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Oceans are 'too noisy' for whales

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Noise from oil exploration is implicated in the plight of gray whales near Sakhalin

Levels of noise in the world's oceans are causing serious problems for whales, dolphins and other marine mammals, a report warns.

The International Fund for Animal Welfare (Ifaw) says undersea noise blocks animals' communication and disrupts feeding.

Naval sonar has been implicated in the mass deaths of some cetaceans.

In some regions, the level of ocean noise is doubling each decade, and Ifaw says protective measures are failing.

"Humanity is literally drowning out marine mammals," said Robbie Marsland, UK director of Ifaw.

"While nobody knows the precise consequences for specific animals, unless the international community takes preventive measures we are likely to discover only too late the terrible damage we're causing."

In its global assessment of cetacean species, released last month, the International Union for the Conservation of Nature (IUCN) concluded that ocean noise posed a significant threat.

Across the spectrum

Whales and dolphins use sound in ways that are clearly important to their survival, though not completely understood.

Baleen whales, such as blue and humpback whales, produce low frequency calls that can travel thousands of kilometres through water.

Dolphins and toothed whales generate higher frequency clicks used to locate prey.

Noise generated by ships' engines and propellers, and by seismic airguns used in oil and gas exploration, produce a range of frequencies that can interfere with both these groups of species, Ifaw concludes.

Its report - Ocean Noise: Turn it down - cites research showing that the effective range of blue whales' calls is only about one-tenth of what it was before the era of engine-driven commercial shipping.



Movements of large ships on the open ocean are largely unrestricted

It also notes that high-energy military sonar systems have driven the mass strandings and deaths of beaked whales.

The sonar is thought to disrupt the animals' diving behaviour so much that they suffer a condition rather like "the bends" which human divers can contract if they surface too quickly.

Pressure from conservation groups has led to restrictions on the use of sonar by the US Navy.

In some places, companies involved in oil and gas exploration limit their use of seismic airguns.

But Ifaw argues these restrictions are not enough.

The use of high-energy sonar and seismic airguns should be completely prohibited in sensitive areas, it says. National legislation, such as the UK's Marine Bill, should comprehensively restrict the exposure of cetaceans to noise.

The UK branch of the Whale and Dolphin Conservation Society (WDCS) has sounded alarm bells recently over oil and gas exploration in the Moray Firth, home to a small population of bottlenose dolphins.

The Ifaw report is not the first to raise the threat posed by ocean noise, and it will not be the last.

The problem is that most of the activities causing the problem - commercial shipping, mineral extraction - are part and parcel of the modern, interconnected economy.

A further obstacle to legislation is that much of the noise is generated on the high seas, which are largely unregulated.