

“Quartz and Calcite: Nature’s Magical Minerals are Iowa’s Treasures”

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Quartz is the second most abundant mineral in Earth's continental crust (after feldspar), and it occurs in two major forms, macro-crystalline quartz (including several semi-precious gemstones) and a dense, compact form called micro-crystalline quartz. Quartz is a defining constituent of igneous granite, it is very common in sedimentary rocks such as sandstone and shale, and is a common constituent of schist, gneiss, quartzite and other metamorphic rocks. Since antiquity, varieties of quartz have been the most commonly used minerals in the making of jewelry and hardstone carvings. It has served as a major building stone, as dimension stone and is a key constituent of concrete, and its variety of uses in our modern civilization, and is very important to the citizens and economy of Iowa. Calcite is another abundant and valuable mineral found in Iowa, as macro-crystals (in a variety of forms) and in microcrystalline form (limestone). It has been used in jewelry making, as building stone (dimension stone, concrete aggregate, and cement), and to keep Iowa's agricultural land at peak productivity. Calcite has a myriad of other uses in modern society from production of paints, plastics, adhesives, sealants, ceramic glazes, and even used in disposable diapers. With its variety of uses, the production of calcite contributes nearly a half billion dollars to Iowa's economy every year.



Calcite and Quartz in an Iowa geode