Rock and Mineral Collecting in Indiana

By John R. Hill

The best rock and mineral collecting localities in Indiana are active and abandoned stone quarries. Unfortunately, most of the quarries where the best specimens could be found are now closed to the public. Abuses of courtesies extended by quarry owners to collectors have resulted in almost total prohibition of public access to those quarries. Federal mining regulations severely limit public access to most stone quarries. It may be possible to gain access, however, by contacting quarry owners, especially those of smaller operations. Hard hats are usually required and you are expected to provide your own. The Directory of Industrial Mineral Producers in Indiana is a useful source of the names, addresses, and phone numbers of the owners and operators of Indiana’s currently active stone quarries. The directory is available from the IGS Publication Sales office (see contact information at the bottom of this page).

All of the rocks that are native to Indiana are sedimentary in origin. The most common types of native Indiana rock are limestone, dolomite, sandstone, siltstone, and shale. Metamorphic and igneous rock types, which were transported to Indiana from Canada by glaciers during the great Ice Age, occur in the glacial sediments that cover about 80 percent of the state.

The oldest rocks that are exposed at the surface in Indiana formed about 450 million years ago during the Ordovician Period. They are at the bedrock surface in a narrow belt in the southeastern part of the state. Traveling westward, progressively younger formations are encountered with the youngest rocks, those of the Pennsylvanian Period, cropping out in the western quarter of the state. Thus, rocks of the Ordovician, Silurian, Devonian, Mississippian, and Pennsylvanian Periods are represented in Indiana. The Permian, Triassic, Jurassic, Cretaceous, and Tertiary Periods are not recorded in the rock column in this part of the Midwest.

Much of the southern one-third of Indiana, particularly that portion not covered by glacial drift, is blessed with an abundance of bedrock outcrops. The major highways that traverse this part of the state cut through thick bedrock exposures at numerous places along their trend. SR 37 south of Martinsville, I 64 and I 65 south of Columbus, SR 135, and US 231, to name a few, expose thick sections of Paleozoic rocks. Along these road cuts and within the stream valleys that exist near them, the collector may often find worthy specimens of minerals, including quartz, calcite, sphalerite, and pyrite.

The best mineral specimens are often found within geodes. More than 20 different minerals, including milrite, celestite, strontianite, barite, and amethyst, have been found in Indiana geodes, which range in size from less than an inch in diameter to about two feet.

Geodes may be found in the northern half of Indiana in the sand and gravel deposits left by the last advance of the glaciers, but most are found in the ravines and creek beds of the south-central part of the state, where they have been left behind by the weathering of bedrock and soil material. They can also be found in bedrock as seen along highway cuts like the ones on either side of SR 37 south of Bloomington.

The Harrodsburg Limestone, a layer of rock found at the surface in south-central Indiana, is famous for its many fine geodes. Two other rock layers that lie beneath the Harrodsburg Limestone, the Ramp Creek Formation and the upper part of the Edwardsville Formation, are also famous for their geode yield. These three formations can be found at the surface in Indiana in the eastern parts of Monroe and Lawrence Counties; in the central and western parts of Brown, Jackson, and Washington Counties, and in most of Floyd and Clark Counties.

All collecting is prohibited in Indiana state parks, but collecting with permission is possible on some state forest land. Call 1-800-289-6646 for a free copy of the Indiana Recreation Guide, which contains contact information for state properties. Of course, you should never attempt to collect on private or posted land without permission of the owner. You should seek permission from the Indiana Department of Transportation and from the Indiana State Police or local county sheriff’s office to collect along road cuts; and if you do collect along road cuts, make sure you and your vehicle are not traffic hazards.