

Lobster Disease in Long Island Sound

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BACKGROUND

Lobsters are invertebrates and they belong to the family of large marine crustaceans. Lobsters have a hard protective exoskeleton and go through molt to grow, leaving them vulnerable. During the molting process, changes in color may occur in several species. Lobsters live on rocky, sandy, or muddy bottoms, or in crevices from the shoreline to the continental shelf. Lobsters are an economically important species as seafood, forming the basis of a global industry that nets US\$ 1.8 billion in trade annually [1].

WHAT HAPPENED TO THE LOBSTERS?

Recently, lobster in Long Island Sound have suffered from outbreaks that have caused enormous mortalities, especially in the western sound. It is a huge problem because the lobster fishery has been seriously damaged. For example, the New York Department of Environmental Conservation reported that lobster landings in some parts of the western sound decreased near 100 % in the fall of 1999. Hundreds of thousands of lobsters have disappeared, and more than 1300 lobstermen sound-wide are losing [2].



Fig.1 areas on the Long Island Sound



Photo: Richard A. French, UCONN

Fig.2 Lobster claw showing shell disease (black areas) affecting the chitin.



CALCINOSIS

In 2002, lobsters died in the Central Basin. Lobsters showed symptoms including lethargy, as orange color in abdomen and rusty colored substance on the gills during a few weeks in the spring and summer seasons. Calcinosis was mainly responsible for the death of the lobsters. Calcinosis is likely to cause the failure of metabolism and respiration in lobsters. It is unclear why calcinosis is occurring in these lobsters, but unusually high temperatures maybe a cause. In Long Island Sound over the past few years, high temperatures have been measured in the bottom waters. High temperature anomaly was too long for the lobsters to endure. This condition is thought to give lobsters serious pain [3].



Fig.3 Affected lobster shows unusual orange appearance of the abdominal segments.

REFERENCES

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