

Ohiopyle State Park

Geology Tours

GO THERE: Get Out and Explore

The geology of Ohiopyle State Park has influenced both the natural and cultural history of this area. This is one of the best places in Pennsylvania to see the relationship between rock layers and the natural forces that impact them. Rocks here are sedimentary in nature. They were deposited in flat layers in marine and fresh water environments. The North American and African tectonic plates collided and caused these layers to uplift and buckle. At their highest point these mountains were as high as the Andes of today. Over millions of years the Youghiogheny River and its tributaries have cut down through these rock layers and eroded them away. The power of water coupled with the freezing and thawing climate of Western Pennsylvania have made the resistant rocks the most visibly prominent in the landscape. The Youghiogheny gorge is the deepest in Pennsylvania, over 2000 feet of relief, with over 2500 feet of exposed rock layers spanning a 60 million year period in geologic time.

The mountain building events that have taken place here are part of the Appalachian mountain chain, more specifically the Allegheny Mountain section. The Park contains sections of both the Chestnut and Laurel Ridges which are the Western most ridges in Pennsylvania. There are no major mountain chains west of here until you reach the Rockies in Colorado. The Chestnut and Laurel Ridges form two anticlines. An anticline is a ridge-shaped fold of rock layers in which the layers slope downward from a crest.

Whether you choose to travel on foot, by bicycle or in a car, the following tours will introduce you to many different facets of the Geology of Ohiopyle State Park. Each tour examines a different aspect of Ohiopyle's geology including the formation of the gorge and waterfalls, evolution of the larger landscape, a journey through the anticline, cultural influences of geology, and the creation of the Ferncliff Peninsula.

Your Options...

Homewood Bound Driving Tour:

This 5 stop driving tour begins at Ohiopyle Falls and takes a look at the large landscape of the park at several scenic views. 1-1.5 hour tour time

Formation of Ferncliff Walking Tour:

This easy 2 mile hike explores the evidence that Geologists have used to determine the formation of the Ferncliff Peninsula. 1.5-2 hour walk time

The Conflict of Water vs Rock Walking Tour:

This moderate 3 mile walking tour explores the war being waged between two of nature's most formidable foes: water and rock. Included on this hike are the formation and migration of two of the park's most famous waterfalls (Ohiopyle and Cucumber Falls) and the erosive power that formed the slides. 2-2.5 hour walk time

The Large Landscape Biking Tour (Ohiopyle to Confluence):

On this easy 8 mile (one way, 16 round trip or 11 to Confluence) biking tour you will bike through the fold structure of the Laurel Hill Anticline. Explore what this word means and see it for yourself. 2 hour bike time

Geology and Man Biking Tour (Ohiopyle to Bruner Run):

This easy 6.5 mile bike tour (one way, 13 miles round trip or 17 to Connellsville) explores how the Geology of this area has influenced the cultural history of Ohiopyle. 2 hour bike time

