Tumor-free flounder: Study underscores Boston Harbor rebirth

November 29 2018, by Philip Marcelo

In this April 26, 2006 file photo, John Kelly Jr. fishes for striped bass in Boston Harbor. A canary in a coal mine? How about a flounder in a harbor? Offering a rare bit of good environmental news, scientists have documented a dramatic rebound in fish health they say shows how once horribly polluted Boston Harbor has cleaned up its act. (AP Photo/Elise Amendola, File)

A canary in a coal mine? How about a flounder in a harbor?

In a study published last week in the journal *Diseases of Aquatic Organisms*, scientists at the Woods Hole Oceanographic Institution in Massachusetts declared that flounder in Boston's once notoriously polluted harbor are now tumor-free.

It's turnaround from the late 1980s, when more than three-quarters of the species in Boston Harbor were found to have signs of liver disease, including cancerous tumors.

But Michael Moore, the Woods Hole biologist who authored the study published in the academic journal Diseases of Aquatic Organisms, said his team hasn't found a tumor on a flounder since 2004.

"The fish aren't getting liver tumors anymore," he said.

Moore has been monitoring harbor flounder since 1986, when the poor health of the once-bountiful, bottom-feeding fish became emblematic of the harbor's broader environmental challenges.

The health of the flounder that generations of Bostonians had fished helped spur a series of lawsuits.

A landmark federal court decision in 1985 compelled Massachusetts to properly treat sewage dumped into the harbor, resulting in billions of dollars in public works projects.

In this Sept. 24, 2016 file photo, a Boston Police Department boat patrols in Boston Harbor. A canary in a coal mine? How about a flounder in a harbor? Offering a rare bit of good environmental news, scientists have documented a dramatic rebound in fish health they say shows how once horribly polluted Boston Harbor has cleaned up its act. (AP Photo/Bill Sikes, File)

Chief among them was the completion of a new sewage treatment plant on the harbor in the 1990s and the opening of a massive underground tunnel directing discharge from the sewage plant nearly 10 miles out of the harbor into Massachusetts Bay in 2000.

The results have been dramatic, with porpoises, seals, humpback whales and other marine animals that had been rarely if ever seen in the harbor now regularly popping up, says Tony LaCasse, the spokesman for the New England Aquarium that overlooks Boston Harbor.

"The people of Massachusetts spent billions of dollars to reclaim their harbor, and it worked," he said.

In this Aug. 25, 2016 file photo, Boston Light flashes in outer Boston Harbor. A canary in a coal mine? How about a flounder in a harbor? Offering a rare bit of good environmental news, scientists have documented a dramatic rebound in fish health they say shows how once horribly polluted Boston Harbor has cleaned up its act. (AP Photo/Elise Amendola, File)

The turnaround of the harbor—once considered the country's dirtiest—can also be seen in the improved water quality in the rivers that feed into it and the high marks its beaches have received for cleanliness in recent years, according to the Massachusetts Water Resources Authority, the drinking water and sewage agency created in the wake of the 1985 decision.

"The empirical data is irrefutable," Frederick Laskey, the authority's executive director, said. "The clean-up of Boston Harbor is the greatest environmental achievement of this generation."

In this May 18, 2018 file photo, The USS Constitution glides through Boston Harbor past the city skyline in Boston. A canary in a coal mine? How about a flounder in a harbor? Offering a rare bit of good environmental news, scientists have documented a dramatic rebound in fish health they say shows how once horribly polluted Boston Harbor has cleaned up its act. (AP Photo/Bill Sikes, File)