Ancient Antarctic Oceans: As clear as mud

The history of the ocean is recorded in **sediment**.

Sediment collects at the sea floor. It is made of **plankton**, mud, sand, and gravel. It also holds chemicals. These tell us about the ocean's **saltiness**, **temperature**, and **chemistry**.

We can look back in time by studying sediment that was buried long ago, to find out how the environment, climate, and oceans were are the time it was deposited.







Sediment layering

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Using sediments from the Ross Sea, we are studying:

How ocean currents in the Ross Sea have varied in the last 1 million years.

How these changes affect the glaciers, ice shelves, and seaice in the Ross Sea.

What can this teach us about modern climate change and global sea-level rise.