



January 10, 2013

MEMORANDUM FOR: MRAG Americas
Northeast Fisheries Observer Program (NEFOP) Observers

FROM: Amy S. Van Atten
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for Amy Van Atten*

SUBJECT: 2013 Northern Shrimp Fishery Update

The purpose of this memo is to:

1. Update observers on the status of the 2013 shrimp season
2. Review commonly misidentified shrimp species
3. Review previously seen shrimp trawl gear and introduce 2 new excluder separator devices.

This memo also includes diagrams of bycatch reduction devices used in the fishery and NEFOP Trawl Gear Characteristics Log examples on how to record them.

1. 2013 Shrimp Season

The Northern Shrimp fishery is a quota-based fishery that takes place in the winter months in the northern waters of the Gulf of Maine. Participating vessels generally utilize Bottom Otter Trawl gear and sail from ports in Maine, New Hampshire, and Massachusetts. The 2013 Northern Shrimp season starts January 22, and is expected to last roughly 2-3 weeks, with landing days on Mondays and Wednesdays with no trip quota.

2. Shrimp Species Identification

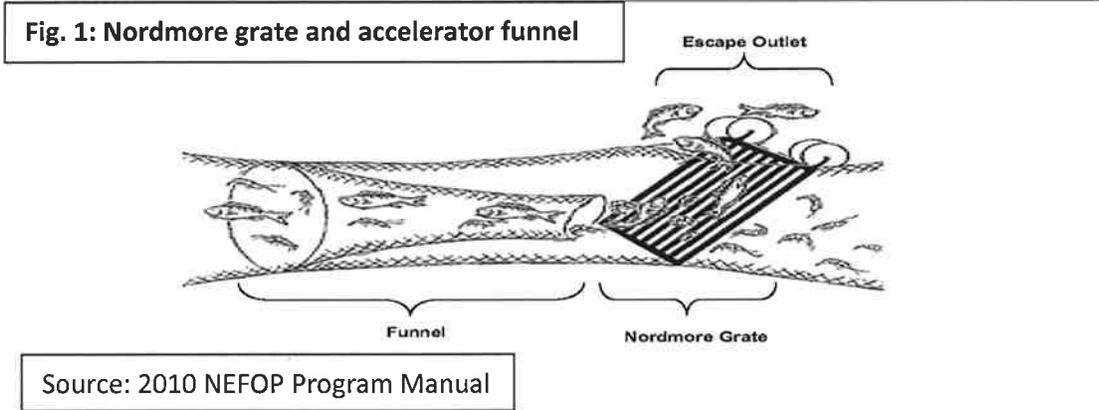
The shrimp species targeted in the Gulf of Maine Northern Shrimp fishery is *Pandalus borealis*. Other *Pandalid* species may be occurring less frequently in the catch. The 2 species of shrimp described on page 15 of the Biological Sampling Manual, Royal Red shrimp (*Pleoticus robustus*) and Scarlet shrimp (*Plesiopenaeus edwardsianus*) may occasionally be seen and have been targeted further south, in Connecticut. Be aware that captains use various terminology and therefore may indicate they are targeting Maine shrimp, pink shrimp, or simply shrimp. Last season a cheatsheet better illustrating the various shrimp species was distributed with the 2012 shrimp memo. Please refer to this cheatsheet when identifying shrimp. Observers should send

in whole samples or pictures for verification if they are unsure of their species id or would like reassurance their id is accurate.

3. Excluder Separator Devices

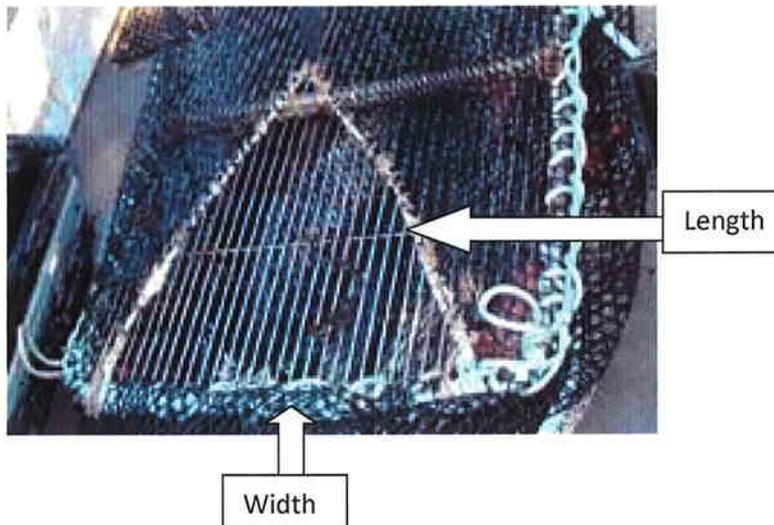
Nordmore Grate

Fishing vessels participating in the Northern Shrimp fishery have specific gear requirements that they must adhere to in order to harvest and land shrimp. Observers deployed on tasked shrimp trips should be familiar with the gear configurations and how to properly document them in the NEFOP Trawl Gear Characteristics Log. Shrimp trawls should be equipped with a type of Nordmore Grate (Fig.1) located in the extension of the trawl and forward of the codend.



