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*Disappearing Ice*

Global Warming and its effect on glacial ice melt and the environment is a great concern for our planet. As the oceans absorb increasing amounts of Carbon Dioxide from the atmosphere, the temperature and the acidity of the water is increasing. The purpose of this Research Project is to test the effects of various pollutants and the acidity of water on the melting rate of ice placed in it. Based on prior research it was hypothesized that the addition of Oil to water would show the slowest rate of ice melt in both fresh and salt water.

Identical volumes of ice cubes were frozen and placed in containers of water to which different substances were added to create increased and decreased acidity, and 2 possible pollutants (Motor Oil and Weed Killer). Solutions were made using fresh water and another set using salt water. The beginning and ending temperature of the solutions as well as the pH and the time it took the ice to totally melt was recorded.

The experiment was conducted twice and results were averaged and tabulated. The ice in the salt water solutions melted the slowest and had the overall coldest ending temperature. The ice in solutions containing the pollutants melted the fastest for both fresh and salt water. The solutions with the highest pH melted the slowest in both the fresh and salt water groups.

Although the original hypothesis was disproved, conclusive data would indicate that pollutants and acidification of the oceans may accelerate glacial ice melt.