

Study: Icebergs create ocean 'hot spots'

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A U.S. study suggests Antarctic icebergs created by global climate change are having a major ecological impact.

The study, led by oceanographer Ken Smith of California's Monterey Bay Aquarium Research Institute, has determined global warming is causing Antarctic ice shelves to split into thousands of free-drifting icebergs in the Weddell Sea.

The floating islands of ice -- some dozens of miles across -- are serving as "hotspots" for ocean life, with thriving communities of seabirds above and a web of phytoplankton, krill and fish below.

"One important consequence of the increased biological productivity is that free-floating icebergs can serve as a route for carbon dioxide drawdown and sequestration of particulate carbon as it sinks into the deep sea," said Smith.

"While the melting of Antarctic ice shelves is contributing to rising sea levels and other climate change dynamics in complex ways, this additional role of removing carbon from the atmosphere may have implications for global climate models that need to be further studied," he said.

The researchers report in detail in the current issue of the journal *Science*.

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