

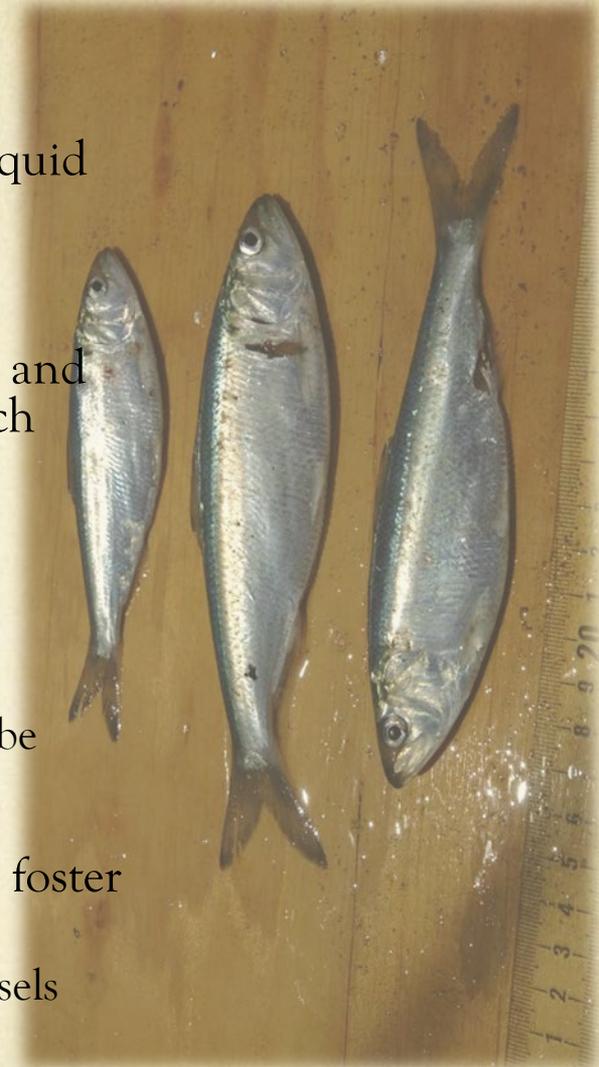


River Herring Bycatch Avoidance in the Longfin Squid Fishery

Cornell Cooperative Extension (CCE)
Marine Program

Overview

- ✦ River herring bycatch reporting from the the longfin squid fleet began in Sept 2012 funding provided by NFWF
 - ✧ Subsequent funding provided by NOAA's BREP
- ✦ CCE coordinated with squid vessels from RI, CT, NY, and NJ to form a communication network to reduce bycatch encounters of river herring and butterfish -2012-2015
 - ✧ Georges Bank Yellowtail Flounder -2015
- ✦ CCE created an email (hotspot@cornell.edu) to communicate and transfer bycatch data
 - ✧ Expansion into Year 2 allowed for a Boatracs macro to be developed
- ✦ CCE developed a website (Squidtrawlnetwork.com) to foster outreach and education for the project
 - ✧ The website posts hotspot charts to inform network vessels and all interested fleets of current bycatch hotspots



Participating Bycatch Avoidance Network Vessels

52 vessels are currently
receiving and
transmitting hotspot
reports via VMS

| | | | |
|-------------------|------------------|-------------------|----------------|
| Jason & Danielle | Travis & Natalie | Anne Kathryn | Enterprise |
| Perception | Nancy Elizabeth | Rayda Cheramie | Sea Breeze Too |
| Caitlin & Mairead | Eva Marie | Heather Lynn | Hopeful |
| Viking Pride | Darana R | Tradition | Cody |
| Pontos | Excalibur | Lena Pearl | Atlantic Queen |
| Stirs One | Determination | Ruthy L | Mystic Way |
| Sea Rambler | Lightning Bay | Conor and Michael | Gabby G |
| Megan Marie | Stephanie Bryan | Shelby Ann | |
| Evening Prayer | Rebecca Mary | Mattie and Maren | |
| Rhonda Denise | Tenacity | Heritage | |
| Illusion | Karen Elizabeth | Debbie Sue | |
| Rianda S | Yankee Pride | Charlie's Pride | |
| Mary Elizabeth | Prevail | Evan Christine | |
| Mackenzie Paige | Persistence | Olivia Catherine | |
| Flicka | Relentless | Alexis Martina | |

River Herring Bycatch Report Levels

Urgent -2-5% or above as a % total catch

High -1%-2% of RH/S as a % total catch

Moderate -0.5%-1% of RH/S as a % total catch

Low -0%-0.5% of RH/S as a % total catch

Negative - 0 river herring present

427 River herring reports have been received. Over 80% have been negative declarations.



Reduction of River Herring Bycatch in the Longfin Squid Fishery

RH/S bycatch levels and reported incidental catch in the longfin squid fishery are not documented and posted by NMFS for public use on a regular basis because there is no bycatch cap.

The RH/S baseline data used in developing our RH/S bycatch avoidance was from Northeast Fisheries Observer Program (NEFOP) data in which we added all RH/S species together including herring NK (unclassified). RH/S total bycatch estimates from observed trips (2006-2010) total 188,585 pounds per year.

RH/S total bycatch estimates from observed trips (2011-2013) total 117,413 pounds per year. An overall reduction occurred from 188,585 pounds in the 2006 to 2010 time series to 117,413 pounds in the 2011 to 2013 time series, a **38% reduction**.

A significant reduction in Herring, NK from 120,610 lbs (2006-2010) to 54,536 lbs (2011-2013).

Multiple variables can be the cause of such a reduction. An overall drive for better herring species identification on the part of this project and the NEFOP is sure to be one component as well as the overall bycatch avoidance strategy.

Outcomes

- MAFMC decided that a RH/S bycatch cap was unwarranted in the longfin squid fishery
- 38% reduction in river herring species in Longfin squid fishery observed
- Voluntary participation to avoid bycatch without regulation
- Evidence of changes in fishing behavior
- At sea monitoring
- Study Fleet Component
- Data Transfer of river herring and butterfish hotspots