



# The NOAA FISHERIES NAVIGATOR

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## Windowpane Flounder AM Area in Southern New England Shrinks

**N** OAA Fisheries implemented Framework Adjustment 52 to the Groundfish Fishery Management Plan on January 14, 2015.

Framework 52 contains two measures that allow NOAA Fisheries to adjust accountability measures (AMs) for southern and northern windowpane flounder. First, NOAA Fisheries can reduce the size of the AM area if the windowpane flounder stock is rebuilt and determined to be healthier than expected under certain criteria. Second, the time that the AM area is in effect can also be shortened if the fishery underharvests its windowpane flounder quota the year following an overage.

Due to substantial fishing year 2012 catch overages of both northern and southern windowpane flounder, large AM areas were put in place for trawl vessels at the beginning of fishing year 2014. The southern windowpane flounder stock is rebuilt and meets the biological criteria described in Framework 52. As a result, the Large AM Area currently in place in southern New England is being reduced to the Small AM Area for the rest of fishing year 2014 (through April 30, 2015). NOAA Fisheries cannot modify the current Large AM Area for northern windowpane flounder because none of the qualifying criteria included in Framework 52 were met.

Bottom-trawl vessels are required

to use selective trawl gear, such as the haddock separator or Rühle trawl when fishing within the windowpane flounder AM areas.

Additional information on Framework 52 can be found online at [www.greateratlantic.fisheries.noaa.gov/regs/2015/January/15mulfw52fr.pdf](http://www.greateratlantic.fisheries.noaa.gov/regs/2015/January/15mulfw52fr.pdf).

### Southern and Northern Windowpane Flounder AM Areas Through April 30, 2015.

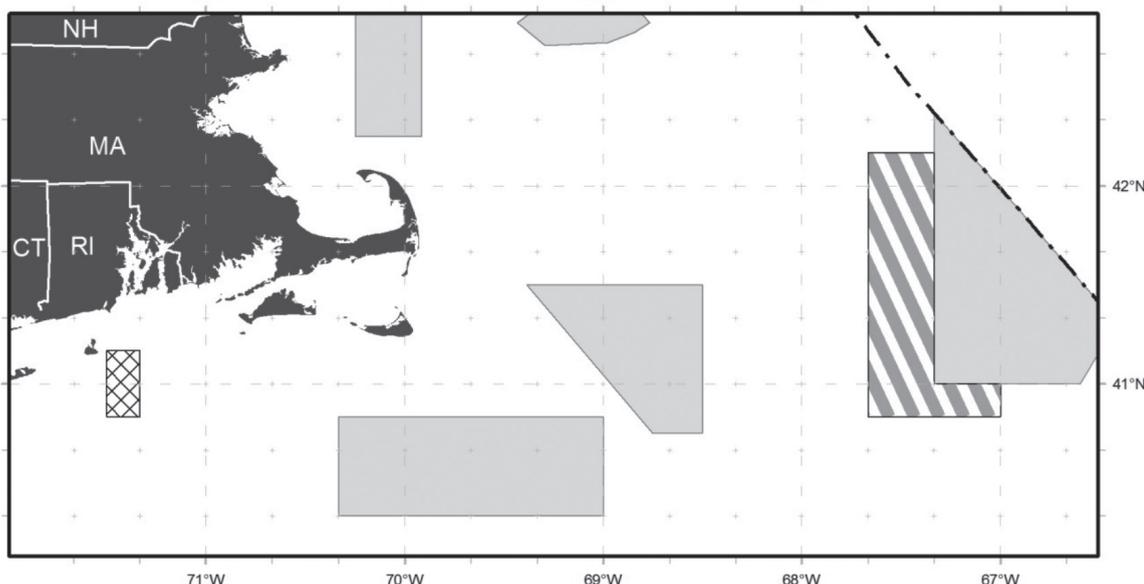
#### Northern Windowpane Flounder Large AM Area

Point	N. Latitude	W. Longitude
1	42°10"	67°40"
2	42°10"	67°20"
3	41°00"	67°20"
4	41°00"	67°00"
5	40°50"	67°00"
6	40°50"	67°40"
1	42°10"	67°40"

