

The hidden 'evil twin' of climate change

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According to the results of a major new national survey published by the University, the majority of the British public has a very low awareness of the issue of ocean acidification, with around only one-in-five participants stating they had even heard of the issue.

The oceans are currently absorbing large quantities of the [carbon dioxide](#) which has been emitted into the atmosphere from human activities. This absorption of CO₂ is leading to a reduction in the pH of seawater – termed '[ocean acidification](#)'. According to the recent Intergovernmental Panel on Climate Change, ocean acidification is the hidden face of

increasing [global carbon emissions](#) and poses a future threat to a range of marine ecosystems and the societies which depend upon them.

Although many other aspects of global [climate change](#) are readily recognised by the general public, we know far less about how they view ocean acidification. Researchers from the School of Psychology have conducted the first comprehensive survey of the British public's views on this topic, interviewing over 2,500 people across the country.

The study reveals:

Very low awareness of ocean acidification:

- Only around 1 in 5 participants state that they have even heard of ocean acidification. Among those who do say they have heard of it, levels of self-reported knowledge about the subject are very low.
- Additionally, we found no significant increase in levels of awareness following the Inter-governmental Panel (IPCC) scientific reports published in April 2014.

Some people do associate ocean acidification with climate change

- The term Ocean Acidification itself evokes associations with pollution and negative environmental consequences. A surprisingly large proportion of those surveyed (38%) also correctly attribute anthropogenic carbon emissions as the main cause of ocean acidification, though as many again (34%) perceived that it is caused by 'pollution' from shipping.
- Damage to coral reefs and consequences for marine organisms were correctly recognised by many as important consequences of

ocean acidification.

Concern increases with knowledge. Distrust remains.

- While most people do not initially express concern about ocean acidification, once provided with some basic additional information a clear majority (64%) do then express concern about the subject.
- Half of those surveyed thought ocean acidification should be a fairly or very high priority for action by the British Government, although very few trust the Government to give correct information about the issue.

Professor Nick Pidgeon, from Cardiff University's Understanding Risk Group at the School of Psychology, who lead the team which carried out the research, explained:

"Ocean acidification is a hidden impact of [carbon emissions](#) – often described as the 'evil twin' of climate change. While the scientific evidence increasingly shows it will be of critical importance for the future health of marine life, public awareness remains stubbornly low. It is nevertheless encouraging to see that when it is properly explained to them many who took part in the research became concerned about the issue. The results point to a clear need to further engage the public in more innovative ways, by changing the narrative about climate change to further emphasise this most important of environmental risk issues."

More information: [psych.cf.ac.uk/understandingri ...
an_acidification.pdf](https://psych.cf.ac.uk/understandingrisk/understandingriskandacidification.pdf)

Provided by Cardiff University

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