

A Science Service Feature

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? WHY THE WEATHER ?

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THE ARCTIC OCEAN AS A HOT-WATER HEATER

An important fact bearing on the temperature of the Arctic is that the greater part of this region is occupied by a deep ocean. It is not frozen, except to a slight extent at the surface, and therefore its temperature cannot be lower than the freezing-point of sea water - about 30 degrees Fahrenheit. This enormous reservoir of relatively warm water is comparable in its effects to the hot-water heating system of a house.

The layer of six or eight feet of ice that covers more or less of the polar sea, according to season, though not a good conductor of heat, is by no means an absolute insulator. It permits the steady passage of heat through it. Dr. A. H. Sverdrup, who had charge of the scientific work on board the "Maud" during her long drift northeast of Siberia, made the interesting calculation that because of the supply of heat from the water the temperature of the air in the regions he visited could never fall lower than 50 degrees below zero Fahrenheit.

Dr. Sverdrup once told me of a sledging party that adopted the expedient of pitching its tent over a hole cut through the ice in order to keep warm.

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