

THE GREAT BAVASPI EARTHQUAKE

by Tom Kollenborn © 1989, 2003

The aftermath of any great earthquake generally generates interesting inquiries in our area. Could an earthquake of any great magnitude strike the Salt River Valley? Secondly, has an earthquake of any great magnitude ever occurred in the Salt River Valley? The answer to both of these questions is yes, however the answer must be qualified.

The Salt River Valley experiences hundreds of small earth tremors daily, however, few if any of these tremors can be felt by the inhabitants of the area. Only very sensitive seismographic instruments can detect these small tremors. The possibility of a major earthquake occurring in the eastern portion of the Salt River Valley is highly unlikely, however it is possible.

A major earthquake occurred here in the Apache Junction area on May 3, 1887, at 2:35 p.m.. The tremor rocked the central mountain region of Arizona Territory for approximately fifty-five seconds and severely shook the area around Superstition Mountain. Some reports suggested the tremor shook the area for at least seventy seconds. The epicenter of this earthquake was a small Mexican village located in northern Mexico. The name of the village was Bavaspi.

The following is a quote from the *Arizona Weekly Enterprise*, May 7, 1887, p. 3, col. 4, "At 2:35 p.m. Florence time we had quite a sharp shock of earthquake here. It was of short duration, large pieces of rock were detached on all sides of Picket Post Mountain which course rolled to the bottom raising a cloud of dust, and for several minutes it ascended about the mountain giving it the appearance of a live volcano." Journals written by early pioneers of the area, such as Gene Middleton, also recorded the impact of this earthquake and described the ascending clouds of debris around Picket Post and Superstition Mountains.

The following are excerpts from the *Arizona Daily Gazette*, May 5, 1887, p.3, col. 2. "Immediately after the shock all eyes were turned to the southeast from where came a deep rumblings and they saw a dense dust hanging over one of the mountains on the south side of the Salt River about nine miles above the confluence of the Verde River (Superstition Mountain).

"It is reported Sgt. Lucking and Company Clerk Reni saddled up and rode toward Superstition Mountain returning at 10:00 p.m. They reported one side of the mountain broken down and debris scattered for several hundred yards around. It looked as though there had been hundreds of tons of dynamite under the base and that when it exploded it had raised the mountain bodily, scattering the fragments in every direction. The seismic action created a dust cloud similar to a volcanic eruption."

Adobe walls were cracked, adobe buildings collapsed, landslides occurred, rocks as large as houses toppled over, frame houses were moved from their foundations and splintered, and glassware was shattered by the force of the Bavaspi earthquake more than a hundred years ago. There was no reported loss of life in Arizona Territory, however the territory was very sparsely populated. The total number of people living in Arizona including the native Americans at the time was about 60,000.

The geologic history of the Superstition Mountain area is a very complex igneous rock formation composed of alternating layer of ash and basalt formed some seventeen to twenty-five million years ago. Seismographic data indicates this region today is somewhat stable. Hundred and sixteen years ago would be a brief instant in geologic time. Some rocks from the top of Superstition Mountain bounced and rolled two miles from the base of the mountain during the tremor of 1887.

The May 3, 1887, Bavaspi earthquake was a major tremor probably reaching the 7.0 mark on Richter scale. The probability of a major earthquake occurring in the Apache Junction or Salt River Valley is highly unlikely, but still remains a possibility. Since 1887, three earthquakes have occurred in the Salt River Valley area. One earthquake occurred in 1910, another followed in 1935 and the last occurred in 1961. The 1961 tremor that mildly shook Arizona had an epicenter in Baja California.

The prediction of earthquakes still remains far beyond the ability of scientist today. For this reason we can not totally ignore the possibility of such a natural event occurring again in the future.



Picket Post Mountain, near Superior, was shook like Superstition Mountain during the 1887 earthquake. Rocks as large as house tumbled from the top of Picket Post Mountain.



Large rocks tumbled from the top of Superstition Mountain to the desert floor during the Bavasipi earthquake of 1887.



The unconsolidated rock on top of Superstition Mountain was the source of these giant boulders that crashed down onto the desert in 1887.