

Multnomah Falls Rock Fall Facts

On Labor Day, September 4, 1995, at approximately 5:30 p.m., a large rock slid from the face of upper Multnomah Falls due to a natural process of erosion and dropped into the upper plunge pool.

Location - about 2/3 of the way down the face of the upper falls where you can see a tan colored area and where the water is splashing on the rock.

Size - 40 feet wide x 20 feet long x 6 feet deep = 175 cubic yards or the size of a school bus.

Weight - over 400 tons (equal to a school bus filled with concrete)

Distance Fell - 225 feet.

Height of Splash - Benson Bridge height is 70 feet, and water and small rocks splashed and flew about 300 feet from the plunge pool over the bridge.

Injuries - 20 people received minor injuries due to fist size or smaller rocks. Thirteen visitors were transported to area hospitals for treatment and released. One person was held overnight for a knee injury.

This rock fall occurred because of the natural process of weathering and erosion. The basalt cliffs have many natural cracks and fractures in it. Water gets into the cracks, freezes, expands and pushes the cracks apart. The exposed tan area where the rock slid out from indicates there was a crack in place for a long time. Minerals and/or algae have had time to change the dark grey to tan. The upper part where the rock slid is darker and shows the more recent fractures. When the rock became too heavy for the un-fractured part to hold it up, it broke loose and fell, due to gravity. This natural process of weathering and erosion has created our beautiful, bowl shaped notch in the cliffs at Multnomah Falls.

The basalt type rock that fell here is called brickbat, which broke into many small pieces when it fell. The plunge pool of the upper falls was then nearly full of these smaller pieces of brickbat, making the pool smaller shallower (to about 5 feet from 10 to 15 feet). These smaller pieces washed downstream in the flood of 1996. The largest boulder in the plunge pool fell in a few years earlier at night. No one saw it and the event went unnoticed.

This rock-slide did not change the status of Multnomah Falls at being the 2nd highest year-round waterfall in the continental United States. Multnomah Falls is at a time of very low water flow, and if you look at other pictures taken about this time of year (late summer), you see the water always cascaded on the rounded rock that fell. Now, at the flat surface, it hits directly. When the rains increase, the force and velocity of the stream will project the water further from the cliff face and much of the water will again not hit the rock. You see pictures of the four seasons behind the desk in the Visitor Information Center.

The upper plunge pool, that is, the pool at the base of the upper falls is now permanently closed for safety.

There are many more fractures in the rock above and below the slab that fell. These cause instability in the rock face and the potential or more rock slides in the future.

This geological process here is not new. It occurs every second all over the globe. No matter where you are, if you under any rock cliff face, you expose yourself to nature in action and that means you can be hit by falling rock.