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Whale poo fights climate change: study

By environment reporter Sarah Clarke

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The fight to stop whaling has been boosted with new research showing the southern ocean sperm whale can remove large amounts of carbon from the atmosphere.

A study has found that instead of increasing carbon levels through respiration, the sperm whale offsets its emissions by defecating.

Flinders University researcher Trish Lavery says the poo is rich in iron, which stimulates phytoplankton to grow, and that traps the carbon dioxide.

"They've certainly gone past the carbon-neutral status that we all attain to and they're actually sinking more carbon from the atmosphere each year into the deep ocean ... than what they add to the atmosphere when they respire," she said.

"It's just like manuring your garden. When these sperm whales defecate on the phytoplankton, that causes them to grow and bloom, and like all plants they take in carbon when they grow.



CLIMATE CHANGE

Carbon neutral: A sperm whale swims in the southern ocean, leaving a trail of faeces behind it. (Flinders University: Peter Gill)

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"This carbon build-up is certainly another unexplored facet of whaling. If we hadn't decreased sperm whale populations from their historical levels, we'd have an extra about two million tonnes of carbon being pulled out of our atmosphere every single year and being sunk to the deep oceans."

According to this research, the whales can remove about 400,000 tonnes of carbon from the atmosphere each year, more than double the amount they add, making the sperm whale a carbon-neutral mammal.

A separate study at the Australian Antarctic Division in Hobart this year found that whale faeces could be crucial in reducing levels of atmospheric carbon dioxide.

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