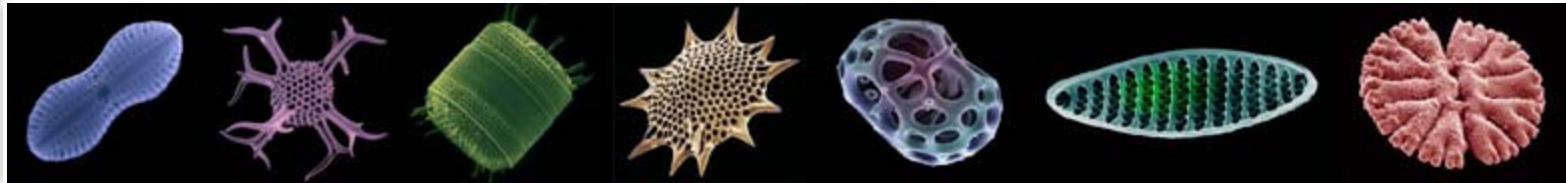


# PLANKTOS



## Language Selection

- [English](#)
- [Français](#)
- [Deutsch](#)
- [Español](#)

## Main Menu

[Home](#)

[FOR INVESTORS](#)

[About](#)

[Science](#)

[Planktos Store](#)

[Newsroom](#)

[Press Releases](#)

[Planktos In The News](#)

[Media Clips](#)

[Monthly Newsletter](#)

[Ocean Crisis News](#)

[Current Events](#)

[Careers](#)

[Resources](#)

[Planktos Educational](#)

[What We Do: AV clip](#)

[Contact](#)

[NBC clip](#)

**The New York Times**

[on Planktos' ocean work:  
"Can plankton power help  
save the planet?"](#) 5/1/07

## The UK Independent on Planktos' "Voyage of Recovery"



**THE**  
**INDEPENDENT**

## Researchers 'seed' ocean with iron to soak up CO2

By Steve Connor, Science Editor

Published: 03 May 2007



A research ship is about to begin a project around the Galapagos Islands, in the Pacific Ocean, that will highlight the importance of marine plankton in the fight against global warming and climate change.

Waterbird II, the research ship of an eco-restoration organisation called Planktos, is on a "voyage of recovery" to "seed" the oceans with the iron in the hope of stimulating blooms of phytoplankton, the microscopic marine plants that soak up the energy of the Sun to convert carbon dioxide into organic matter.

The organisers of the venture hope to shine a spotlight on the critical role that plankton plays in maintaining the carbon dioxide balance of the oceans and the atmosphere with the help of several tons of iron dust.

Scientists have long postulated that it may be possible to speed up the rate at which the oceans soak up atmospheric CO2 by stimulating the growth of plankton in the oceans with added iron - an essential nutrient for photosynthesis.

The research ship has a crew of 17, including eight scientists, and is scheduled to sail to the Galapagos, Tahiti, the coast of South America, and the South Pacific.



Noel Brown, a former director of the United Nations Environment Programme, said that the pilot project to fertilise the oceans with iron filings is important in terms of raising awareness of the huge potential the oceans have in mitigating rising levels of atmospheric CO<sub>2</sub>.

"I cannot overstate the importance of these Planktos pilot projects. If their applied science works as well as the early research indicates, this work will both help restore the neglected oceans and give everyone concerned about global warming truly meaningful hope," Dr Brown said.

Normally plankton forms vast blooms at certain times of the year that can be seen from space. But this occurs only under certain conditions, such as adequate mineral availability - iron is often the limiting factor.

Scientists established in the 1990s that adding iron to the oceans causes plankton to multiply in areas that would not have seen a bloom at that time of year. This led to the idea that seeding vast areas artificially with iron dust could stimulate the plankton to draw down more CO<sub>2</sub> from the atmosphere, where it might be sequestered for many centuries when the organic matter formed by photosynthesis sinks to the seabed.

The "iron hypothesis" was first suggested by John Martin, an oceanographer at the Moss Landing Marine Laboratory in California, who died before his idea could be properly tested.

In order for it to work, however, it was important for the phytoplankton to sink quickly to about 300 metres, beyond the range of the zooplankton - the tiny animals that also live within the same surface layers, feeding on other plankton.

A number of small-scale trials tested Martin's idea but it soon emerged that zooplankton multiplied as quickly as the phytoplankton, with the result that the animals quickly ate the organic material formed as a result of adding the iron. Instead of the carbon sequestered by the phytoplankton sinking to the seabed as planned, it was emitted to the sea and air by the feeding zooplankton.

Nevertheless, the Planktos team believe that the Waterbird II mission will raise greater awareness of what the oceans can do in mitigating the effects of climate change. "Planktos is working to ensure the ocean's enormous natural carbon dioxide sequestration potential is recognised and prioritised in any future federal climate change laws, and we are finding real enthusiasm for this powerful green approach," said Kyle Hence of Planktos.

---

**Source:** [http://news.independent.co.uk/environment/climate\\_change/article2504646.ece](http://news.independent.co.uk/environment/climate_change/article2504646.ece)

---

#### **Fair Use Notice**

This page contains copyrighted material, the use of which has not always been specifically authorized by the copyright owner. We are making such material available in our efforts to advance public understanding of critical environmental issues relating to ocean crises, biosphere health and human survival. We believe this constitutes a 'fair use' of any such copyrighted material as provided for in section 107 of the US Copyright Law. In accordance with Title 17 U.S.C. Section 107, the material on this site is distributed without profit to those who have expressed a prior interest in receiving the included information for research and educational purposes. For more information go to: <http://www.law.cornell.edu/uscode/17/107.shtml>. If you wish to use copyrighted material from this site for purposes of your own that go beyond 'fair use', you must obtain permission from the copyright owner.

---

© 2007 Planktos