#### Southern Windowpane Flounder Small AM Area

Point	N. Latitude	W. Longitude
1	41°10"	71°30"
2	41°10"	71°20"
3	40°50"	71°20"
4	40°50"	71°30"
1	41°10"	71°30"

### Gear Restricted AM Areas for Windowpane Flounder Through April 30, 2015



 Southern Windowpane Flounder Small Accountability Measure Area
  Northern Windowpane Flounder Large Accountability Measure Area
  Groundfish Closed Area

## Winter Safety Reminder

**C**ommercial fishing, as most fishermen know, is one of the most dangerous occupations in the US.

According to the Center for Disease Control and Prevention, roughly 46 fishermen die each year, with vessel disasters and falls overboard the leading cause of death.

According to the National Institute for Occupational Safety and Health report, "Fatal Occupational Injuries in the US Commercial Fishing Industry", the East Coast had the highest number of commercial fishing fatalities in the US.

Fisheries with the highest number of fatalities on the East Coast include scallop, groundfish, and lobster.

By ensuring that vessels are in full compliance with safety requirements and crews are trained in safety and survival techniques, we can all contribute to improving the safety record of the commercial fishing industry.

### Safety gear

- Most importantly, is everything readily accessible?
  - PFDs and Immersion Suits:** Are they the right size and in good condition?
  - Life Ring Buoy:** Is your life ring marked? Does it have an appropriate lifeline?
  - Survival Craft:** Is your survival craft due for a servicing? Is it capable of holding all crew onboard?
  - EPIRBs:** Does the EPIRB's battery need replacing? When was the last time it was tested?
  - Flares:** Are they being stored properly in a waterproof container?
  - Fire Extinguishers:** Do you have enough onboard? Are they in serviceable condition (within the weight and/or pressure limits, and free of leaks or damage)?
  - Backfire Flame Arrester:** Is it clean, free of foreign matter, holes and/or tears?

### Commercial fishing safety training

The National Institute for Occupational Safety and Health (NIOSH) recommends that all fishermen take a Marine Safety class at least once every 5 years.

The Northeast Center for Occupational Health and Safety (NEC) in partnership with Fishing Partnership Support Services offers commercial fishing safety training sessions as often as funding allows.

To find out the date and location of the training nearest you, contact them by e-mail at [info@nycamh.org](mailto:info@nycamh.org), or by phone at (800) 343-7527. You can also visit <http://www.necenter.org/fishing/services/> for more information.

### Live to Be Salty

Live to Be Salty is a safety program developed by NIOSH and their partners to reduce drownings by promoting the use of personal flotation devices (life jackets) on board commercial fishing vessels.

Visit <http://www.livetobesalty.org/> to learn about comfortable PFD options currently available for use by commercial fishermen.



## Northern and Southern Areas Reopened to Bivalve and Gastropod Harvesting

On Jan. 1, the closures referred to as the Northern and Southern Temporary Paralytic Shellfish Poisoning Closed Areas (see figure) off of the coasts of Massachusetts and New Hampshire were lifted for gastropod (whelks, conchs, snails) and whole and roe-on scallop harvesting.

These areas were closed to bivalve harvesting in 2005 due to paralytic shellfish poisoning concerns, and they remained closed through 2014. Starting in 2014, the closures also included a prohibition on the harvest of gastropods.

Last year, after including gastropods in the closure, NOAA Fisheries received a number of inquiries regarding whether these closures were still warranted.

In response, we worked closely with the fishing industry, the US Food and Drug Administration (FDA), and the MA Div. of Marine Fisheries (MA DMF) to find out.

With support from this collaborative effort, commercial fishermen collected samples from these closed areas during last summer. The FDA conducted laboratory testing of the samples, and determined that toxin levels were well below those known to cause human illness.

As a result, we – with the FDA – were able to safely reopen these areas.

To ensure continued public safety, MA DMF will coordinate regular tests on samples collected from this area. If tested samples exceed the threshold for

public safety, we will reinstate the closure.

