

# Tow log and catch for study of windowpane flounder catch using scup gear and a Large Mesh Belly Panel (LMBP), October 2015 (Windowpane Bycatch project)

**Website:** <https://www.bco-dmo.org/dataset/685079>

**Data Type:** Cruise Results

**Version:** 1

**Version Date:** 2017-03-16

## Project

» [Small Mesh Fishery Bycatch Reduction in the Southern New England/Mid-Atlantic Windowpane Flounder Stock Area](#) (Windowpane Bycatch)

## Program

» [NorthEast Consortium](#) (NEC)

Contributors	Affiliation	Role
<a href="#">Hasbrouck, Emerson C</a>	Cornell University (Cornell)	Principal Investigator
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## Abstract

This dataset reports the cruise metadata, gear deployment information as well as the weights for the species caught in each haul. Data was collected from paired tows to determine if a large mesh belly panel effectively reduces the catch of windowpane flounder in the small mesh scup fishery with existing gear and fishing practices. The data was analyzed to determine the statistical level of difference between the control and experimental nets for the targeted scup catch and for the windowpane flounder catch, should a difference exist.

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## Coverage

**Spatial Extent:** N:41.333 E:-70.667 S:40.833 W:-71.5

**Temporal Extent:** 2015-10-15

## Methods & Sampling

Hauls were made in southern New England marine waters encompassing approximately 2000 square miles extending from Point Judith, RI in the west to Martha's Vineyard, MA in the east and extending south to include Rhode Island Sound and portions of the Atlantic Ocean.

The methodology is available in the final report (pdf). See Supplemental Files section.

## Data Processing Description

### BCO-DMO Processing Notes:

- added conventional header with dataset name, PI name, version date
- modified parameter names to conform with BCO-DMO naming conventions
- reduced number of significant digits of weights (wgt\_fish\_avg) due to sampling precision methods

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## Data Files

File
<b>tow_log.csv</b> (Comma Separated Values (.csv), 20.98 KB) MD5:dde24c0356cf7e0218f33473bae3cf4d Primary data file for dataset ID 685079

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## Supplemental Files

File
<b>Small Mesh Fishery Bycatch Reduction in the Southern New England/Midatlantic Windowpane Stock Area</b> filename: CCE_Windowpane_Scup_Final_Report_111516.pdf (Portable Document Format (.pdf), 4.83 MB) MD5:ca92acdd509050168719dff5050eee77 A Final Report to The Northeast Consortium and The New England Fishery Management Council Groundfish Research Program Agreement No. 15-033 Period of Performance: 3/1/15 - 8/31/16

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## Related Datasets

### IsRelatedTo

Hasbrouck, E. C. (2021) **Scup and windowpane flounder expanded length frequency for study of scup and windowpane flounder catch using scup gear and a Large Mesh Belly Panel (LMBP), October 2015 (Windowpane Bycatch project)**. Biological and Chemical Oceanography Data Management Office (BCO-DMO). (Version 1) Version Date 2017-03-16 doi:10.26008/1912/bco-dmo.686700.1 [[view at BCO-DMO](#)]

Hasbrouck, E. C. (2021) **Scup and windowpane flounder length frequency count for study of windowpane flounder catch using scup gear and a Large Mesh Belly Panel (LMBP), October 2015 (Windowpane Bycatch project)**. Biological and Chemical Oceanography Data Management Office (BCO-DMO). (Version 1) Version Date 2017-03-16 doi:10.26008/1912/bco-dmo.686539.1 [[view at BCO-DMO](#)]

Hasbrouck, E. C. (2021) **Scup and windowpane flounder length frequency for study of windowpane flounder catch using scup gear and a Large Mesh Belly Panel (LMBP), October 2015 (Windowpane Bycatch project)**. Biological and Chemical Oceanography Data Management Office (BCO-DMO). (Version 1) Version Date 2017-03-16 doi:10.26008/1912/bco-dmo.685559.1 [[view at BCO-DMO](#)]

