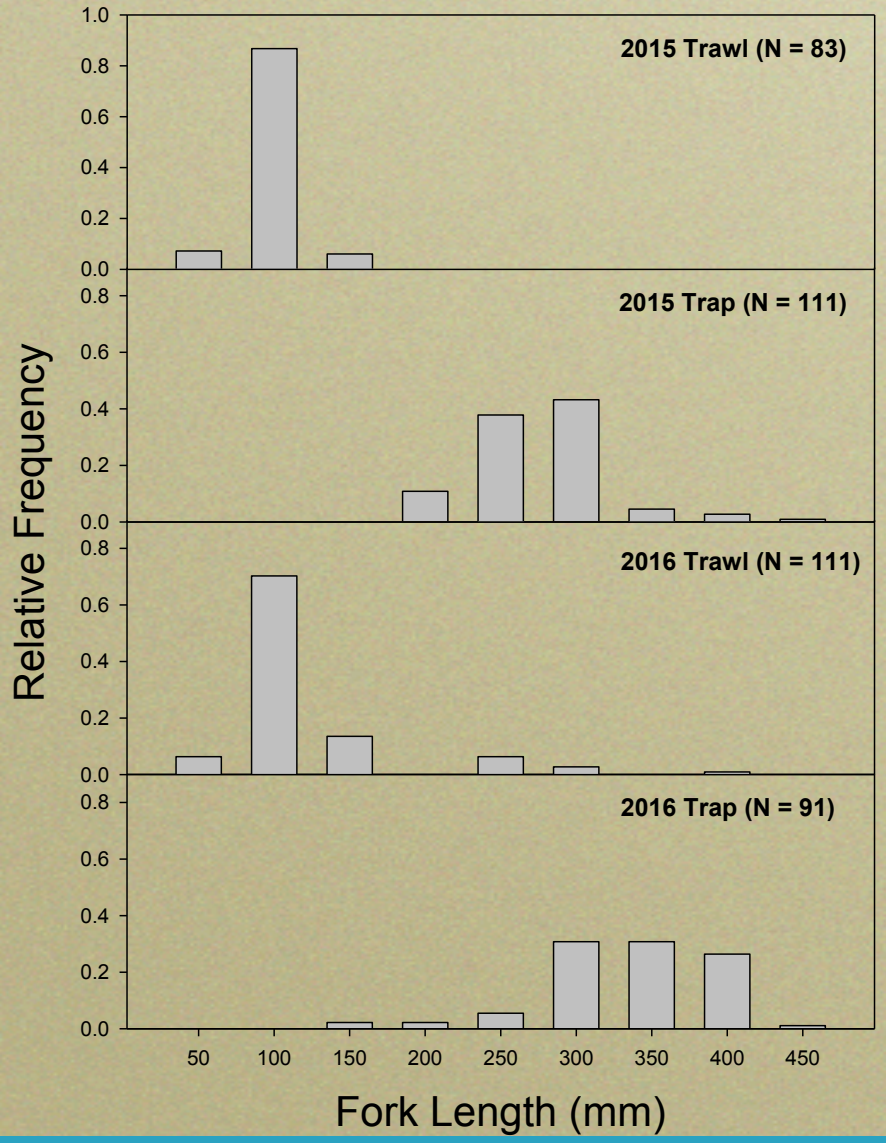
VLL = Vertical Longline
BLL = Bottom Longline
RTD = Repetitive Timed-Drop

