

# Dead fish blanket Delaware Bay shore | delawareonline.com

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Never in more than a half-century of summers on Delaware Bay near Cape May, N.J., had Charles G. Cubbler Jr. seen anything like the fishy spectacle laid out along the water on Thursday.

Tens of thousands of finger-sized menhaden -- Cubbler figured millions was more accurate -- had washed up dead along eight miles of New Jersey beach.

Initially mystified, state environmental regulators late Thursday blamed the kill on weather-related low oxygen levels in the near-shore waters of the lower bay.

"It stretches for miles. It was pretty thick on the beach," said Cubbler, 70. "If something like this was at all common, I would have seen it at least once in 50 years, but I've never seen anything like it."

State officials announced their findings after taking water and fish-tissue samples along the shoreline roughly opposite Delaware's Bowers Beach-Slaughter Beach area.

The victims were mostly menhaden, a bottom-of-the-food-chain fish known to school in massive numbers, and known to sometimes make disastrous forays into stagnant water. Three of four samples on Thursday were below the 5 micrograms-per-liter level considered safe for aquatic life, with the lowest at 3.4 micrograms per liter.

"These low levels likely occurred as a result of very warm weather and warm temperatures in the bay," Robert Van Fossen, the emergency management chief for the New Jersey Department of Environmental Protection, said in a written statement.

"The warmer water is, the less dissolved oxygen it is able to hold. If the fish schooled very tightly in shallows very close to shore for any reason, they may have simply used up all the oxygen that was available to them and died," Van Fossen said.

Water temperatures were described as "very high, nearly 85 degrees," potentially contributing to low oxygen levels.

Dead fish were found from Kimbles Beach in Middle Township south to the Villas in Lower Township, with the highest concentrations at High's Beach.

Larry Hajna, a DEP spokesman, said Thursday that tests also showed low oxygen levels in creeks emptying into the bay where the fish were found, although the lowest reading was in bay waters.

Maya van Rossum, who directs the Delaware Riverkeeper Network conservation group, said the fish kill provides more evidence that the river, bay and Delaware River watershed need help.

"While the cause is still under investigation, we know for sure that the Delaware Bay has some of the highest nutrient concentrations of any water body in the world, that it still suffers from low dissolved oxygen in critical reaches of the river, and that during times of drought the river system is always stressed."

High levels of fertilizer-like nitrogen and phosphorus nutrients, hot weather and poor circulation have combined repeatedly over the years to kill millions of menhaden, shellfish and other aquatic life in Delaware waters, most prominently in the resort area's Inland Bays.

Losses and deterioration of habitat in the bays led to a more than decade-long push to halt discharges of treated sewage to the bays and cut down the flow of polluted runoff from lawns, farms and commercial areas.

Cubler said late Thursday afternoon that local officials were still working out plans for managing the mess, which ranges across hard-to-reach marshy areas. Late in the day, state officials authorized use of heavy equipment along beaches to speed removal and disposal in a county landfill.

"I just came in from walking the dog and it really stinks," Cubler said. "The horseshoe crabs come in here every spring and die all over the place and they don't smell any better, but nobody ever raised a finger to pick them up."

"If it was Stone Harbor or Avalon, where there's real money," Cubler added, "they'd be doing something pretty quick."