

Mineral Spotlight: Malachite

It's time to deck the halls – if we had to choose a mineral that looks like most like a Christmas tree, we'd probably choose malachite. Malachite is a copper carbonate hydroxide. It most typically forms in opaque, banded masses, but can occasionally be found in a stubby crystalline form.

Malachite has a long history in human culture, beginning in antiquity. It was used as a pigment in green paints until being replaced by a synthetic substitute around 1800. It has almost always been a popular decorative stone, being used in China as decoration as far back as the Eastern Zhou period (~500 BCE). Mayan funerary masks were sometimes made of malachite for the most distinguished people, and a malachite vase was considered one of the best diplomatic gifts given by Tsars Nicholas I and II.

The string of lights you use to decorate for the holidays probably contains copper wire inside – perhaps some of it came from malachite. As a low grade copper ore, it's not one of the main sources of copper (other minerals like chalcopyrite take that title), but with the rising demand for electronics, more malachite is being processed.

This feature was posted on Dice Museum social media by Museum curator Jillian Herlinger on 12/6/2022.

