

Fish kill in Delaware Bay attributed to warm water

Thursday, 12 August 2010 14:56



BY JOE TYRRELL
NEWJERSEYNEWSROOM.COM
UPDATED

The state Department of Environmental Protection has been unable to definitively identify the cause of a major fish kill in Delaware Bay, but is continuing to investigate.

The DEP announced plans to take more water samples on Aug. 12, and analyze tissue samples from some of the thousands of dead menhaden first reported on Aug. 11 along an eight-mile stretch of shoreline.

In a statement released late Thursday afternoon, the DEP said the additional water tests "strongly suggest" low oxygen levels were responsible for the massive die-off.

"These low levels likely occurred a result of very warm weather and warm temperatures in the bay," Van Fossen said in an update. "The warmer water is, the less dissolved oxygen it is able to hold."

DEP gave approval to local officials to use heavy equipment to remove the dead fish from beaches and waterways, with the clean-up scheduled to begin Aug. 13.

In a statement, the agency said the massive die-off "appears to have been a natural event,"

but also cast doubt on initial theories.

"Right now, we do not have any indication that pollution or a toxic algae bloom such as red tide caused this large die-off," Bob Van Fossen, DEP manager for emergency management, said in an earlier statement.

The dead fish also did not seem to come from a broken commercial fishing net, he said. Initial surveys found the wash-up appeared to be concentrated at High's Beach in Middle Township.

But corpses were found from Kimbles Beach in Middle Township to the Villas in Lower Township, with additional shoreline surveys still taking place, according to the DEP.

Although not currently used for human consumption, menhaden has been vital to marine ecosystems and to American industry. In the 19th Century, the oily-fleshed fish replaced whale oil as a source of commercial and industrial lubricants.

In the modern era, menhaden are the major component of fishmeal, fed to chickens and farm-raised fish. Menhaden are also major sources of bait used in recreational fishing. They are commonly caught in large purse seines.



In his 2007 book of the same name, Rutgers Professor H. Bruce Franklin labeled menhaden "The Most Important Fish of the Sea," calling the fish "the living keystone of the marine ecology of the Atlantic and Gulf coast," from Mexico's Yucatan Peninsula to Nova Scotia.

Fish kill in Delaware Bay attributed to warm water

Thursday, 12 August 2010 14:56

Franklin decried the near monopoly exercised by Omega Protein in the commercial fishing and production of menhaden products. He also described the fish's role in filtering water as the consume algae and microscopic plants, and as food sources for larger fish.

The DEP has theorized that predators could have driven large schools of small menhaden close to shore, where they depleted the supply of dissolved oxygen in the water. But initial water samples taken Aug. 11 showed acceptable oxygen levels, the DEP confirmed.

Joe Tyrrell may be reached at jtyrrell@newjerseynewsroom.com