

ARCTIC OCEAN


Salinity and Temperature:
A decrease in temperatures in the Arctic Ocean creates an increase in ice. An increase in ice creates an increase in salinity.

Climate Change Predictions:
"Sea ice is critical for polar marine ecosystems in at least two important ways: (1) it provides a habitat for photosynthetic algae and nursery ground for invertebrates and fish; and (2) as the ice melts, releasing organisms into the surface water, a shallow mixed layer forms which fosters large ice-edge blooms important to the overall productivity of polar seas (Noaa.gov 2011)."

If global warming continues, this marine life would be lost, as would the marine life of other seas as the ice in the arctic melts, lowering the overall salinity in all earth's oceans.

Source: www.arctic.noaa.gov/essay

Location and Geography:
The Arctic Ocean is located at the north pole between the landmasses of Eurasia and North America. It is mostly ice and frigid waters.



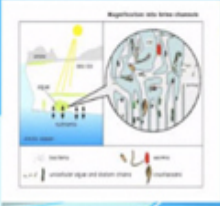
The topography of the Arctic Ocean
becomes more severe when proceeding from the Canadian to the Eurasian side of the Arctic Basin. The thickest ice occurs on the Eurasian side of the Mid Ocean Ridge.
Source: <http://arctic.synergiesprairies.ca/arctic/index.php/arctic/article/viewFile/1703/1682>

Sunlight and Seasons:

Sunlight in the summer seasons creates pockets of ice crystals, salt, and water called brine. This brine creates an ice ecosystem for special bacteria, viruses, unicellular algae, diatom chains, worms and crustaceans.

In the winter season, more ice forms, decreasing the brine pores from the summer. Organisms adapt to the harsh winters by accumulating large deposits of organic molecules and fatlike material in their bodies to protect them from the colder temperatures and increased salinity of the brine.

Source: www.arctic.noaa.gov/essay





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