



Arizona Rocks 43

Text and photos by Ray Grant

The Boyce Thompson Arboretum on route 60 just west of Superior has a geology tour every month. Here is the information for the next tour - Dec. 31, Special New Year's Eve Geology Walk with Rich Leveille 1:30 pm. I have gone on the geology tour with two different geologists (They have three who rotate tours.) and they were very good.

The rocks seen at the Arboretum are the Superstition volcanics. The volcanoes were active from about 30 to 15 million years ago. The magma came from melting of the crust or from melting of subducted sedimentary rocks and was very viscous. Some eruptions occurred as lava flows, but the magma was often rich in gas and would explode violently on reaching the surface; erupting as ash flows that formed the rocks we see today. Tuff is the common volcanic rock here and because it is resistant to erosion it forms the cliffs seen all around the Superstitions.

Another place to visit nearby (a couple of miles toward Superior) are the wagon wheel tracks and the Apache Tears Caves. On Google earth the turn off to the south is shown as Perlite Road. (Unfortunately the last time I was there the road was blocked off from the construction on highway 60,) A short distance down this dirt road was a sign and a turn to the left for the wagon wheel tracks (you can see them clearly on Google earth). Wagons carrying silver ore from the Silver King Mine to the town of Pinal cut these tracks in the tuff.

Continue up this road until it ends at a small parking area and take the trail to the right for the caves. You can get there coming around from the south, check maps, but it is a longer walk. I hope that the road from 60 is not permanently blocked as this an interesting area. Here is a report about a visit by the Arizona Department of Mines staff to the Apache Tears Caves. "While on the Dec 5, 1985 Forest Service field trip, we visited the Apache Tears Caves operated by Guzman Construction. The gemstone collecting site is opened every day of the year except Christmas. The charge is currently \$2.00 to collect a one gallon bucket of tears. The Apache Tears can also be purchased at the little rock shop at the site. The local Forest Service District Ranger has contended for years that the rock shop and collecting fee collecting site are not legal uses of a mining claim, but it has remained intact as a long time Arizona rock hound tradition." For more about the origin of Apache Tears go to the Earth Science Museum's November 2013 newsletter.



Picket Post Mountain forms the backdrop for the Boyce Thompson Arboretum; its Superstition volcanic rocks are mainly tuffs.



Volcanic breccia in Superstition volcanics, Boyce Thompson Arboretum



Wagon tracks cut into tuff.



Eroded tuff at the Boyce Thompson Arboretum



Wagons carrying ore from the Silver King Mine to Pinal. Note steel rim wheels, Arizona Geological Survey photograph



Apache Tears Cave where obsidian (Apache Tears) was mined



Apache Tears Cave