The Old Man Of The Mountain

High above the Franconia Notch gateway to northern New Hampshire there is an old man. He has been described as a relentless tyrant, a fantastic freak, and a learned philosopher, feeble and weak about the mouth and of rarest beauty, stern and solemn, one of the most remarkable wonders of the mountain world. Daniel Webster once said, ..."Men hang out their signs indicative of their respective trades; shoe makers hang out a gigantic shoe; jewelers a monster watch, and the dentist hangs out a gold tooth; but up in the Mountains of New Hampshire, God Almighty has hung out a sign to show that there He makes men." Thus it happens that New Hampshire has her Profile, "The Old Man of the Mountain," sublimely outlined against the western sky; a sign unique, distinctive, and inspirational as to the kind of men the sons of the Granite State should be.



The Old Man of the Mountain has several names including "The Profile", "The Great Stone Face", "The Old Man," and "The Old Man of the Mountains". The Profile is composed of Conway red granite and is an illusion formed by five ledges, that when lined up correctly give the appearance of an old man with an easterly gaze, clearly distinct and visible from only a very small space near Profile Lake. When viewed from other locations in Franconia Notch, the same five ledges have a very rough and ragged appearance, and there is no suggestion of The Profile.*

Geological opinion is that The Profile on Profile Mountain is supposed to have been brought forth partly as the result of the melting and slipping away action of the ice sheet that covered the Franconia Mountains at the end of the glacial period, and partly by the action of the frost and ice in crevices, forcing off, and moving about certain rocks and ledges into profile forming positions. It is supposed that the Old Man of the Mountain was completed during the latter part of the post glacial period, from 2,000 to 10,000 years ago.**

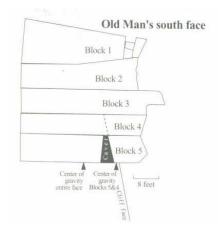
The Old Man is formed on a shoulder of Profile Mountain,

which juts out abruptly into space, some 1200 feet above Profile Lake. It is composed of five layers of granite ledge, one exactly above the other, the lateral distance being 25 feet. Of these five layers one forms the chin, another the upper lip, a third the nose and two layers make up the forehead. The Old Man has been measured as being forty feet and five inches in height. It is all together, just as it appears to be when viewed from the road or lake below.



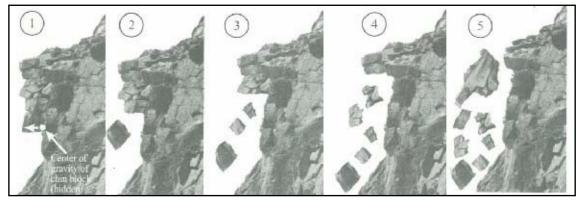
The Old man of the Mountain, long the symbol for the state of New Hampshire fell from his lofty perch on May 3rd, 2003. He will be sorely missed.

Geologists speculate that the Old Man of the Mountain, formed by a retreating glacier during the last ice age, looked out over Profile Lake for more than 12,000 years. On May 3, 2003, the delicate balance that had held the "Great Stone Face" in position through the ages came to an abrupt end.



Brian Fowler made the drawing left (we've modified it slightly) during his study of the Old Man in 1976. It depicts the south side of the stone face, which few folks would have recognized. But Fowler believes this view holds the key as to how and why the Old Man fell. The Old Man actually was made of five slabs of Conway granite balanced atop one another, as shown. As seen in this view, but hidden in the familiar view from the north, was a cavern, about four feet wide, behind the Old Man's chin (Block 5) that ran almost the entire width of the Old Man's face. About 80 percent of the chin block hung out over the cliff, according to Fowler. Thus, just about two feet of the chin was anchored to the cliff, held there only by the weight of the four slabs above it. Amazingly, the other four slabs were positioned just so, so that the center of gravity of

the chin block was within that two-foot span, allowing the entire Old Man to balance on its chin for centuries. However, through the years, rain and snow, blown through Franconia Notch on southerly winds, was driven into the cavern and the other cracks between and within the five slabs. One property of water is that it expands when it freezes, and water freezing in a crack in a rock will act as a wedge when it expands, making such cracks larger, eventually splitting the rock. Meanwhile, rocks are comprised of minerals, many of which react chemically with water. Those reactions can weaken the rock from within, eventually breaking it down. Conway granite is loaded with the mineral potash feldspar, which is particularly reactive with water.



The Old Man's visage was delicately balanced on the chin, with weight of upper blocks holding chin in place. Water damage eventually moved chin's center of gravity, causing chin to topple. With the chin gone, the support from below for the upper lip, nose and forehead slabs was removed. The weight of those slabs, combined with chemical water damage they sustained through the years, caused them to break and topple soon after the chin.

According to Fowler, the physical and chemical damage to the Old Man's granite through the years, Especially in the cavern, eventually wore away enough rock just behind the chin that the center of gravity of that block moved slightly forward, past the cliff face. When that happened. Fowler believes, the chin tumbled down the cliff, and the rest of the Old Man quickly followed.