

*NORTHEAST CONSORTIUM*  
**2011 Progress Report**

**Project Title:** Defining Atlantic wolffish aggregations in Massachusetts Bay.

**Award Number:** 111C61

**Period of Performance:** 7/1/10-12/31/10

**Date of Annual Report Submission:** December 16, 2010

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**Hypothesis: In early June on Stellwagen Bank, Atlantic wolffish are not evenly distributed, solitary or paired but instead, occur in very dense concentrations. By the end of June, they disperse.**

To test this hypothesis we plan to meet the following objectives:

1. Sample the Atlantic wolffish population in our selected study area in May-June to quantify temporal abundance and distribution.
2. Utilize a proportion of the wolffish catch to:

- a. Calculate age and growth,
  - b. Determine the sex ratio and reproductive status, and
  - c. Analyze food habits.
3. Externally tag and release all remaining wolffish to understand seasonal dispersal patterns.

**Major Accomplishments and Milestones:**

During this reporting period, permits were obtained for the research. The project is not due to start until spring 2011.

**Unexpected difficulties and project alterations:**

There were no unexpected difficulties or project alterations during this reporting period.

**Next steps, tasks for next 6 months:**

During the next six months, project participants will meet to schedule tasks and all supplies will be purchased. All field work (10 sea days) will be completed in May and June 2010, and data analyses will begin.

**Impacts of the project to fishermen/fishing community and scientist/science community:**

This study contributes to a broader understanding of Atlantic wolffish life history and ecology. The research will allow us to document ephemeral concentrated aggregations of Atlantic wolffish, a species of concern. Clearly such information will contribute towards an understanding of essential Atlantic wolffish habitat. Age and growth, reproductive status, diet analyses, and movements of these fish will add to the relatively sparse biological information on this species in the southern Gulf of Maine. Finally, the project will forward the goal of the Northeast Consortium to develop partnerships between commercial fishermen and researchers.



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**Elizabeth Fairchild**  
**December 16, 2010**