



Cooperative Gear Research to Reduce Protected Species Bycatch

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Protected Species Gear Research Group



NEFSC / PSB GEAR RESEARCH FLOWCHART

Problem Identification
All

Bycatch analysis to describe interaction and spatial

We plan to work with industry to the fullest extent possible throughout the entire documentation, design, and testing phases. We believe that working with industry when

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industry

but crucial location.

and the

exists.

Industry

Testing

Experimental fishery

Observers are placed on commercial vessels operating in the commercial fishery and collect quantitative data on the gear modification that is used to assess the effectiveness of the gear modification.

NEFSC provides scientific information to NERO

NERO decision making

Key to color coding

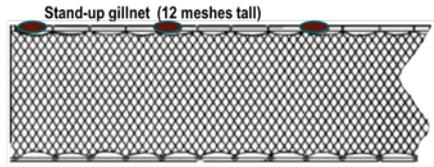
NMFS
NERO

NMFS
NEFSC

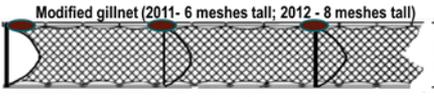
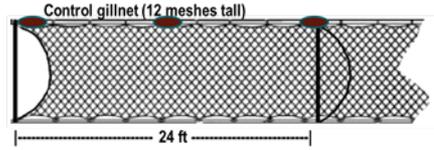
Fishing
Industry

Collaborative Gear Research Studies

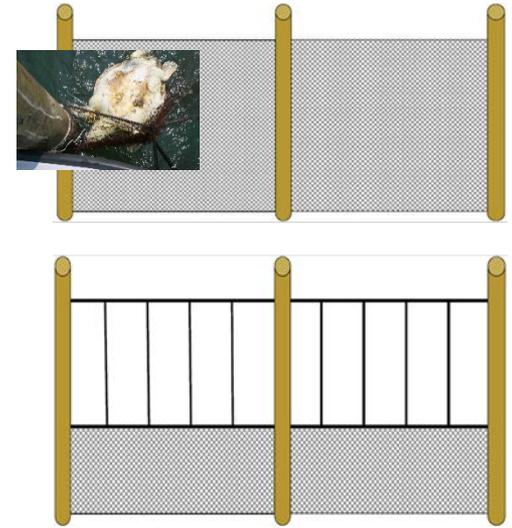
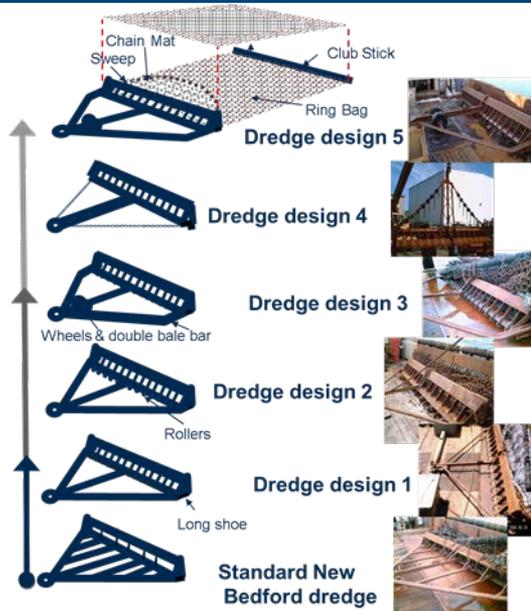
- **Scallop dredge (turtles)** – 2004, 2005, 2008, 2010, 2012
- **Pound net fishery (turtles)** – 2004, 2005
- **Trawl fisheries (turtles)** -2006, 2007, 2009, 2010, 2012, 2013, 2014, 2015, 2017
- **Gillnet fishery (sturgeon)**- 2010, 2011, 2012, 2013
- **Gillnet fishery (turtles)** - 2017
- **Longline fishery (cusk)** - 2014



Side view



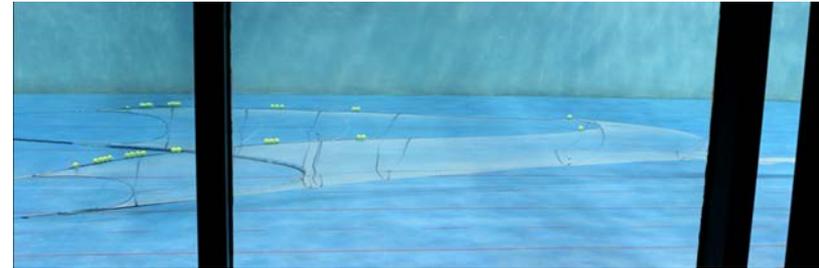
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Chain mat for excluding turtles

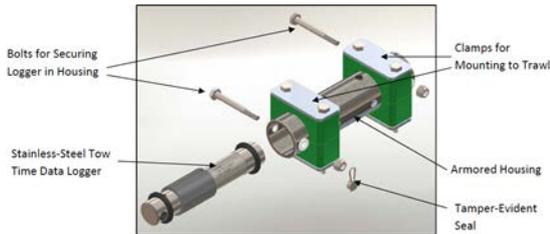


Typical rock chain configuration



Standard TED with large opening

Standard TED with large opening and 25% blockage



Collaborative Gear Research Studies

Fishermen Collaborators

- **Trawl fisheries (turtles)** – Jimmy Ruhle, Bobby Rhule, Chris Roebuck, Brady Lybarger, Thomas Newman, Kurt Deyback, Phil Rhule Jr., Dave Aripotch, Jeff Krauss, Pat Kavanaugh, Jeff Eustler, Jim Brindley, Andrew Jackson, Dave Trader, James Lund.
- **Gillnet fishery (sturgeon)**- Kevin Wark, Mike Karch, Richard Luedtke, Thomas Danchise, James Wescott, Sonny Gwyn.
- **Gillnet fishery (turtles)** – Charlie Locke.
- **Scallop dredge (turtles)** – Ron Smolowitz, Ronnie Schrader, Mike Francis, Jim Gutowski – numerous others.
- **Pound net fishery (turtles)** – Keith Like, Kenny Heath.
- **We also collaborate with the GARFO, SEFSC, UMASS, UDE, WHOI, MBL, MADMF, UNH, URI**



http://www.nefsc.noaa.gov/read/protssp/PR_gear_research/