

Connecticut Department of Environmental Protection

Lobster Assessment

The lobster population in Long Island Sound is monitored by Fisheries staff to provide information necessary to assess its health and reproduction, as well as the effect of harvest which supports the second most lucrative commercial fishery in the Sound (surpassed in dollar value only by shellfish landings) and a popular recreational fishery. Standardized research catches of larval, juvenile and mature adult lobsters from the CT DEP Marine Resource Trawl Survey and Larval Survey, combined with data gathered from the commercial harvest allows Fisheries staff to calculate recruitment and mortality rates for the Sound's population. This information is also used in a coastwide assessment of the larger Southern New England lobster stock that ranges from offshore Virginia to southern Massachusetts.



Following the 1998-99 lobster die-off, the abundance of lobster in the Sound fell from an historic high level (3.5 millions pounds) to historic lows recorded every year since 2002. Several research studies were carried out to specifically answer questions concerning the interaction of lobster habitat quality, reproduction and growth, and harvest mortality. Expanded research trawl catches and sea-sampling of the commercial harvest, and a 3-year tag/recapture study reinforced our understanding that there is no wide scale movement of lobsters in or out of

Long Island Sound, even from hypoxia prone waters in the western basin. Current assessment work involves stock rebuilding through a legislatively funded restoration program where mature female lobsters are marked (v-notched) and returned to the water. This program employs high school students from three coastal high schools with maritime curricula (Bridgeport Regional Vocational Aquaculture School, The Sound School in New Haven and Ella Grasso Regional Vocational Technical School in Groton). These students do the v-notching aboard cooperating vessel working with members of the commercial lobster industry. Since the earlier research showed that the present population structure results from localized production and/or survival, the additional recruitment of young lobsters gained from returning v-notched females to the water should begin to rebuild the local population immediately.

For more detailed information about Long Island Sound lobster studies, select a category below. The studies below were all funded by the National Marine Fisheries Service to assess and monitor the American lobster resource and fishery in Long Island Sound from 2001 to 2007, following the die-off of lobsters in 1999.

- [Lobster fishery monitoring](#)
- [Lobster abundance](#)
- [Lobster movement](#)
- [Lobster habitat](#)
- [Lobster genetics](#)
- [Lobster aging](#)

The initial Mortality Report describes the 1998-1999 lobster die-off:
[1999 Lobster Mortality Report](#)

The Marine Fisheries Division's latest lobster monitoring project report describes the current status of the Long Island Sound lobster population and the Connecticut commercial lobster fishery: [Spring 2009 Report](#)

The current Atlantic Coast American Lobster Stock Assessment and Peer Review documents can be found on the [Atlantic States Marine Fisheries Commission](#) website: www.asmfc.org/meetings/spring09MTG/documents/AmericanLobsterManagementBoard.pdf (19.6MB) The Long Island Sound lobster population is assessed as part of the Southern New England Stock which extends from south of Cape Cod to offshore New Jersey.

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