The Commercial Fisheries Research Foundation (CFRF) is a non-profit, private organization that was founded in 2004 by a group of commercial fishermen. The fundamental goal of the CFRF is to create practical solutions to the issues faced by commercial fishermen in southern New England. The CFRF’s Board of Directors is filled entirely by commercial fishermen and individuals who work in industries that support commercial fishing. The Foundation’s mission is to establish quality relationships between fishermen, managers, and scientists through collaborative research projects. These projects allow fishermen and scientists to work together to alter current gear designs or develop new ones to fish more selectively which ultimately culminates in better management decisions.

The Gear Trials Program was established and sponsored by the CFRF. The Program addresses two experimental gear types, the large mesh belly panel and the 12" drop chain sweep. Both were designed to reduce winter flounder bycatch in the southern New England stock area within the small mesh trawl fisheries. Through this project, CFRF with Cornell University Cooperative Extension Marine Program (CCE) acting as a facilitator, implemented a program to assist the commercial fishing industry with obtaining and implementing these two conservation engineering gear modifications. The program will also continue to test the performance of the two gear modifications. The financial support component of the program assists fishing vessel owners with acquiring this new gear technology (large mesh belly panel and/or 12" drop chain sweep) through a financial assistance program for fishing vessel owners.

The overall goals and objectives of the two components of the Gear Trials Program are the following:

- To coordinate and assist industry with acquiring the new gear technology (large mesh belly panel and/or 12" drop chain sweep) through a financial assistance program for fishing vessel owners.
- Establish an outreach program that will monitor and record fishermen’s observations and comments about the performance of these two gear types and effectively relay this information back to fishing industry members. The outreach program will also distribute the results of the continued testing of the new gear in the whiting fishery when the research is completed.

The large mesh belly panel was initially tested by CCE in 2010 for a Southern New England Collaborative Research Initiative (SNECRI) project which was funded by CFRF. Results of the study showed that the use of the belly panel resulted in an 88% reduction in winter flounder, and an 83% reduction in combined demersal species (all flounders, skates, dogfish and sea robins) while showing no statistically significant loss of squid. Similarly, the experimental 12” drop chain sweep was proven to be functionally effective through testing conducted by CCE in 2011/2012 and funded by CFRF. During this project, the 12” drop chain sweep resulted in a 78% reduction in winter flounder bycatch and a 76% reduction in combined demersal species bycatch with no significant loss of squid.

Both of these demonstration projects were well received by the commercial fishing industry. The significant bycatch reduction achieved by each of the modified gear types in the squid fishery has been recognized mutually by industry and scientists prompting them to now seek more information on the performance of this technology in the small mesh whiting fishery.
Outcomes (as of September 16, 2013)

At the start of the program efforts focused on identifying qualified participants and informing them of the unique opportunity that was being offered by the CFRF. Qualifications included home port (NY, CT, MA, RI, DE, NJ, VA) and vessel trip reports (current VTR’s indicating the use of an otter trawl with 3” mesh or smaller landing whiting, squid, or scup in NMFS statistical areas 537, 538, 539, 611, 612, or 613). Eligible participants received voucher applications for one or both of the new gear types from CFRF that could be redeemed at Superior Trawl or Reidar’s Manufacturing, Inc.

To date:
• 44 completed applications have been received from the combined states of NY, CT, MA, and RI.
• From all the completed applications, 41 vouchers were issued for the 12” drop chain sweep and 39 vouchers were issued for the large mesh belly panel.
• 31 participants have already received their new gear accounting for 27 drop chain sweeps and 26 belly panels.

Fishermen have begun using the new gear and CCE has started to receive feedback on the performance of the new gear types. The gear has been used by fishermen targeting primarily squid, whiting, and scup. Opinions of these gear modifications are predominantly positive.

To date:
• 18 responses have been received by CCE in the form of a brief survey (10 questions) regarding the fishermen’s opinions.
• The surveys are from March, April, May, and June of 2013.
• 16 surveys were received relative to the use of the 12” drop chain sweep and 2 surveys were received commenting on the combined use of the 12” drop chains and the large mesh belly panel.
• All 18 surveys indicated a positive reduction in bycatch with estimates ranging from a 20% reduction to a 90% reduction.
• 15 of the 18 surveys stated there was no reduction in retention of the target species while the 3 remaining surveys indicated an estimated 20% reduction in the target species.

Continued Research

During mid-July of 2013 four days of research fishing evaluating the performance of the two gear types were conducted while targeting whiting. Two additional days of fishing still remain and then the accumulated data will be organized and analyzed to evaluate the effectiveness of the two gear types as a means of winter flounder bycatch reduction in the targeted small mesh whiting fishery. Once completed, the results will be available to all interested parties. Future research may be directed at the effectiveness of these gear types in reducing the bycatch of other flounders as well.

For More Information:
If you are interested in participating in the Program there is funding still available. Please contact Jane Dickinson at:
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Commercial Fisheries Research Foundation go to:
www.cfrfoundation.org

Gear Trials Program go to:
www.geartrials.org

Cornell University Cooperative Extension Marine Program go to:
www.ccesuffolk.org/marine-2/

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