

# Maximizing sea life's ability to reduce atmospheric carbon may help combat climate change

December 22 2015

---

New research on West Antarctic seabed life reveals that the remote region of the South Orkney Islands is a carbon sink hotspot. The findings suggest that this recently designated (and world's first) entirely high seas marine protected area may be a powerful natural ally in combating rising CO<sub>2</sub> as sea ice melts.

"There has been a cascade of rising atmospheric CO<sub>2</sub> driving warming, reducing sea ice, leading to longer micro-algal blooms—which means longer meal times for animals, which are growing more," said Dr. David Barnes, senior author of the *Global Change Biology* study. The recently discovered polar seabed [carbon](#) gains remove carbon from cycling and represent a key negative feedback working against climate change.

This new science, which was conducted with Darwin Initiative funding, suggests that researchers should investigate whether maximizing natural carbon capture by seabed life could help reduce global CO<sub>2</sub>.

**More information:** David K. A. Barnes et al. Why is the South Orkney Island shelf (the world's first high seas marine protected area) a carbon immobilization hotspot?, *Global Change Biology* (2015). [DOI: 10.1111/gcb.13157](https://doi.org/10.1111/gcb.13157)

Provided by Wiley

Citation: Maximizing sea life's ability to reduce atmospheric carbon may help combat climate change (2015, December 22) retrieved 26 April 2024 from

<https://phys.org/news/2015-12-maximizing-sea-life-ability-atmospheric.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.