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## Parameters

Parameter	Description	Units
trip	trip number	unitless
tow	tow number	unitless
vessel	vessel name	unitless
boat_position	boat position relative to other vessel and shore: IN or OUT	unitless
treatment	Control net or net with large mesh belly panel	unitless
date	tow date	unitless
time_start	tow start time	unitless
time_end	tow end time	unitless
lat_start	latitude at start; north is positive	decimal degrees
lon_start	longitude at start; east is positive	decimal degrees
lat_end	latitude at end	decimal degrees
lon_end	longitude at end	decimal degrees
depth_w_start	water depth at start	fathoms
depth_w_haulback	water depth at haul back	fathoms
speed	tow speed	knots
gear_len_fa	ground gear length (legs/ground cable)	fathoms
len_tow_cable_fa	tow cable length	fathoms
door_spread_start_fa	door spread at tow start	fathoms
door_spread_end_fa	door spread at tow end	fathoms
tow_dir	tow direction: heading	unitless
area	statistical area: nmfs defined areas	unitless
scup_catch_lb	scup lbs: total catch of scup in lbs	pounds
scup_wgt	scup individual fish weight: lbs calculated from length frequency tab	pounds
scup_count	scup count: number of individual scup	fish
windowpn_catch_lb	windowpane pounds: total lbs caught of windowpane flounder	pounds
windowpn_wgt	wp individual fish weight: lbs calculated from length frequency tab	pounds
windowpn_count	windowpane count: number of individual windowpane flounder	fish
fluke_catch_lb	total weight of each fish species caught in net	pounds
winterfl_catch_lb	total weight of each fish species caught in net	pounds
yelltail_catch_lb	total weight of each fish species caught in net	pounds
fourspot_catch_lb	total weight of each fish species caught in net	pounds
butterfi_catch_lb	total weight of each fish species caught in net	pounds
loligo_catch_lb	total weight of each fish species caught in net	pounds
whiting_catch_lb	total weight of each fish species caught in net	pounds
ling_catch_lb	total weight of each fish species caught in net	pounds
skate_catch_lb	total weight of each fish species caught in net	pounds
dogfish_catch_lb	total weight of each fish species caught in net	pounds
monk_catch_lb	total weight of each fish species caught in net	pounds

scallop_catch_lb	total weight of each fish species caught in net	pounds
searobin_catch_lb	total weight of each fish species caught in net	pounds
blakbass_catch_lb	total weight of each fish species caught in net	pounds
bluefish_catch_lb	total weight of each fish species caught in net	pounds
striper_catch_lb	total weight of each fish species caught in net	pounds
weakfish_catch_lb	total weight of each fish species caught in net	pounds
horseshoe_catch_lb	total weight of each fish species caught in net	pounds
rockcrab_catch_lb	total weight of each fish species caught in net	pounds
torp_ray_catch_lb	total weight of each fish species caught in net	pounds
lobster_catch_lb	total weight of each fish species caught in net	pounds
triggerfi_catch_lb	total weight of each fish species caught in net	pounds
bonito_catch_lb	total weight of each fish species caught in net	pounds
total_catch_lb	total catch weight	pounds

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## Instruments

<b>Dataset-specific Instrument Name</b>	
<b>Generic Instrument Name</b>	Otter Trawl
<b>Dataset-specific Description</b>	See final report for full description of these net systems.
<b>Generic Instrument Description</b>	Otter trawls have large rectangular otter boards which are used to keep the mouth of the trawl net open. Otter boards are made of timber or steel and are positioned in such a way that the hydrodynamic forces, acting on them when the net is towed along the seabed, pushes them outwards and prevents the mouth of the net from closing. The speed that the trawl is towed at depends on the swimming speed of the species which is being targeted and the exact gear that is being used, but for most demersal species, a speed of around 4 knots (7 km/h) is appropriate. More: <a href="http://en.wikipedia.org/wiki/Bottom_trawling">http://en.wikipedia.org/wiki/Bottom_trawling</a>

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## Deployments

### Sea Breeze Too-trip1

<b>Website</b>	<a href="https://www.bco-dmo.org/deployment/685121">https://www.bco-dmo.org/deployment/685121</a>
<b>Platform</b>	F/V Sea Breeze Too
<b>Start Date</b>	2015-10-07
<b>End Date</b>	2015-10-09
<b>Description</b>	fishing gear studies

### Sea Breeze Too-trip2

<b>Website</b>	<a href="https://www.bco-dmo.org/deployment/685130">https://www.bco-dmo.org/deployment/685130</a>
<b>Platform</b>	F/V Sea Breeze Too
<b>Start Date</b>	2015-10-15
<b>End Date</b>	2015-10-15
<b>Description</b>	fishing gear studies

### Sea\_Breeze\_Too-trip3

<b>Website</b>	<a href="https://www.bco-dmo.org/deployment/685133">https://www.bco-dmo.org/deployment/685133</a>
<b>Platform</b>	F/V Sea Breeze Too
<b>Start Date</b>	2015-10-18
<b>End Date</b>	2015-10-19
<b>Description</b>	fishing gear studies

### Sea Breeze Too-trip4

<b>Website</b>	<a href="https://www.bco-dmo.org/deployment/685135">https://www.bco-dmo.org/deployment/685135</a>
<b>Platform</b>	F/V Sea Breeze Too
<b>Start Date</b>	2015-10-21
<b>End Date</b>	2015-10-21
<b>Description</b>	fishing gear studies

