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A Science Service Feature

? WHY THE WEATHER ?

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ABOUT HOARFROST

Hoarfrost is defined in some schoolbooks as frozen dew. Sometimes it actually does consist of congealed dewdrops, but as a rule it is produced by the direct condensation in solid form of the gaseous moisture in the atmosphere. The ice crystals of which it is composed assume a great variety of shapes, hundreds of which have been drawn and photographed with the aid of the microscope.

Hoarfrost occurs not only on outdoor objects, after a clear frosty night, but also indoors on window-panes, refrigerating pipes and other cold surfaces. Not all the so-called frost figures seen on window-panes, however, are due to hoarfrost. Many, including the long feathery or fern-like forms, result from the freezing of a thin film of water on the pane, and have sometimes been distinguished as "window-ice".

Some of the most beautiful deposits of true hoarfrost are found on the surface ice of lakes, streams and glaciers. They are known as "ice flowers".

Hoarfrost should not be confused with the rough or feathery coating of ice deposited on terrestrial objects in cold weather by drifting fog. This is now termed "rime" by meteorologists.

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