

Rhode Island Ventless Trap Survey

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Objectives of the Research:

To initiate a fishery independent data collection program to monitor the incidence and severity of shell disease and obtain biological data and population statistics on the sub-legal portion of the Rhode Island inshore areas (Lobster Management Area 2).

Methods:

A random-stratified sampling design will be employed, with two (2) depth strata being sampled (1-20 meters and 21-40 meters). A total of 24 trawls consisting of 6 traps per trawl (3 vented and 3 vent-less traps) will be used, with 12 trawls per depth strata. All traps will be hauled and sampled twice per month during the months of June-August, with a 3-4 day soak time between hauls.

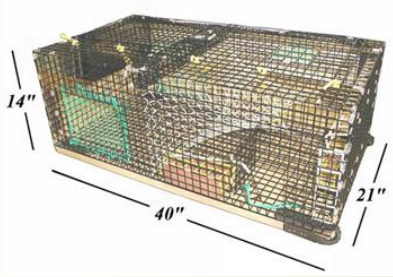
Data recorded included size of lobsters, sex, shell condition, presence or absence of eggs, reproductive condition of females, cull status, other shell/body damage, V-notch status, mortality, incidence and severity of shell disease, marketable catch in number, gear type, total traps hauled for trip, catch per trap haul, soak time, surface water temperature, and trap locations (LORAN). Also, calculations of length frequency, catch per unit of effort, and size at sexual maturity will be made.

Results to Date:

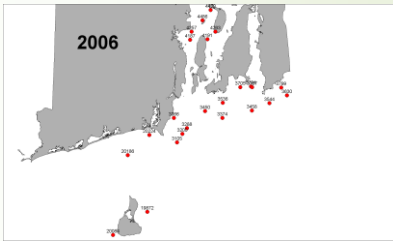
In 2006, 4306 lobsters sampled from 864 trap hauls (CPUE 4.98). In 2007, 5127 lobsters sampled from 848 trap hauls (CPUE 6.04).

In 2006, of the 2058 males sampled, 179 were infected with shell disease (8.6%). In 2007, of the 2049 males sampled, 71 were infected with shell disease (3.5%).

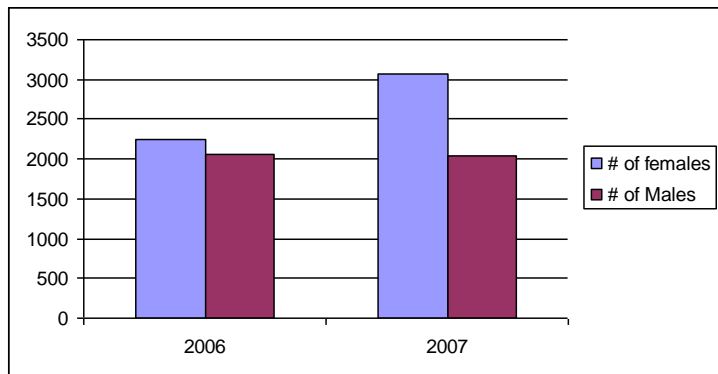
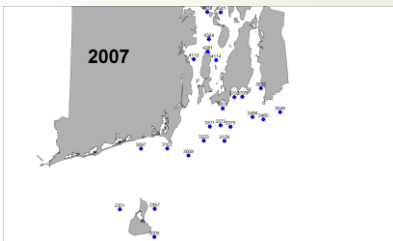
A ventless trap is one that has been altered to reduce escapement of smaller lobsters by using smaller mesh and no escape vents.