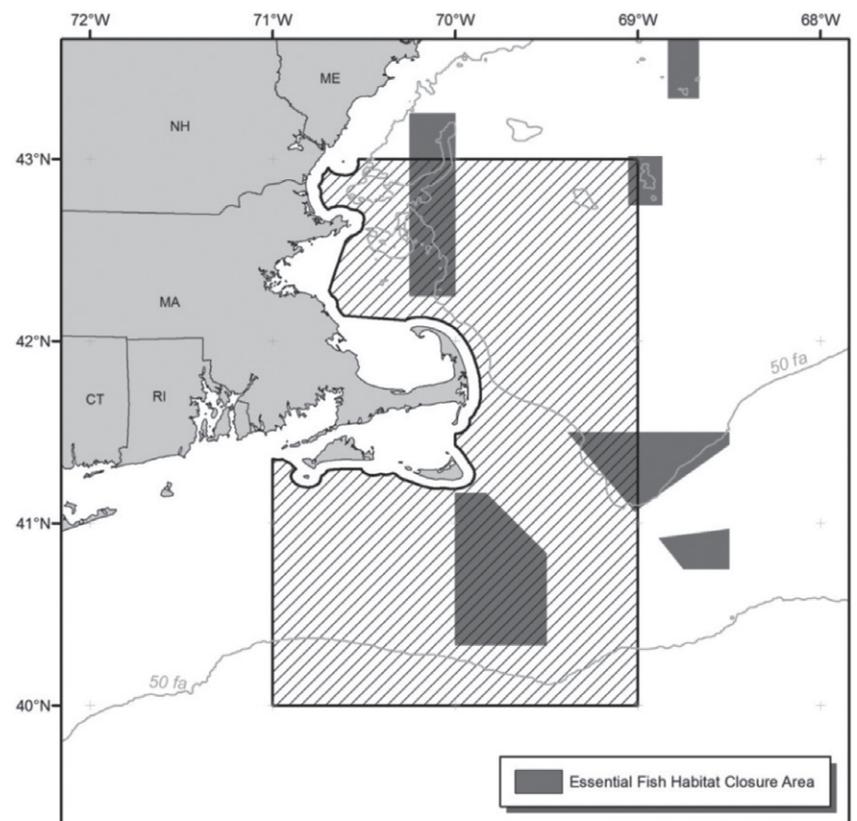
“This is a great example of what can be accomplished when we work with the fishermen,” said NOAA Fisheries Regional Administrator John Bullard.

“It was becoming apparent that these closures needed to be revisited, and through fishermen’s efforts and collaboration with us and multiple other government organizations, we were able to reopen approximately 17,000 square miles of important fishing grounds.

“This could not have been done without the fishing industry’s involvement,” he continued.

Please remember, though, that the overlapping Essential Fish Habitat Areas will remain closed to all bottom-tending mobile gear, including scallop dredge gear.

For more information, call the Sustainable Fisheries Division, at (978) 281- 9315.



## Efforts Underway to Improve Fishery Dependent Data

Last fall, we began the long overdue effort to improve our fishery dependent data system.

What is fishery dependent data?

It is data associated with fishing activity, and that describes fishing operations, including:

- Fishing location,
- Gear type used,
- Area fished,
- Landings,
- Bycatch, and
- Operational costs.

The data come from a variety of sources – including fishermen, dealers, and observers – and from automated technology such as vessel monitoring systems.

This information is critical for monitoring catch, but also helps us estimate the size of fish populations and better understand how fisheries operate.

Fishermen use this information to plan their operations and correct errors in their landings statistics, while dealers use this information to forecast landing trends to anticipate when they could fill future orders.

### An evolving process

We started collecting fishery dependent data more than 20 years ago, beginning with fishing logbooks.

Our data collections have expanded over time, and were developed to meet specific needs in one fishery or another. As a result, our fishery dependent data system is a patchwork of separate collections and databases.

As our scientific and management objectives have changed over the years – including the recent trend towards more real-time and vessel-specific data – our data collection systems have not been able to keep up with our current and anticipated needs.

“We created our existing data reporting and monitoring systems over many years to support fishery management measures as they were developed,” said John Bullard, Regional Administrator.

“But as management plans and requirements have evolved, we’ve seen an increased demand for finer scale and more timely information.

“We recognize that our data systems need to improve to accommodate that demand.”