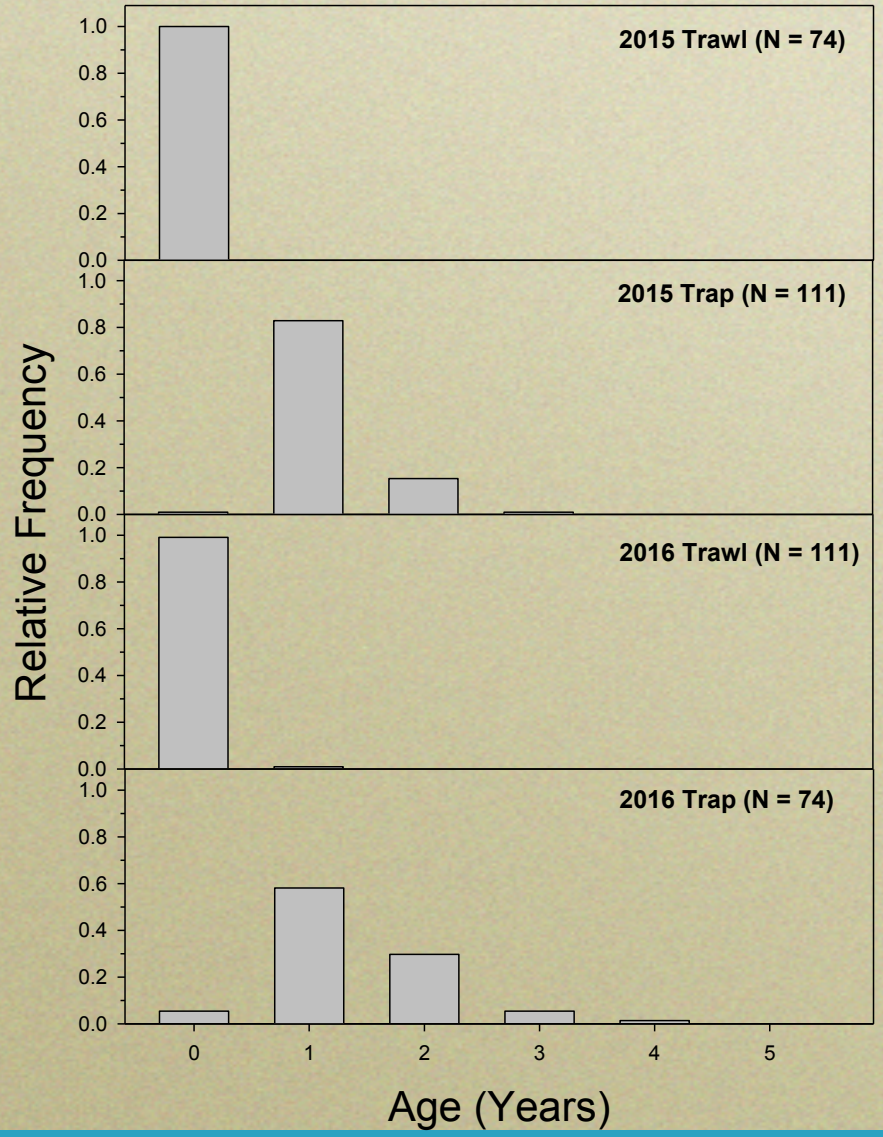
Standardized Hook-Gears – Size/Age Comparison



