Geology of the Ozark Plateau and the Visitor Center Trails

Trail Description

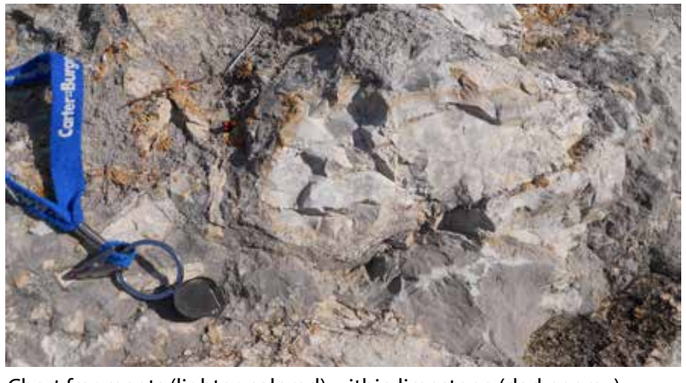
Along the trail, light-colored, fist-sized fragments of chert can be found lying on the ground. The chert is weathered from the Boone Formation and shows up as white pieces on the tops and sides of the hills. The fossils of marine animals may be preserved in the chert, so look closely at pieces you may find on the ground. This trail provides good views of the topography of the Ozark Plateau. Look at the hillsides. Do you see water in the drainage below? Probably not, since it is a dry valley typical of a karst terrain.

Geology around the Visitor Center

As you walk around the grounds at the Visitor Center you may notice a series of gray boulders scattered throughout the landscape. According to state park staff, the boulders were collected during construction of Rock Road (Hwy 127) just east of the Visitor Center. The rock is a limestone found in the Boone Formation. A few of the boulders contain light-colored chert. The photo below is of a limestone boulder located at the bottom of the stairs leading from the lower parking lot to the Visitor Center. Close observation of these features here will help you recognize them elsewhere.

While continuing your outdoor exploration, you may notice the decorative building stone used for both the stone wall and the building's foundation. This stone is from the Cotter Formation quarried near Beaver, Arkansas.

The Cotter is not exposed within the park so this is a good chance to see boulders from the oldest geologic unit exposed in the Ozark Plateaus. The Cotter is around 488-472 million years old and is made up of dolostone.

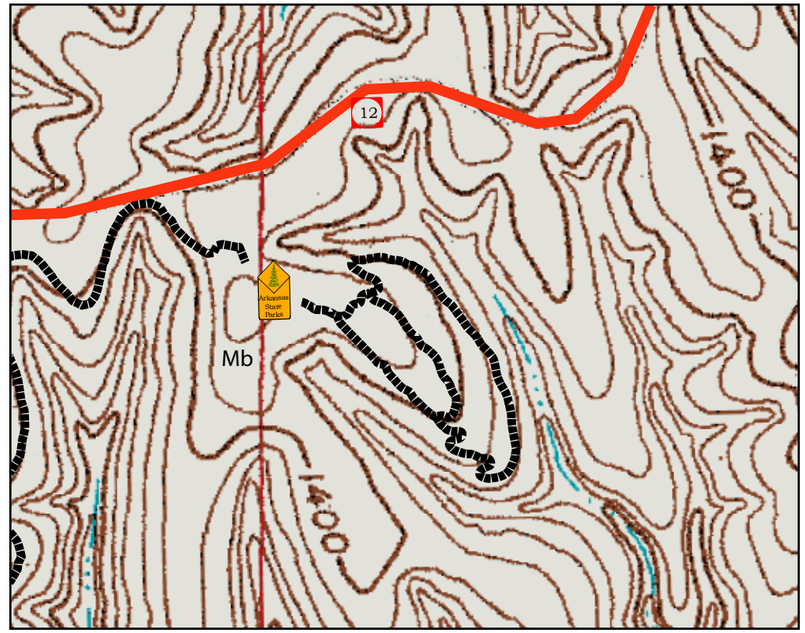


Chert fragments (lighter-colored) within limestone (darker gray) from the Boone Formation, located at the Visitor Center parking lot.

Chert fragments scattered on the hillside along the Ozark Plateau Trail.

Dry valley, or disappearing stream, along the Ozark Plateaus Trail.

Decorative dolostone wall composed of the Cotter Formation.



Sylolite in the dolostone wall. A stylolite is a pair of interlockingwavy surfaces created when a rock dissolves due to the pressure from the overlying rocks. Clay fills in between the surface giving it a darker appearance.

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