

## GROUND LEVEL

ESSAY AND PHOTO BY Dan Holtmeyer

On a cold and quiet Ozark morning you might see them, the little bundles and sinuous coils of ice that seem to glow in the day's first faint light. Or you might not. Frost flowers grow only when heat and cold, timing and ecology mix in just the right way, and they last only one sunrise.

The first necessary ingredient for frost flowers' brief blooms, paradoxically, is warmth. It must be warm or sunny enough the day before for water to be seeping through roots and stems. Once night falls, the temperature must leisurely, gently slip below freezing. Sap in certain plants can then freeze and expand, splitting their stems' sides near the ground. Some sap is still flowing when this happens, so out the liquid comes, continuously freezing on contact with the air and getting pushed outward by the sap behind it. The process is not unlike dough pushing through a pasta maker. In this way a frost flower grows its petals as light and brittle as Styrofoam. They're at once parasitic and graceful, the ghosts of a warmer season's blossoms.

I came upon them for the first time in early January during a hike around Lake Wedington, a small human-made lake in northwest Arkansas' Ozark National Forest. The specific plants that foster frost flowers apparently grow well around here, because the ice formations popped up every few feet along some stretches of the lake's hiking trail. I have to credit blind luck, too. I wasn't looking for or expecting them, and they probably weren't there the day before or after.

These ephemeral wonders, then, are a reminder of how much photography can rely on luck, and of how much beauty is right under our feet. Arkansas has some remarkable scenic vistas, but in my walks around this corner of the state I've been awed, too, by its smaller gems: streams and fog frozen into gorgeous fractals and crystals, icicles the size of elephant tusks, creek-side mosaics of undulating curves and sharp edges. Other seasons bring their own ground-level treasures, with fungi, slime molds, plants, arthropods and other organisms that explode into seemingly limitless color and shape and invention. Frost flowers and all of the rest alike need the right conditions to show themselves. Miss them, and you might have to try again next year.

