Bruce Dice MINERALOGICAL MUSEUM

Mineral Spotlight: Garnet

What semi-precious stone can be found in Alaskan cliffs just as well as the sand of Michigan beaches? This week's Mineral of the Week, garnet, can take many colors, but is almost always recognizable by its crystal form – usually dodecahedral or trapezoidal.

The term "garnet" is technically the name of a group of minerals. Their cations vary between different elements like Mg, Mn, Fe, or Ca. This variance in chemical composition can lead to extremely different colors between types of garnet. Almandine is a garnet with the deep purple-red color people typically expect of garnets. Uvarovite, however, is a deep and vibrant forest green. All garnets have around the same hardness (6.5-7.5) which helps to identify them, along with their aforementioned characteristic crystal shape.

You can find garnets at Lake Michigan sand beaches. These tiny grains of garnet come from eroded metamorphic rocks in the Upper Peninsula. Similarly, small grains of garnet appear in the sandstone at Pictured Rocks National Lakeshore. Next time you're at the beach, take a moment to look up close at some sand grains. Most usually, garnet in Michigan sand will appear as rounded, dark red grains.

This feature was posted on Dice Museum social media by Museum curator Jillian Herlinger on 9/13/2022.