### Reaching out

In Sept. 2013, we began interviewing people who submit or use fishery dependent data within the

Northeast to find out what data they use, what data they want, and how we can improve our data collections and associated systems.

Our goal is to identify ways to improve the timeliness, accuracy, consistency, and availability of fishery dependent data, or data that will be used for efforts such as stock assessments, quota monitoring, and fishery business planning.

We teamed with the Gulf of Maine Research Institute (GMRI) to interview fishing industry participants, industry organizations, sector managers, and dealers.

We also interviewed biologists and managers within our agency, fishery management councils, the Atlantic States Marine Fisheries Commission (ASMFC), and state fishery agencies from Maine to Florida and the Gulf of Mexico.

Finally, we interviewed non-governmental organizations (NGOs) and academic institutions to identify their data needs as well.

All together, we interviewed 180 individuals about what data they need and use, and what an ideal fishery data management system would look like.

Last July, we also held a two-day workshop

See *DEPENDENT DATA*, page 4

# Researchers Use Sound to Map Atlantic Cod Spawning Grounds

**A** collaborative multi-year program to monitor winter cod spawning activity in Massachusetts Bay is just one of several projects managed by the recently formed Northeast Passive Acoustic Network within NOAA Fisheries Northeast Fisheries Science Center (NEFSC).

Using underwater recording units that detect and record ambient sounds to listen for cod that carry sound-emitting (acoustic) tags;

And now, by deploying underwater gliders equipped with sound recording devices;

Scientists hope to confirm the location and duration of known coastal cod spawning grounds throughout the year while also identifying possible new spawning areas in both state and federal waters.

## Deploying gliders

Last December, gliders were fitted with sound recording equipment and deployed in Massachusetts Bay.

The gliders are unmanned, programmable vehicles that use buoyancy-based propulsion and wings to move up and down through the water.

For three weeks, these gliders followed programmed track lines heading south from

Salem toward Plymouth, recording both natural and artificial sounds in known winter cod spawning grounds. These spawning grounds are closed to fishing from mid-November through January.

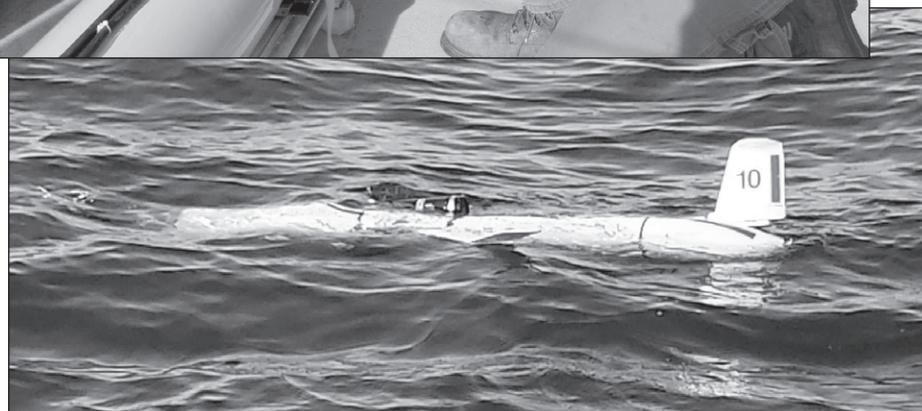
The information gathered by the gliders will be added to data already collected by stationary underwater recording units deployed in the bay. Those units were placed during a series of projects that began in 2011 and were expanded in time and area in 2012 and 2013.

Some of these units passively collect and record ambient sounds: others are active sensors that listen for acoustically tagged cod. Both types of stationary units store the data for weeks or months, until the unit can be retrieved.

"We are excited about bringing in new technologies to identify historic and perhaps new spawning grounds of cod," said Sofie van Parijs, who heads the NEFSC's



Christopher McGuire/The Nature Conservancy photos



Eric Matzar/NEFSC/NOAA photo

passive acoustics group.

"The gliders cover areas that stationary recorders and active sensors don't reach, giving us a better sense of where and when fish are in the area." This work builds upon our existing knowledge and adds another piece to the puzzle."

## Finding the "haystacks"

Atlantic cod are known to gather in high concentrations in very small areas to spawn, sometimes forming vertical columns or "haystacks."