### Elizabeth\_and\_Katherine-trip1

<b>Website</b>	<a href="https://www.bco-dmo.org/deployment/685137">https://www.bco-dmo.org/deployment/685137</a>
<b>Platform</b>	F/V Elizabeth & Katherine
<b>Start Date</b>	2015-10-07
<b>End Date</b>	2015-10-09
<b>Description</b>	fishing gear studies <b>Methods &amp; Sampling</b> This subset doesn't map: <a href="http://nec.who.edu/jg/serv/nec/Gear/tow_log.html1?(trip=1)&amp;(vessel%20contains%20KATH)">http://nec.who.edu/jg/serv/nec/Gear/tow_log.html1?(trip=1)&amp;(vessel%20contains%20KATH)</a>

### Elizabeth\_and\_Katherine-trip2

<b>Website</b>	<a href="https://www.bco-dmo.org/deployment/685140">https://www.bco-dmo.org/deployment/685140</a>
<b>Platform</b>	F/V Elizabeth & Katherine
<b>Start Date</b>	2015-10-15
<b>End Date</b>	2015-10-15
<b>Description</b>	fishing gear studies

### Elizabeth\_and\_Katherine-trip3

<b>Website</b>	<a href="https://www.bco-dmo.org/deployment/685142">https://www.bco-dmo.org/deployment/685142</a>
<b>Platform</b>	F/V Elizabeth & Katherine
<b>Start Date</b>	2015-10-18
<b>End Date</b>	2015-10-19
<b>Description</b>	fishing gear studies

#### **Elizabeth\_and\_Katherine-trip4**

<b>Website</b>	<a href="https://www.bco-dmo.org/deployment/685144">https://www.bco-dmo.org/deployment/685144</a>
<b>Platform</b>	F/V Elizabeth & Katherine
<b>Start Date</b>	2015-10-21
<b>End Date</b>	2015-10-21
<b>Description</b>	fishing gear studies

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## **Project Information**

### **Small Mesh Fishery Bycatch Reduction in the Southern New England/Mid-Atlantic Windowpane Flounder Stock Area (Windowpane Bycatch)**

**Website:** <http://ccesuffolk.org/marine/fisheries/bycatch-reduction-projects/large-mesh-belly-panel-windowpane-bycatch-reduction-in-scup-fishery>

**Coverage:** Southern New England

*Extracted from the NSF award abstract:*

Currently, bycatch of windowpane flounder in the northwestern Atlantic is a concern of fishery management. Exceeding the Annual Catch Limit (ACL) for windowpane has the potential to trigger Accountability Measures that restrict fishing activities. This project sought to enhance the opportunity for fishermen to fully access ACLs by validating the effectiveness of an innovative gear modification. CCE tested and evaluated a large mesh belly panel for use as an avoidance gear to reduce windowpane flounder bycatch in small mesh trawl fisheries in Southern New England. Statistical analysis of the data indicated that there was a significant reduction in catch of windowpane flounder in the control net compared to the experimental net with the large mesh belly panel when analyzed in terms of both catch weights and in number of individual fish.

**A Final Report to The Northeast Consortium and The New England Fishery Management Council Groundfish Research Program ([PDF](#))**

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## **Program Information**

### **NorthEast Consortium (NEC)**

**Website:** <http://northeastconsortium.org/>

**Coverage:** Georges Bank, Gulf of Maine

The Northeast Consortium encourages and funds **cooperative research** and monitoring projects in the Gulf of Maine and Georges Bank that have effective, **equal partnerships** among fishermen, scientists, educators, and marine resource managers.

At the 2008 Maine Fishermen's Forum, the Northeast Consortium organized a session on data collection and availability. Participants included several key organizations in the Gulf of Maine area, sharing what data are out there and how you can find them.

**The Northeast Consortium has joined the Gulf of Maine Ocean Data Partnership.** The purpose of the GoMODP is to promote and coordinate the sharing, linking, electronic dissemination, and use of data on the Gulf of Maine region.

The Northeast Consortium was created in 1999 to encourage and fund effective, equal partnerships among commercial fishermen, scientists, and other stakeholders to engage in cooperative research and monitoring projects in the Gulf of Maine and Georges Bank. The Northeast Consortium consists of four research institutions (University of New Hampshire, University of Maine, Massachusetts Institute of Technology, and Woods Hole Oceanographic Institution), which are working together to foster this initiative.

The Northeast Consortium administers nearly \$5M annually from the National Oceanic and Atmospheric Administration for cooperative research on a broad range of topics including gear selectivity, fish habitat, stock assessments, and socioeconomics. The funding is appropriated to the National Marine Fisheries Service and administered by the University of New Hampshire on behalf of the Northeast Consortium. Funds are distributed through an annual open competition, which is announced via a Request for Proposals (RFP). All projects must involve partnership between commercial fishermen and scientists.

The Northeast Consortium seeks to fund projects that will be conducted in a responsible manner. Cooperative research projects should be designed to minimize any negative impacts to ecosystems or marine organisms, and be consistent with accepted ethical research practices, including the use of animals and human subjects in research, scrutiny of research protocols by an institutional board of review, etc.

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## Funding

Funding Source	Award
NorthEast Consortium (NEC)	<a href="#">15-033</a>

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