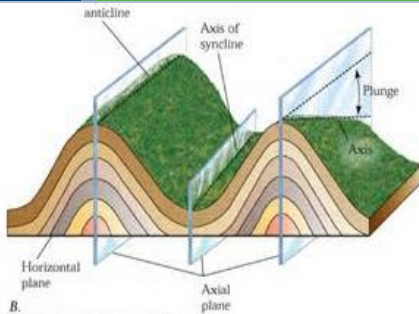


# Ohiopyle Geology Biking Tour Ohiopyle to Confluence: The Large Landscape

## The Big Picture



The rocks at Ohiopyle were originally deposited in flat layers. But because of the mountain building activity, these once flat layers have been folded upwards causing the layers to tilt. We call this upward tilting an anticline. During this biking tour you will be traveling through these layers of tilted rock. If you go all the way to Ramcat you will have traveled through both end of the anticline. Not all of these rock layers erode away or are weathered at the same rate. Layers that are more resistant to erosion are more obvious because they dominate the landscape. We are able to travel through the anticline here because the Youghiogheny River has eroded these layers and made them visible. (Start this trip at the Train Station, head away from the low bridge.)

## Stop#18: Train Station

As we begin our trip upstream we encounter a large ledge of the rock layer that creates many of the more famous features in Ohiopyle. This rock is the Homewood sandstone. To the right of the trail, right next to the parking lot, you see a large outcrop of the very resistant Homewood Sandstone. It is this rock that forms many of the falls, including Cucumber and Ohiopyle, and the rapids all along the river.

Here we are at the western edge of the Laurel Hill anticline. As we head towards Confluence the rocks will be getting older until we reach the axis of the anticline. ( next stop roughly half a mile)

## Stop#19: Vegetation

Notice the vegetation change in front of you. Younger rocks were laid down on top of older rocks but because our rocks have folded, the order that you see them may not be what you expect. Homewood, a younger rock, is acidic which favors the growth of acid loving rhododen-

dendrons. While the Mauch chunk, an older rock, is alkaline and favors other less noticeable plants. You can easily pick out bedrock change by simply looking at the plants growing on them. As you cruise along notice the vegetation changes while you go. When the rhododendrons return you have reached a Burgoon sandstone ledge, notice how this ledge is tilted. You will continue biking towards the center or axis of the Anticline (stop in 2 miles).

## Stop #20: Catskill Ledge

Look in the river. Here you can see the Catskill ledge. On the side of the mountain the ledge heads down to the river where it forms a diagonal pattern of small rapids that go from one bank to the other. This rock sticks out of the river not just because it is hard and resistant but because its angle is very steep and the rocks around it are much softer. As the rock layers here were being folded to form the anticline they tore off and broke upwards forming a fault, causing the rock to have a steep angle. This is an actual ledge influencing the river, similar to what you see at Ohiopyle Falls.

## Stop #20 continued

In most places along the river we see boulders making rapids but here there is a continual shelf. (.25 miles to next stop)

## Stop #21 Avalanche chute

What you are seeing is an avalanche chute causing the birth of a valley. Look around at the trees that are still standing here. You may see large gashes on them from where large boulders have come down the chute and damaged the trees. Large piles of rock often accumulate at the base after a hard rain. These chutes, like the Catskill Ledge we just saw are located near the axis or crest of the anticline. The Catskill formation has some of the oldest rocks in the park.

Rock slides like this are one way that valleys and gorges form. They strip the land of vegetation and make way for erosion. (5 miles to next stop)

## Stop #22: Finnegan's Ledges

These ledges in front of you are made of Loyahanna limestone. This marine deposited stone is formed from what used to be underwater sand dunes formed in an ancient ocean that covered this area. It is because of these dunes that you see cross bedding in the limestone. Limestone is lower in acidity than the sandstones we see in the park and provides an excellent habitat for a wide variety of plants. This limestone is used throughout our area to create roads and even to resurface the trail you are riding on. (Next stop 1 mile)

## Stop #23: Exit the Anticline

Here the Western Maryland Railroad decided it was easier to cut through rock than to go around it. This gives us an excellent chance to look at the Homewood Sandstone on the other side of the anticline. Remember, this is the same rock layer that we saw at the very beginning of our bike trip. This rock is dominant throughout the park because of its resistance to erosion forming famous falls and rapids throughout the gorge. It acts almost like very resistant book ends in the Anticline. (Turn around to return to Ohiopyle 8 miles or travel to Confluence 2.5 miles)

