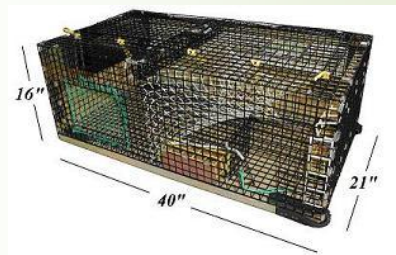

*Ventless Trap Survey – Maine
Department of Marine Resources*



Trap Design and Construction

Traps are standardized 40" L x 21" W x 16" H single parlor lobster trap with 5" entrance hoops, 1" square rubber coated 12-gauge wire, standard shrimp mesh netting, cement runners, 4" x 6" disabling door, and one legal rectangular vent. All traps were constructed by Brooks Trap Mill in Thomaston, Maine. Traps were assembled as triples or 6-trap trawls depending on local fishing practices.

Biological data was collected by trained sea samplers and participating fishermen on commercial fishing vessels. Data collected included lobster size, sex, shell condition, presence or absence of eggs, cull status, V-notch status, mortality, incidence and severity of shell disease, crab by-catch numbers and species, gear type (vented or ventless traps), total traps hauled for trip, catch per trap haul, soak time, and trap locations (latitude/longitude).

Regional Ventless Trap Survey

Melissa Smith and Carl Wilson, Maine Department of Marine Resources

Objectives of the Research:

1. Characterize abundance and size-distribution of juvenile lobsters in Maine waters.
2. Develop a coast-wide fishery independent monitoring program.
3. Document the relative importance of depth to abundance and distribution.
4. Conduct collaborative research between the fishing industry and Department of Marine Resource scientists.
5. Improve industry participation in the lobster stock assessment process.

Rationale:

The United States Lobster fishery is managed from ME to VI with a stock assessment every 5 years. There are 3 stock assessment areas for lobster: Gulf of Maine, Georges Bank, and Southern New England. One of the strongest recommendations of past assessments has been the need for more data; particularly for juvenile lobster. There is a need for a common independent program to compare state-to-state lobster stocks using a sea sampling program. The Maine Department of Marine Resources (DMR) is therefore conducting a collaborative Ventless Lobster Trap Study in order to address this need.

The regional ventless trap program fulfills the need for a common independent survey for juvenile lobster by standardizing methods for Maine, Massachusetts, Rhode Island, Connecticut and New York.

Currently there are three types of sampling for lobster

1. Fishery Dependent Surveys
 - Sea sampling programs
2. Fishery Independent Surveys

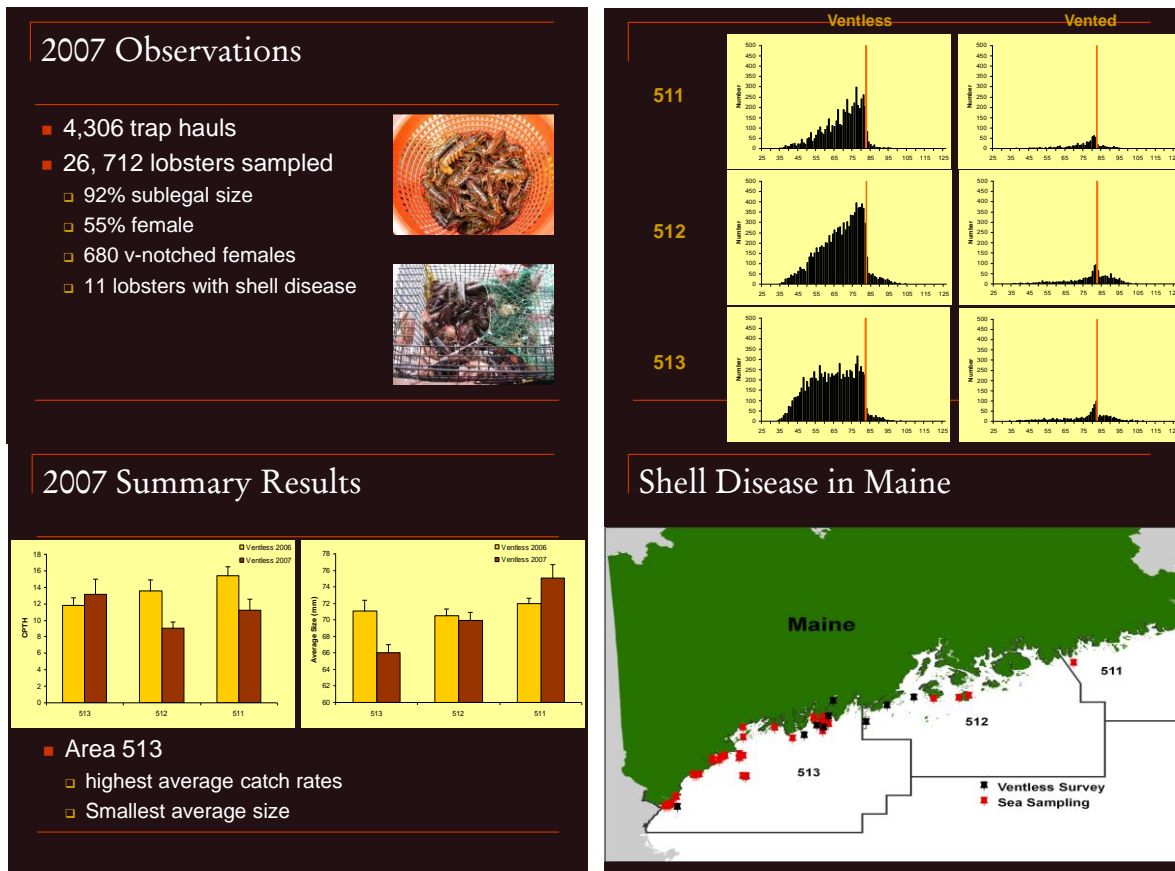
Trawl Survey

- National Marine Fisheries Service (NMFS)
 - State
3. Larval Settlement Monitoring

Methods to of collection for lobsters:

Sampling in Maine is divided into 3 NMFS statistical areas; 511, 512 and 513. Each station was sampled by six (6) traps set in two (2) triples or one (1) six trap trawl, in which vented and ventless traps were alternated (3 of each per station). The baited traps were hauled twice a month with at three night soak. A total of 9 participants fished 123 sites using 738 traps. The random distribution of the traps within each area is based on water depth (< 20m, 21 to 40m and 41-60m). This is a fishery independent study and DMR staff were onboard all trips to measure all lobsters. All lobsters were returned to the area captured. The survey runs from June through August.

Results:



Changes for sampling in 2008:

- Survey will begin June 1st
- Sampling intensity will increase from 123 site in 2007 to 139 sites in 2008
- Opportunities for collaborations with other institutions
- Sampling schedule known 2 months in advance

Melissa and Carl work for the Maine Department of Marine Resources on the Lobster Research, Monitoring, and Assessment Program.

