



Cooperative Research's work with the Atlantic Herring and Mackerel Fisheries

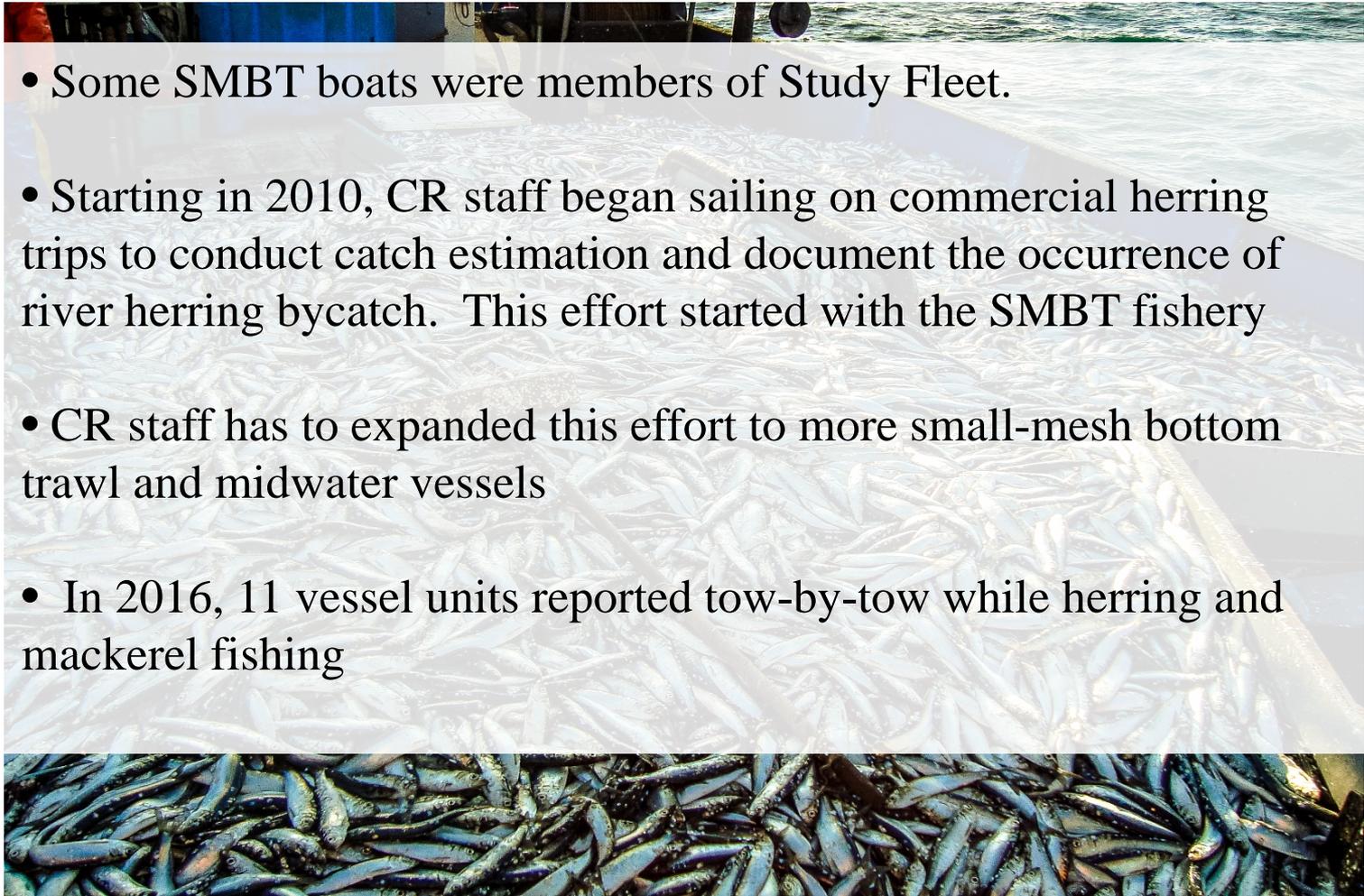


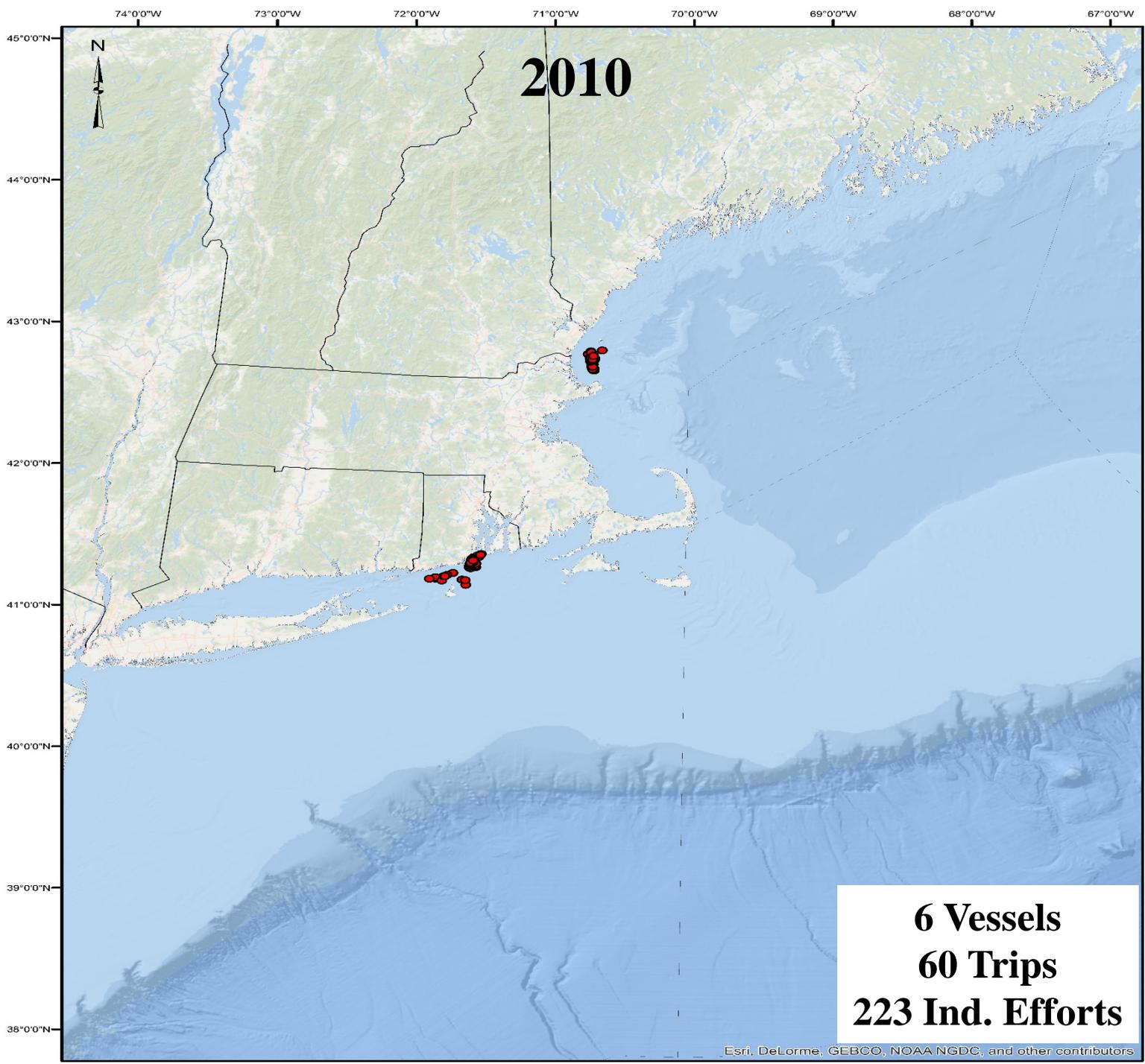
Christopher L. Sarro
10/4/17



Background

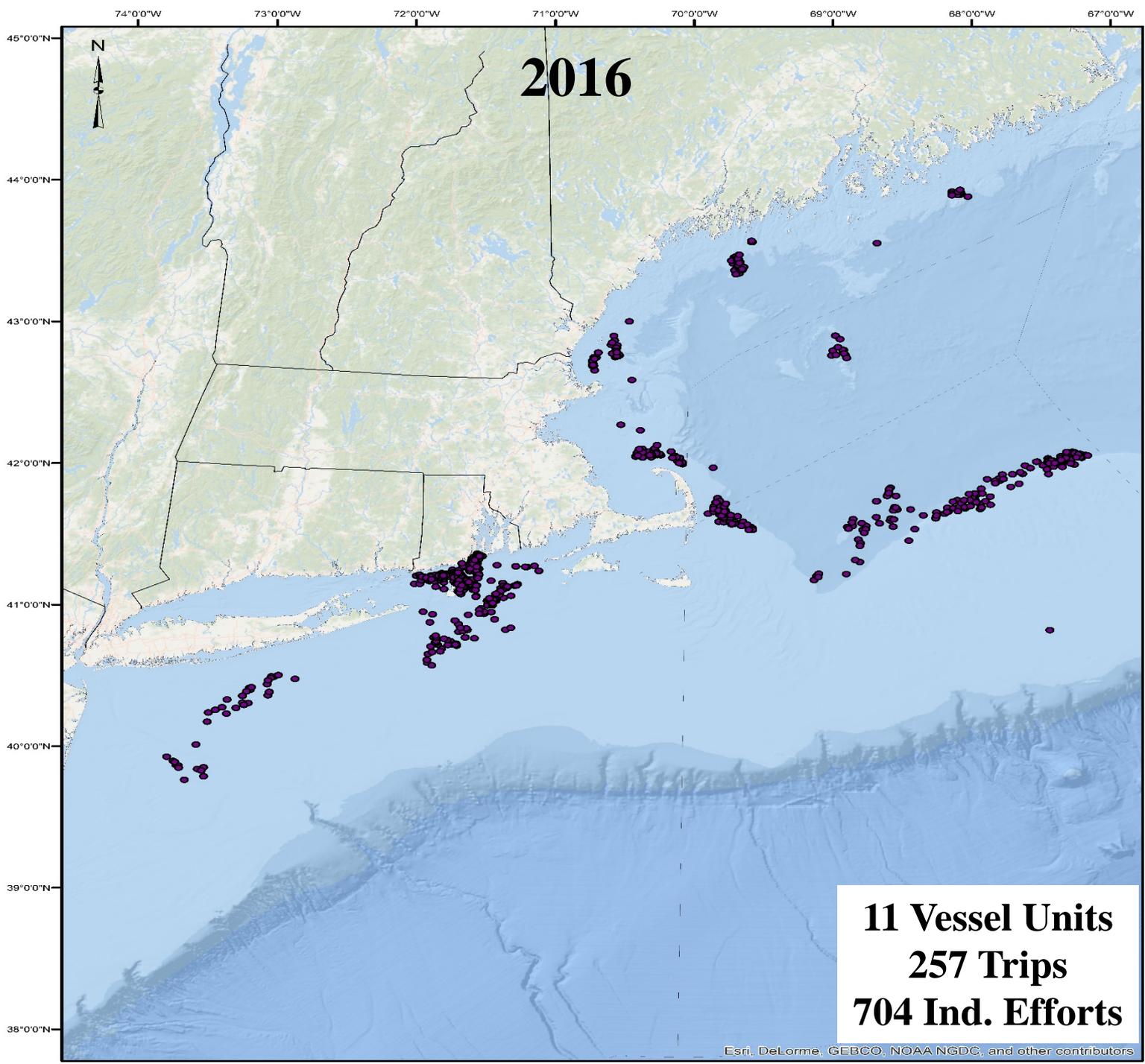
- Some SMBT boats were members of Study Fleet.
- Starting in 2010, CR staff began sailing on commercial herring trips to conduct catch estimation and document the occurrence of river herring bycatch. This effort started with the SMBT fishery
- CR staff has to expanded this effort to more small-mesh bottom trawl and midwater vessels
- In 2016, 11 vessel units reported tow-by-tow while herring and mackerel fishing





2010

**6 Vessels
60 Trips
223 Ind. Efforts**





Study Fleet's Collaboration with MADMF and SMAST



- Starting in January, 2013, CR staff began a data sharing project with MADMF and SMAST to reduce effort duplication between the two group and reduce the burden on captains. This effort started with the SMBT fleet in Point Judith
 - Allows MADMF staff to access to fishermen's data
 - We share CR staff collected data with MADMF staff for higher resolution bycatch estimates
- Starting in January, 2016, CR staff began installing a herring reporting module on midwater boats, which replaces the need for captains to report using both FLDRS and a separate reporting software





Study Fleet's Data Sharing

Important Notes

In 2015 bycatch classifications were changed to reflect river herring catch limits. HIGH bycatch events now reflect a rate at which river herring catch limits will be reached bycatch t

Information only inclu

Cell class

All catch samplers

Numbers within the

A single t

- Low (le
- Moder
- High (a

C

- Low (le
- Moder
- High (a

Last Upd
Vessel Sa

Questions or
contact Dave
nbethoney@umassd.edu
or 1-508-910-6386

Herring Daily Report



Trip ID:

