What's Happening to Long Island Sound Lobsters?



Lobsters in Long Island Sound have shown increased mortalities — especially in its western waters. While effects on economic value and perhaps mortality of eastern Sound lobsters have been attributed to a bacterial-induced shell infection, reasons for the western Sound die-off are still uncertain. The mortalities mark the third time in as many years that there has been a dramatic decrease in economically important marine species. In 1997 and 1998, it was oysters and clams. In 1999, it was lobsters, causing more than 1.300 lobstermen Soundwide to be impacted by the loss. So what's happening to Long Island Sound lobsters? Is the die-off part of a larger problem concerning the health of the Sound's ecosystem?

At SUNY Stony Brook in late May, lobstermen, researchers, resource managers and legislators heard experts discuss some of the current hypotheses to explain the lobster die-off in Long Island Sound. The University at Stony Brook's Marine Sciences Research Center (MSRC) and the NYS Department of Environmental Conservation (NYSDEC) teamed up with NYSG to host "Lobsters and the Long Island Sound: 1999-2000." This meeting was an opportunity for researchers and administrators to discuss with lobstermen the research priorities that came from April's Lobster Health Symposium. That event, sponsored by NY, Connecticut, National and other northeast Sea Grant programs, the NYSDEC, Connecticut Department of Environmental Protection, U.S. Environmental Protection Agency, National Marine Fisheries Service, and SUNY Stony Brook's MSRC, was held in Stamford, Connecticut on April 17-18. Attended by over 250 lobstermen, researchers and members of federal and state agencies as well as environmental organizations, the successful first-day meeting provided a forum for lobstermen and seafood

dealers to relate how the lobster crisis

has affected their livelihood. In addition, scientists presented some of the factors that may be the cause of lobster deaths based on their research. Environmental organizations also contributed to the discussions.

"Our intent in planning the Stamford workshop was to gather the concerns from groups most affected by the issues at hand so that the participating agencies could effectively develop a comprehensive plan for lobster and Long Island Sound environmental monitoring and research," says NYSG Director Jack Mattice. "The audiences targeted here included both lobster fishers who have anecdotal observations as well as scientists who have taken water quality samples somewhat coincidental to the mortalities, measured trace contaminants in lobster tissue or conducted screening for various parasites and pathogens."

Connecticut Sea Grant Communicator Peg Van Patten explains, "The aim of this workshop was to review potential factors, both environmental as well as pathogenic, contributing to the recent massive lobster dieoff in Long Island Sound." In second-day workshops, participants identified several research and monitoring priorities. They include the extent to which a paramoeba is responsible for killing the lobsters and how a wide variety of environmental factors such as increases in the Sound's water temperature and numerous anthropogenic inputs such as sewage, contaminants and pesticides affect lobsters. One commonly held hypothesis is that a combination of factors act as stressors on the northern lobsters — already in the southernmost part of their range — and make the animals more susceptible to illness and death from pathogens such as the paramoeba. Specialists and lobstermen also met to address the socioeconomic impact of the lobster die-off as well as how to conduct the assessment of this important natural resource.

Facts to Remember:

The American lobster is one of New York's largest and economically important commercial fisheries. Earning a dockside value of over \$29 million in 1998, according to National Marine Fisheries Service statistics, the New York lobster catch was greater than the value of all its fin fish combined in 1996, 1997 and 1998.

Lobster sculpture and photo by James Cook.

In the weeks following the workshop, Mattice says the mindset was to "produce a comprehensive plan oriented toward identifying potential causes for the Sound's lobster illnesses and mortalities that can be eliminated as well as those that should be considered further with research or future monitoring." By keeping lines of communication open, participating researchers will review the events that led to the die-off and join resources to expand the benefit of ongoing research while keeping lobstermen involved in the process to uncover the cause of the lobster mortalities.

For more on lobsters, check out our web site: <www.seagrant.sunysb. edu/pages/LILobsters.

NYSG Director Jack Mattice addresses a crowd of lobstermen, researchers and members of federal and state agencies, environmental organizations and the media at April's first annual Lobster Health Symposium held in Stamford, Connecticut.

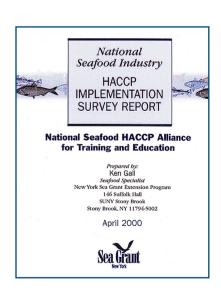
Seafood Education Ideal for FDA Compliance

Seventy-seven percent of the nearly 750 companies that responded to a recent NYSG-compiled, National Seafood HACCP Alliance-funded seafood safety survey indicated they would not have been able to develop a plan to comply with new U.S. Food and Drug Administration seafood regulations without in-depth training. The finding is part of a new 65-page report on the costs, benefits and impacts of Hazard Analysis Critical Coastal Point (HACCP) principles on the seafood industry.

"The intent of the national survey," says HACCP educator and NYSG seafood specialist Ken Gall, "was to accurately document the time, effort and resources that seafood industry processors and wholesalers devoted

to implementing the FDA's regulations. It was also meant to identify potential changes or problems in the process as well as to plan for additional training activities that might be needed."

Over 90 percent of the responding firms felt that Seafood Alliance training courses, which at least one of their employees attended, provided them with the information they needed to develop a HACCP plan, understand FDA's guidance information, and comply with the FDA seafood HACCP regulation. Considerable interest was expressed in having additional one-day training courses, with approximately two-thirds of the survey respondents expressing that this could best be achieved via Internet-based training courses.



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