

Whales navigate a perilous route off the NJ Shore

January 23 2023, by Frank Kummer



Credit: Unsplash/CC0 Public Domain

At any given time, 50 or more vessels, ranging from massive cargo ships to small fishing boats, are motoring off New Jersey's 127-mile coast from New York to Delaware.

The smaller vessels often travel at just a few knots per hour, while larger ones run to 20 knots (23 mph) or more.

Little wonder whales sometimes crash into one of them, receiving what amounts to giant-sized headaches or fatal blows.

Two whales that died in January and were stranded in Atlantic City and Brigantine showed evidence of blunt force trauma associated with vessel collisions. Opponents of [offshore wind](#) have suggested survey vessels are to blame, but officials suggest otherwise.

Walt Nadolny, a professor emeritus at SUNY Maritime College in New York, has been teaching students for two decades how to avoid whale strikes before they head to sea as merchant mariners.

"The odds are ridiculously low" that the whales struck a slow-going survey vessel, said Nadolny, who has no affiliation with an offshore wind company.

Orsted, a global offshore wind company that started in Denmark, is set to build New Jersey's first wind farm but has not started construction. In January, it has had one vessel at a time on the water totaling little more than seven days.

Nadonly surmises that it's highly unlikely an offshore wind surveying vessel, which normally would travel at 8 to 10 knots (9-11 mph), could cause a fatal blow to a whale. Rather, he said, fatal collisions typically occur with bigger ships traveling at least 18 knots (21 mph) or more. Usually only large commercial ships travel that fast.

For example, on Friday morning the Maersk Pittsburgh container ship with a gross tonnage of 74,642 was traveling off the coast of Long Beach Island from New York City to Charleston at almost 21 knots (24 mph),

according to tracking provided on marinetraffic.com. Multiple other container ships were traveling at similar speeds.

Many of those fast ships, Nadolny noted, often come from, or are headed to, the busy ports of New York/New Jersey or the Delaware Bay toward Philadelphia. The ships are required to reduce speed only as they near the ports, but they often follow voluntary speed restrictions farther out.

'Unusual mortality event'

At least 178 [humpback whales](#) have died from Maine to Florida since 2016, with necropsies completed on half. About 40% of those bear evidence of being struck by a vessel or entangled in fishing gear, according to the National Oceanic and Atmospheric Administration's Marine Fisheries Service, which has designated the time period as an unusual mortality event that predated offshore wind energy activity.

NOAA scientists say whales die from a variety of reasons, and necropsies are often difficult to carry out, especially if the bodies are badly decomposed. Sometimes, no cause of death is determined.

"No whale mortality has been attributed to offshore wind activities," said Lauren Gaches, a spokeswoman for NOAA. "We know of several factors that may be driving these interactions. As the humpback whale population has grown, their occurrence in the mid-Atlantic has increased. These whales may be following their prey, which we're hearing from our partners in the region are reportedly close to shore this winter."

Over the past year, there have been nine large whale strandings from Maine to Cape Hatteras, N.C., which NOAA describes as a recent "pulse" of deaths. Humpback whale strandings tend to occur in winter

months.

A humpback whale was found dead this week in Assateague Island in Maryland. A cause of death has not been released.

N.J. whale deaths

Recent deaths have shown signs of vessel strikes, but tests might take weeks to months, and it's possible no conclusion might ever be reached on some.

A humpback whale found dead in Atlantic City on Jan. 7, however, had clear evidence of a large head injury behind the blowhole, leading to the belief it was struck by a vessel.

The most recent death along the New Jersey coast occurred Jan. 12 in Brigantine. The 32-foot female also showed signs of being struck.

"Preliminary results based on observations during the necropsy suggest that the whale suffered blunt trauma injuries consistent with those from a vessel strike," the Marine Mammal Stranding Center in Brigantine said in a statement about the Jan. 12 stranding. "Injuries and hemorrhaging were observed on the head and thoracic region, as well as along the right side and the pectoral flipper."

The statement added that, "Although there has been speculation about whether these whale deaths are linked to wind energy development, at this point no whale mortality has been attributed to offshore wind activities. We will continue to gather data and go where the science leads us."

There are currently a high number of large whales in the waters off New Jersey, the center said, attracted by small fish that attract stripers. So, it

advises boaters to travel slower than 10 knots (11 mph). Currently, any vessel 65 feet or longer is required to travel at that lower speed as they enter major ports.

Offshore wind testing

Social media forums are filled with people questioning whether offshore wind vessels using sonar or seismic testing are to blame.

Orsted is set to build New Jersey's first wind farm, Ocean Wind I, which calls for up to 98 wind turbines to be erected about 12 miles off of Atlantic City. The company says it is not performing any seismic activity as part of its testing of the seafloor.

"Our current work off the coast of New Jersey consists of surveys and does not involve sounds or actions that will disturb whales or any ocean mammals," Maddy Urbish, Orsted's head of government affairs and market strategy for New Jersey said in a statement. "Orsted-contracted vessels have not experienced any marine mammal strikes during offshore survey activity in the U.S."

Orsted said it carried out geotechnical investigations of the ocean floor Jan. 4-10 with its ship *Regulus*, a 272-foot vessel that has since moved out of the area. Another vessel, the *NorthStar Voyager* will be conducting surveys in the next few days.

Orsted provides weekly briefings to mariners, with the latest saying that the *NorthStar Voyager* will be traveling along a planned cable route and within the area it has leased from the Bureau of Ocean Energy Management. It asks vessels to provide a wide berth because the ship will be limited to maneuver because it is towing gear up to 300 meters behind.

The ship is conducting tests to learn the nature of the soil under the seabed. During the test, a machine on the vessel presses a metal rod into the seafloor to test the soil's friction and resistance. Orsted said the test is "low in terms of noise impacts." Some of these kinds of tests use sound, Orsted said, but their vessels do not.

NOAA said the acoustic systems used by offshore wind ships around the world have not had whale strandings associated with them.

Each vessel also has to have at least one person designated to monitor for marine mammals and report any disturbances of whales.

Paul Forsberg, a commercial ship captain who has done surveying work for offshore wind, posted a video Friday saying surveying has been done since 2017 and no known whale deaths have been associated with the activity. He said operations shut down immediately anytime a whale is spotted nearby, and there were often multiple spotters on each [vessel](#).

Forsberg said a small acoustic device known as a sparker with very low power was often used to scan the ocean floor.

Offshore wind opponents seized on the recent fatalities to tarnish the wind industry, he said.

"If offshore wind surveying started way back in 2017 and now we're into 2023, how come there aren't hundreds of dead whales?" Forsberg asked. "I'll tell you why. 'Cause offshore [wind](#) survey stuff is not killing them."

2023 The Philadelphia Inquirer, LLC.

Distributed by Tribune Content Agency, LLC.

Citation: Whales navigate a perilous route off the NJ Shore (2023, January 23) retrieved 2 May 2024 from <https://phys.org/news/2023-01-whales-perilous-route-nj-shore.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.