

NORTHEAST CONSORTIUM Annual Report

Project Title: Archival Tagging Study of Monkfish, *Lophius americanus*

NEC Award Number: 09-042

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Project objectives and scientific hypotheses

The primary objectives of this project are (1) to investigate movements of monkfish (including deepwater excursions) among the southern and northern U.S. management regions and Canadian waters, and (2) to validate aging methods for monkfish. Additional objectives are to learn about monkfish behavior, including off-bottom excursions that may be related to transport on ocean currents and/or spawning behavior; activity rhythms in relation to tidal cycles; and habitat (depth-temperature) associations. We hypothesize that monkfish move extensively and that there is exchange between fishery management areas and a possible deepwater excursion by maturing females from the southern area.

Major Accomplishments and Milestones

We have taken 5 day-trips to release DST-tagged monkfish in the Gulf of Maine and southern New England (4 trips within this performance period):

Date	Vessel	Tagging Location	Captain	Number Tagged
1/13/2009	Gertrude H	So. New England	Ted Platz	16
7/23/2009	Gertrude H	So. New England	Ted Platz	26
10/16/2009	C.W. Griswold	W. Gulf of Maine	Tim Caldwell	6
10/26/2009	C.W. Griswold	W. Gulf of Maine	Tim Caldwell	43
11/10/2009	Gertrude H	So. New England	Ted Platz	54
Total DSTs released				
			W. Gulf of Maine	49
			So. New England	96
			Total	145
Tags remaining				45

We have begun outreach efforts, including increased web presence (<http://www.nefsc.noaa.gov/read/popdy/monkfish/Survey2009/taggingstudy.htm>), produced a press release (http://www.nefsc.noaa.gov/press_release/2010/SciSpot/SS1002/), and worked with Commercial Fisheries News to produce a cover article on the project http://www.nefsc.noaa.gov/read/popdy/monkfish/Survey2009/Tagging%20Study/pdf%20files/Monkfish_Tagging_CFN%202_10.pdf.

We have prepared dissection and sample collection kits and protocols to be followed when monkfish are returned with DSTs.

Some photos from the tagging trips can be found at the end of this report.

Project Alterations

The work under this project has been supplemented by a 2008 monkfish RSA grant awarded to Grabowski and Sherwood (GMRI), which increased the number of tags to be released in each site.

Next Steps (6 months)

We will release the remaining 45 tags in the Gulf of Maine during autumn 2010 and continue with our outreach efforts.



Figure 1. Tagging set-up with holding tank in foreground and tagging apparatus in background.



Figure 2. Apparatus for tagging monkfish while keeping them submerged. Note incision on monkfish ready for tag insertion. Measuring board is embedded in base of box.



Figure 3. Tagged monkfish showing location of data storage tag and pink external tags



Figure 4. Monkfish being released after tagging operation.

Cooperative Monkfish Tagging Study

Have you caught a monkfish with pink tags?
If so, you are eligible for a...

\$500 REWARD

These fish have been implanted with electronic data storage tags to help us investigate large-scale monkfish movements and behaviors.

To Claim Your Reward:
You must **SAVE THE ENTIRE FISH*** and report capture date and location.

To report a tagged fish or for more information:
visit: <http://www.gmri.org/tagging> or
<http://www.nefsc.noaa.gov/read/popdy/TagReporting/TagReporting.htm>
email: monkfishtagging@gmri.org (subject monkfish)
call toll-free: 1-866-447-2111

*Please store on ice or freeze if necessary.

Contact us for instructions on where to send the fish and to receive your reward.

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Figure 5. Poster for outreach for archival tagging study.