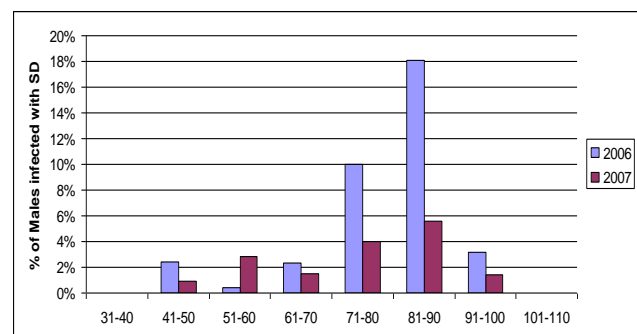
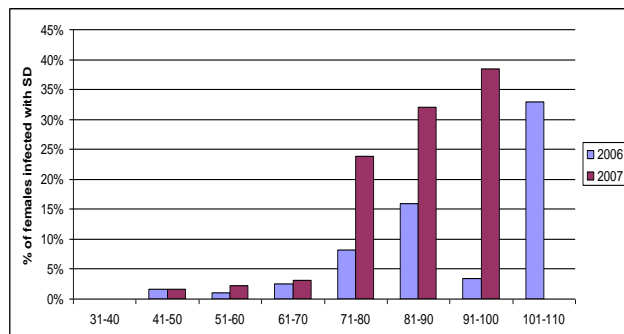
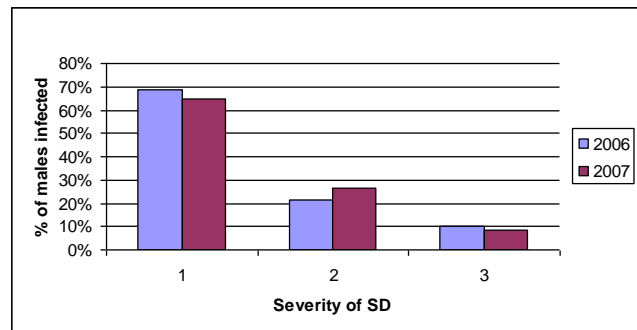
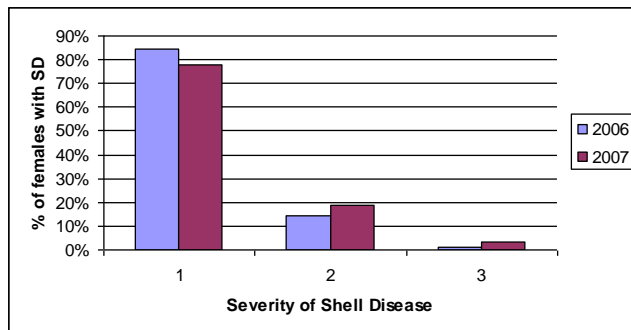
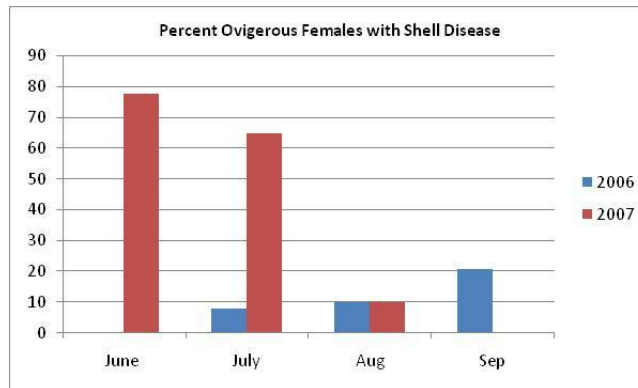
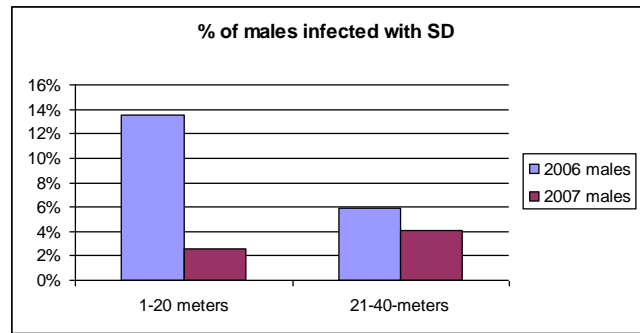
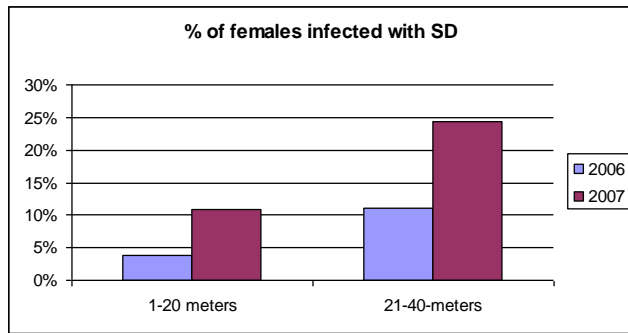
Traps are constructed of 1 inch mesh and fitted with cement runners.



Sample locations



Major decrease was most likely due to difference in sampling months and locations.



Dan and Tom are Marine Biologists for the Rhode Island Department of Environmental Management in the Division of Fish & Wildlife