The grate is orientated at a 45 degree angle with a triangular escape outlet located at the apex of the grate to facilitate the exclusion of finfish and other large non-targeted species. Refer to (Fig.2) on how to record escape outlet dimensions. (i.e. length and width)

Fig. 2: Triangular escape outlet dimensions



Source: <http://www.seagrant.unh.edu/necfrnordmore.html>

The grate and escape outlet can be orientated towards, and located at either the top or bottom of the net. Often a mesh accelerator funnel (Fig. 1) is used with the Nordmore grate to concentrate the catch at the base of the grate to maximize shrimp retention; it is important to note that an accelerator funnel is considered a “guiding device” and has a separate excluder/separator device code. When an accelerator funnel is used in conjunction with a Nordmore grate, the Excluder/Separator Device Type code should be marked ‘98’ (combination), with a comment made indicating that the device is a “Nordmore grate with accelerator funnel.”

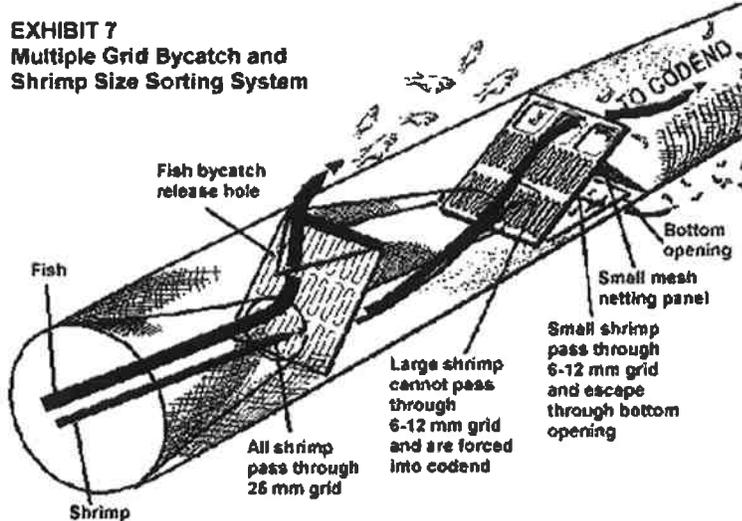
Some shrimp trawls may be equipped with a more complex system for minimizing bycatch. A Double Nordmore Grate (Fig.3) or a Compound Nordmore Grate (Fig.4) may be seen in the Northeast. The purposes of these configurations are to prevent the capture of finfish and small shrimp.

Double Nordmore Grate

The Double Nordmore Grate (Fig.3) consists of a regular Nordmore Grate to exclude/separator fish and another grate that acts as an excluder/separator to allow small, non-marketable shrimp to escape before entering the codend. In the case of a Double Nordmore Grate the Trawl Gear Characteristics Log excluder/separator and escape outlet and fields should be filled out with the **fish grate** and the **fish escape outlet** that corresponds to it. The **shrimp grate**, and **shrimp escape outlet** that corresponds to it should be documented in the comments. Observers are encouraged to describe the grates in as much detail as possible in the comments (i.e. dimensions and bar spacing). The Double Nordmore Grate system has not yet been added as a type of excluder separator device in the NEFOP Program Manual but a code has been created for it. If

this system is used a type code of '07' should be marked in the excluder separator section of the Trawl Gear Log. This will be included as an option with the next version of the program Manual and logs.

