

# When ships pass, whales eat less: study

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Shipping lanes overlapping with the coastal migratory paths of whales create a steady source of underwater noise pollution

Noise from ships impedes humpback whales from foraging for food, and could have long-term impacts on the health of these majestic creatures, according to a study released Wednesday.

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Earlier research has shown how this can interfere with the behaviour of so-called toothed whales—a category that included dolphins, as well as killer and sperm whales—that emit sonar-like pings to locate prey and communicate.

But very little was known about how the constant, low-frequency drone of ocean vessels might affect [baleen whales](#), the other major category.

These include blue, humpback, right and bowhead whales.

To find out, a team of scientists led by Hannah Blair of Syracuse University in New York attached non-intrusive sensors to 10 humpbacks in the western North Atlantic.

The devices not only picked up and recorded all the sounds heard by the whales, but also tracked their underwater movement.

Humpbacks have a wide array of foraging techniques used to consume a large number of small prey, including one manoeuvre scientists call the "bottom side-roll".

To feed on sand lance—bottom-dwelling eel-like fish—"the whale dives and scrapes along the ocean floor," explained Blair.

A humpback can deep-dive for up to 30 minutes.

"At the same time, it rolls regularly onto its side and opens its mouth, scooping up the fish hidden in the sand," especially at night, she told AFP.

Every barrel roll is like a meal.

The study found that half of the whales—all of them adult

females—failed to execute these important side-rolls in the presence of ship noise on at least one of their deep dives.

Researchers can only speculate as to why.

The humpback may have perceived the ships as a threat. It is also possible, they said, that the prey reacted to the noise too, scattering or digging more deeply into the sand.

Humpbacks have been dealing with chronic noise from ships for decades, and have shown some capacity to adapt.

The new findings, however, "suggest that the [whales](#) are unable to completely adjust to this disturbance," the study concluded.

The paper appears in *Biology Letters*, a journal published by Britain's de-facto academy of sciences, the Royal Society.

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