Many of them return annually to the same location to spawn, a behavior termed spawning site fidelity.

During the spawning season, male cod produce low frequency sounds, called grunts, which are thought to serve as a courtship display to females or as an aggressive display to competitors.

The grunts, as well as other ambient sounds, are "heard" and recorded by the stationary units.

By analyzing these data, scientists are able to characterize ocean noise, study the acoustic behavior of marine mammals and fish, and gain a better understanding of the abundance and distribution of different species.

Because cod vocalizations can be detected only within 50-100 meters (165-330 feet) of the source, the gliders helped identify possible cod spawning activity in areas outside the range of the stationary recording units. This includes an area to the east that extends into the Stellwagen Bank sanctuary.

During the deployment last December, the two gliders – operated by Woods Hole Oceanographic Institution (WHOI) – followed a programmed track line, one 12 hours behind the other, recording both day and night.

The gliders were equipped with a variety of instruments, including acoustic receivers that can detect cod grunts and tagged fish in the vicinity.

Both gliders were recovered on Dec. 22. NEFSC's

Orono Field Station in Maine loaned several receivers, usually used to track tagged Atlantic salmon, to the project.

A bonus on both gliders was a separate passive acoustic device that records whale vocalizations in the area. Every two hours, real-time sound detections of humpback, right, fin, and sei whales were relayed to Van Parijs and other scientists on shore.

"We will be pulling up the recording units in March," said Van Parijs.

"In the coming months we will be looking at where we found cod and where we didn't, and planning for next winter's experiment.

"From a fisheries management perspective, we need to know what spawning areas should be protected, how big an area should be considered, and for how long."

These projects are the result of joint work involving researchers from the NEFSC passive acoustics group, NOAA's Stellwagen Bank National Marine Sanctuary, the MA Div. of Marine Fisheries, the University of Massachusetts-Dartmouth School for Marine Science and Technology, and local fishermen.

WHOI and The Nature Conservancy joined the group for the glider study.

Other Northeast Passive Acoustic Network projects include:

- Collecting near real-time data on baleen whale distribution and occurrence,
- Long-term monitoring of baleen and toothed whales, and
- Mitigation of potential impacts on North Atlantic right whales.

For further information, visit the Northeast Acoustic Network website at: <http://www.nefsc.noaa.gov/psb/acoustics/psbAcousticsNEPAN.html>.

## Did you find what you were looking for?

**N** OAA Fisheries wants to know how we can improve our website to better serve your needs.

We are partnering with ForeSee to randomly survey visitors about your experience on our website. When you visit one of our websites, the survey will automatically pop up. If you decline, the survey will not bother you again.

If you choose to help us by completing this short survey, please know that we appreciate your time.



## Harbor Porpoise Take Reduction Annual Management Area Reminder

The Harbor Porpoise Take Reduction Plan (HPTRP) was implemented to reduce bycatch of harbor porpoise in gillnet fisheries from Maine to the North Carolina/South Carolina border.

Management under the HPTRP includes pinger requirements, seasonal closure areas, and consequence closure areas.

The following table lists upcoming dates for Northeast and Mid-Atlantic HPTRP management area restrictions that gillnet fishermen need to know.

Details on gear modifications, pinger specifications, and management area maps are available on the HPTRP website <<http://www.greateratlantic.fisheries.noaa.gov/hptrp>>.

For more HPTRP information contact the fishery liaison in your area:

- New England – John Higgins at (207) 677-2316; or
- Mid-Atlantic – Glenn Salvador at (757) 414-0128.

Or call NOAA HPTRP Coordinator Kate Swails at (978) 282-8481.

### ALWTRT Update

The Atlantic Large Whale Take Reduction Team (ALWTRT) met in Providence, RI in January to discuss proposals submitted by the MA Div. of Marine Fisheries, RI Div. of Fish and Wildlife, and ME Dept. of Marine Resources, to make adjustments to the recent vertical line rule.

The team recommended that NOAA Fisheries accept the proposals as suggested by the states – provided that additional gear marking occurs in certain areas.

We are currently reviewing the team's recommendation.