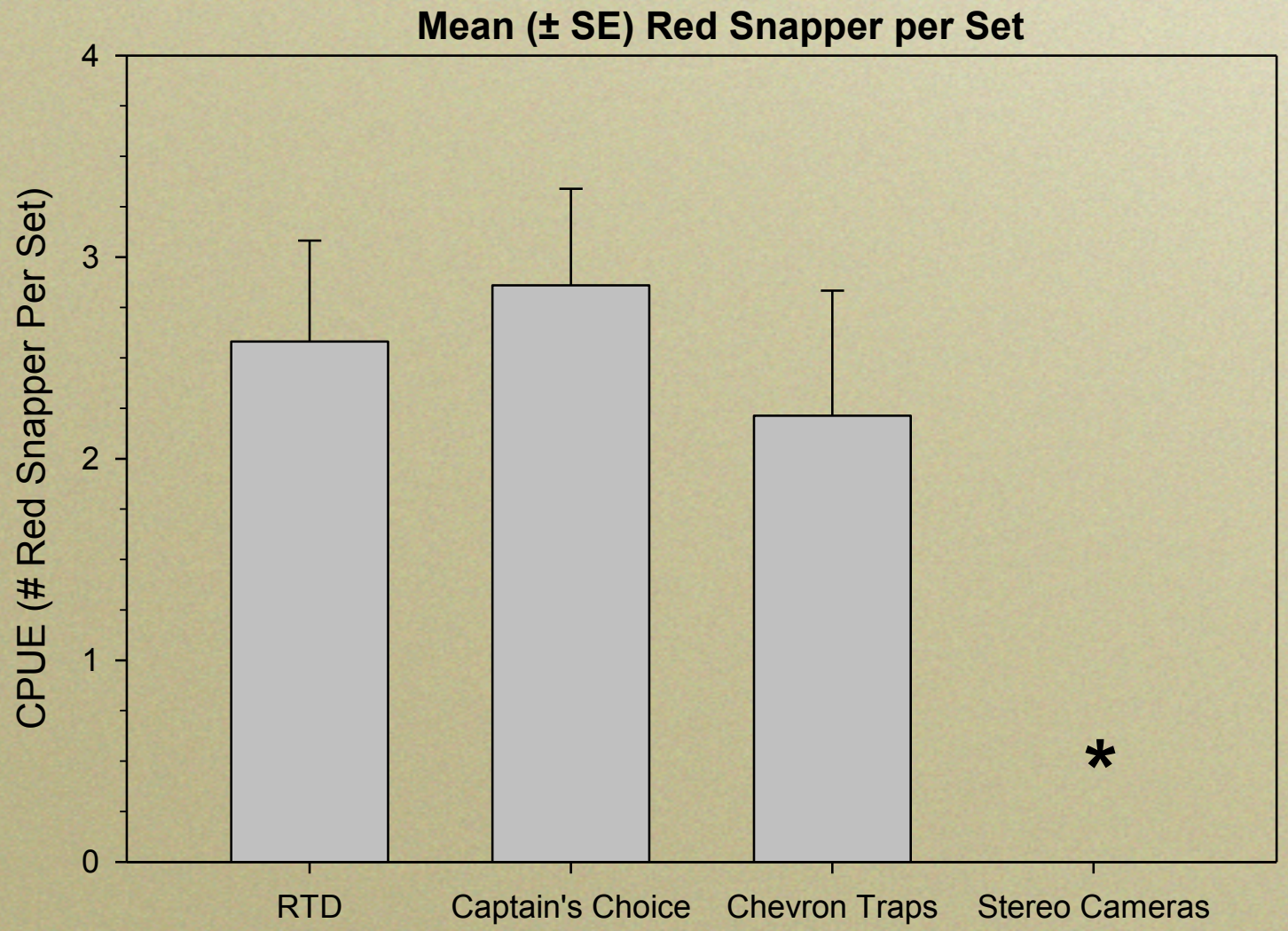


Juvenile Survey – Size/Age Comparison



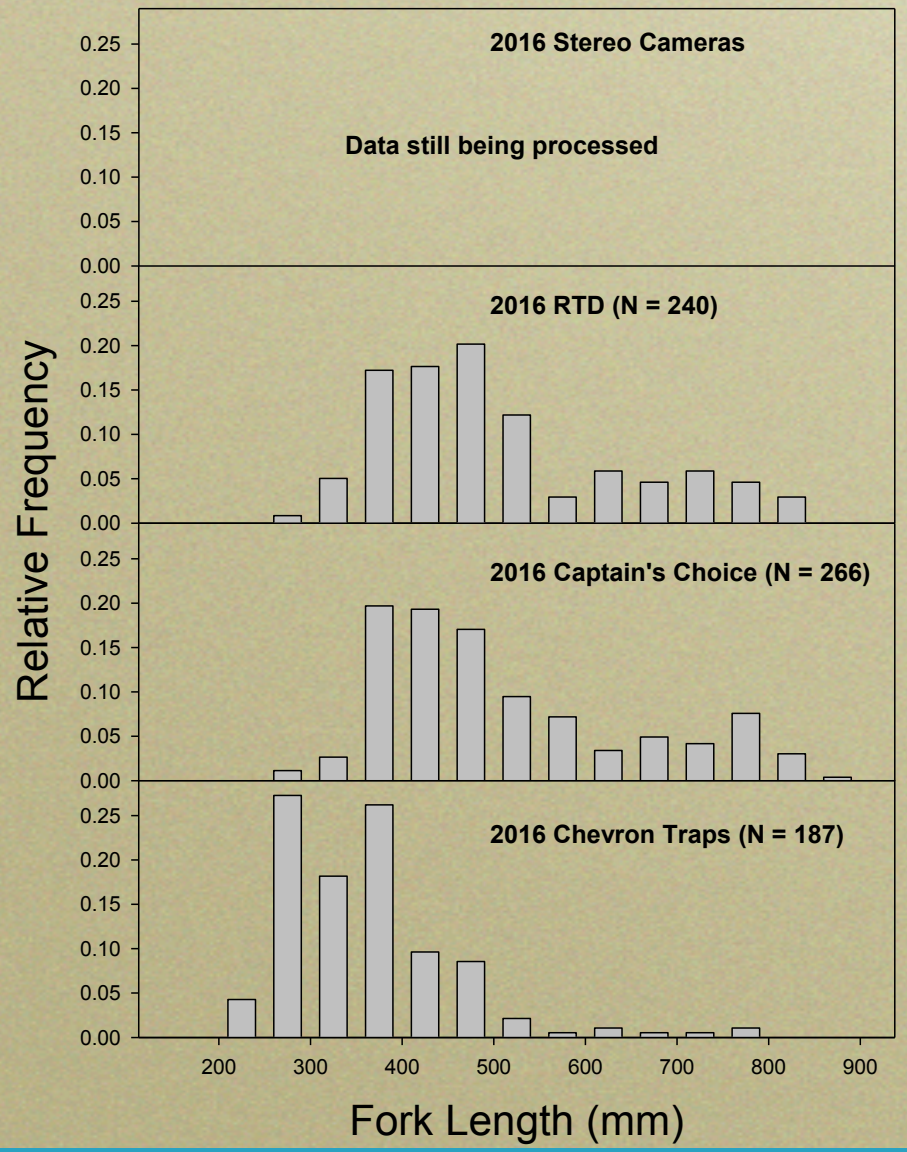


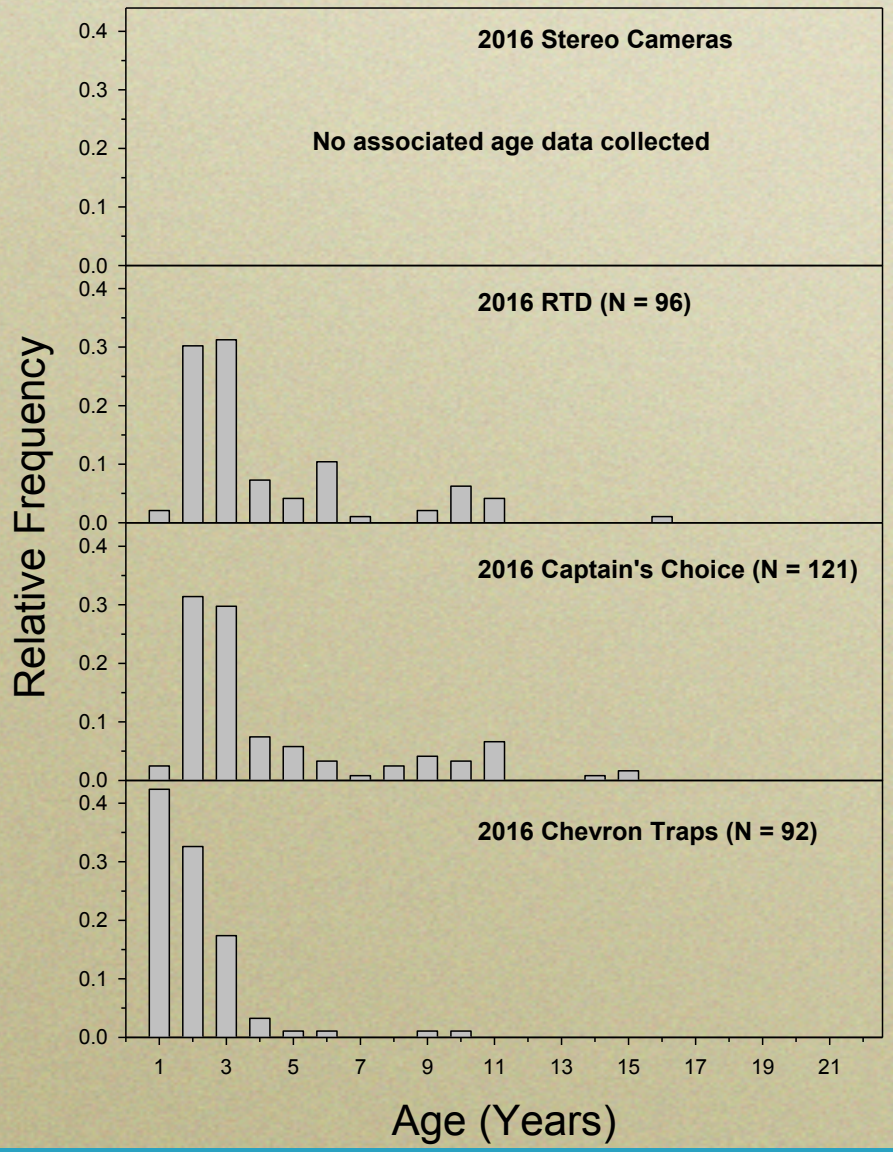
