

Designing and Testing a Sublegal Lobster Sampling Trap NAO5NMF4701257
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Objectives: The goal of this project was to design and test a lobster sampling trap to monitor sub-legal lobster population as an indicator of the abundance of our lobster stock.

Methods: The plan was to test these traps on a variety of substrates. We found that on some bottom types the traps filled with crabs, which inhibited the entry of sub-legal lobsters.

Work Completed to date: Sampling traps have been built then redesigned to optimize harvest of sublegal lobsters and minimize crab entry.

Results to date: Video observation showed how difficult it was to keep crabs out of the traps. Two different trap designs proved to be successful in harvesting sublegal lobsters with mean carapace sized of 55.22 and 53.77 respectively. This compares with a mean carapace size in a ventless trap on the same string of 69.04. The lobsters from the sub-legal traps are probably two years younger than those caught by the ventless trap.

Data: Catch data is being statistically analyzed for submission to the web site.

Impacts and application: These traps, designed to catch sub-legal lobsters, give a snapshot of the upcoming recruitment. If sub-legal traps can be dispersed through out the range of the lobster, this could be a powerful predictor of recruitment 2-3 years in the future.

Related Projects: The project continues with a volunteer fishermen, who is working on refining the trap design.

Partnership: Joe Chalmers was involved in site selection and trap design.

Presentation: Northeast Consortium poster November 2006

Student participation: William Fike is a graduate student in Marine Bio-resources at the University of Maine. This is his M.S. thesis project with support from the Maine Agricultural and Forest Experiment Station.

Reports and Papers: William Fike will publish the results of the project as part of his Thesis.

Pictures will be submitted.