For more information, visit the Atlantic Large Whale Take Reduction website: <[www.greateratlantic.fisheries.noaa.gov/whaletrp](http://www.greateratlantic.fisheries.noaa.gov/whaletrp)>.

Harbor Porpoise Take Reduction Plan		
Northeast Gillnet Fisheries (All)		
Management Area	Dates	Closure or Gear Modifications
Northeast Closure Area	August 15- September 13	CLOSED to ALL gillnet fishing
Mid-Coast Management Area	September 15- May 31	Pingers Required
Massachusetts Bay Management Area	November 1- February 28/29	Pingers Required
	March 1-31	CLOSED to ALL gillnet fishing
	April 1- May 31	Pingers Required
Stellwagen Bank Management Area	November 1- May 31	Pingers Required
Southern New England Management Area	December 1- May 31	Pingers Required
Cape Cod South Closure Area	March 1-31	CLOSED to ALL gillnet fishing
Offshore Management Area	November 1- May 31	Pingers Required
Cashes Ledge Closure Area	February 1-28/29	CLOSED to ALL gillnet fishing

Mid- Atlantic Gillnet Fisheries (Large and Small Mesh Requirements)		
Area	Dates Gear Modifications Required	Dates of Gillnet Closure
LARGE MESH GILLNET (MESH SIZE 7-18 INCHES)		
Mudhole North Management Area	Jan. 1- Jan. 31; March 16-March 31; April 21- April 30	Feb. 15- March 15; April 1-April 20
Mudhole South Management Area	Jan. 1- Jan. 31; March 16-March 31; April 21- April 30	Feb. 1- March 15; April 1-April 20
Southern Mid-Atlantic Management Area	Feb. 1- Feb. 14; March 16- April 30	Feb. 15-March 15
Waters off New Jersey Management Area	Jan 1- Mar 31, April 21-30	April 1-April 20
SMALL MESH GILLNET (MESH SIZE >5 INCHES TO < 7 INCHES)		
Waters off New Jersey Management Area	Jan. 1- April 30	-
Mudhole North Management Area	Jan. 1-Feb 14, March 16-31, April 21-30	Feb. 15- March 15
Mudhole South Management Area	Jan. 1- Jan. 31; March 16-April 30	Feb. 1- March 15
Southern Mid-Atlantic Management Area	Feb. 1-April 30	-

## Dependent data

Continued from page 2

in New Bedford to further discuss data needs. The workshop report can be found at: <[http://www.gmri.org/sites/default/files/resource/final\\_fdd\\_workshop\\_report\\_91014.pdf](http://www.gmri.org/sites/default/files/resource/final_fdd_workshop_report_91014.pdf)>.

### Feedback helps form a plan

We are now evaluating the interviews and workshop feedback to develop recommendations on how to improve our data systems.

An external contractor is helping develop a project plan, which will be implemented over time, with system updates expected to be fully operational during 2017.

Our current timeline is as follows:

- Spring 2015 – Approve general vision,
- Summer/Fall 2015 – Develop project plan & business rules,
- Spring/Summer 2016 – Develop work breakdown structure and implementation timeline,
- Fall 2016/Spring 2017 – Program and test updates to various components, and
- May 2017 – Improved system is fully operational.

This is an ambitious timeline, but we are already making progress towards this vision and have identified several projects that can start now – beginning with revised vessel logbook instructions, and streamlined vessel declarations and reports.

These changes will allow us to provide higher quality and more timely data for scientific and management purposes while also providing

industry with more fine-scale data for use in business planning, daily operations, and catch accounting.

Because our collective data needs and uses will change over time, we will continue to seek input on how to improve our data systems to meet everyone's ongoing data needs and uses.

Look for periodic updates on our progress, and please provide feedback on how we are doing in meeting our shared goals.

If you have any questions or want more information on our fishery dependent data improvements, please contact our project coordinators:

- Jennifer Anderson, by phone at (978) 218-9226, or by e-mail to <[Jennifer.anderson@noaa.gov](mailto:Jennifer.anderson@noaa.gov)>, or
- Jon O'Neil, by phone at (508) 495-2207, or by e-mail at <[Jon.Oneil@noaa.gov](mailto:Jon.Oneil@noaa.gov)>.