

Grand Canyon National Park's Ranger Audio Tour Stop # 1 **Mather Point**

Welcome to Mather Point.

For most people, Mather Point provides their first view of one of the greatest geological wonders in the world. As you walk up to the rim, try to appreciate the immensity of what lies before you. Look across the canyon - over ten miles separates you from the North Rim. The North Rim is over 8,000 feet in elevation and is typically covered by many feet of snow each winter. Temperatures there are about five degrees Fahrenheit colder than on the south rim. Temperatures are far more warmer at the bottom of the canyon, a good 20 to 25 degrees Fahrenheit.

Look down at the bottom of the canyon to the inner gorge. You are almost a mile higher than the Colorado River right now. It's taken the last 6 million years for water to carve out this canyon and expose the bottom layers of the canyon that this incredible power that the river has helped push the dirt and rock that used to be here downstream another 500 miles into the Sea of Cortez at the Pacific Ocean.

As you look up and down the canyon walls, each layer represents another period in Grand Canyon's history. Look at the top layer at the far side of the canyon - it's the same one that you're standing on right now. This Kaibab Limestone is 270 million years old and formed when all of northern Arizona was covered by a shallow sea. Let your eyes drift down a little farther to the next layer, right above where the canyon walls start to turn red. This is the Coconino Sandstone layer was laid down 275 million years ago when an immense coastal sand dune covered this landscape. Follow all the layers down into the bottom of the canyon. You'll see some dark purple rocks interlaced with some white and pink granite. This is the basement of the Grand Canyon rock layers, Vishnu Schist. This rock was created 1.7 billion years ago - one third of the history of our planet.

All of these colorful, ancient rock layers coupled with the carving power of the Colorado River have created the landscape and biological diversity that sits before you today. If you're here at Mather Point at mid-day, consider returning for sunset or sunrise. The golden hour just before sunset and just after sunrise creates a whole new panoply of colors. Mather Point or any of the points along the canyon rim make for excellent sunset viewing stops.

If you want to find out about good sunset spots or learn more about the Grand Canyon, consider taking the short walk over to the park visitor center. Follow the signs to the east side of the parking lot and cross the street to make your way down to rangers at the visitor center.

Enjoy your day at the park.