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THE COVER

What looks like an intricate flower is actually a natural ice structure. Conditions must be just right for such "ice flowers" to form: The air has to be below freezing, but the ground must remain warm enough for water to stay a liquid. In addition, only certain plants have the right kids of stems to produce these structures. The stems pull up water from the ground, and as water freezes on the central stem, it pushes out the dry and cracked outer layers. Then more water rises through the stem, ultimately giving rise to long frozen curls. In "Flowers and Ribbons of Ice" (pages 360-369), James Carter explains how to observe, and even create, these delicate marvels. He also describes other ice formations — emerging from rocks or soil, or extruding from holes in pipes — that illustrate how weird water can be. (Image courtesy of James R. Carter.)