Selectivity Study – CPUE Comparison

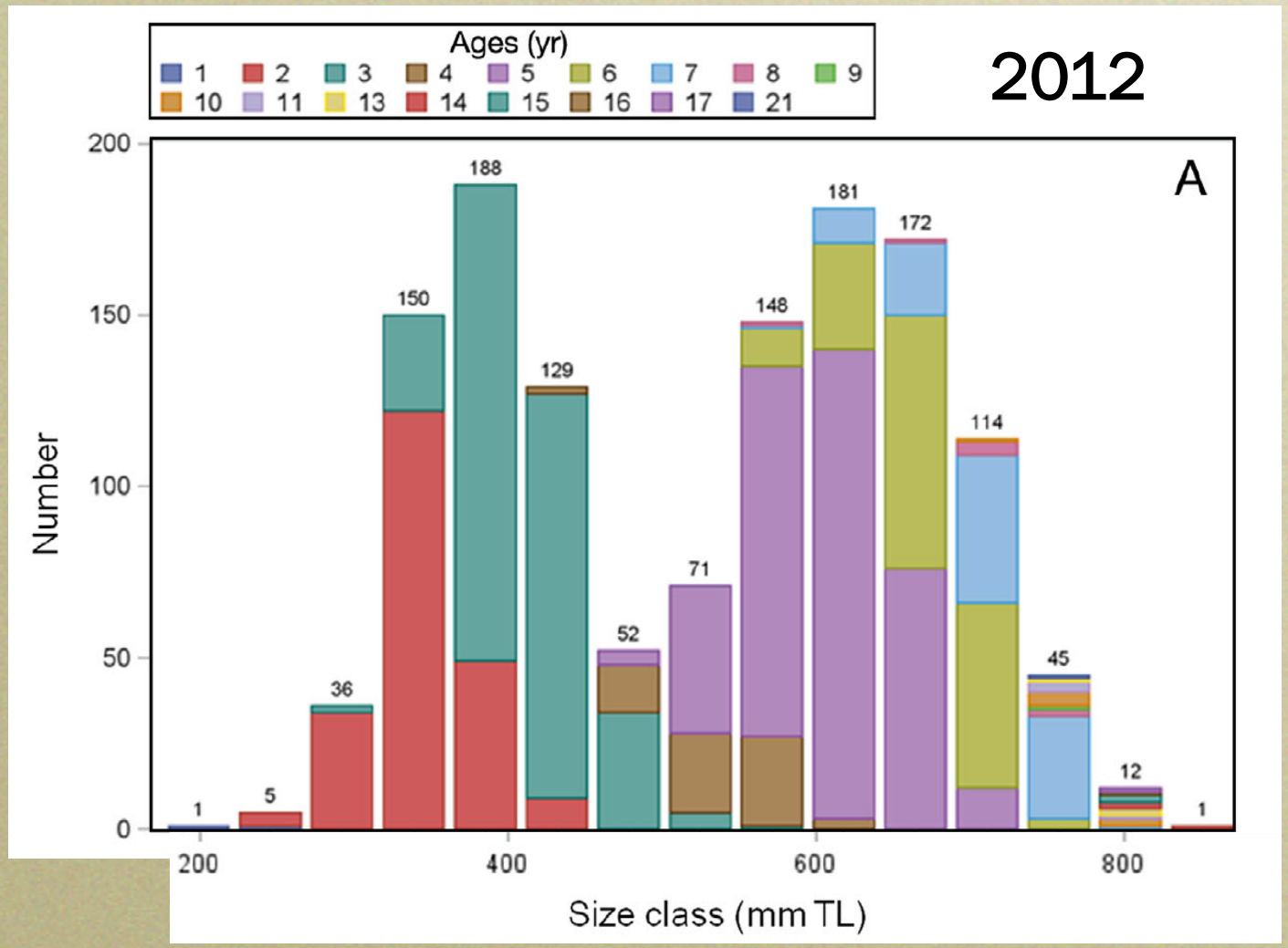


* = Data still being processed

Selectivity Study – Size/Age Comparison






Ages (yr)
1
2
3
4
5
6
7
8
9
10
11
13
14
15
16
17
21
2012
A
Number
Size class (mm TL)
200
150
100
50
0
200
400
600
800
1
5
36
150
188
129
52
71
148
181
172
114
45
12
1