Fig. 3: Double Nordmore Grate

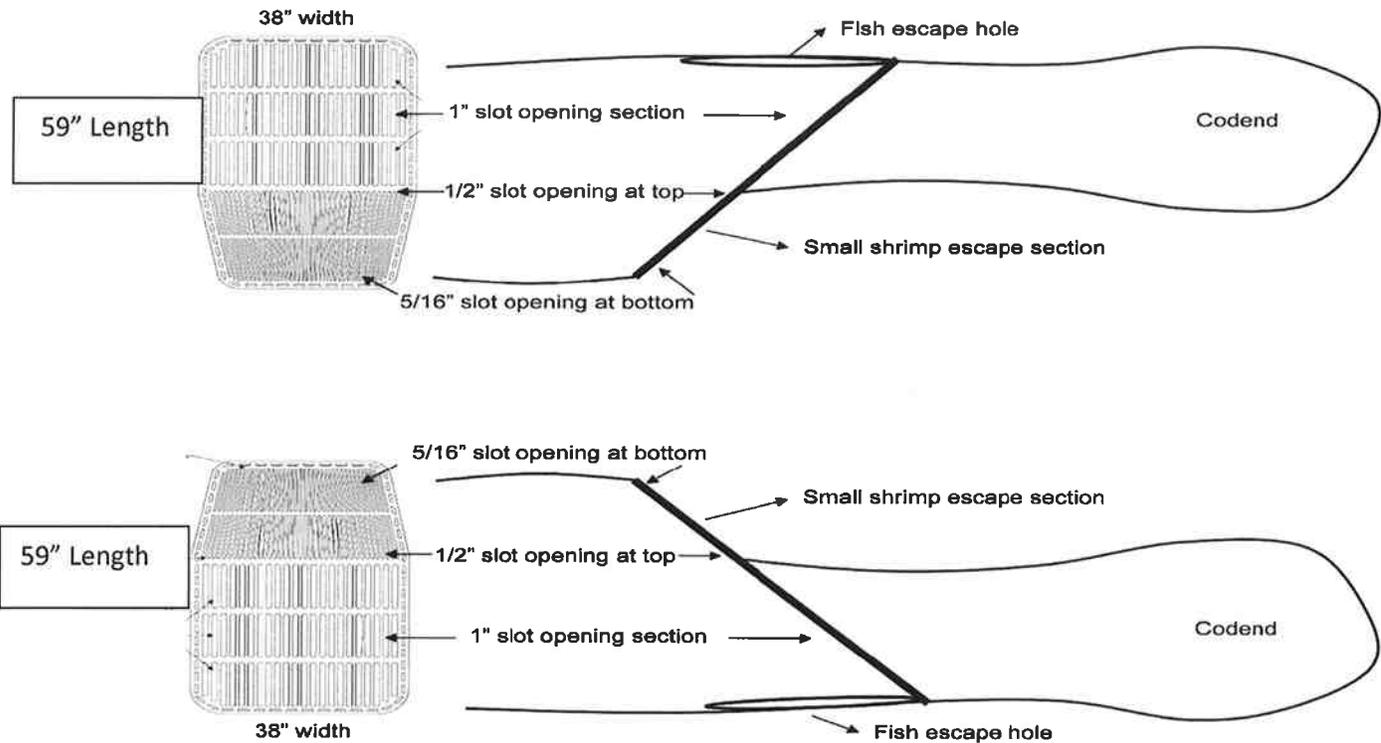


Source: <http://www.crimond.com/twintrawlreport.htm>

Compound Nordmore Grate

The Compound Nordmore Grate (Fig. 4) only consists of one grate divided into two parts. One portion of the grate acts as a regular Nordmore Grate and excludes finfish while the other half of the grate acts as a grading device to allow small shrimp to escape. In the case of a Compound Nordmore Grate the Trawl Gear Characteristics Log excluder/separator and escape outlet fields should be filled out with the **multipurpose grate** and **fish escape outlet**. The **shrimp escape outlet** is described in the comments. Observers are encouraged to describe the grate in as much detail as possible in the comments (i.e. Dimensions and bar spacing). The Compound Nordmore Grate system has not been added as a type of excluder separator device in the NEFOP Program Manual, but a code has been created for it. If Compound Nordmore Grate system is used a type code of '06' should be marked in the excluder separator section of the trawl section. This will be included as an option with the next version the Program Manual and logs.

Fig. 4: Diagram of the Compound Grate. The top panel diagrams the small shrimp size sorting section of the grate at the bottom side of the net. The bottom panel diagrams the small shrimp size sorting section of the grate at the top side of the net.



Source: Atlantic States Marine Fisheries Commission: Addendum 1 to Amendment 2 to the Interstate Fishery Management Plan For Northern Shrimp. Nov 2012.

We strongly encourage observers to photograph or sketch any gear configurations they are not familiar with and upload with trip data. Please refer to this memo, the accompanying example gear logs, and shrimp ID cheatsheet when deploying on Northern Shrimp targeted trips. Please contact **Mark Hager** at **(508)-495-2292** with any questions. We thank you for your attention to these important issues. Your thorough review of the data in accordance to these protocols will enhance the data quality and expedite data processing.

Attachments:

Shrimp ID characteristics (same as laminated version previously issued)

Nordmore Grate Gear Log Example

Nordmore Grate with Funnel Gear Log Example

Double Nordmore Grate Gear Log Example

Compound Nordmore Grate Gear Log Example