

# Geology of the Karst Loop Trail South Half

## Trail Description

This description starts at Stop 6 on Trail Map 7A and encompasses the south half of the Karst Loop Trail.

**Stop 6:** After following the trail on top of the St. Joe Limestone, you finally drop a bit lower in elevation to the Chattanooga Shale. When the lake level is low you are able to walk along the shoreline in the shale to get a good view of the St. Joe Limestone bluff above. You might even see pyrite nodules scattered about on the Chattanooga Shale.

Continue around the drainage on the trail, which is once again on top of the St. Joe Limestone.

**Stop 7:** The trail meanders from the top of the St. Joe down through the limestone. Here's another chance to get a good look at it. Walk down to the edge of the lake for a scenic view!

**Stop 8:** This is an excellent opportunity to view a sinkhole. This sinkhole is present at the base of the Boone Formation. The St. Joe Limestone crops out below near the lake level. If you take a tour on the lake and follow the Boy Scout Trail, letter G on that trail is directly below us. A tunnel cave is developed at the base of the St. Joe at this location and is best viewed from the lake when levels are low.

Continue along the trail. There are smaller sinkholes above the trail before you get to Stop 9.

**Stop 9.** The base of Boone Formation is exposed along the trail here. This is a good time to compare the cherty limestone in the Boone to the fairly chert-free St. Joe Limestone. Look closely and you might find trace fossils.



Stop 6. View of finger of lake when water level is low.



Stop 7. St. Joe Limestone along the trail.



Stop 8. Sinkhole above the trail.



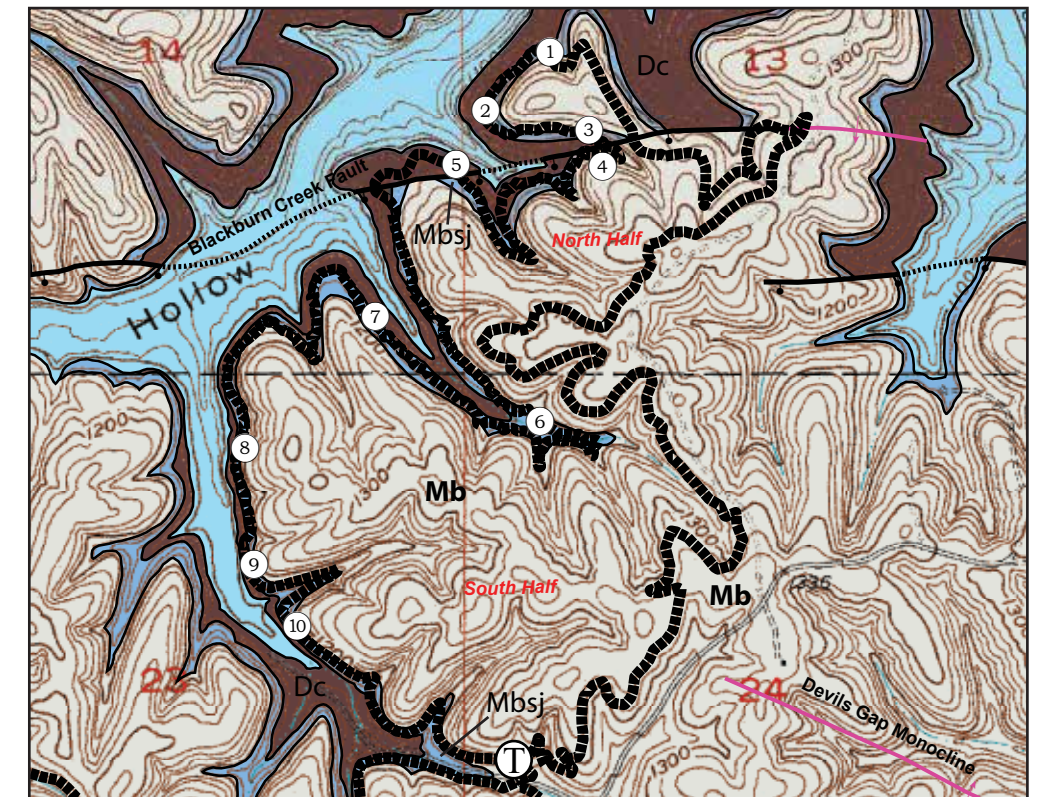
Stop 9. Cherty limestone in the Boone.



Stop 6. Pyrite nodules in shale.

- Mb** Boone Formation
- Mbsj** St. Joe Limestone
- Dc** Chattanooga Shale and Clifty Formation

- T** ① Trailhead and Trail stop
- |||||** Karst Loop Trail
- Contour interval = 20 feet



- Scale |-----| 1 mile
- N** ↑
- Normal fault - ball and bar on downthrown side. Dotted where concealed.
- Monocline

**Stop 10.** The trail stays on top of the St. Joe Limestone from this point until you reach the trail head along Page Sawmill Road. Notice the enlarged fractures in the limestone. These joints allow water to percolate into the limestone and dissolve it. This creates the karst features seen in the park and along this trail. Also, look at loose fragments of chert and limestone along the trail to see trace fossils.

As you get closer to the trail head you will see many pieces of limestone containing crinoid fragments. You will also see chert fragments in the limestone. These fragments have weathered from the basal portion of the Boone Formation



Stop 10. Trace fossils in the Boone Formation.



Stop 10. Crinoid fossils along the trail.