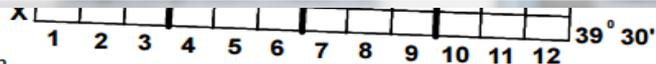
	Efforts Transmitted
▶ 1	
2	

Output Folder:

Catch Vessel:

30'
2° 5'

1° 30'





River Herring Bycatch Avoidance Project

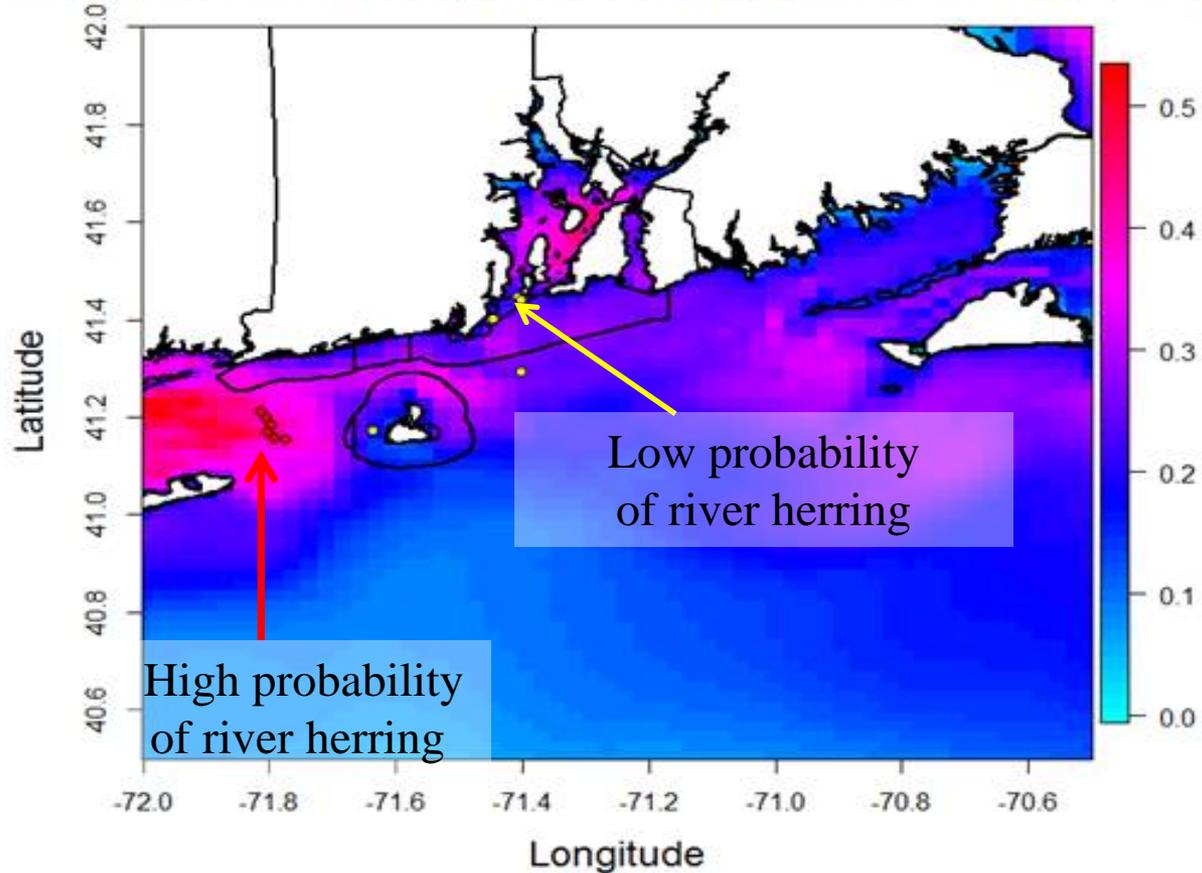
- From December 2015 through February 2016, CR staff field tested predictive river and Atlantic herring distribution models and collected detailed environmental data with funding from GARFO's Protected Resources Division.





River Herring Bycatch Avoidance Project

Alewife/Atl herring overlap forecast 1.14.16, 12a



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River Herring Bycatch Avoidance Project

- The model could not accurately predict the likelihood of catching river herring in the study area
- The relatively small spatial scale of the fishery likely affected the accuracy of the model.
- A model based on fisheries dependent data may be more accurate than one based on fisheries independent data.
- A fisheries dependent data approach will soon be underway with the midwater fleet.
- Fishermen were involved throughout the entire process and helped with the decisions in the field.