

British team trek to measure CO₂ in Arctic Ocean

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The team led by polar explorer Ann Daniels headed northward from a remote staging area in Canada's far north to collect data and samples for the Catlin Arctic Survey, an international scientific mission.

Over the next two months, they are to haul sledges weighing up to 120 kilograms (264 pounds) over pressure ridges and rubble fields, and swim

across leads of open water, as wind chills push temperatures down to minus 75 Celsius (minus 103 Fahrenheit).

Eventually, they will meet up with other scientists who will fly ahead to an "ice base."

Results from the expedition will be made available to scientists in Europe, Canada and the United States.

"The expedition focus is on ocean acidification which some scientists describe as the Earth's 'other carbon dioxide problem,'" said Daniels in a statement.

Although most international attention has focused on the effects of [carbon dioxide emissions](#) in pushing up temperatures, scientists believe dangerous levels of ocean acidity are a problem that also needs exploring.

But there is scarce research on its effects.

This expedition is believed to be the first of its kind.

Some scientists believe that, based on current projections, the world's oceans' pH could reach levels by 2050 not seen for 20 million years.

And if this occurs it may become corrosive to shelled organisms such as lobsters, crabs and oysters. Rising [acid](#) levels in [sea water](#) reduces the availability of the carbonate mineral -- used by many [marine organisms](#) to form their shells.

Carbon dioxide is absorbed into cold water more easily than warmer seas, making the [Arctic Ocean](#) particularly vulnerable.

The Catlin expedition is the second in as many years. In 2009, survey director Pen Hadow led a mission to map out thinning [Arctic sea ice](#) as part of a larger study of global warming.

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